

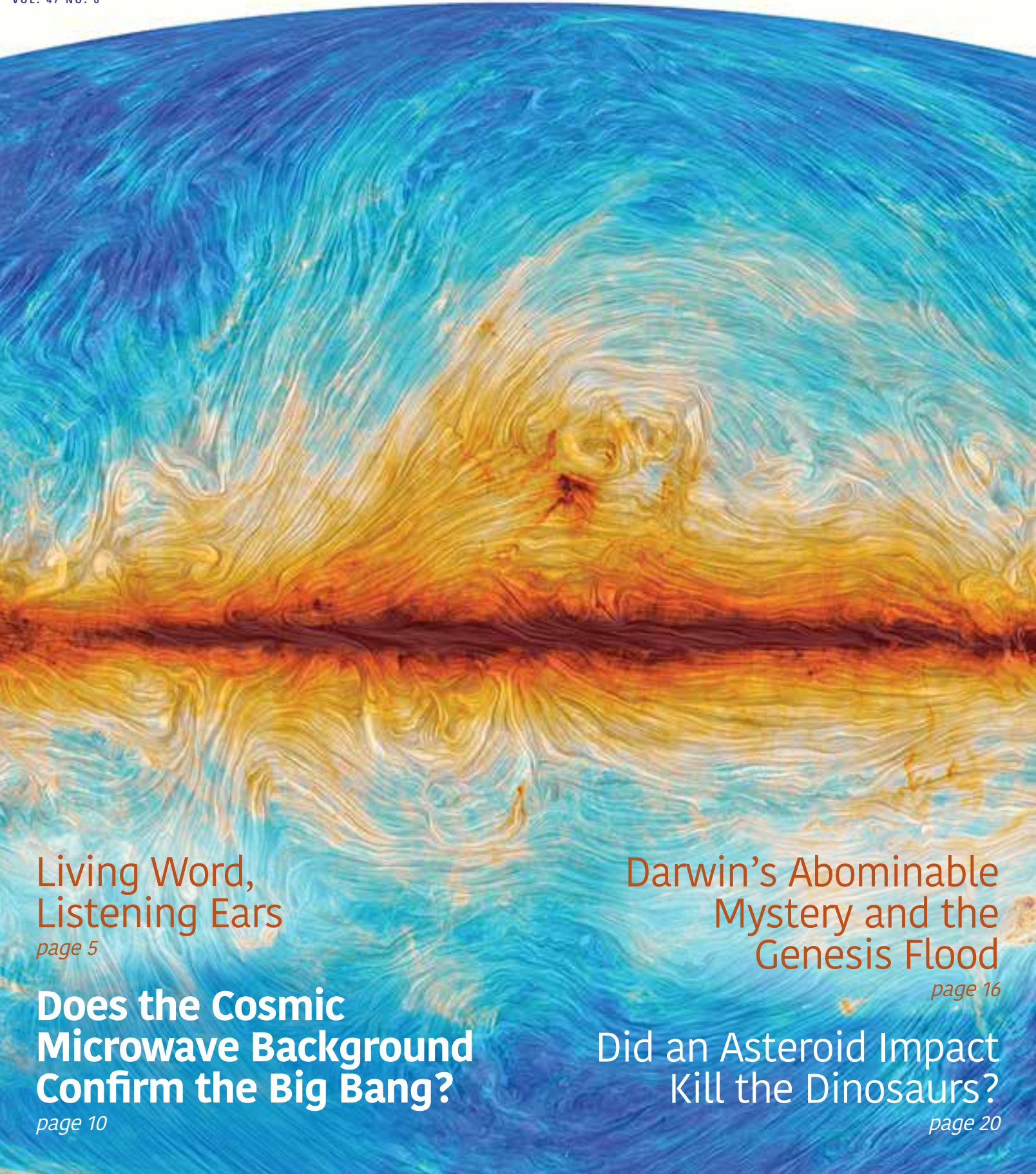
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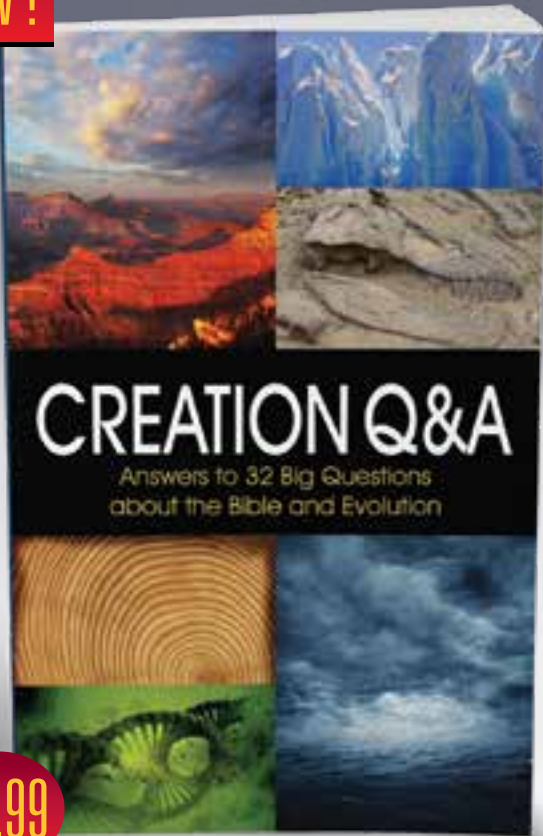
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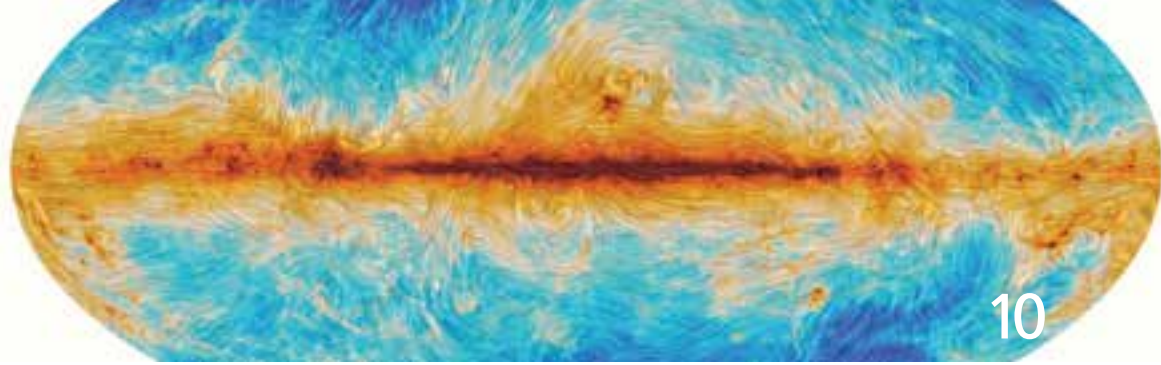
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Front cover: The interaction between interstellar dust in the Milky Way and the structure of our galaxy's magnetic field, as detected by ESA's Planck satellite over the entire sky.

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Sowing Seeds

My grandfather was a careful gardener. He prepared the soil months in advance of planting season. He meticulously laid out the straight rows, scooped out the dirt, and placed every seed exactly where he wanted. When he finished, the dirt was mounded around the site of each buried seed to hold the correct amount of water and nourish the seedling as it grew.

Because I watched my grandfather work with seed and soil for so many years, I've always been a little perplexed by the way the sower in Jesus' parable throws the seed all over the place—beside the road, on rocky ground, among thorns, and on good soil. Doesn't it seem like a waste? What kind of gardener does that?

A generous one. A loving, faithful, wise one.

Our Sower casts the seed everywhere, providing every opportunity for it to take root and grow, even in the hard-to-reach locations. The lost causes. The unexpected places. Our Lord offers "whoever" a chance to hear and receive His Word (John 3:16; 5:24). He wants us to understand it and bear fruit. No one is beyond His reach.

As believers, we have the opportunity to sow seeds of truth about creation. Jesus said not everyone will receive His Word, but we share it anyway in the hope it will land on receptive hearts. We know that sometimes we're the ones who plant seeds while another person will harvest the fruit later.

In this issue of *Acts & Facts*, Dr. Henry Morris III discusses the parable of the sower and the seed. In his feature article, "Living Word, Listening Ears," we see how people respond differently to the Word of God and how we are responsible to share His message regardless of how others respond. Dr. Morris says, "We must not become discouraged by the rejection of the many" (page 7). Even though it's easy to get discouraged when others don't get excited about the things of God, we have the awesome responsibility and

privilege to share the creation message.

Our scientists sow the seeds of truth as they share how scientific findings confirm the Bible. Dr. Tim Clarey shows us how limestone deposits match the biblical Flood account (page 9). Dr. Jake Hebert reminds us of "God's great care and attention for this planet" as he discusses the problems with the Big Bang model ("Does the Cosmic Microwave Background Confirm the Big Bang?" page 12). Dr. Jeffrey Tomkins and Dr. Clarey team up to point out how the fossil record "helps us determine the extent of the global Flood in the geological record" ("Darwin's Abominable Mystery and the Genesis Flood," page 16). Dr. Randy Guliuzza highlights the incredible design and "unequaled workmanship of the Lord Jesus Christ" in living creatures ("Adaptive Changes Are Purposeful, Not Random," page 19).

When the seed of the living Word takes root and grows in the hearts of those who hear and receive it, God allows it to bear fruit. As you share the truth about creation with others, don't get discouraged. Remember the sower in the parable and cast the seed of God's Word wherever you can. Be generous with His truth. And pray that it lands in the good soil of receptive hearts.



Jayme Durant

Jayme Durant
EXECUTIVE EDITOR

LIVING WORD, LISTENING EARS

HENRY M. MORRIS III, D. MIN.

“If anyone has ears to hear, let him hear.” Then He said to them, “Take heed what you hear. With the same measure you use, it will be measured to you; and to you who hear, more will be given.” (Mark 4:23-24)

article highlights

- Christ’s living Word is sown throughout the whole world.
- Some hear His call and accept salvation, but many reject Him or drift away.
- Humans tend to evaluate people by their outward success, but God’s Kingdom work uses a different measuring and reward system.
- Our works will follow us into eternity.

