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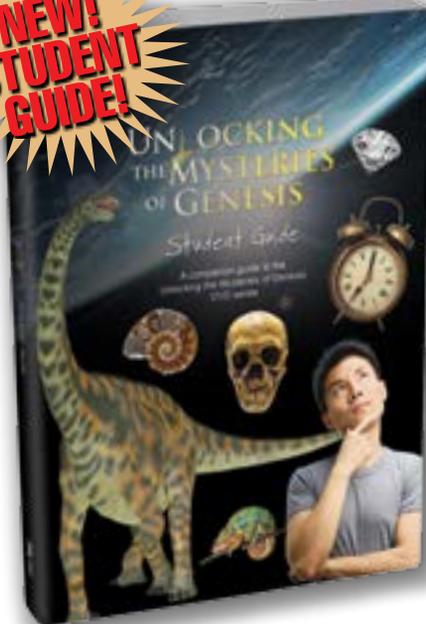
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The Gift of God’s Presence

During the Christmas season, my children often sit around the Christmas tree with lights flashing and Christmas music jingling throughout the house. When they were little, they gingerly touched gifts or enthusiastically shook them, depending on whether or not I was in the room. Sometimes they even peeled back edges of the wrapping paper, attempting to glimpse the mystery contents. Inevitably, they all seemed most drawn to the largest gifts.

While most of us have outgrown the lure of the huge, carefully wrapped presents under the Christmas tree, if

grace to us. None of us deserve it. None of us earn it. God gives it because of who He is—not because of who we are or what we’ve done. Christmas is a simple reminder that it’s all about Him and His goodness. His daily presence. A gift. And we get to enjoy it.

Our feature article this month highlights the gift of “God with us”—His very presence. You can’t get any bigger than that! ICR founder Dr. Henry Morris reminds us of some of the men and women of old who walked and talked with God—Enoch, Abram, Jacob, Moses, Gideon, the parents of Samson, Job, Isaiah, Ezekiel, and many others (pages 5-7). These people enjoyed the gift of His presence and fellowship.

Dr. Morris also points out that “first-century disciples were...privileged to see God ‘manifested in the flesh’” and believers today enjoy the privilege of God abiding in us through His Spirit. We daily live with the reality of *God with us*.

What does “God with us” mean? Salvation and eternal life! Changed hearts and lives. Help in daily living. Desires centered on His will. Fulfillment. Contentment with His provision and His presence. Empowerment to do the work He has asked us to do. Kindness and love extended to others. Wisdom to discern His truths in Scripture. Giftedness to serve and enrich the lives of those around us. True fellowship—a constant conversation with the God of the universe.

I hope you take the time to enjoy God’s “big gift” this Christmas—His perfect gift of salvation through His Son Jesus, Immanuel—God with us. Enjoy the gift of His very presence! We at ICR wish you and your families a most blessed Christmas through the grace of our Lord Jesus Christ.

Jayme Durant
EXECUTIVE EDITOR



we’re honest we probably have to admit that even as adults we sometimes find ourselves pursuing the largest gifts this world has to offer—and not all these big gifts come wrapped in shiny paper. Applause at church. Power position at work. Big money. First-place team. Larger home. Pinterest-worthy décor. Car with a certain shiny medallion on the hood. Record sales. Yard of the month. Awards, recognition, and the praise of men and women around us. Even as believers, we may find ourselves striving to be a kind of trophy Christian who says and does all the right things as an attempt to verify our worth to the world.

Christmas is a time to stop and reflect on God’s gift of

GOD WITH US

HENRY M. MORRIS, PH.D.

One of the most familiar passages in the Bible—familiar because of its frequent appearance on Christmas cards and in Christmas sermons—is also one of the most profound and mysterious passages in the Bible. I am referring to Isaiah 9:6.

For unto us a Child is born, unto us a Son is given; and the government will be upon His shoulder. And His name will be called Wonderful, Counselor, Mighty God, Everlasting Father, Prince of Peace.

The mystery is how a mere child, born like other children, could also be the “Everlasting Father.” The very terms seem to constitute, in the modern jargon, an oxymoron—that is, an impossible contradiction in terms.

The same problem is encountered in that other very familiar Christmas verse, Micah 5:2:

But you, Bethlehem Ephrathah, though you are little among the thousands of Judah, yet out of you shall come forth to Me the One to be Ruler in Israel, whose goings forth are from of old, from everlasting.

That is, how could a Babe be “given birth” (verse 3) by a mother in Bethlehem when He had already been “going forth” from everlasting?

Then, consider also the great prophecy of the virgin birth, “which was spoken of the Lord by the prophet [that is, in Isaiah 7:14], saying,” as cited by the angel in Matthew 1:23:

“Behold, the virgin shall be with child, and bear a Son, and they shall call His name Immanuel,” which is translated, “God with us.”

God Himself—with us—in the guise of a virgin-born child! How can such things be?

God Himself had told Moses: “You cannot see My face; for no man shall see Me, and live” (Exodus 33:20). Similarly, the apostle Paul spoke of God as “dwelling in unapproachable light, whom no man has seen or can see” (1 Timothy 6:16).

Indeed, the very concept of an everlasting, omnipotent God who created the mighty universe seems impossible to grasp by mere mortals—especially by those astronomers and cosmologists whose very careers are spent in studying the universe and trying to understand its origin and nature. Surveys have shown that only a very small percentage of scientists in these fields are active in any kind of church. Their very purpose in life seems to be to try to explain not only the evolution of the universe but even its very origin without God. The Big Bang theory, with its initial period of supposed “inflation,” increasingly involves the assumption (at least by those who think about ori-

“BEHOLD, THE VIRGIN SHALL BE WITH CHILD, AND BEAR A SON, AND THEY SHALL CALL HIS NAME IMMANUEL,” WHICH IS TRANSLATED, “GOD WITH US.” (MATTHEW 1:23)

gins at all) that our universe simply evolved out of nothing by means of a “quantum fluctuation in the primeval state of nothingness.”

Such explanations are considered by them to be preferable to believing that “in the beginning God created the heavens and the earth” (Genesis 1:1). While it is true that one cannot *prove* that God created, neither can anyone prove that the universe created itself. At least the concept of Almighty God as Creator presents a reasonable First Cause able to account for the complex of myriad effects that comprise the cosmos, whereas the assumed primeval nothingness explains nothing! Creationists thus have a *reasonable faith*, based on good evidence, whereas cosmic evolutionists have a highly *credulous faith*, based on the omnipotence of “nothing.”

It may be true that we cannot actually see God, for He is “the King eternal, immortal, invisible, [the] God who alone is wise” (1 Timothy 1:17). Christ Himself said that “no one has seen God at any time” (John 1:18). And to those in this scientific age who stress that the scientific method requires “observability,” this may seem to be a problem.

But the fact is that God *has* been seen by men! Enoch and Noah both “walked with God” (Genesis 5:24; 6:9), and “the LORD appeared to Abram” (Genesis 12:7; 17:1; 18:1) as well as Isaac (Genesis 26:2). Jacob testified, “I have seen God face to face, and my life is preserved” (Genesis 32:30).

It was also said that Moses was



a man “whom the LORD knew face to face” (Deuteronomy 34:10). During the period of the conquest and the judges, there were occasions when “the angel of the LORD” appeared to men and was recognized as the Lord Himself (note the case of Gideon and also that of the parents of Samson, for example, Judges 6:22; 13:21-22). The patriarch Job could say after deliverance from his sufferings, “I have heard of You by the hearing of the ear, but now my eye sees You” (Job 42:5).

Much later the great prophet Isaiah testified, “I saw the LORD sitting on a throne, high and lifted up” (Isaiah 6:1). Ezekiel also saw that “on the likeness of the throne was a likeness with the appearance of a man high above it....This was the appearance of the likeness of the glory of the LORD” (Ezekiel 1:26, 28).

There were still other occasions recorded in the Old Testament when the Lord appeared to men either in a vision or “face to face,” as well as even more times when He spoke audibly to men. As would be expected, numerous skeptics through the centuries have said this was one of the Bible’s “contradictions.” In many places, they say, the Bible says that no man can see God, whereas in other places it says that many men did see God.

This superficial discrepancy, of course, is beautifully resolved in the wonderful truth of the triune Godhead and was specifically clarified by the Lord Jesus Christ when He said,

“No one has seen God at any time. The only begotten Son, who is in the bosom of the Father, He has declared Him.” (John 1:18)

That is, whenever the omnipresent, invisible God has deigned to appear to men, He has done so in the person of His eternal Son, who is “the image of the invisible God” (Colossians 1:15).

Since the Son is, indeed, “in the form of God...equal with God” (Philippians 2:6), He is omnipotent and can surely assume the

form of an angel or a man or even a burning bush (note Exodus 3:2-6) when He so wills. Thus, men have on occasion in the past actually seen God. It was not God in His essential triune glory, of course, but rather God declared and manifested as God the eternal Son, forever “in the bosom of the Father” (John 1:18) yet eternally “going forth” (Micah 5:2) to manifest the Godhead.

All such appearances of God to men were what are called *theophanies*, or preincarnate appearances of Christ. The English word *theophany* is from two Greek words meaning “God appearing,” and it beautifully defines these many appearances of God the Son to men before He actually *became* man.

THE MYSTERY IS HOW A MERE CHILD, BORN LIKE OTHER CHILDREN, COULD ALSO BE THE “EVERLASTING FATHER.”

Now, however, He has become forever Immanuel, “God with us!” He who was the very “brightness of [God’s] glory, and the express image of His person” (Hebrews 1:3), was made in the likeness of men (Philippians 2:8). He was one with the “Mighty God” and the “Everlasting Father” but has now become one with us, “made like His brethren” (Hebrews 2:17) in order that He, as Immanuel, might also become “JESUS, for He will save His people from their sins” (Matthew 1:21). He who had “created all things” (Ephesians 3:9) finally created a human body in which He Himself would dwell and in which He would then die for our sins and rise again for our justification.