There are over 100 references in the New Testament to the necessity of having ears that will hear the message of the Scriptures. Some address the terrible results of not listening to what God has said. From his prison cell, Paul even told Timothy that “the time will come when they will not endure sound doctrine, but according to their own desires, because they have itching ears, they will heap up for themselves teachers; and they will turn their ears away from the truth, and be turned aside to fables” (2 Timothy 4:3-4). The majority of passages, however, stress the benefits of hearing the message that has been recorded, promising that the more one listens, the more one will understand Kingdom principles.

Some Will Not Listen

Two vivid illustrations from our Lord’s teaching speak to the way eternal truths are received in the world: the Parable of the Sower and the Parable of the Wheat and the Tares (Matthew 13; Mark 4; Luke 8). The illustration of the sower identifies the seed as “the word” and gives us the picture of how we can expect the word to be received when it is “sown” throughout the world. Sometimes the word is not understood (Matthew 13:19), and Satan comes immediately (Mark 4:15) and “takes away the word out of their hearts” (Luke 8:12). Clearly, some hearts will not be receptive to the truths of Scripture; their ears will not hear.

The Parable of the Wheat and the Tares speaks to this same issue from God’s perspective. The Son of Man

sows “sons of the kingdom,” and the devil sows “sons of the wicked one” (Matthew 13:37-39). Apparently, even the angels of God are unable to tell the difference (Matthew 13:28-29). They are told to wait and let them grow together until the end of the age before they are authorized to gather “those who practice lawlessness” out of His Kingdom and “cast them into the furnace of fire” (Matthew 13:39-42). Evidently, there are those among the children of the Kingdom who are mistaken for “ministers of righteousness” (2 Corinthians 11:15).

The illustration of the sower identifies the seed as “the word” and gives us the picture of how we can expect the word to be received when it is “sown” throughout the world.

Some Seem to Listen But Do Not Last

There are also some who respond to the word and “immediately receive it with gladness” (Mark 4:16). However, that immediate “joy” (Luke 8:13) fades when “tribulation or perse-

cution arises because of the word,” and they stumble (Matthew 13:21). Many pastors can affirm this disappointing reaction among those who initially seem to respond to the gospel but soon disappear or fall away from what they once embraced. The Bible tells us that once these ears have heard but later reject what they knew to be true, they cannot be rededicated to what they have spurned (Hebrews 6:4-6; 2 Peter 2:20-22).

Perhaps the most important principle we can gain from these parables is that some people (perhaps even the majority) will not respond to God’s Word—no matter how of-

ten they hear or how much they have experienced. Our job is to be His spokespersons, but some ears are shut tight.

Some Respond Positively But Will Not Embrace Eternal Values

Our Lord spoke of some seed that found root in the soil of the Kingdom, but the seed fell among thorns and “the cares of this world and the deceitfulness of riches choke[d] the word” (Matthew 13:22). They have heard the word but “are choked with cares, riches, and pleasures of life, and bring no fruit to maturity” (Luke 8:14). Apparently, the spiritual birth is real—so much so that the “servants of the owner” (the angels) are unable to “gather up the tares” without uprooting “the wheat” as well (Matthew 13:27-29).

The tares are sown by the “enemy” in the same field as the wheat (Matthew 13:25). The ultimate proof of what is sown will not show up until the harvest. Herein lies our dilemma. We would expect fruit to be available among those who claim to be God’s people, and we are often surprised by their indifference toward the Kingdom.

We would expect excitement for spiritual vision and a willingness to invest in eternal projects. Yet, when we seek their joyful participation within the fellowship of God’s people, we can become discouraged—even disillusioned—by their love for “this present world” (2 Timothy 4:10).

Given the warning that “narrow is the gate” and difficult to find, and that few find it (Matthew 7:14), we should not expect the majority of those professing to be part of the Lord’s family to be easily persuaded to commit their lifestyles and invest their resources in the things that embrace the Word of God or impact the souls of men.

Some Do Respond and Joyfully Produce Kingdom Fruit

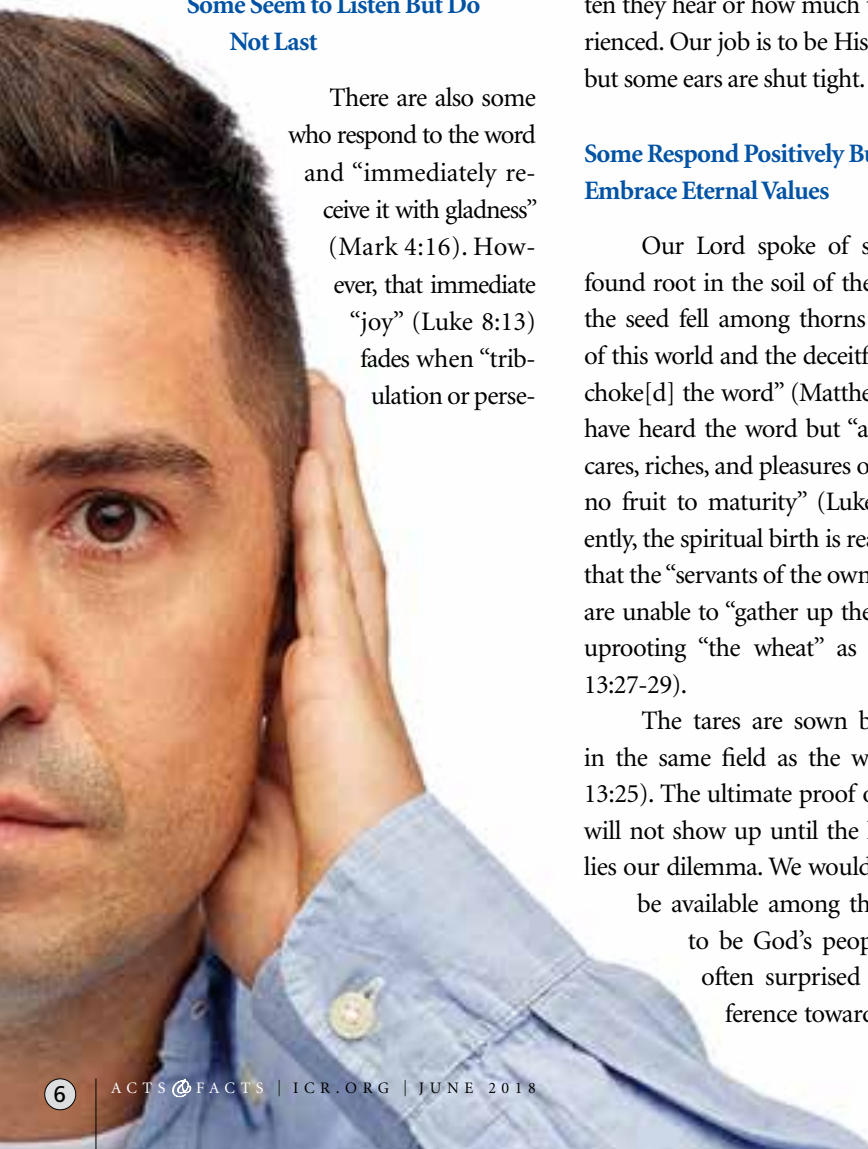
There are some, however, who “received seed on the good ground,” having heard the word with understanding and without the thorns surrounding them that might rob them of the fruit of new life (Matthew 13:23). Their ears are connected to a “noble and good heart” that retains the word, and they “bear fruit with patience” (Luke 8:15). These “are the ones sown on good ground, those who hear the word, accept it, and bear fruit: some thirtyfold, some sixty, and some a hundred” (Mark 4:20).

Yet, even among the precious minority who do hear, understand, and produce the eternal fruit of the “new creation” (2 Corinthians 5:17), even among these chosen there are significant differences between the levels of productivity.

God’s Gracious Reward System

Human evaluation tends to exalt only those who exceed all others. But God’s gracious gift of Kingdom work has a different measuring system.

To begin with, all the Kingdom parables point out that the word, the seed, the sowing, and the soil are all of God’s making. The gospel is sufficient for the sins of the whole world (1 John 2:2). The nobleman who left his servants in charge while



The gospel power lies in the word, not in the messenger. Our job is to be a constant witness of that power and expect the Holy Spirit of God to “convict the world of sin, and of righteousness, and of judgment” (John 16:8).

he went to a “far country” (Matthew 25; Luke 19) gave different levels of resources for the servants to invest until he returned. In one illustration, he gave the same amount to each of his servants and rewarded them on the basis of “how much every man had gained by trading” (Luke 19:15). In the other illustration, he gave each servant a different amount “according to his own ability” (Matthew 25:15). The rewards were proportionate to the work accomplished.

There was one servant who did nothing with the opportunity given; that “wicked and lazy servant” (Matthew 25:26) was rejected entirely and thrown into “the outer darkness” (Matthew 25:30). God is gracious to all those who bear fruit, even though the amounts are widely different. But God has no tolerance for those who waste the opportunity and reject the priceless gift of eternal life.

What Must We Learn from These Overarching Principles?

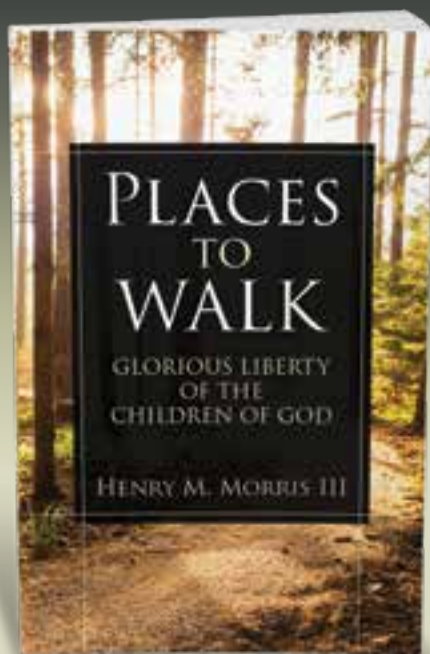
First, the message of the gospel and the responsibility of identity with the Creator are not popular. Many—perhaps the vast majority—will not respond positively to the gospel, and even many among those who appear to embrace it will not endure or invest their lives in eternal matters. We must not become discouraged by the rejection of the many. Some will hear and understand and will become part of the “general assembly and church of the firstborn” (Hebrews 12:23).