And the Word [that is, the creating Word!] became flesh and dwelt among us, and we beheld His glory, the glory as of the only begotten of the Father, full of grace and truth. (John 1:14)

His first-century disciples were thus privileged to see God “manifested in the flesh” and then “received up in glory”

(1 Timothy 3:16). We who live in the twenty-first century have not been given this particular privilege, although He does, even now, “abide” in us by His Spirit (note John 14:21-23; 15:15).

But we also shall see Him in the flesh one of these days, for He is still a true man, resurrected and glorified, forever the Son of man as well as God. Furthermore, “when He is revealed, we shall be like Him, for we shall see Him as He is. And everyone who has this hope in Him purifies himself, just as He is pure” (1 John 3:2-3).

And when we finally see Him, it will be far more glorious than when John and Peter saw Him by the Sea of Galilee. The only place in the Bible where His physical appearance as Son of man is actually described is when John saw Him on the isle of Patmos, many years later, after His resurrection and ascension. Here is how John saw Him, and this is how we shall see Him—not as a babe in a manger and not as our sin-bearing substitute nailed to a cross, but as our eternal King of kings and Lord of lords!

I saw...One like the Son of Man, clothed with a garment down to the feet and girded about the chest with a golden band. His head and hair were white like wool, as white as snow, and His eyes like a flame of fire; His feet were like fine brass, as if refined in a furnace, and His voice as the sound of many waters; He had in His right hand seven stars, out of His mouth went a sharp two-edged sword, and His countenance was like the sun shining in its strength. (Revelation 1:12-16)

Then, when we, as His heavenly bride, shall “see Him as He is,” we can say with thanksgiving, “This is my beloved, and this is my friend” (Song of Solomon 5:16). ●

This article was adapted from Dr. Henry Morris’ article “Theophany” in the December 1994 issue of *Acts & Facts*.

Dr. Henry M. Morris (1918-2006) was Founder and President Emeritus of ICR.



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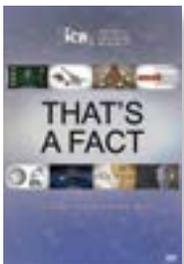
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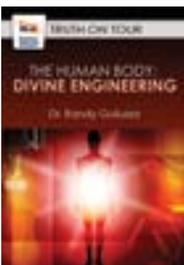
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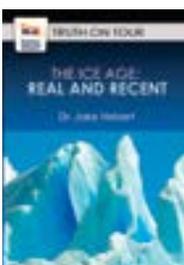
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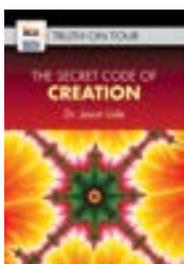
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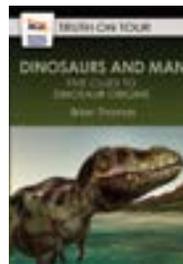


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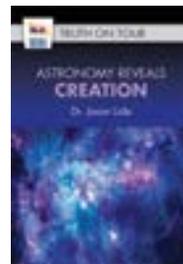


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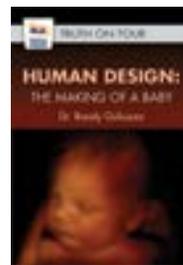


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**INSTITUTE FOR
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BioOrigins Project Update

Purpose, Progress, and Promise

Part 3

The last two installments of this series described the purpose and strategy of the Institute for Creation Research's life sciences research and highlighted the key questions on origins we're trying to answer—the *how*, *where*, *why*, *when*, and *from whom* different species originated, as well as *why* species go extinct.¹ This month's article reports our progress on answering these questions for just a single species: humans.

The key scientific tool on this front is genetics. This may come as a surprise since most of creation/evolution debates during the last 150 years have been preoccupied with fossils, radiometric dating, and anatomical similarities. However, the question of human ancestry is deeply genetic. Since the physical traits that define humans and apes are *inherited*, any attempt to describe human origins must invoke the only direct record of inheritance—genetics.

The field of genetics is doubly important due to recent evolutionary attacks on the biblical record of human origins. In the last several decades, the unified chorus from evolutionary camps has been the supposed overwhelming genetic similarity between humans and chimpanzees—claimed to be 98 to 99% genetically identical. From the recent explosion of human genetic data, evolutionists have grown increasingly bold and claimed that *Homo sapiens* cannot trace their genetic ancestry back to a single primate couple. Instead, evolutionists say that

humans originated from a population of proto-humans that lived in Africa hundreds of thousands to millions of years ago.

Hence, the purpose of ICR's investigation into the human origins question is clear. We seek to demonstrate the scientific validity of the Genesis model (chapters 1 to 11). Practically, this means that we'd expect to trace human ancestry back to a single couple—Adam and Eve—not to a group of ape-like creatures. We'd also expect to find evidence that mankind “re-started” from four couples (Noah, his wife, his three sons, and their wives) near Mt. Ararat about 4,350 years ago.

The results of our studies have been striking. Dr. Jeff Tomkins reanalyzed the raw data from the chimpanzee DNA sequencing project and found that the actual overall identity between humans and chimpanzees is only about 70%.² In terms of actual DNA letter differences, this computes to a 900 million-letter gap. Generating this level of genetic divergence in just six million years by random mutation, natural selection, and fixation (i.e., spreading mutations throughout the entire population of each species) seems impossible.

Dr. Tomkins also reanalyzed some of the DNA organizational differences between humans and chimps. The billions of DNA letters in the human genome (the entire set of DNA letters) are broken down into two sets of 23 chromosomes. In contrast, apes have two sets of 24 chromosomes. Evolu-

tionists postulate that the common ancestor of apes and humans also had two sets of 24 chromosomes but that a genetic error occurred and “fused” two of the chromosomes, causing it to become 23. Furthermore, evolutionists have asserted that human chromosome 2 bears the mark of such an event.

But no such mark exists. First, the supposed fusion site is highly corrupted and tiny in size—very different from the expectations of evolution.^{3,4} Second, the fusion site is a key functional part of an active gene (a sequence of DNA that codes for proteins), further straining the credulity of the evolutionary claim.⁵ How could a random error just happen to end up as an important part of the intracellular information processing system?

Our research is growing more exciting by the day. Look for the next installment! ●

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Dr. Jeanson is Deputy Director for Life Sciences Research and received his Ph.D. in cell and developmental biology from Harvard University.



THE NOBLE CLOCK

THE POTASSIUM-ARGON DATING METHOD, RADIOACTIVE DATING, PART 3

V E R N O N R . C U P P S , P H . D .



Radioactive dating methods—many of which are quite elaborate—have numerous physical condition requirements that cannot realistically remain unaffected over millions and perhaps billions of years. Since the potassium-argon dating methods clearly appear to be unreliable, why should any rational person trust them to provide accurate dates for rocks?

In the early 1950s, scientists established theories for using the decay of radioactive potassium (^{40}K) to argon (^{40}Ar) as a clock for dating certain types of rocks. Called “noble” because it rarely bonds with other elements, argon (Ar) is one of the six noble gases. The others include helium (He), neon (Ne), krypton (Kr), xenon (Xe), and radon (Rn).

As one of the most abundant isotopes in the earth’s crust, ^{40}K is an ideal candidate to use as a “rock clock.” Out of a wide array of available test methods, ^{40}K is one of those unusual radioisotopes that

exhibit all three forms of beta decay:

- Electron decay
- Electron capture
- Positron decay

Almost 90% of ^{40}K decays occur when one of its neutrons emit an electron (or beta particle) as it transmutes to the ground state—the state in which the nucleus is stable (not excited) and not decaying—of ^{40}Ca (calcium). The second-most prominent decay mode is through electron capture by one of its protons, which converts it to an excited state of the noble gas ^{40}Ar that then decays to the ^{40}Ar ground state by emitting a 1.4608 MeV gamma ray.¹ The electron capture decay mode can also proceed directly to the ground state of ^{40}Ar for 0.16% of ^{40}K decays. Finally, a positron decay mode to the ground state of ^{40}Ar has been observed in approximately 0.001% of ^{40}K decays. Figure 1 schematically illustrates these three processes.

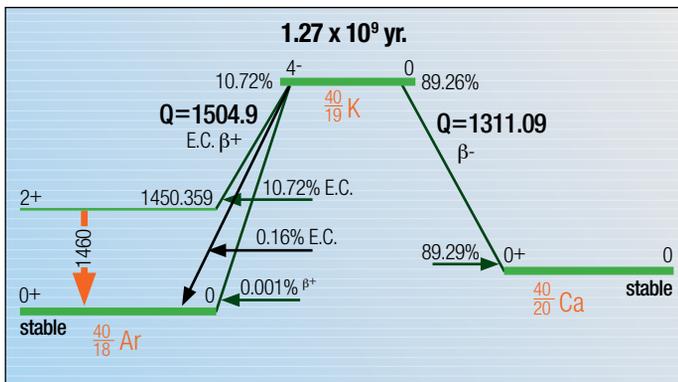


Figure 1.

Potassium (K), along with lithium (Li), sodium (Na), rubidium (Rb), and caesium (Cs), is an alkali metal that reacts violently with water, air, and the halogen elements (fluorine, chlorine, bromine, iodine, and astatine). It is so chemically reactive that it must be stored under oxygen-free liquid paraffin to prevent oxidation. Thus, it can move somewhat freely in most rock matrices. Most minerals that can incorporate calcium or sodium into their structure can also accommodate potassium, since all three elements have similar atomic radii. Interestingly, the ^{40}Ar atom is small enough—more than 10 times smaller² than the inter-crystalline distances in sanidine³—that it can move freely between a rock suite and its surrounding environment. Clearly, the closed-system assumption (i.e., that the rock sample being tested has not interacted with its environment) cannot be reasonably presumed to hold for any significant period of time in the K-Ar system, much less for millions or billions of years.



Radioactive potassium (^{40}K) only constitutes 0.0117% of the potassium in nature. This fact, coupled with its extremely long half-life, makes it an experimental challenge to separate its decay product ^{40}Ar from primeval and cosmogenically produced ^{40}Ar in any rock sample; i.e., extremely small amounts of ^{40}Ar are generated by decay of ^{40}K . Thus, it

becomes impossible to definitively determine which ^{40}Ar is the result of ^{40}K decay and which is the result of another process. This can have a profound effect on obtaining a reliable date as the initial presence or addition of even small amounts of ^{40}Ar to a rock suite or any samples contained within the rock would cause the sample to appear older than it really is.

Dating using the potassium-argon (K-Ar) clock employs three different methods. As Paul has exhorted us to test all things, let's carefully look at these three methods:

1. The straightforward potassium-argon (K-Ar) solution method
2. The isochron method
3. The argon-argon (Ar-Ar) method

In the straightforward solution method, the concentration of ^{40}Ar is assumed to have been zero when the rock suite specimen crystallized, and therefore any ^{40}Ar that is present is considered to be the result of ^{40}K decay.

SIDEBAR A

1. The Straightforward Potassium-Ar (K-Ar) Solution Method

This K-Ar method is described by the equation:

$$^{40}\text{Ar}_p = B_r \times ^{40}\text{K}_p (e^{\lambda t_a} - 1)$$

Where: $^{40}\text{Ar}_p$ $\stackrel{\text{def}}{=}$ Amount of ^{40}Ar measured in the sample

$^{40}\text{K}_p$ $\stackrel{\text{def}}{=}$ Amount of ^{40}K measured in the sample

B_r $\stackrel{\text{def}}{=}$ Proportion of ^{40}K decays that led to production of ^{40}Ar

t_a $\stackrel{\text{def}}{=}$ Age of the rock suite being dated

λ $\stackrel{\text{def}}{=}$ Decay constant for ^{40}K

Since t_a is the only unknown in this equation, it can be directly solved to give the approximate age of the rock sample:

$$t_a = \frac{1}{\lambda} \ln \left[\frac{^{40}\text{Ar}_p}{^{40}\text{K}_p B_r} + 1 \right]$$

This value of t_a is only a valid estimate of the age of the rock suite when all eight of the following assumptions hold rigorously:⁴

1. No radiogenic ^{40}Ar produced by the decay of ^{40}K in the rock suite escaped during its lifetime.
2. The rock suite must have become closed to ^{40}Ar after its formation. This means it must have cooled rapidly and remained below the blocking temperature for ^{40}Ar .⁵
3. No ^{40}Ar was incorporated into the rock suite at the time of its formation or during its lifetime due to metamorphic events.
4. Appropriate corrections are made for the presence of atmospheric ^{40}Ar .
5. The rock suite was closed to potassium during its lifetime.
6. The isotopic composition of ^{40}K in the rock suite was not changed by fractionation⁶ through other physical, chemical, or nuclear processes but only by the decay of ^{40}K .
7. The decay constants of ^{40}K are known accurately and have not been affected by environmental physical or chemical conditions since it was incorporated into the earth.
8. The concentrations of potassium and ^{40}Ar were determined accurately.

From recent experimental evidence,⁷ we know that assumption 7 does not hold. Assumptions 2, 3, 4, and 5 are all closed-system assumptions that are not realistic, especially in secular deep-time frames. Assumption 8 is strongly dependent on the methodology used and the personnel making the measurements. ^{39}K , the most abundant isotope of potassium (93.3%), is easily converted to ^{40}K by absorption of prompt and thermal neutrons,⁸ and therefore assumption 6 does not rigorously hold. Finally, to assume that ^{40}Ar cannot move at least somewhat freely through a rock matrix is unreasonable—so scratch assumption 1.

Of the eight assumptions, *none* can be considered to rigorously hold in all situations. Therefore, dating by this method is at best a hy-

pothesis concerning the age of any rock suite or mineral; it is certainly not a scientific fact!

In the straightforward model for K-Ar dating, it was assumed that no primeval, outgassed, absorbed, or cosmogenic (i.e., caused by cosmic rays) ^{40}Ar existed in the rock matrix being analyzed. As pointed out in last month's *Acts & Facts* article,⁹ this is a shaky assumption. So the K-Ar straightforward method becomes the K-Ar isochron method by adding the original concentration of argon 40 ($^{40}\text{Ar}_0$) to the right side of the equation and dividing both sides of the equation by non-radiogenic ^{36}Ar (an isotope not produced by radioactive decay that is used as an index isotope).

SIDEBAR B

2. The Potassium-Argon Isochron Method

Thus, the isochron method is defined by the equation:

$$\frac{^{40}\text{Ar}_p}{^{36}\text{Ar}_i} = \frac{^{40}\text{Ar}_0}{^{36}\text{Ar}_i} + B_r \times \frac{^{40}\text{K}_p}{^{36}\text{Ar}_i} (e^{\lambda t_a} - 1)$$

And the age is given by:

$$t_a = \frac{1}{\lambda} \ln \left[\frac{m}{B_r} + 1 \right]$$

Where: m = slope of the linear plot $\frac{^{40}\text{Ar}}{^{36}\text{Ar}}$ vs. $\frac{^{40}\text{K}}{^{36}\text{Ar}}$ for each sample from a given rock suite.

Critical assumptions for this method of K-Ar dating include the eight listed above in sidebar A, plus:

- 9. The selective homogeneous assumption, i.e., all samples had the same ^{40}Ar to ^{36}Ar ratio but *different* ^{40}K to ^{36}Ar ratios when the rock suite solidified.
- 10. The rock suite is composed of minerals that do not have significantly different blocking temperatures.⁵
- 11. Accurate corrections for absorption of atmospheric argon can be made.

Assumption 9 is simply a contradiction for any whole-rock sample and only workable for a collection of different mineral samples contained in the same rock suite. The family of potassium feldspars have a wide range of blocking temperatures (~900°C to 135°C), and therefore assumption 10 is not generally applicable—meaning one cannot definitively differentiate between a true isochron and a mixing line (an imperfect mixing of two or more rock types). Methods of correcting for atmospheric absorption of argon are still quite hypothetical,¹⁰ making assumption 11 questionable. Assumptions that are integral to both these K-Ar dating methods make the dates obtained with them hypothetical estimates at best; but again, they are certainly not scientific fact.

The third method for dating rock



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suites using the K-Ar decay chain as a clock is commonly referred to as the argon-argon (Ar-Ar) method. This method avoids the homogeneity problem for whole-rock samples by only measuring isotope ratios of Ar, and it avoids the need for an index isotope such as ^{36}Ar . It also avoids the problem of accurately measuring the absolute concentrations of potassium and argon (assumption 8), so it is most often used to date very small or very rare samples such as meteorites or lunar rocks and minerals.

SIDEBAR C

3. The Argon-Argon (Ar-Ar) Method

Irradiation of K-bearing rock samples with neutrons from a nuclear reactor initiate the following nuclear reaction:



^{39}Ar is unstable and beta decays back to ^{39}K with a half-life of 269 years. However, during the relatively short time necessary for the analysis, it can be considered stable. Because ^{39}Ar is not normally present in measurable amounts, it is assumed that all ^{39}Ar present after irradiation is due to this particular reaction, i.e.:

$$^{39}_{18}\text{Ar} = ^{39}_{19}\text{K} \Delta T \int_{\epsilon_1}^{\epsilon_2} \varphi(\epsilon) \sigma(\epsilon) d\epsilon$$

Where: ΔT $\stackrel{\text{def}}{=}$ Irradiation time

$\varphi(\epsilon)$ $\stackrel{\text{def}}{=}$ Neutron flux at energy ϵ

$\sigma(\epsilon)$ $\stackrel{\text{def}}{=}$ (n,p) Cross-section at energy ϵ

$\int_{\epsilon_1}^{\epsilon_2} d\epsilon$ $\stackrel{\text{def}}{=}$ The integral (continuous summation) over the energy range ϵ_1 to ϵ_2

Now, if we go back to the straightforward model for the present amount of ^{40}Ar in the sample, assume that the amount of ^{40}Ar and ^{40}K is unaffected by the irradiation, and divide both sides of the equation by ^{39}Ar , then we are left with the equation:

$$\frac{^{40}_{18}\text{Ar}}{^{39}_{18}\text{Ar}} = B_r \cdot \frac{^{40}_{19}\text{K}}{^{39}_{19}\text{K}} \cdot \frac{(e^{\lambda t_a} - 1)}{\Delta T \cdot \int_{\epsilon_1}^{\epsilon_2} \varphi(\epsilon) \sigma(\epsilon) d\epsilon}$$

If we now define J as:¹¹

$$J = \frac{^{39}_{19}\text{K} \cdot \Delta T \cdot \int_{\epsilon_1}^{\epsilon_2} \varphi(\epsilon) \sigma(\epsilon) d\epsilon}{B_r \cdot ^{40}_{19}\text{K}}$$

Then the age of the rock can be estimated from the ratio of the ^{40}Ar to ^{39}Ar in the rock sample by:

$$t_a = \frac{1}{\lambda} \cdot \ln \left(\frac{^{40}_{18}\text{Ar}}{^{39}_{18}\text{Ar}} \cdot J + 1 \right)$$

Now, in order to calculate the approximate age from the ^{40}Ar to ^{39}Ar ratio, one needs to evaluate J .¹¹ In order to directly calculate J , we must measure the ^{39}K to ^{40}K ratio and irradiation time accurately, and we must know the energy spectrum for the neutron flux (the number of neutrons per square centimeter per second in a given object) and the energy dependence of the (n,p) reaction cross-section (the probability that a neutron incident on a ^{39}K nucleus will produce a proton and an ^{39}Ar nucleus) over that entire energy spectrum. Unfortunately, the (n,p) cross-sections over the entire reactor neutron energy range

Test all things;
hold fast what is good.
(1 Thessalonians 5:21)

are not well known and neither is the energy spectrum. So, a flux monitor of known age is irradiated with the rock sample, and the measured ^{40}Ar to ^{39}Ar ratio for that monitor, or standard, provides the J for that particular irradiation. Two questions immediately arise: How do we know the age of the flux monitor, and how good is the assumption that ^{40}K , ^{40}Ar , and ^{39}Ar are unaffected by the irradiation process?