Secondly, the gospel power lies in the word, not in the messenger. Our job is to be a constant witness of that power and expect the Holy Spirit of God to “convict the world of sin, and of righteousness, and of judgment” (John 16:8). Once the “new creation”

has taken place and eternal life is granted, we will see the fruit among the redeemed, “some a hundredfold, some sixty, some thirty” (Matthew 13:8). God’s promise to us is that His Word “shall not return to Me void, but it shall accomplish what I please, and it shall prosper in the thing for which I sent it” (Isaiah 55:11).

Finally, our harvest and reward come with the “new heavens and a new earth” (2 Peter 3:13). Whether we are planting (evangelizing) or watering (discipling), “neither he who plants is anything, nor he who waters, but God who gives the increase. Now he who plants and he who waters are one, and each one will receive his own reward according to his own labor” (1 Corinthians 3:7-8). What a wonderful promise! As we “seek first the kingdom of God and His righteousness” (Matthew 6:33), our majestic Creator has guaranteed that our “works follow” us into eternity (Revelation 14:13). ✨

Dr. Morris is Chief Executive Officer of the Institute for Creation Research. He holds four earned degrees, including a D.Min. from Luther Rice Seminary and an MBA from Pepperdine University.



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Rapid Limestone Deposits Match Flood Account

Secular science has long taught that sedimentary rocks were deposited slowly over vast ages, but what does the research show? People are indoctrinated with the notion that enormous periods of time are necessary to explain rock layers. However, empirical evidence demonstrates this is false.

For example, clay, the most common sediment on Earth, doesn't slowly settle out of still water to form rocks. It must be deposited in energetic settings by moving water.¹ These results match the predictions of creation geologists, who interpret clay, the resulting mudstones and shales, and nearly all sedimentary rocks as rapid deposits that occurred during the year-long Flood.²

A second finding has uniformitarian geologists scratching their heads. A groundbreaking paper shows that lime mud (micrite) is also deposited by moving water and not in a slow-settling process as previously thought.³ Although some lime-rich mud rocks called *carbonates* have been interpreted to form in high-energy settings such as fossil-rich zones and aggregate particles, carbonate mud has always been thought of as forming in "quiescent ocean settings."⁴

Carbonates comprise 20 to 25% of the total sedimentary strata and can be quite thick. The Redwall Limestone in Grand Canyon is 400 to 800 feet thick, but some carbonates can exceed 3,000 feet.⁴ Carbonate rocks also contain about one-third of the world's oil deposits and are an important source of construction materials.⁴

The concept of slow-forming limestone strata has been taught as fact for so long it's ingrained in countless students' minds going back for generations. Uniformitarians have used the presence of these rocks to criticize the biblical Flood account, pointing out that thick deposits of "quiet water" carbonates must have taken millions of years to form.

But all that has changed, and this long-held belief is now shattered. Flume experiments have verified that carbonate mud isn't deposited slowly but rapidly by wave and current action.³ Laboratory experiments demonstrate that water flowing between 10 and 20 inches per second creates ripples and laminated carbonate mud layers *identical* to those observed in carbonate rocks.⁴

article highlights

- Contrary to traditional understanding, Earth's sedimentary rock layers could not have been laid down slowly over vast amounts of time.
- Observation shows virtually all layers were deposited by rapid water movement.
- Secular scientists should reevaluate their adherence to slow processes and accept catastrophism to explain their findings.

According to the study authors, "These experiments demonstrate unequivocally that carbonate muds can also accumulate in energetic settings." They added, "Observations from modern carbonate environments and from the rock record suggest that deposition of carbonate muds by currents could have been common throughout geologic history."³

Unfortunately, secular scientists deliberately forget that the global Genesis Flood was responsible for most of the rock "history" of all the continents on Earth (2 Peter 3:5-6). And conditions during the Flood

were anything but quiescent! Catastrophic water currents from many directions clearly washed across the continents in tsunami-like fashion, as described in Genesis 7:19: "The waters prevailed exceedingly on the earth, and all the high hills under the whole heaven were covered."

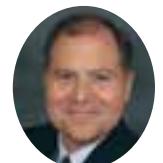
Carbonate muds were a large component of the sediments deposited by the rapidly flowing floodwaters. Secular scientists have again had to back away from their strict adherence to uniformitarianism and become more accepting of catastrophism to explain their findings: "The observations we report suggest that published interpretations of ancient lime muds and derived paleoceanographic conditions may need to be reevaluated."³

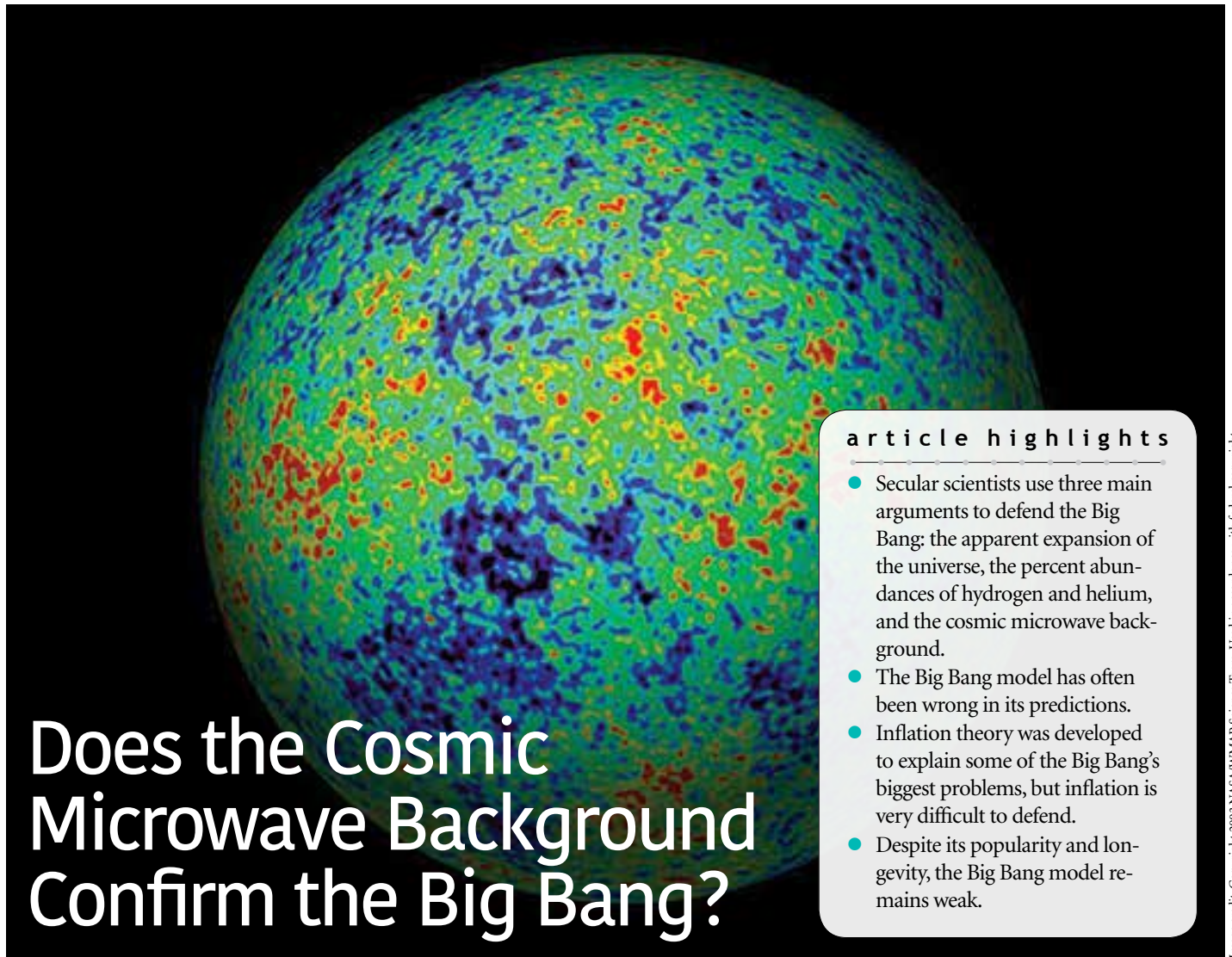
This study affirms the biblical Flood as a historical event. We can be assured that the thousands of feet of sedimentary rocks found across the continents stand as powerful empirical evidence against generations of uniformitarian dogma. Sandstones, mudstones, and carbonate rocks were deposited rapidly, not slowly, attesting to the power unleashed on the world during the Genesis Flood. ☞

References

1. Schieber, J., J. Southard, and K. Thaisen. 2007. Accretion of Mudstone Beds from Migrating Floccule Ripples. *Science*. 318 (5857): 1760-1763.
2. Snelling, A. E. 2009. *Earth's Catastrophic Past*, vol. 2. Dallas, TX: Institute for Creation Research, 493-499.
3. Schieber, J. et al. 2013. Experimental Deposition of Carbonate Mud from Moving Suspensions: Importance of Flocculation and Implications for Modern and Ancient Carbonate Mud Deposition. *Journal of Sedimentary Research*. 83 (11): 1025-1031.
4. Boggs Jr., S. 2006. *Principles of Sedimentology and Stratigraphy*, 4th ed. Upper Saddle River, NJ: Pearson/Prentice Hall, 159-167.

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article highlights

- Secular scientists use three main arguments to defend the Big Bang: the apparent expansion of the universe, the percent abundances of hydrogen and helium, and the cosmic microwave background.
- The Big Bang model has often been wrong in its predictions.
- Inflation theory was developed to explain some of the Big Bang's biggest problems, but inflation is very difficult to defend.
- Despite its popularity and longevity, the Big Bang model remains weak.

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Does the Cosmic Microwave Background Confirm the Big Bang?

Introduction

Three main arguments are commonly used to support the Big Bang model of the universe's origin:

1. The apparent expansion of the universe, inferred from redshifted spectra of distant galaxies;
2. The fact that the Big Bang can account for the observed relative abundances of hydrogen and helium;
3. The observed cosmic microwave background (CMB) radiation, thought to be an “afterglow” from a time about 400,000 years after the supposed Big Bang.