When a rock sample is irradiated with a broad spectrum of neutrons, such as those produced by a nuclear reactor, many competing reactions occur simultaneously. Competing reactions for various Ar isotopes can invalidate the dating process. They are listed in Faure's *Principles of Isotope Geology*.¹² This means that a series of corrections must be made¹³ that are especially serious for "young samples" less than one million years old ($< 10^6$ years) and those having significant concentrations of Ca (i.e., $\frac{K}{Ca} < 1.0$).

In addition to the eight assumptions that go into the straightforward model, it must also be assumed that all measurable ^{36}Ar originates from atmospheric diffusion into the rock matrix, all measurable ^{39}Ar is produced by the (n,p) reaction on ^{39}K , and the isotope production factor, J, can be accurately correlated with the decay of ^{40}K into ^{40}Ar . For any mineral with a substantial chlorine (Cl) content, the assumption concerning ^{36}Ar becomes problematic since the neutron capture cross-section for ^{35}Cl (which indirectly produces ^{36}Ar through the beta decay of ^{36}Cl) is approximately 44 barns (10^{-24} cm²), a very large production cross-section for the most abundant form of chlorine.

The second assumption—i.e., all measurable ^{39}Ar is produced by the (n,p) reaction at nuclear reactor energies—appears to be a reasonable assumption provided spallation¹⁴ cross-sections on transition metals such as scandium, calcium, titanium, cobalt, nickel, and iron are comparatively small. The only way to correlate the decay of ^{40}K into ^{40}Ar to the reactor production of ^{39}Ar is through the nuclear reaction constant J, but J must be determined using a standard of known age—this is clearly a circular methodology! Besides all the dubious assumptions that go into it, this method is deliberately biased by the standard used to determine J. This appears to be academic propaganda rather than good science.

Other than the unreasonable assumptions that form an integral part of all three K-Ar dating methods, there are many examples

listed by Andrew Snelling in *Radioisotopes and the Age of the Earth* in which the methods give erroneous K-Ar dates.¹⁵ Thus, the K-Ar model does not meet even the basic criteria of a hypothesis in the scientific method.

Researchers who use results from these dating methods to conclude that rock sample dates are evidence of a millions or billions-year-old Earth are simply not using a legitimate scientific method. Dating methods that use better assumptions which can reliably reproduce known ages of rocks are needed. The potassium-argon dating method—once heralded as a solid scientific method—has proven to be unreliable. ●

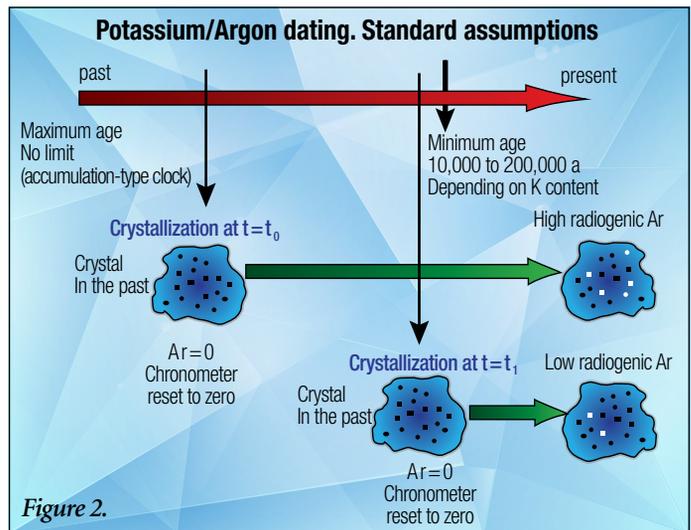


Figure 2.

References

1. MeV is an abbreviation for the energy unit of one million electron volts. One eV is defined as the amount of energy gained (or lost) by the charge of a single electron moved across an electrical potential difference of one volt. One MeV is 10^6 eV.
2. Hurlbut, C. S., et. al. 1977. *Manual of Mineralogy*, 19th ed. New York: John Wiley & Sons, 428.
3. *Sanidine* is potassium feldspar mineral, KAlSi_3O_8 , which is considered the best specimen for dating using the K-Ar methodology.
4. Faure, G. 1986. *Principles of Isotope Geology*, 2nd ed. New York: John Wiley & Sons, 67.
5. *Blocking temperature*, or more generally *closure temperature*, is defined as the temperature at which the loss of ^{40}Ar by diffusion out of a given mineral or rock suite is negligible compared with its rate of accumulation.
6. *Fractionation* is the separation of isotopes through chemical and physical processes and occurs frequently during the cooling of igneous rocks as they come into the crust and solidify.
7. Cupps, V. 2014. Clocks in Rocks? Radioactive Dating, Part 1. *Acts & Facts*, 43 (10): 8-11.
8. Cross-sections for the reaction $^{39}\text{K}(n, \gamma)^{40}\text{K}$ range from approximately two barns (10^{-24} cm²) for three MeV neutrons to 1,000 barns for one eV neutrons. These are very large cross-sections for nuclear reactions.
9. Cupps, V. 2014. The Iconic Isochron: Radioactive Dating, Part 2. *Acts & Facts*, 43 (11): 10-13.
10. Faure, *Principles of Isotope Geology*, 74.
11. J is the isotope production factor. In order to evaluate the amount of ^{39}Ar generated during the irradiation of ^{39}K , the amount of ^{39}K must be known as well as the time over which the irradiation occurs, the number (flux) of neutrons of a given energy which strike the sample during the irradiation, and finally the cross section (or probability of the reaction occurring) at the given energy. Summing (integrating) the product of these factors over the entire energy spectrum of the neutrons generated by a specific nuclear reactor will then yield the amount of ^{39}Ar formed by the irradiation.
12. Faure, *Principles of Isotope Geology*, 95.
13. Brereton, N. R. 1970. Corrections for Interfering Isotopes in the $^{40}\text{Ar}/^{39}\text{Ar}$ Dating Method. *Earth and Planetary Science Letters*, 8 (6): 427-433.
14. *Spallation* is the process by which a nuclear projectile, such as a proton or neutron, breaks a target nucleus into two or more component parts.
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Archaeologists have been using ground-penetrating radar and other techniques to intensively study underground areas all around Stonehenge, a mysterious circle of stones in England that secular historians believe was constructed many thousands of years ago. Recently the archaeologists discovered an unexpected array of buried stone structures, leading them to once again rewrite their Stonehenge origin theories. Bible believers also struggle to understand when and why Stonehenge was constructed. Forgotten clues from history answer these questions with much greater surety than secular speculations have mustered.¹

First, we can reject the stone artifact's reported ages, ranging from 6000 to 2500 B.C., for at least two reasons. Secular archaeologists regularly select dates simply because they align with the evolutionary timescale of human history, but Institute for Creation Research scientists, along with other researchers, have amply demonstrated why that timescale has failed. Enlightenment era secularists concocted it, and their disciples continue to systematically reject any dates that don't fit, protecting their timescale with

what amounts to mere circular reasoning.² Another reason to reject their reported ages is that they dismiss written records detailing Britain's past and similar records from several ancient European nations that trace royal ancestries all the way back to Japheth son of Noah.³ With ancient documents including the Bible out of the way, evolutionists have felt free to invent a version of history that excludes God and even humanity's own historical records.

A free online, high-quality translation of *The Chronicle of the Early Britons* offers the second clue to unraveling Stonehenge.⁴ Many of *The Chronicle's* place names correspond to modern names, and many of its people occur in other ancient documents. It calls Stonehenge the "Giant's Ring," and native Welshmen still refer to Stonehenge as *Cor y Cewri*, which means "the Giants' Ring."^{5,6}

The Chronicle tells how King Ambrosius' royal advisor Merlin, accompanied by Ambrosius' brother and troop commander Uther Pendragon, helped build Stonehenge. Merlin became famous for devising a clever way to transport monolithic stones from "Killara" to their current position in Wales.^{7,8}

Historian Bill Cooper recently cross-referenced Killara with a modern map of Ireland, finding a match with the town Kildare—just west of Dublin. Its Gaelic name was *Chill Dara*. The king of Wales and his people were convinced the stone arrangements helped heal the sick, so they wanted to reconstruct the magical Irish monument closer to home.

All agree that Stonehenge's stones were obtained from faraway sources. According to *The Chronicle*, giants who had originally inhabited Ireland brought the stones from Spain (though another ancient account cites remote Africa) and set them up on a hilltop in Killara. *The Chronicle* also describes how Britain's founder Brutus, of Trojan descent, and his entourage disposed of giants when he founded the place now named after him: Britain.⁹ *The Chronicle* also mentions a dragon encounter. Modern secularists scoff at this mention of giants and the dragon, fueling their opinion that *The Chronicle* is more fantasy than history, but that's partly because they already deride Scripture and any record that supports it. *The Chronicle's* references to giants actually substantiate the Welsh document for those familiar with biblical references to giants living after the

A Recent Origin for STONEHENGE?



Flood, like Goliath, and with the Bible's clear references to "dragons."¹⁰ Like the Neanderthal peoples and whole nations such as the Ammonites and Philistines, giant human varieties have probably gone extinct.

The recent archaeological work indicates that Stonehenge was apparently part of a much larger complex than previously thought. Workers from the Stonehenge Hidden Landscapes Project have discovered 17 distinct underground stone structures spread across an area equaling 1,250 soccer fields.¹¹ At nearby Durrington Walls, they imaged "super henge," perhaps the largest stone circle in the world. Back when Stonehenge was thought to be a lonely stone circle set on a stark plain, it was a bit challenging to match it to *The Chronicle's* description. But the newfound array of structures fits quite well with the document's description of how King Ambrosius beautified the area.

With wisdom and but little labour did he [Merlin] remove the stones to the ships. And so were they brought to Mount Ambri. And to that place did Ambrosius summon all his earls and his barons, and all the sacred scholars of the realm, to seek their counsel how he might beautify the place and adorn it....And having all things prepared, Ambrosius commanded Merlin to as-

semble the stones as they had been at Killara. And this he did, and all acknowledged that wisdom is better than strength."⁵

When did this construction occur? They must have built Stonehenge after the Flood, because according to Scripture Noah's Flood obliterated the globe's surface, implying forces that would utterly destroy even massive stone monuments.¹² Historian Manley Pope translated *The Chronicle* in the 19th century and assigned many dates to the kings' reigns, beginning with Brutus in 1074 B.C. and ending with Cadwaladr in 660 A.D. Bill Cooper more recently used historical sources both within and outside *The Chronicle* to deduce 1104 B.C. for Brutus and 633 A.D. for Cadwaladr, plus adjusted dates for the many intervening kings, including Ambrosius' grandson Arthur.³ Dates like these help set King Ambrosius in time and thus the building of Stonehenge itself.

The Chronicle says, "And in those days a star of wondrous size appeared to Uther, having but a single tail."¹³ Pope wrote, "In the catalogue of comets given by Shelburne at the end of his *Manilius*, a comet is described...of A.D. 504, crowned with a dragon, [and] is more probably the same that is said to have been seen by Uther."^{14,15}

A final clue corroborates this timing. The Romans famously occupied Britain from 43 to 410 A.D. During that time, they renamed most of England's stone works, ancient castles, and religious sites, including Old Sarum, located within seven miles of Stonehenge. The Romans Latinized Old Sarum to *Sorviodunum*. But they did not rename Stonehenge or build a Roman shrine there, as they did at other key locations. Why do we have Roman names for so many monuments but not England's most famous one? Well, according to dates taken from historical sources, Stonehenge was built almost a century after the Romans departed.

So, secular scientists have guessed that Stonehenge may have been constructed between 3000 and 2000 B.C., but this merely follows a pre-set evolutionary timescale. They assert that Stonehenge is a "prehis-

toric" monument, meaning that it was constructed prior to any written history. But if *The Chronicle*—which is a written history—describes Stonehenge, then their "prehistoric" conjecture is as false as their evolutionary age assignments. A date of around 504 A.D. for the construction of Stonehenge is much more recent than 2500 B.C., but it is backed by written history. By setting aside secularists' bias against the Bible and other documents that confirm the Bible, we find that ancient writings, modern archaeology, and Genesis history mesh quite well. ●

References

1. Even back in 1135, the Earl of Huntingdon wrote about Stonehenge, "No one has been able to discover by what mechanism such vast masses of stone were elevated, nor for what purpose they were designed." Forester, T., transl. 1853. *The Chronicle of Henry of Huntingdon*. London: Henry G. Bohn, 7. Huntingdon must have been unfamiliar with *The Chronicle of the Early Britons*, as is consistent with its omission from his sources as listed on his Wikipedia page.
2. For an example of this circular reasoning, see Hebert, J. 2014. *The Ice Age and the Flood: Does the Ice Age Really Show Millions of Years?* Dallas, TX: Institute for Creation Research.
3. Cooper, B. 1995. *After the Flood*. Chichester, UK: New Wine Press.
4. This document gives a history of the Britons, an ancient Celtic people, that begins a thousand years or so before the arrival of the Romans in England. Bill Cooper translated a 15th-century Welsh copy of the 12th-century original. See Cooper, W. R., transl. 2002. *The Chronicle of the Early Britons*. An annotated translation of Jesus College MS LXI. Posted on www.annomundi.com/history/chronicle_of_the_early_britons.htm.
5. *Ibid*, 43.
6. The Welsh call themselves Cymru ("goom ree" with a trilled "r") after their progenitor Gomer, one of Noah's grandsons (Genesis 10:2).
7. Medieval French novelist Chrétien de Troyes retold stories of King Arthur, adding Lancelot and a Holy Grail to his version, and spawned an industry of Arthurian fiction that continues to the present day. These many stories shroud the historicity of the real people on which they are loosely based.
8. Modern examples of low-tech monolith transport include Wally Wallington's sand ballast and lever techniques he is using to build a Stonehenge replica at his home in Flint, Michigan, a recent study in the *Proceedings of the National Academy of Sciences* showing that an artificial ice road makes sliding blocks seven times easier, and a report in the *Journal of Archaeological Science* showing how 18 people moved a 4.4-ton rock by "walking" it using three ropes.
9. Brutus' co-leader Corineus, after whom Cornwall was named, killed a giant probably named Gawr Madoc ("Madoc the Giant" in Welsh) in hand-to-hand combat by throwing him over a ledge into the sea at Plymouth Ho in Devon. See *The Chronicle*, 10.
10. Thomas, B. 2013. *Dinosaurs and the Bible*. Dallas, TX: Institute for Creation Research.
11. Kaplan, S. Envisioning an even bigger Stonehenge: New maps reveal 17 previously unknown structures at the site of the British monument. *The Washington Post*. Posted on [washingtonpost.com](http://www.washingtonpost.com) September 12, 2014, accessed September 17, 2014.
12. Morris, J. D. 2012. *The Global Flood*. Dallas, TX: Institute for Creation Research.
13. *The Chronicle*, 131.
14. Pope, M. 1862. *A History of the Kings of Ancient Britain, from Brutus to Cadwaladr*. London: Simpkin, Marshall, and Co., 206.
15. Many references in this article are available for free online, including the book that Pope referenced: Sherburne, E. 1675. *The Sphere of Marcus Manilius*. London: Nathaniel Brooke, 198.

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Fountains of the Deep

Most of the fossil-bearing strata on Earth are comprised of six megasequences.^{1,2} Secular scientists believe they were laid down over millions of years, but this assumption prevents them from describing some prominent geological features—features that are best explained by large-scale flooding. Using data from over 500 stratigraphic columns,³ I examined megasequences across North America to document the sedimentary evidence for the Flood's catastrophe. At each site, the megasequence boundaries were identified, along with the thicknesses and extent of individual rock types. These findings enabled the creation of computer maps that will build a chapter-by-chapter model of how the Flood changed the entire surface of the world.

Preliminary results demonstrate the presence of a seventh megasequence below the six common fossil-bearing megasequences. It lies just below the Sauk Megasequence in what secularists call the late Precambrian or Proterozoic Era. However, this newly delineated pre-Sauk sequence may be instrumental in documenting the onset of the Flood.

In part, the pre-Sauk megasequence was created by a tremendous outpouring of basaltic lava that split open central North America and caused the Midcontinent Rift.⁴ This fracture extended over 1,800 miles across what is now Lake Superior all the way to Kansas. It produced nearly 500,000 cubic miles of lava!⁴ The mystery of why it “failed” to grow into a large ocean like the Atlantic baffles secular scientists. And yet the Midcontinent Rift contains far more than lava flows—over 11 billion pounds of copper were mined from the Rift in Michigan's upper Peninsula alone.⁵ Tremendous volumes of superheated groundwater—~430°F (220°C)—followed the eruption of lava and placed the huge copper deposits within the flows.⁵ Could this be evidence of the breaking up of the “fountains of the great deep” mentioned in Genesis 7:11?

This research also demonstrates the Rift played a primary role in the formation of North America during the Flood year. Flood deposition for the next six megasequences had to detour around this uplifted area, as demonstrated by the thickening of the megasequences on either side of the Rift (Figure 1).

The Midcontinent Rift runs along the Transcontinental Arch—the high grounds of the Sauk, Tippecanoe, and Kaskaskia Megasequences combined.^{6,7} Uniformitarian geologists claim the Rift occurred 1.1 billion years ago, whereas the Arch formed 500 million years ago.^{4,6} Because of this 600 million-year difference, they cannot connect the two. And rocks representing this supposed time gap are also largely missing across most of North America, making the explanation even more problematic.

Furthermore, secular scientists cannot explain the formation of large basins adjacent to the rift zone, areas where the crust fell thousands of feet. However, the fountains-of-the-deep Flood model offers a solution. Rapid expulsion of nearly 500,000 cubic miles of

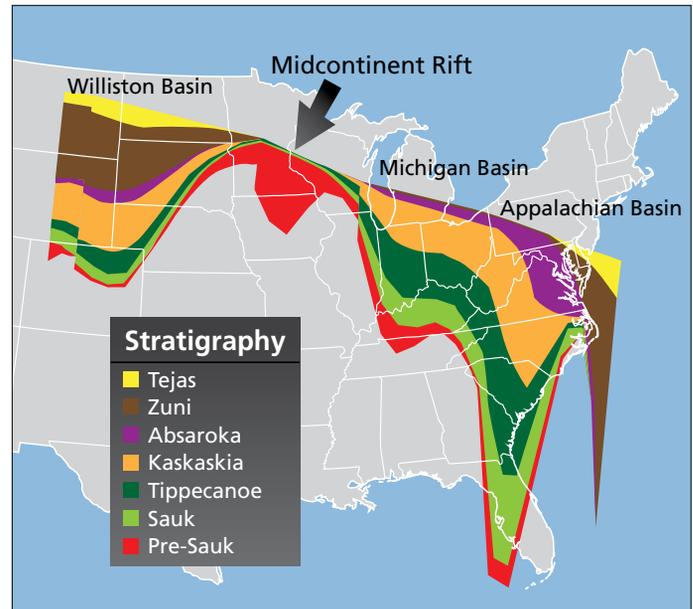


Figure 1. East-west stratigraphic cross-section showing the seven megasequences across the uplifted Midcontinent Rift/Transcontinental Arch. Cross-section runs from Montana, across the Midcontinent Rift and the Michigan Basin, and ends just offshore New Jersey. Section is flattened on the Tejas Megasequence and exaggerated vertically.

magma and volumes of superheated water from deep in the earth would have created huge voids, possibly causing the crust below the basins to collapse.

The coincidence of the Midcontinent Rift, Transcontinental Arch, and the formation of adjacent, down-dropped basins makes sense in a biblical worldview. The Flood offers a connection between three seemingly disconnected events and better explains the Rift volcanism, and the burst of hydrothermal water can easily be understood as part of the “fountains of the great deep,” creating vast copper deposits. The Flood model also offers a cause for the drop of the crust beneath the sedimentary basins near the Rift—magma and water were expelled from underneath them, creating large sinkhole-like structures.