Although an expanding universe is consistent with the Big Bang, it doesn't necessarily demand a Big Bang as its cause. One could imagine that for some reason God imposed an expansion on His created universe, perhaps to keep the universe from collapsing under its own gravity. Of course, this assumes that secular scientists' interpretation of the redshift data is correct, which some creation scientists are starting to question.¹

The second argument isn't as impressive as it sounds. The Big Bang model is able to account for the observed abundances of hydrogen and helium because it contains an adjustable parameter called the *baryon-to-photon ratio*. Big Bang scientists simply choose a value for this parameter that gives them the right answer. Even so, it's not clear that the Big Bang can account for the total number of atoms (per unit volume) in the universe. And even with this adjustable parameter, the Big Bang cannot correctly account for the observed amounts of lithium isotopes.^{2,3}

However, the third argument, the existence of the CMB radiation, is a successful prediction of the Big Bang. We observe very faint but uniform electromagnetic radiation—radiation not associated with particular stars or galaxies—coming from all directions in space, and the intensity of this radiation is brightest in the microwave part of the electromagnetic spectrum. Big Bang scientists interpret this to be the oldest light in the universe, light emitted when the universe became cool enough for neutral hydrogen atoms to

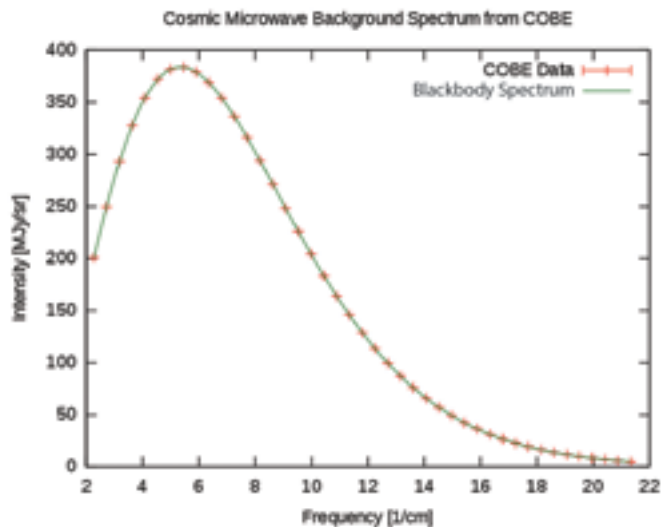


Figure 1. The intensity of the CMB radiation (as a function of frequency) very closely matches the intensity profile of a blackbody having a temperature of 2.7 Kelvins. Measurements were taken by NASA’s Cosmic Background Explorer (COBE) satellite.

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form. As the universe expanded, the wavelengths of these traveling photons were stretched so that most of them had wavelengths corresponding to the microwave part of the electromagnetic spectrum. The intensity of this CMB radiation (as a function of wavelength or frequency) very closely matches the intensity of the radiation given off by an ideal emitter/absorber that physicists call a *blackbody*. Such a blackbody would have a temperature of 2.7 Kelvins, or about -270° Celsius (Figure 1).

The CMB and Inflation Theory

Aside from successfully predicting the CMB’s existence, the Big Bang has often been wrong about the CMB’s details. In order to understand why, let’s review some of the Big Bang’s main assumptions.

The Big Bang model assumes there are no special places or directions in space. In other words, it supposes the universe is homogeneous and isotropic. Because the Big Bang assumes there are no special directions in space, any direction should look much the same as any other direction. And because space is supposed to look nearly the same in all directions, the CMB should *also* look nearly the same in any direction. This is indeed the case. So far, so good.

But Big Bang theorists soon realized that the uniformity of the CMB, even though required by their model, was also a problem for the Big Bang model. Such uniformity would require all points within the supposed primeval fireball to be characterized by the same temperature. Given that the Big Bang was supposedly undirected and purposeless, this requires very unlikely initial conditions. Generally,

these theorists don’t like this because it could be construed as fine-tuning, or evidence for a Designer. However, they could also explain the uniformity if radiant energy from one direction in space “warmed up” space in another direction. But this radiant energy travels at the finite (but still very fast) speed of light, and even the 13.8 billion years allowed by the Big Bang model is not enough time for this process to completely equalize the CMB everywhere in the universe. This is known as the *horizon problem*.⁴

So, theorists proposed that very shortly after the Big Bang the universe underwent a huge growth spurt called *inflation* in which space itself expanded faster than the speed of light. Supposedly, the part of the universe we see was, before inflation, small enough that traveling radiant energy *did* have sufficient time to warm the cool spots. Supposedly, inflation “ballooned” the universe so much that the part of the CMB we can observe is very uniform—as demanded by Big Bang assumptions.

Not surprisingly, there is no direct evidence for inflation. Supposed evidence for inflation made front-page headlines in 2014 but was quickly retracted.⁵ Moreover, inflation theory has become so strange that even secular cosmologists harshly criticize it.⁶

A CMB Surprise

According to the Big Bang model, however, the CMB should not be *perfectly* uniform. Although the Big Bang assumption of isotropy does not allow for temperature differences that stretch across large patches of the sky, it predicts that small patches (with an angular diameter of about 1° or less) should show extremely subtle variations in temperature, with some spots being *very* slightly warmer or cooler than 2.7 Kelvins.⁷ Secular cosmologists originally expected the sizes of these temperature differences to be about one ten-thousandth of a Kelvin, but later measurements showed that this expectation was 10 times too large; the actual measured differences were about a hundred-thousandth of a Kelvin.⁸

Creation astronomer Dr. Danny Faulkner often recounts his personal memory of how surprised secular scientists were when the measured temperature differences were smaller than expected. So, despite popular perception, observations have *not* always been in agreement with Big Bang expectations. Instead, the Big Bang has often been tweaked to absorb “anomalous” observations.

Challenges for Secular and Creation Scientists

Even so, there are other problems with the Big Bang interpretation of the CMB. Although small-scale (angular diameter of less than 1°) temperature anisotropies (differences) are expected in the Big Bang model, there also exist very subtle temperature anisotropies within the CMB stretching across *large* patches of the sky. Because the Big Bang assumes isotropy, these large-scale anisotropies

should not exist. Secular scientists had hoped that better data would remove these apparent anomalies, but higher-resolution CMB data obtained by the Planck satellite (Figure 2) disappointed them. George Efstathiou, a Cambridge astrophysicist and one of the leaders of the Planck satellite’s science team, explained in an interview:

The theory of inflation predicts that today’s universe should appear uniform at the largest scales in all directions....That uniformity should also characterize the distribution of fluctuations at the largest scales within the CMB. But these anomalies, which Planck confirmed, such as the cold spot, suggest that this isn’t the case....This is very strange....And I think that if there really is anything to this, you have to question how that fits in with inflation....It’s really puzzling.⁹

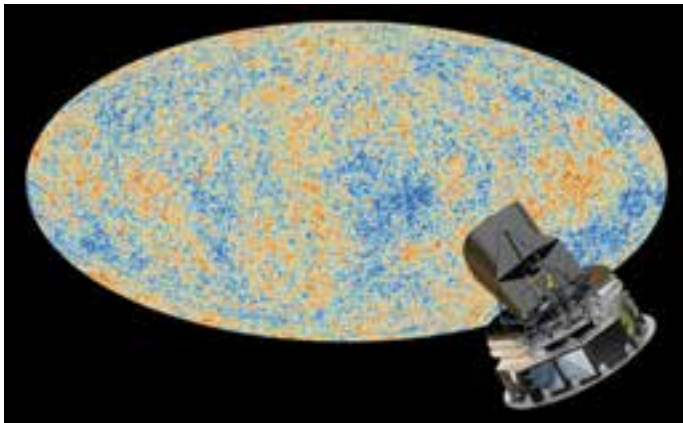


Figure 2. A sky map showing the very subtle temperature differences in the CMB. Yellow spots are slightly warmer than average, and blue spots are slightly cooler than average. The Planck satellite was used to obtain the data.

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To summarize, the Big Bang assumes that the universe is isotropic—space should basically look the same in all directions. Since the universe is assumed to be isotropic, the CMB should also be isotropic. And the CMB is very isotropic, which would seem to be a plus for the Big Bang model. But Big Bang cosmologists realized that isotropy was extremely unlikely, so they proposed inflation to explain *why* the CMB was isotropic. But there is no evidence supporting inflation theory, and the theory has become so weird that it’s now being harshly criticized by other secular scientists. The small-scale temperature differences in the CMB were about 10 times smaller than predicted, so the Big Bang was tweaked to bring these temperature differences into agreement with the model. But the high-resolution Planck data show that subtle large-scale features in the CMB are present—features that are not supposed to exist if inflation is correct!

But it gets worse. Some of these large-scale temperature differences in the CMB seem to be aligned with our solar system.¹⁰ As acknowledged by outspoken Big Bang proponent Lawrence Krauss:

But when you look at CMB map, you also see that the structure that is observed, is in fact, in a weird way, correlated with the plane of the earth around the sun. Is this Copernicus coming back to haunt us? That’s crazy. We’re looking at the whole universe. There’s no way there should be a correlation of structure with our motion of the earth around the sun—the plane of the earth around the sun—the ecliptic. That would say we are truly the center of the universe.¹¹

This apparent alignment, if real, is a huge problem for the Big Bang, as it seems wildly improbable that Earth should be in a special place in the universe. Don’t forget that according to the Big Bang, special places and directions aren’t supposed to exist at all! Creation scientists have no problem with Earth being near the center of the universe, as this might be expected given God’s great care and attention for this planet.

But the CMB also presents challenges for creation scientists since it needs to be explained within a creation context. Recently, Dr. Faulkner and creation physicist Dr. Russell Humphreys both proposed possible explanations for the CMB within a biblical world-view.^{12,13} However, more work needs to be done in order to refine and decide between competing models.