When the shackles of deep time are removed and Genesis is viewed as history, unrelated events start to fall into place. ●

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- Megasequences are discrete groups of sedimentary rock layers bounded top and bottom by erosional surfaces, often with coarse sandstone layers at the bottom (deposited first), followed by shale, and then limestone at the top (deposited last).
- Morris, J. D. 2012. *The Global Flood: Unlocking Earth's Geologic History*. Dallas, TX: Institute for Creation Research.
- A stratigraphic column is the record of which sediments are present at a particular location. It is compiled from the actual rock layers drilled through by a well and/or observed directly in outcrop.
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ROCKSLIDES ON ARARAT

JOHN D. MORRIS, P.H.D.

Mt. Ararat is a volcano, erupting numerous times since the Flood. Its ice cap continually erodes the hardened basaltic rock underneath. As the ice sheets move along, they push the loosened rock over the edges of the mountain, causing high-speed avalanches. On my first expedition I was warned about the “crumbly rock” but was not prepared for the enormity of the dangers.

Thursday, August 3, 1972

I heard a noise up above us on the slope. I looked up just in time to see a rock bigger than my head hurtling through the air right at my head, traveling at great speed. I ducked instantly, and it whistled by just six



inches away. We stood in stunned silence for a few seconds until we saw dozens of such rocks speeding toward us from above. We left our packs and ran up the side slopes, off the glacier, and onto the loose rock. At that point even the loose rock was safer than the glacier. We watched

as rocks bounced all around where we had been standing, expecting to see our equipment demolished at any second, but the shower was over within a minute and no damage had been done.

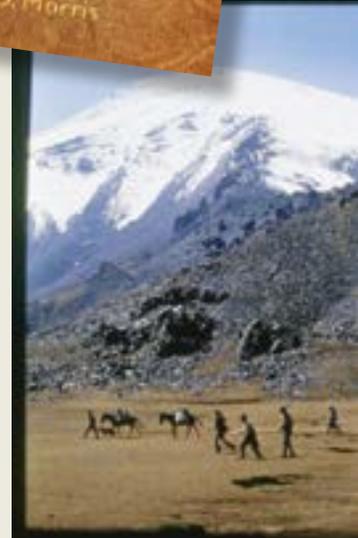
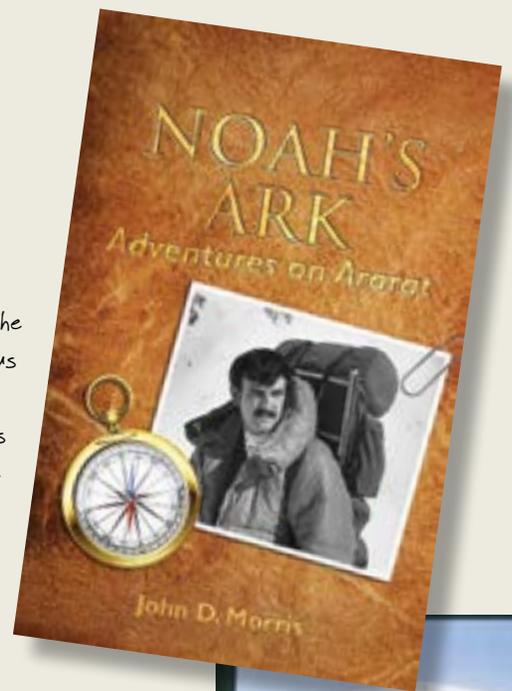
Once our courage returned, we stepped back onto the glacier. Again the rocks came. But we were watching for them and were up the slope before they reached us. However, one stray rock narrowly missed J.D. The situation was indeed grim. We knew the only way up the slope with such heavy packs was on the glacier. We also knew that to stay on the glacier was very dangerous. Furthermore, we knew that the Lord had called us to do a job, sent



us halfway around the world, and protected us all the way.

Many more times throughout the day we were subjected to similar rock slides. The slope steepened, causing poor footing and slowing our progress, as well as making it more difficult to avoid the slides. I ripped off my pack, threw it down, and began dodging, running, jumping, falling, and praying, trying to avoid the rocks. It's very hard to be nimble-footed on these loose rock slopes, especially when wearing metal crampons. But the Lord was in complete control, and I escaped without a scratch.

The rocks vary from walnut size to Volkswagen size, but at such dizzying speeds even the small ones could kill. They make very little noise in the snow but fall with such force that they shake the earth. The speeds probably reach 100 mph. Their bounces are unpredictable, and it is hard to get out of their way. As they fall, they fly through the air sometimes for hundreds of feet, spinning like a wheel and whistling like shrapnel. Each rock is like a buzz saw and would destroy anything in its path, but we felt we were in the Lord's will and continued climbing the slope. ●



Editor's note: This excerpt was adapted from Dr. John Morris' recently released booklet *Noah's Ark: Adventures on Ararat*, which recounts some of his adventures as he led teams in search of Noah's Ark. His scientific expeditions provided critical Flood research in the ensuing years—research made possible by the generous support of countless ICR donors. With that in mind, we chose this booklet as our Christmas present

to ICR donors who have supported our current research projects this past year. It should arrive in early December. If you'd like to receive a copy, simply ask for the booklet with your next gift to ICR.

Dr. John Morris has served ICR in many immeasurable ways for decades, contributing his expertise as a geological engineer to ICR's research and sharing his authoritative Flood knowledge with our readers. We are deeply saddened to inform you that he recently suffered a stroke and will be focusing on recovery in the months ahead. While he will continue to be a valuable part of our ICR family, Dr. Morris will no longer serve as president of ICR; he has been appointed President Emeritus by the ICR Board of Trustees. Please pray for Dr. Morris and his wife, Dalta. We appreciate your prayers for his continued healing and recovery.

Q: Are Animals the Result of Natural Processes or Creation?



A: Either the current animals on this planet somehow evolved from simple creatures or they suddenly appeared—amazingly complex the first time we find them—with no evolutionary ancestors. Put another way: Are animals the result of chance, time, and natural processes—or are they the result of purpose, plan, and special creation?

Biologists at Auburn University recently investigated the genome (DNA) of a ctenophore, a type of jellyfish, called the Pacific sea gooseberry (*Pleurobrachia bachei*). These small creatures have transparent bodies and often generate their own light. (You can view the fantastic display these creatures produce by typing in “ctenophore bioluminescence” on YouTube.) The researchers discovered that the species is quite unique, particularly in the design of its muscles and nerves.¹ As stated in the journal *Nature*:

Ctenophores (comb jellies) are enigmatic animals that combine two distinct nervous systems with an elementary brain-like centre and possess mesoderm-derived muscles appropriate to their predatory life.²

According to secular scientists, this discovery shakes the very foundation of Darwinism because, they contend, this new research places ctenophores at the evolutionary base of the animal kingdom—replacing sponges, as previously supposed. Auburn biologist Dr. Kenneth Halanych stated, “The

new genomic data overturns 150 years of scientific theories about the early evolution of animals.”³

The problem begins with the overt complexity of these “first animals.” Other evolutionists do not understand Ctenophora origins either:

Joseph Springer and Dennis Holley confess, “The phylogeny and taxonomy [evolutionary history] of ctenophora must be regarded as unsettled.”⁴

Peter Raven admits, “The phylogenetic position [i.e., where it belongs on the evolutionary tree] of the Ctenophora is unclear.”⁵

Dr. Halanych also voiced a second, more significant problem. He said, “There is strong evidence that animal nervous systems, and maybe neurons, have evolved at least twice independently.”⁶

Non-evolutionary scientists find this statement to be truly astounding.⁷ To have complex neurons or an elaborate nervous system evolve in the first place is impossible enough. But to have them evolve “at least twice independently” stretches all reason. When evolutionists say something evolved *twice*, it appears they mean they have no idea how the organ or animal evolved traits similar to those of unrelated creatures. Indeed, one large group of evolutionists said it best: “The origins of neural systems remain unresolved.”⁸ There’s no doubt about that from an evolutionary standpoint! The typical neuron and its process of electrical impulses

is a wonder, as any university physiology text will attest.

It is presumptuous for secularists to insist on a naturalistic origin for life on Earth in all its unparalleled sophistication—a clear hallmark of design (Ecclesiastes 11:5). Evolutionists do not know where ctenophores or their nervous systems came from, or where their placement should be on the evolutionary tree. But, “regardless of where ctenophores finally end up on the tree, the development and evolution of the complex nervous system of these creatures will be an enigma for some time.”²

It might be an enigma for evolutionists, but Genesis provides the true source of this amazing system—the Creator God of the Bible! ●

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Mr. Sherwin is Research Associate, Senior Lecturer, and Science Writer at the Institute for Creation Research.



JOB'S ICY VOCABULARY

By the breath of God ice is given, and the broad waters are frozen.

(JOB 37:10)

JAMES J. S. JOHNSON, J.D., T.H.D.

Institute for Creation Research scientists have repeatedly analyzed the Ice Age, showing how a solitary post-Flood ice age was both relatively brief and recent.¹ A scientific model based on the biblical account fits the geological facts much better than explanations offered by old-earth evolutionists.^{1,2}

However, beyond chronological data for a young earth,³ does the Bible provide evidence that corroborates the idea of a recent ice age? Yes. Although ignored by most readers, the vocabulary of the book of Job actually corroborates the scenario of a recent ice age caused by the global climate conditions that likely followed the worldwide Flood. ICR's founder Dr. Henry Morris wrote, "There are more references to cold, snow, ice, and frost in Job than in any other book of the Bible."⁴ How can a book's vocabulary be forensic evidence of global climate conditions?

To answer this question, consider how the word "snow" is generally more important to Alaskans than to Jamaicans. Imagine personal correspondence, such as emails or text messages, between Jamaicans compared to those of Alaskans. Who will repeatedly mention snow, ice, or blizzards? Unlike Jamaicans, Alaskans routinely use those words. Similarly, some Alaskans may on occasion refer to jerk chicken or reggae music, but Jamaicans will do so more often. Even in formal courtroom contexts the comparative frequency of word usage can provide objective evidence of communication habits concerning common life experiences.⁵

In essence, forensic evidence rules recognize that repetitive conduct, applicable to routine practice and "habit" behaviors, can help prove facts about no-longer-observable events of the past.⁵ How often a word is used can show the importance of that word or topic because it reveals what a particular communicator is frequently thinking about.⁶ Before a message can be sent, it must be composed. Communication begins with a creative selection process. Starting from a blank slate, a communicator must consider what is important enough to speak or write about. Composing messages requires purposeful selections from available options.

This decision-making process includes collecting and interpreting relevant information, then making value judgments about what should be said, followed by selecting and expressing words to purposefully carry the message to intended recipients.

Consider the snow-and-ice vocabulary used in the lively dialogues of Job's book:

Which are dark because of the ice,
And into which the snow vanishes. (Job 6:16)

For He says to the snow, "Fall on the earth";
Likewise to the gentle rain and the heavy rain of His strength. (Job 37:6)

From the chamber of the south comes the whirlwind,
And cold from the scattering winds of the north.
By the breath of God ice is given,
And the broad waters are frozen. (Job 37:9-10)

Have you entered the treasury of snow,
Or have you seen the treasury of hail? (Job 38:22)

From whose womb comes the ice?
And the frost of heaven, who gives it birth?
The waters harden like stone,
And the surface of the deep is frozen. (Job 38:29-30)

Cold comes from the north. God's breath gives frost, there are treasuries of snow and hail, and ice is delivered like childbirth! Does Job's icy vocabulary sound like Jamaicans talking or Alaskans? Job's book, which records events that occurred a few generations after the global Flood, uses language that fits the life experiences of people living during the post-Flood Ice Age. ●

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6. See Matthew 12:34b and 15:18.

Dr. Johnson is Associate Professor of Apologetics and Chief Academic Officer at the Institute for Creation Research.



It is unfathomable what it meant for our transcendent Creator God to become finite man. Nevertheless, the One who was “so much better than the angels” (Hebrews 1:4) willingly set aside certain features of His deity, descended from the authority of heaven’s throne, and “made Himself of no reputation, taking the form of a bondservant, and coming in the likeness of men” (Philippians 2:7). But even beyond stepping down from the glorious form of God to the humble form of a human slave, the King of heaven took on “the likeness of sinful flesh” (Romans 8:3) and “became obedient to the point of death, even the death of the cross” (Philippians 2:8). In this way, God graciously showed His great love for us by giving “His Son to be the propitiation for our sins” (1 John 4:10).

This perfect gift is the reason we celebrate Christ’s birth on Christmas Day, and its profound significance was best summarized by Jesus Himself: “For God so loved the world that He gave His only begotten Son, that whoever believes in Him should not perish but have everlasting life” (John 3:16). This is perhaps the best known and most loved verse in the entire Bible, and it surely has been the most effective in illuminating blinded minds and breaking hardened hearts to bring them to Christ and salvation.

The theme of giving is prominent in Scripture, with such words as “give,” “gift,” “gave,” etc., appearing more than 2,000 times. Genesis 1:17 records the first occurrence, when on the fourth day of creation God created the sun, moon, and stars “to give light on the earth,” and the last is Revelation 22:12, when Christ will return with His rewards “to give to every one according to his work.” Clearly, though, the greatest of all gifts was when God gave Himself for a lost and undeserving world—because it revealed the greatest love, met the greatest need, and had the greatest scope and pur-

GOD'S PERFECT Gift



The greatest of all gifts was when God gave Himself for a lost and undeserving world—because it revealed the greatest love, met the greatest need, and had the greatest scope and purpose of any gift that could possibly be conceived in the heart of God.

pose of any gift that could possibly be conceived in the heart of God.

Such a gift from God is abundantly sufficient to provide salvation and eternal life for the whole world. But a gift only becomes a gift when it is accepted, and the greatest of all tragedies is to see this greatest of all gifts ridiculed and scorned by humanity, or simply ignored by vast multitudes who need it so deeply. When the world turns down the perfect gift of Christ Jesus, they are turning down the source of all love, life, and truth. Ultimately, when God’s free gift of everlasting life is brazenly refused, the end result can only be everlasting death. God did all He could do when He gave His Son to suffer and die in our stead. Then what joy is ours to accept it, knowing we shall spend eternity in heaven with Him!

For all these reasons it is fitting that we

give gifts at Christmastime to emulate God’s first and most perfect Christmas “Gift” to us. ICR is so very grateful to all those who follow this example, thanking God daily for those who uphold our ministry with their gifts of prayer and finances. As *Acts & Facts* has shown this year, our agenda is full of new initiatives with great potential to reach the world for Christ, and your generous tax-deductible gift this season will be an even greater blessing to us as we make plans for the coming year. If you are able, please prayerfully consider how you can help. We promise to carefully apply it to our work for the cause of Christ, our Creator.

From all of us at ICR, may God richly bless you and your family this holiday season as we celebrate the birth of our Savior—God’s perfect gift to us. Merry Christmas! ●

Mr. Morris is Director of Donor Relations at the Institute for Creation Research.



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I am a 16-year-old who loves to study creation science. I have spent much time reading and listening to the seminars given. You guys are doing some great work.

— D.S.



The article “Doing the Lord’s Business” by Dr. [Henry] Morris in the October issue [of *Acts & Facts*] was perhaps the most important one I have read in the fifty-eight years I have been a Christian. Certainly one of the most—if not the most—instructive. Since I have never so much as dissected a frog, I could hardly be numbered among the scientists. So, after reading this article, I said to myself, “Well, I don’t need to read the rest of this issue, as I’ve had my blessing for today.” But “Something” kept me reading until I had devoured the entire issue. Our God is an awesome God! And that fact is underscored by the ministry of ICR.

— P.C.



I just want to express my thanks to ICR for producing *Unlocking the Mysteries of Genesis*. When I first heard this series was available I got excited. Then I ordered it, saw each video, and I got even more excited about the possibilities of this great teaching tool. Now we are showing each episode during Sunday evening services at our congregation. So far there has been nothing but a positive response from the members. Some are coming out to evening services for the first time!

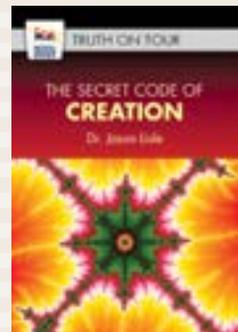
— D.M.

I don’t know exactly how I found your organization. When I did, as I always do, I put you under the microscope for quite a while and did some snooping around. There is so much false teaching today, perhaps even more so in the parachurch, that I am on guard with nearly everything I find. Eventually, after some time, and the confirmation of some fellow saints that I have come to trust, I subscribed to your daily email devotional. This has proven to be one of the biggest blessings of my life.

— S.F.

Finished watching Dr. Lisle’s *The Secret Code of Creation* DVD. A fascinating exploration into the complexity of a certain set of numbers that also reflects the omniscient mind of an omnipotent God. Wow!

— C.W.



We plan to use the [*Unlocking the Mysteries of Genesis*] DVD in our Wednesday adult Bible study class. We’re excited to have your excellent materials to help us better understand creation and be able



to respond to the questions of faith and science. Hearing evolutionists’ false doctrines preached in every area of life is such a grief.

No matter where we turn, it’s there—news programs, academia, TV shows, movies, and “documentaries” on public television. So your strong voice of truth over the years is deeply appreciated.

— D.S.

Corpus Christi Caller Times

Thanks to an article this weekend in the *Corpus Christi Caller-Times* I now know of you and your ministry. I see that you believe that science and Scripture can agree. Great. For years I have been teaching, in Bible classes with and without scientists, that science and Scripture *always* agree—when science is properly understood and Scripture is properly understood. When they don’t fully agree, it is because one or both are not properly understood. The Creator and Sustainer of all creation is also the Speaker of all Scripture. He is absolutely the Truth. In Him is no variance. He cannot lie by words or works. It is good to see you on the job. I will be signing up for whatever you publish. As a bomber pilot said, he knew when he was nearing the target because the flack got thicker. It seems that you are on course.

— R.M.E., M.D.

Have a comment? Email us at editor@icr.org or write to Editor, P. O. Box 59029, Dallas, Texas 75229.

Note: Unfortunately, ICR is not able to respond to all correspondence.

Unlocking the Mysteries of Genesis

THE CONFERENCE

A crowd of over 3,400 recently gathered at Grace Community Church in Sun Valley, California, to hear an all-star team of speakers teach about biblical creation truths. At the Unlocking the Mysteries of Genesis conference—co-hosted by The Master’s College and the Institute for Creation Research—scientists, pastors, and biblical advocates addressed topics such as why Genesis matters, discipleship through education, and dinosaurs living with man.

Dr. John MacArthur began with a powerful message on the relevance of Genesis. He was followed by Dr. Henry Morris III who further developed the conference’s theme of unlocking the mysteries of Genesis. Kirk Cameron underscored why Genesis is more than a peripheral teaching even in his role as

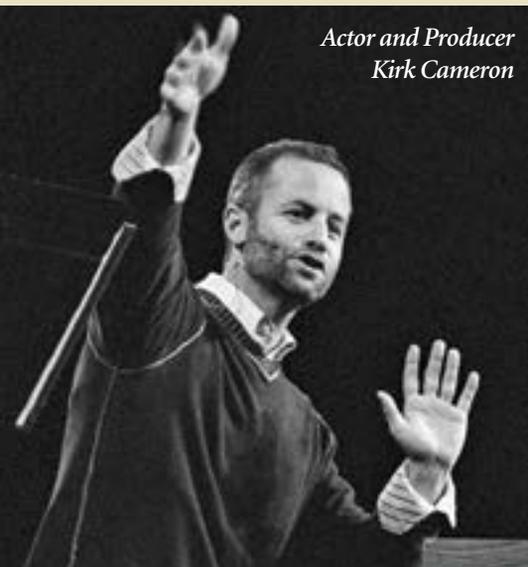
a producer and actor in Hollywood.