Conclusion

The successful prediction of the existence of a cosmic microwave background is arguably the Big Bang’s greatest success, and creation scientists need to provide a detailed alternative explanation for its existence. Even so, there are features within the CMB that are completely contrary to Big Bang expectations. Given that the Big Bang’s *strongest* argument has these problems, one can safely conclude that the scientific case for the Big Bang model is extremely weak, and no one, especially Christians, should feel compelled to accept it. ☒

References

- Hartnett, J. 2011. Does observational evidence indicate the universe is expanding?—part 2: the case against expansion. *Journal of Creation*. 25 (3): 115-120.
- Hebert, J. 2013. Dark Matter, Sparticles, and the Big Bang. *Acts & Facts*. 42 (9): 17-19.
- Thomas, B. Big Bang Fizzles under Lithium Test. *Creation Science Update*. Posted on ICR.org September 22, 2014, accessed March 7, 2018.
- Coppedge, D. F. 2007. The Light-Distance Problem. *Acts & Facts*. 36 (6).
- Hebert, J. Big Bang Evidence Retracted. *Creation Science Update*. Posted on ICR.org February 12, 2015, accessed March 9, 2018.
- Hebert, J. Big Bang Blowup at Scientific American. *Creation Science Update*. Posted on ICR.org May 29, 2017, accessed March 9, 2018.
- In the 13.8 billion years allowed by the Big Bang model, traveling radiation would only have had sufficient time to equalize the CMB in small patches of the sky (with angular diameters less than about 1°).
- Wright, E. L. 2004. Theoretical Overview of Cosmic Microwave Background Anisotropy. In *Measuring and Modeling the Universe*, Carnegie Observatories Astrophysics Series, vol. 2. W. L. Freedman, ed. Cambridge, UK: Cambridge University Press, 292.
- Discoveries from Planck may mean rethinking how the universe began. Posted on phys.org July 26, 2013, accessed March 9, 2018.
- Huterer, D. 2007. Why is the solar system cosmically aligned? *Astronomy*. 35 (12): 38-43.
- The Energy of Empty Space That Isn’t Zero: A Talk with Lawrence Krauss. *Edge*. Posted on edge.org July 5, 2006, accessed March 9, 2018.
- Faulkner, D. R. 2016. Thoughts on the *raqia’* and a Possible Explanation for the Cosmic Microwave Background. *Answers Research Journal*. 9: 57-65.
- Humphreys, D. R. 2014. New view of gravity explains cosmic microwave background radiation. *Journal of Creation*. 28 (3): 106-114.

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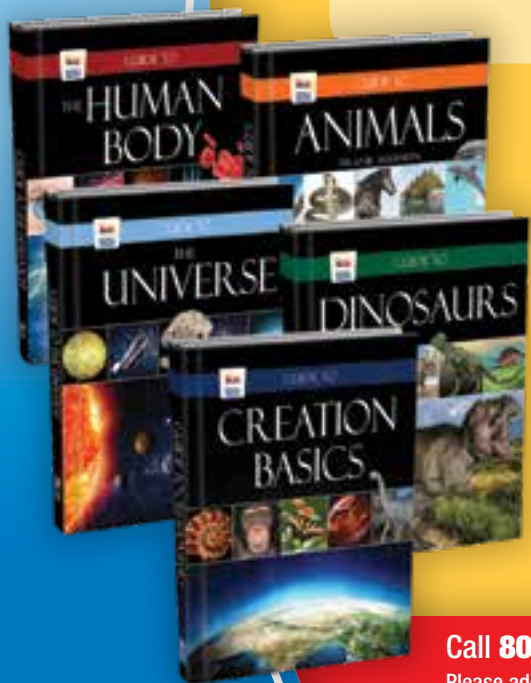
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Male-Female Differences Supported by Scripture and Science

The issue of gender is a frequent news topic. What is the Christian's position on this issue, and what does science document? Echoing Genesis 1:27 and 2:24, Jesus said, "From the beginning of the creation, God 'made them male and female.' 'For this reason a man shall...be joined to his wife, and the two shall become one flesh.'"¹

From this and other passages, the Christian church has always taught the gender complementarity concept—that God designed men and women for different corresponding social roles. This is also revealed in both the physical and psychological sexuality-compatible roles of males and females.²

Genetics Research

Genetically, except for enucleated (cells without a nucleus) blood cells, every human body cell is either male (XY chromosomes) or female (XX chromosomes). All healthy humans begin life with sex chromosomal differences: the Y contains over 200 genes, of which 72 code for proteins, while the X contains over 12 times as many, fully 874 genes. After a zygote (a fertilized egg) is formed, thousands of genetic differences are created due to an epigenetic process called *imprinting*. This system turns off a wide variety of genes in males and a wide variety of other genes in females depending on whether the gene came from the father or the mother. The result is that many genetic differences exist between the sexes well before birth.³

These male-female genetic differences have profound ramifications in medicine. For years, only males were generally tested to determine proper drug dosages. Then it was discovered that the popular sleep drug Ambien is metabolized differently in females. Consequently, women initially obtained about twice the proper systemic dose, resulting in some female users being overmedicated, and this produced a rash of traffic accidents. One reason for drug dosage differences is due to the major hormone variations between males and females.

article highlights

- God intentionally created built-in differences in men and women.
- Men and women are equal but not interchangeable.
- Both genders find their worth in the Lord since they are designed to reflect His image.

Adult males and females also have different physiological reactions to alcohol due to variations in alcohol dehydrogenase—a detoxifying enzyme. Alcohol dehydrogenase breaks down ethanol, and as a result females exhibit higher alcohol metabolic rates than males. In other words, liquor tends to have a stronger effect on women.

Research Using Computer Technology

A fruitful area of research compares males and females on psychological or physiological traits. Differences between males and females are virtually always found. Having males and females perform some mental activity, such as reading a paragraph or looking at a picture, often shows significant differences in their brain scans.

Even sleep cycles tend to be different. Females tend to go to sleep earlier, wake up earlier, and are more active in the morning than males.⁴ This fact has an adverse effect on boys and is one of several reasons for their poorer school performance compared to girls from first grade through college.

Occupationally, as a whole, women tend to make better neurosurgeons due to their superior fine-muscle coordination, and men make better diesel mechanics due to their superior gross-muscle coordination.⁵ Women lean toward careers that focus on people, like teaching and healthcare. Males tend to go into careers that involve working with things, such as manufacturing and agriculture.

Females tend to choose careers with more personal reward even though the pay may be relatively lower. Males tend to choose better-paying careers over those they might otherwise prefer, with income often being a major consideration.

Genetic and other research continue to find evidence of built-in differences in males and females, confirming the biblical record about the implications of God separately creating human males and females for slightly different, but compatible, roles. Together, they reflect His image. ☞

References

1. Mark 10:6-8.
2. Alunkal, A. W. 2017. *Paranoid Science: The Christian Right's War on Reality*. New York: New York University Press, 107-108.
3. Stump, J. B. 1985. *What's the Difference?: How Men and Women Compare*. New York: William Morrow.
4. Lusher, L. and V. Yassenov. 2018. Gender Performance Gaps: Quasi-Experimental Evidence of the Role of Gender Difference in Sleep Cycles. *Economic Inquiry*. 56 (1): 252-262.
5. Lee, P. C. and R. S. Stewart. 1976. *Sex Differences: Cultural and Developmental Dimensions*. New York: Urizen Books, 138.

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Darwin's Abominable Mystery and the Genesis Flood

JEFFREY P. TOMKINS, PH.D., AND TIM CLAREY, PH.D.

Charles Darwin frankly acknowledged that the profound lack of transitional forms in the fossil record for one fundamental type of creature evolving into another was “a valid argument” against his idea of progressive gradualistic evolution over deep time. Not only were undisputed transitional forms missing for the animal kingdom, the plant kingdom’s lack of such fossils was even more problematic.

About 20 years after Darwin published his famous treatise on evolution, he penned a letter to his close friend the famous botanist Joseph Hooker, complaining, “The rapid development as far as we can judge of all the higher plants within recent geological times is an abominable mystery.”¹

Now a leading authority in plant evolution at the Royal Botanic Gardens, Kew in London has stated in an editorial in the prestigious journal *Nature Ecology & Evolution*, “Although this abominable mystery is often cited today, and sometimes declared solved, few realize that the mystery is deeper today than it was for Darwin.”²

The chief evolutionary problem with the fossil record is the repeating theme of sudden appearance and stasis (lack of change). Organisms appear fully formed with no previous evolutionary precursors or ancestors, and then they stay the same for millions of years according to evolutionary dating.³ In fact, many modern living creatures appear nearly identical to their fossilized counterparts. Nowhere in the fossil record is this more dramatic than with the appearance and timing of the diverse, large group of flowering plants known as *angiosperms*, which produce seeds within an enclosure (i.e., a fruiting plant).

Plants are the foundation of the global ecosystem, a key factor in the carbon/oxygen cycle for life and the food chain in general. A majority of today’s plants are angiosperms. The key question for evolution is why these angiosperms appeared so suddenly and so widely diversified so late in the fossil record. In other words, why have evolution’s predictions failed so spectacularly?

article highlights

- Darwin admitted that the lack of transitional fossils was strong evidence against evolution.
- Specifically, he called the profound lack of transitional flowering plant fossils “an abominable mystery.”
- Scientists confirm this mystery is even worse today than Darwin believed.

The solution to this quandary is readily available in the Bible, which states that plants were created along with the rest of the earth and its inhabitants during an initial creation week. Complex systems must be assembled all at once for them to function, not bit by bit over slow eons of time. Thus, the creation of the earth and its unimaginably complex life cycle in a single six-day period not only makes good engineering sense but also solves the problem of the sudden appearance of the angiosperms, along with their stasis. The fact

that such delicate tissues as plant leaves, flowers, and soft stems could be perfectly preserved en masse in sedimentary rocks the world over is only explained by a rapid catastrophic burial in a global flood—also exactly as described in the book of Genesis.