The conference included NASA astronaut Mission Commander Colonel Jeff Williams in a breakout session in which he shared his personal testimony. Todd Starnes from Fox News provided a journalist’s perspective, and Dr. Voddie Baucham concluded the conference with a compelling message about the importance of creation, using the marriage covenant between a man and woman taken from Genesis 2. Ph.D. scientists and biblical scholars from both ICR and The Master’s College offered their expertise in matters of science and Scripture. Conference participants came from 20 different states, including attendees from both Canada and Mexico, indicating a widespread interest in origins issues. The Master’s College is one of the only remaining Christian colleges that teaches

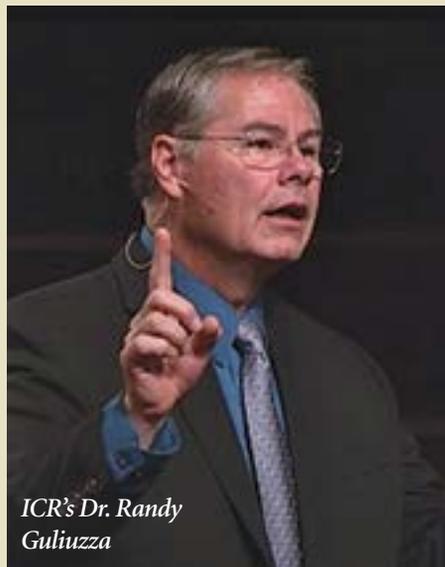
biblical creation. Over 250 prospective college students interacted with faculty during the conference activities. In addition to the large crowd in attendance, another 2,500 watched online, including a large viewing audience from other countries.

The conference kicked off Friday evening, ran all day Saturday, and addressed some of the most stimulating, relevant, and controversial topics of our day from a biblical and scientific perspective. As one conference-goer said at the close, “I didn’t want the conference to end...thank you for equipping us to give an answer to skeptics and believers alike!”

For more information on events or to schedule an event, please contact the ICR Events Department at **800.337.0375**, visit www.ICR.org/events, or email us at events@ICR.org.



*Actor and Producer
Kirk Cameron*



*ICR’s Dr. Randy
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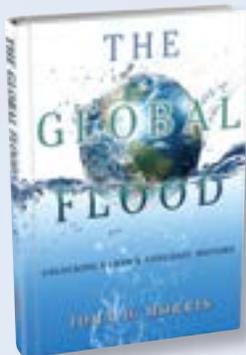


*Dr. John MacArthur
interviewed on KKLA*



*Full house. Grace Community Church
Sun Valley, California.*

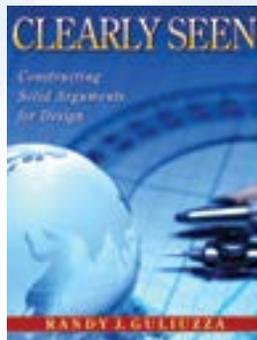
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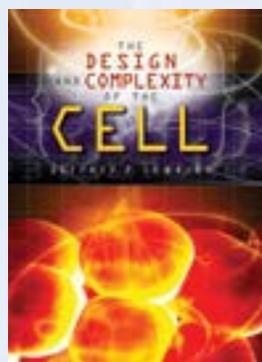
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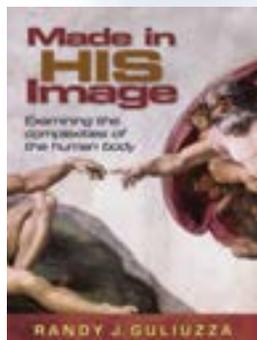
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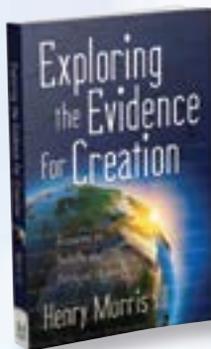
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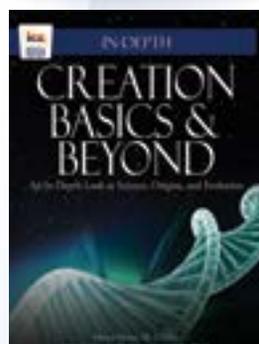
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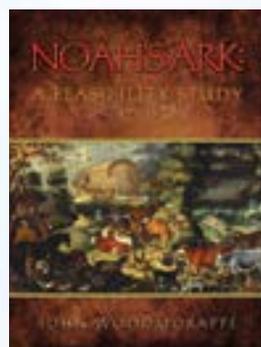
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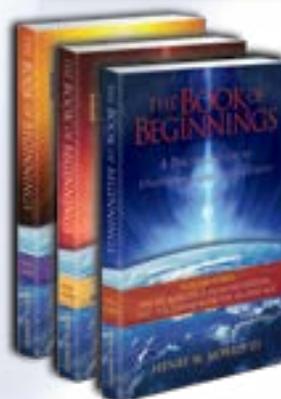
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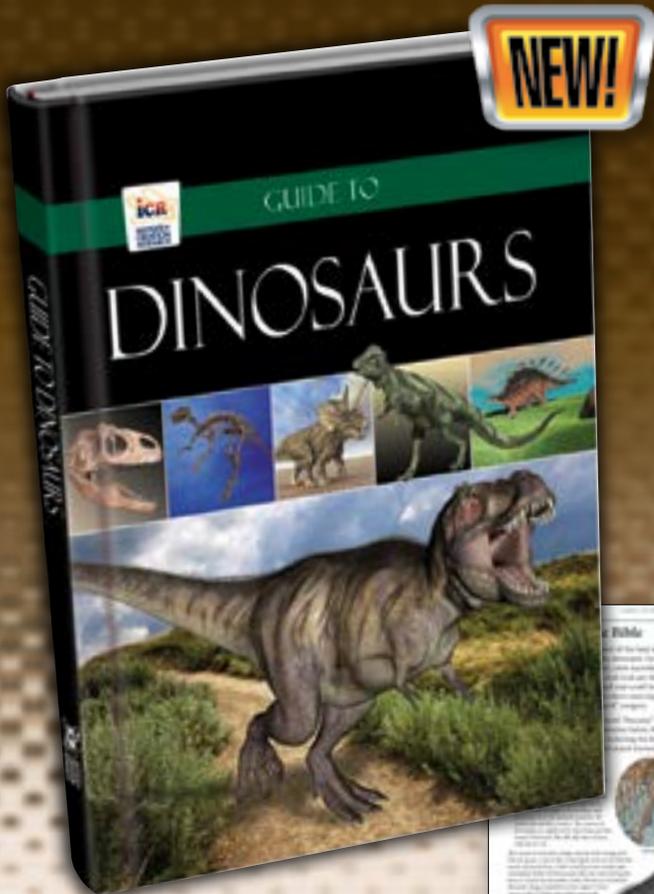
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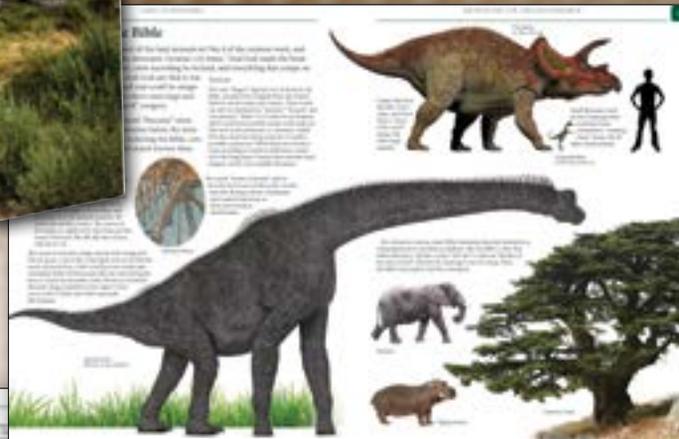
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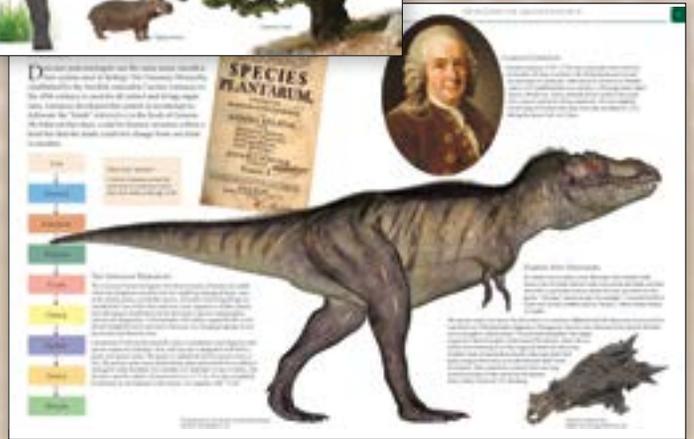
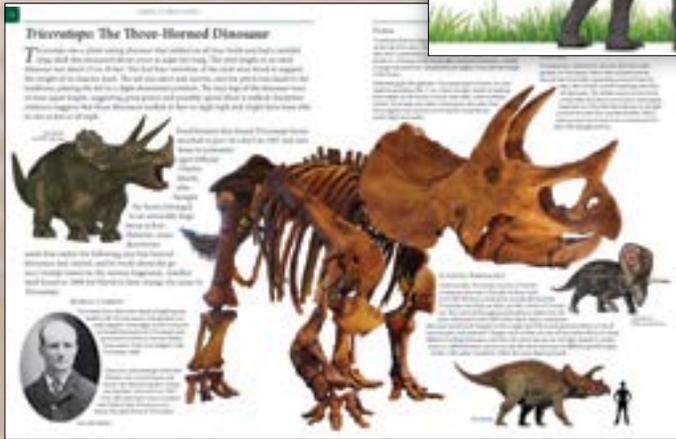
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