From a creationist perspective, the angiosperm record also helps us determine the extent of the global Flood in the geological record, where the layers generally correspond to the floodwater levels and their violent ebb-and-flow depositional patterns. Since the appearance of angiosperms is found throughout the rock layers from the Cretaceous through the Neogene, with many entirely new groups of angiosperms found in both the Paleogene and Neogene,⁴ the Flood record clearly extends throughout most of the Cenozoic.⁵ God’s book, not Darwin’s, answers the abominable mystery. ✎

References

1. Darwin, F. and A. C. Seward. 1903. *More letters of Charles Darwin. A record of his work in a series of hitherto unpublished letters.* London: John Murray, 20-21.
2. Buggs, R. J. A. 2017. The deepening of Darwin’s abominable mystery. *Nature Ecology & Evolution*. 1 (6): 169.
3. Morris, J. D. and F. J. Sherwin. 2010. *The Fossil Record: Unearthing Nature’s History of Life.* Dallas, TX: Institute for Creation Research.
4. Magallón, S. et al. 2015. A metacalibrated time-tree documents the early rise of flowering plant phylogenetic diversity. *New Phytologist*. 207 (2): 437-453.
5. Clarey, T. L. 2017. Local catastrophes or receding floodwater? Global geologic data that refute a K-Pg (K-T) flood/post-flood boundary. *Creation Research Society Quarterly*. 54 (2): 100-119.

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Adaptive Changes Are Purposeful, Not Random

R A N D Y J . G U L I U Z Z A , P . E . , M . D .

Suppose you were in a game show with \$100,000 riding on how well you match the top three responses to this question: “What word means the opposite of designed?” You might have a good chance of winning if you say random, accidental, or unintentional.

If you also found these same words characterizing a scientific theory about how living creatures originated, then you might conclude it was an anti-design explanation—and you would be right. Darwinian evolution has been summed up in just that way. In a refreshingly clear statement about evolution in 1995, the National Association of Biology Teachers (NABT) said:

The diversity of life on Earth is the outcome of evolution: an unsupervised, impersonal, unpredictable and natural process of temporal descent with genetic modification that is affected by natural selection, chance, historical contingencies and changing environments.¹

The NABT’s 1995 position left no room for a supervised evolutionary process

article highlights

- The assumption of undirected genetic variability is a core tenet of evolutionary theory.
- Evolutionary arguments for random adaptations are intended to oppose the idea that life’s diversity is the purposeful workmanship of a supreme engineer.
- Undirected, random variation is emerging as another major evolutionary blunder as more and more studies discover regulated mechanisms that direct specific responses.
- Highly regulated genetic modifications that produce targeted adaptive outcomes are evidence for a design-based continuous environmental tracking model of adaptation.

as embraced by theistic evolutionists and definitely ruled out the intelligent design of organisms. If someone visited the NABT website today, they’d find that the current position statement on evolution is far less

candid about what evolutionary ideas imply than what evolutionists actually advance in their classrooms. Unlike position statements, evolutionary theory has not changed. Evolutionary literature still stresses the theory’s bedrock characteristics of unpredictability and randomness:

A classical or Darwinian evolutionary system embodies a basic principle: purposeless genetic variation of reproductive individuals, united by common descent, coupled with...natural selection of those rare individuals that fortuitously express the traits that complement or thwart the contemporary selective pressures or constraints. It’s a process replete with chance.²

But, it is far easier to claim that adaptable processes are non-purposeful (i.e., random with respect to a goal) than back it up with scientific evidence. Even descriptive terms that may be construed as somewhat synonymous with *random*—like unsupervised, impersonal, and unpredictable—all mean different things. Since evolutionists lack a test to demonstrate that evolution is



unsupervised and impersonal, the NABT dropped those terms. What test can rule out an underlying purpose for biological processes? Just because people can't currently predict a biological outcome doesn't necessarily mean it happens randomly. What is, therefore, driving this fixation on randomness?

The Intent of Evolutionary Randomness Is to Refute Design

Given that engineering design and purposefulness are inseparably linked, assertions that life's diversity arose from non-purposeful processes are intended to be a highly specific refutation of claims that living things were intentionally designed.³ This underlying philosophical intent of evolutionary theory rests on a core assumption that life evolves in a purposeless manner. Note how British evolutionist Helena Cronin affirms both the intent and the assumption:

All this apparent design has come about without a designer. No purpose, no goals, no blueprints. Natural selection is simply about genes replicating themselves down the generations. Genes that build bodies that do what's needed—seeing, running, digesting, mating—get replicated; and those that don't, don't.⁴

But without evidence that adaptive genetic variation is fully random or that adaptive processes are random with respect to a goal, bold assertions like Cronin's come across more like pulpit-pounding declarations that strongly point to an anti-intelligent-design motive.

On the other hand, if organisms express adaptations that are repeatable and predictable, this would strongly suggest they have internal processes that are controlled by nonrandom, logic-based mechanisms, which is an outcome more consistent with design than evolution. And this is what researchers actually find—repeatable outcomes of traits targeted to solve environmental challenges. These findings are a threat to Darwinian evolutionary theory but

are strong support for the continuous environmental tracking (CET) framework being developed in this article series.

Evolutionary Theory Rests on Random Genetic Variation

Stephen Jay Gould's *The Structure of Evolutionary Theory* uses concepts and assumptions from evolutionary literature to build a theoretical framework. Within Darwinism, he identified three criteria for genetic variability, stating, "Variation, in short, must be copious, small in extent, and undirected. A full taxonomy of non-Darwinian evolutionary theories may be elaborated by their denial of one or more of these central assumptions."⁵

The most important criterion is undirected variation. Gould emphasized that wholly unbiased variation is fundamental to evolutionary theory, going on to say, "In a sense, the specter of directed variability threatens Darwinism even more seriously than any putative failure of the other two postulates [copious, small in extent]." He clarifies the meaning of directed variation as "adaptive pressures [that] automatically trigger heritable variation in favored directions." Automatic triggers that lead to specific responses sound a lot like the outcomes and system elements associated with human-engineered systems, and thus, "Darwin clearly understood the threat of directed variability to his cardinal postulate of creativity for natural selection."⁵

Non-purposeful adaptive variability is a foundational assumption of the evolutionary theory known as the *modern synthesis* (MS). Therefore, to avoid the specter of a design-based explanatory threat to natural selection:

The core tenet of the MS is that adaptive evolution is due to natural selection acting on heritable variability that originates through accidental changes in the genetic material. Such mutations are random in the sense that they arise without reference to their advantages or disadvantages.⁶

Directed Adaptive Variability Happens Regularly

If the specter of directed variability threatens Darwinism, then the abundant findings of highly directed genetic variability is a dreadful prospect for some evolutionists. Consider how one study found that some yeast show a highly specific response to toxic levels of zinc by regulating an increase in genetic variability. The study's researchers recognized that their findings clash with evolutionary theory:

The assertion that adaptation occurs purely through natural selection of random mutations is deeply embedded in our understanding of evolution. However, we have demonstrated that a controllable mechanism exists in yeast for increasing the mutation rate in response to at least 1 environmental stimulus and that this mechanism shows remarkable allele selectivity.⁷

They added that "evidence for adaptation through genome-wide nonrandom mutation is substantial."⁷

Actually, in a much earlier paper titled "Evidence for the Adaptive Evolution of Mutation Rates," David Metzgar and Christopher Wills highlighted nonrandom genetic variance, which they also noted was contrary to orthodox evolutionary theory.⁸

A clarification of the word mutation may be needed. The common understanding of mutations is random mistakes in DNA. Mutations are seen as undesirable since they can cause diseases. Abundant references to mutations tend to reinforce "random genetic variation" within the public mindset. This, as we saw, is a core tenet of evolutionary theory. But, evolutionary reports could just be using the basic technical meaning of mutation, which is any type of change in DNA. People may be surprised to start hearing about "directed mutation" because in their minds these words are contradictory. Evolutionists could call these new findings "regulated genetic modification," but saying "nonrandom mutation" fits better with their anti-design agenda.

However, regulated genetic modifica-

tions are how many genetic changes should be classified—for instance, the regulated movement of defined segments of DNA called *mobile genetic elements*. The activation of mobile elements causes a type of genetic instability with specific adaptive outcomes. University of Chicago geneticist James Shapiro explains that “there is now an extensive literature on the great diversity of challenges and stress factors that activate genome instability...[which] include nutritional deprivation, intercellular signaling molecules, exposure to toxic substances” that couple DNA restructuring by mobile genetic elements to transcription. Shapiro details how this is not a random occurrence but highly specific, since “there is no question that cells have the ability to target transcription to particular sites in the genome as part of a biologically adaptive response to external and internal circumstances.”⁹

Another mechanism directs genetic variability by regulating specific signaling pathways to rapidly amplify the action of DNA that codes for a protein-making machine called a *ribosome*. The researchers of this mechanism said:

Here we show that signaling pathways that sense environmental nutrients control genome change at the ribosomal DNA. This demonstrates that not all genome changes occur at random and that cells possess specific mechanisms to optimize their genome in response to the environment.¹⁰

An online literature search would uncover other regulated mechanisms controlling genetic expression, as well as highly adaptive functions for certain genes indicative of nonrandom variable responses. A brief list includes regulated multiple gene copy usage, amplified micro-satellite mutation rate, repeatable synonymous mutation, taxonomically restricted genes, and GC-biased mutational heterogeneous gene conversion. In regard to this last mechanism, when evolutionary biologist Spencer Galen and his team studied high-altitude Andean house wrens, they found a mutational hot



spot (with a 10-fold higher rate of genetic modification) at a location specific for a change to hemoglobin. This adaptive response confers a higher affinity in the wren’s hemoglobin for oxygen.¹¹

When findings anomalous to current theory grow too numerous, at some critical point the inconsistencies must be addressed. An international conference titled *On the Nature of Variation: Random, Biased and Directional* was held at the University of Lisbon, Portugal, in October 2017. The conference aimed at “critically evaluating the rationale behind” evolutionary assumptions about “variation randomness in the light of new developments.” The topic for reevaluation on center stage was “the claim that natural selection provides a sufficient explanation for the evolution of most traits, [which] pervades all aspects of biological thinking. The underlying assumption supporting adaptationism is that variation is somehow random, namely, that it is neither biased nor directional.” They seriously questioned: “Why was variation characterised as random in the first place?...How useful is the doctrine of variational randomness? And how should it be characterised?”¹²

The Design-Based CET Model Expects Directed Variability

Asking why variation was characterized as random in the first place seems somewhat disingenuous since they could ask fellow evolutionists like the NABT or Helena Cronin, who would say, “No purpose, no blueprints, no design.” Materialists know that evolutionary emergences that are random with respect to a goal are a key argument against viewing life’s diversity as the

purposeful workmanship of a supreme engineer. That’s why undirected genetic variability is a core tenet of evolutionary theory, not just an easily abandoned corollary. But if the materialistic assumptions of random variability and of living organisms not being the product of engineering are wrong, then it was only a matter of time before real observational data would cause the whole randomness notion to blow up. The Lisbon conference seems like an attempt by evolutionists to distance themselves from a crumbling idea, especially given that the randomness of genetic variation was never demonstrated scientifically but was only a theoretical assumption that has been imposed on interpretations of data.

The CET model provides the clearest explanation for what we observe. If organisms continuously track environmental changes with mechanisms that correspond to elements in human-engineered tracking systems, then regulated genetic modifications are an expected outcome. Without question, the unequalled workmanship of the Lord Jesus Christ in crafting living things is clearly seen in how they are engineered to rapidly self-adjust to changing conditions. ✎

References

1. NABT Unveils New Statement on Teaching Evolution. *The American Biology Teacher*. January 1996, 58 (1): 61-62.
2. Greaves, M. and C. C. Maley. 2012. Clonal evolution in cancer. *Nature*. 481 (7381): 306-313.
3. Ayala, F. J. 2007. Darwin’s greatest discovery: Design without designer. *Proceedings of the National Academy of Science*. 104: 8567-8573.
4. Cronin, H. 1997. The Evolution of Evolution. *Time*. 92 (9): 80.
5. Gould, S. J. 2002. *The Structure of Evolutionary Theory*. Cambridge, MA: Harvard University Press, 145.
6. Charlesworth, D., N. H. Barton, and B. Charlesworth. 2017. The sources of adaptive variation. *Proceedings of the Royal Society B*. 284 (1855): 20162864.
7. Hull, R. M. et al. 2017. Environmental change drives accelerated adaptation through stimulated copy number variation. *PLOS Biology*. 15 (6): e2001333.
8. Metzgar, D. and C. Wills. 2000. Evidence for the Adaptive Evolution of Mutation Rates. *Cell*. 101 (6): 581-584.
9. Shapiro, J. A. 2013. How life changes itself: The Read-Write (RW) genome. *Physics of Life Reviews*. 10 (3): 287-323.
10. Jack, C. V. et al. 2015. Regulation of ribosomal DNA amplification by the TOR pathway. *Proceedings of the National Academy of Sciences*. 112 (31): 9674-9679.
11. Galen, S. C. et al. 2015. Contribution of a mutational hot spot to hemoglobin adaptation in high-altitude Andean house wrens. *Proceedings of the National Academy of Sciences*. 112 (45): 13958-13963.
12. On the Nature of Variation: Random, Biased and Directional, a CFCUL/BIODECON Conference. Posted on thenatureofvariation.campus.ciencias.ulisboa.pt.

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Q: Did an Asteroid Impact Kill the Dinosaurs?

A During a recent visit to a church, I told a group of children how and why Noah's Flood fossilized the dinosaurs. A boy told me he saw a documentary that said an asteroid impact killed the dinosaurs. Did an impact or the Flood kill them? Three science clues help answer this question.

One clue is frogs. An impact powerful enough to demolish thick-skinned, tough, monstrous dinosaurs all over the world surely would have erased thin-skinned amphibians first. The same goes for certain sensitive clams, but that didn't happen. Frog and clam fossils found near dinosaur bone fossils look the same as today's frogs and clams.¹ Harmful chemicals go right through porous frog skin, and silt chokes clam gills, so how did *they* survive and not dinosaurs?

Next, where is the impact crater? An impact large enough to wipe out all the world's dinosaurs should have left a huge, round pit. Most scientists who study this think a region beneath the southern Gulf of Mexico and northern Yucatan Peninsula represents the impact site. However, others



article highlights

- Many scientists believe a massive asteroid impact wiped out the dinosaurs.
- This impact would have killed off more sensitive creatures like frogs and clams—but it didn't.
- No known crater matches a huge impact like this.
- The sediments laid down by Noah's Flood better explain dinosaur deaths.

disagree for good reasons.

For one thing, the underground feature at that site is *not* round. Plus, an impact with worldwide destructive force would have melted rocks, but the site has very little melted rock. The rocks down there don't need an impact to explain them. Magma that rose from the depths could have made the rocks the way we see them today.² Why should we believe an impact killed the dinosaurs if we can't find a crater that fills the bill?

The size and shape of rock layers give us a third clue that the Genesis Flood, not an asteroid impact, best explains the dinosaur fossils they contain. Each of these rock layers can cover thousands of square miles! A single layer can cover several states. For example, the Hell Creek and Lance Formations were deposited at the same time. They span Montana and Wyoming, plus parts of other states.

How could an impact way down in Mexico deposit this thick layer so far away?

An impact should make a wedge-shaped layer, with mud thinning out from the crater. But actual dinosaur layers keep the same thickness for hundreds of miles. Noah's Flood could do that.

The Bible says that surging Flood waters took months to cover the whole globe. Sure enough, dinosaurs got buried in mud on every continent. And this Flood happened about 4,500 years ago, not 66 million years ago. Science supports this, too. Erosion over millions of years would have carved ruts. Where are the expected ruts between the layers? Instead of erosion ruts, the upper surface of each layer looks flat, as though hardly any time passed before the next layer was laid on top of it by the next huge Flood surge.

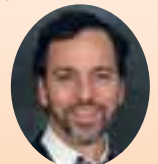
Also, flexible animal tissues still persist inside many fossilized dinosaur bones. Blood vessels, hemoglobin proteins, and whole bone cells could never last one million years, let alone 67 million.³ These rocks and fossils look young.

Did an asteroid impact kill the dinosaurs millions of years ago? No way. Noah's recent Flood formed dinosaur fossils fast all over the world.⁴

References

1. Hoesch, W. A. and S. A. Austin. 2004. Dinosaur National Monument: Jurassic Park or Jurassic Jumble? *Acts & Facts*. 33 (4).
2. Clarey, T. L. 2017. Do the Data Support a Large Meteorite Impact at Chicxulub? *Answers Research Journal*. 10 : 71-88.
3. Thomas, B. Best of 2017: Fleshy Fossils. *Creation Science Update*. Posted on ICR.org December 28, 2017, accessed April 16, 2018.
4. Some dinosaurs survived the Flood onboard Noah's Ark. Genesis 7:15 says that Noah rescued two of every land-dwelling creature with the breath of life in its nostrils, and dinosaurs had legs and nostrils. It appears that the few dinosaurs that lived after the Flood eventually went extinct from habitat loss and hunting. See Thomas, B. 2017. Dinosaurs and Dragon Legends. *Acts & Facts*. 46 (7): 14-16.

Mr. Thomas is Science Writer at the Institute for Creation Research and earned his M.S. in biotechnology from Stephen F. Austin State University.



Infinite Time Won't Rescue Evolution



Evolutionists use a variety of imaginative analogies to make the spontaneous generation of life seem plausible. One of the more familiar is the typing monkeys scenario, also known as the infinite monkey theorem. It proposes that hordes of monkeys, randomly typing on typewriters with unlimited supplies of ink, time, and paper, can eventually produce a work of Shakespeare.

This hypothetical scenario has been argued by evolutionists to imply that given enough time, anything material—including life forms that appear to be intelligently designed—can develop through random processes.¹ As *Acts & Facts* readers know, ICR scientists have repeatedly debunked this “it could happen” analogy, exposing its oversimplifying flaws.²

However, some people insist that even ridiculously small improbabilities are ultimately achievable. With infinite time, they say, any interrelated series of “lucky” coincidences can occur.

Is infinite time the ultimate “rescuing device” for evolution’s improbabilities? Evolutionists say yes, worshipping unlimited time itself as a “hero” (a Creator substitute, actually) that somehow carries the irrationally improbable into the realm of the possible.

But is literally anything possible in our universe given mere molecules-in-motion

and infinite time? As applied to life’s origins, the answer is absolutely no, for many reasons.

One such reason is entropy—the Second Law of Thermodynamics—which is the universal tendency in the real world toward a decrease in order and complexity. Entropy won’t go away, no matter how desperately evolutionary imaginations wish it to!

The naturalistic creed of most evolutionists, however, requires them to account for complexity naturalistically. Somehow a scenario must be developed showing how a primeval chemical molecule could evolve into a replicating protein, then a complex protozoan, eventually a large beast, and finally a human being with an infinitely complex brain... [However], there is a universal scientific law that all natural processes tend to decrease complexity in the universe. This is the famous Second Law of Thermodynamics, or law of increasing entropy... [the] decreased energy available, increased randomness and disorganization, garbled transmission of information, etc.³

Our universe is always governed by entropy, and the biochemical compounds needed for life, such as DNA, RNA, amino acids, lipoproteins, glycoproteins, etc., are no exception. Thermodynamically speaking, all of the basic biochemical building blocks needed to construct body parts for humans and animals are inherently and inescapably *unstable*. Thus, any accidental (random, lucky, undesigned) assembly of biochemicals in a so-called “primordial soup” would be statistically likely to disintegrate *with every passing moment*.

That means any accidental bio-assemblage would be ephemeral at best. Entropy ensures that infinite time is the destroyer of accidental biomolecules, not a “savior” that preserves and then builds them from simple to complex.

As Dr. A. E. Wilder-Smith once clarified, the typing monkeys scenario is a false analogy.⁴ Forgetting that the monkeys will die of hunger, and ignoring the problem of

article highlights

- Evolutionists claim long eons of time enable abiogenesis, the idea that random processes generated life from nonliving biochemicals.
- The universal reality of entropy negates this possibility.
- Time is evolution’s undoing, not its enabler.

sourcing unlimited paper, and omitting the inevitability of typewriter keys being ground to powder long before anything that appears intelligent can be accidentally typed—the typewriters themselves must use “biochemical entropy ink,” an ink destined to disappear over time.

Specifically, whenever “evolutionary typewriter” keys strike paper, the ink (representing any inherently unstable organic compound) deposited will continuously tend to disintegrate. In other words, the ink used at every split second thereafter is likely to disappear off the page. Consequently, any lucky Shakespearean words or phrases will not survive for any meaningful time!

Thus, eons of time guarantee that the simian keypunchers can never type out *Hamlet*—the imagined luck is “not to be.” Time plus entropy prevents the spontaneous generation of life and any hope of evolution. Getting to the real truth about origins requires opening and reading the pages of Genesis. ✎

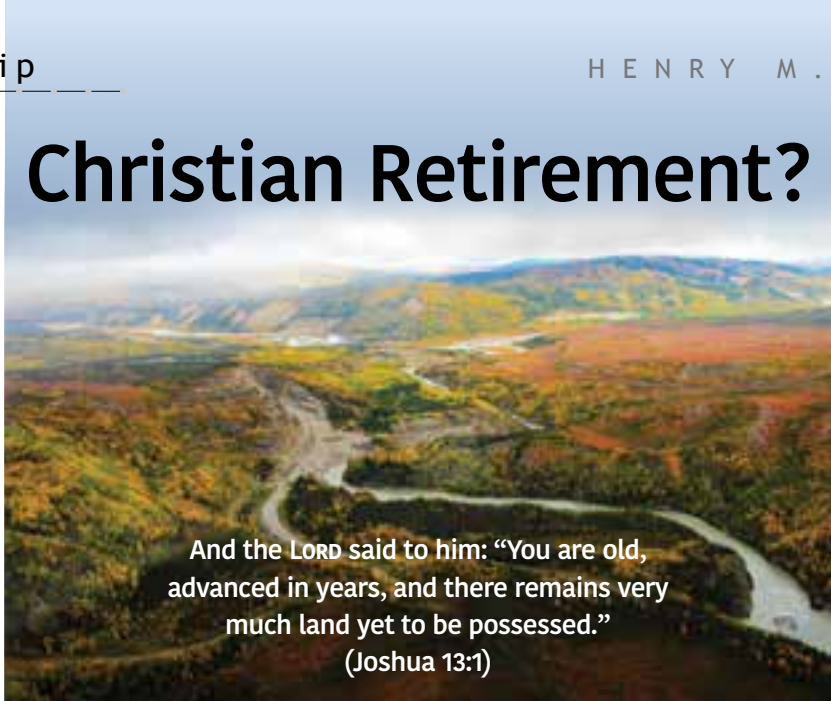
References

1. Morris III, H. 2013. Willingly Ignorant. *Acts & Facts*. 42 (3): 5-7, illustrating 2 Peter 3:5.
2. Gish, D. 1976. Origin of Life: Theories on the Origin of Biological Order. *Acts & Facts*. 5 (7). See also Tomkins, J. P. 2018. The Impossibility of Life’s Evolutionary Beginnings. *Acts & Facts*. 47 (3): 11-14; Morris, H. M. 1973. Evolution, Thermodynamics, and Entropy. *Acts & Facts*. 2 (3); McCombs, C. 2004. Evolution Hopes You Don’t Know Chemistry: The Problem of Control. *Acts & Facts*. 33 (8); Thomas, B. Critique of ‘Primordial Soup’ Vindicates Creation Research. *Creation Science Update*. Posted on ICR.org February 11, 2010.
3. Morris, H. M. 2002. The Mystery of Complexity. *Acts & Facts*. 31 (1).
4. When I was a doctoral student at the University of North Carolina in the early 1980s, Dr. Wilder-Smith discussed this topic during a Q&A session at an apologetics event there. See also Wilder-Smith, A. E. 1993. The Origin of Conceptual Thought in Living Systems. *Acts & Facts*. 22 (2).

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Christian Retirement?



And the LORD said to him: "You are old, advanced in years, and there remains very much land yet to be possessed."
(Joshua 13:1)

"I'm old. I'm tired. But I still got some kick left in me. And while God gives me strength, I'm dead set on doing what I can."

I chuckled as I read this opening line from a long-time ICR supporter. I'd sent a personal note of thanks for his generous gift for the ICR Discovery Center for Science and Earth History and included an update on recent developments. My brief note, it seems, inspired him to respond with this marvelous testimony. With his permission, I'd like to share his thoughts.

He began by sharing his personal grief that "the atheistic lie of evolution has stolen my children and grandkids...convincing them that the Bible isn't true." My heart broke for this man as his deep sorrow for his family's salvation poured from the pages. But he then spoke glowingly about ICR and our discovery center project. "ICR's research has uncovered loads of evidence that confirms God's Word," he stated, "so it's ABOUT TIME you put all that evidence on public display!" His family had "long ago stopped listening to me preach," he continued, "but I'm certain—I'm praying—they'll come see this."

He followed with some sweet words of encouragement and ended with a curious reference to God's charge to Joshua: "Now Joshua was old, advanced in years. And the LORD said to him: 'You are old, advanced in years, and there remains very much land yet to be possessed'" (Joshua 13:1). "Like

certainly "old" and "advanced in years"—so much so that God even told him he was old! But there was still "very much land yet to be possessed," and rather than allowing Joshua to enjoy the fruits of his labor, God sent him out once again to conquer new territory.

The testimony from our long-time supporter

reminds us there is no such thing as retirement for the Christian. For those who love and serve the Lord, there is always more Scripture to study, more resources to be earned and given to ministry, and more people to witness to and reach with the gospel. Even those who are limited in some way have much praying to do. No one who has tasted the redemptive love of Christ is ever too old to possess more "land" for Him.

Just as Joshua was called to continue God's work, we are called to keep working and sowing so that we may "still bear fruit in old age" (Psalm 92:14). ICR still has much "land" to win for the Lord, and the ICR Discovery Center will greatly expand our ability to do so. Conservative estimates show at least 100,000 people will visit each year, and many will come to accept Christ because of it. Please join with us through your financial gifts and intercessory prayers to reach "the generation to come" with the truth of "His strength and His wonderful works that He has done" (Psalm 78:4). ✨

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



article highlights

- Throughout Scripture, the Lord used many older people as His instruments of grace.
- The believer never retires from his or her calling.
- Christians are called to witness and work in God's Kingdom until He takes them home.

Joshua," our supporter concluded, "I am old and advanced in years. But God doesn't expect me to quit until He calls me home. And brother—neither should you!"

Joshua's campaign to conquer the land of Canaan seemed somewhat out of place in this letter. But as I reflected, I began to see how it applies not only to ICR's ministry but to all Christians everywhere.

References throughout the Pentateuch and the book of Joshua indicate that Joshua was at least 80 and likely older at the time of the conquest. He had endured 40 years in the wilderness, and after Moses' death spent several years leading the children of Israel in a long, hard battle for Canaan. By the time of the events in chapter 13, Joshua was most

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WOW! Just wanted to say that **Tim Clarey's [April 2018 *Acts & Facts*] article "Assembling the Pre-Flood World" is probably the best article I've ever read on the subject.** I really appreciate the info on the various land areas

and what likely happened at the different elevations—also enjoyed comments about Pangaea and the Dinosaur Peninsula. I would love to see larger graphics of the OmniGlobe projection system with informational pointers, if that were possible. Great information!

— J. N.

Editor's note: We plan to depict Pangaea and the various phases of the Flood year on the ICR Discovery Center's OmniGlobe in 2019.



Just bought this [ICR homeschool resources] kit. My husband and I have watched at least one new video each day. **I'm finding that my kids aged 8 and under are fascinated by all the information. It causes them to think and ask questions.** Which we can study together to find answers. I recommend this kit to all my friends and family.

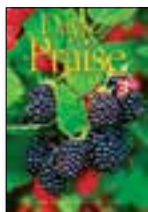


— P. B.



I'm a homeschooling mother of four. Growing up, I was always interested in science, but creation always seemed like some mystical, silly story. **Through ICR and other valuable ministries, I have gained such an appreciation and love of creation as a way of pointing to my heavenly Father.** I find myself studying the topics covered in *Acts & Facts*, not just to enjoy the science but because I have such a hunger and thirst for knowing God. We have adopted the motto "To know God and make him known" in our homeschooling journey, and ICR is a huge part of this!

— A. B.



Thank you for the *Days of Praise* devotional. It provides spiritual meat which is edifying. I used to read [another devotional] which was good for a young Christian, but now it only seems like fluffy cake and ice cream. In the past,

the rich, deep devotionals in *Days of Praise* were a bit too much to take in, but now I find them very enriching.

— T. W.



Earlier this month, an atheist made several anti-creation comments about how mankind had to be at least 90,000 years old, and he stated some scientific "facts" against God and His ignorant followers. As I listened, I realized that no one was refuting his claims. I am usually non-confrontational, but as a long-time subscriber of *Acts & Facts* I knew too much to keep quiet. So, for the next 15 minutes, I brought up many infallible proofs supporting a young earth. **However, after reading the article "Communicate Creation with Mirror Questions" in the April edition, it really got my attention about how Jesus related to the lost. May Christ tender my heart toward my unsaved co-worker.**

— J. T.



What a fine job Brian Thomas did in his article "Communicate Creation with Mirror Questions" in your April 2018 issue of *Acts & Facts*. He nicely justified his approach from Scripture, the smokescreen demolition strategy. **It's such a wonderful and Christ-like way to cut through apparent "gotcha" barbs from evolutionists, and most of the ones we deal with are not university professors but everyday non-scientists who are only parroting what they've been brainwashed to think.**

— R. D. P.



I'm excitedly watching the progress of the ICR Discovery Center. I would also like to compliment you for your financial position. I'll be very honest, until you spelled

out your position in *Acts & Facts* I didn't feel very motivated to give. In this day and age we are bombarded with pleas for money, and there is no way to help everyone. I only give to causes with similar values as my own, so when I realized how this project is being funded I immediately felt very motivated to help.

— H. O.

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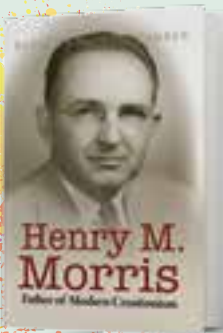
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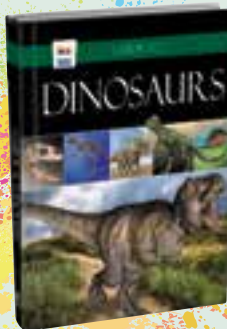


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