

Why Believe in God?

Ben Deaver @ Tallgrass Church on 6/10/18

Pray over Ron and Barb!

Tallgrass Church Mission Statement: Because God first loved us, we exist to love God and love our neighbors.

- We've talked about the unique love of God but we've not talked about why even believe in God in the first place.

Goals:

1. Clues—Answer questions people may have; both non-believers and believers alike.
2. Equip—Equip us to help our neighbors in their faith journey.
3. Awe—Move us to greater awe and wonder before our Creator. Reclaim a supernatural worldview.

Four Weeks:

1. Why believe in God?
2. Why believe the Bible?
3. Why believe in Jesus?
4. What's my next step?

Encouragements for Your Spiritual Journey:

1. Don't Dump Your Brains Out
2. Don't Be Afraid to Take a Step of Faith
 - a. If we needed 100% certainty we wouldn't do anything.
 - b. Example: Taking medication for a problem. Going out to eat. Buying a car. Getting married.
 - c. We all exercise faith. The question is what kind of faith will you exercise? Blind faith or reasonable faith?
3. Don't Give Up the Search
 - a. Let's take the BIG questions in life seriously.
 - b. I'm so tired of apathetic people. Sorry if that offends you but then again, if you're truly apathetic then you probably don't care.
 - c. If there's even a tiny chance that the claims of the Bible are true then wouldn't it be worth considerable exploration? Or at least a little exploration? What do you have to lose? If the claims of the Bible aren't true the only loss to you is some hours of reading, study, thoughtful analysis, prayer, debate, and discussion. You may even gain a relationship or two. If it turns out to be true then there is a lot to gain, meaning in this life and eternal happiness.
 - d. If you're a close-minded person then nothing we say over these next few weeks will convince you to consider the claims of the Bible. But, if you're open-minded then I think there will be a lot of evidence given to you that will be interesting and you'll want to chew on.

Big Idea: Faith in God is the most reasonable response to the evidence around and within us. There is absolutely no problem with reconciling scientific discovery and faith in God. In fact, the deeper science digs the more reasonable faith in God appears to be.

What is faith?

- Not wishful thinking—Belief in something that you don't really think is true. Example: I have faith the Cleveland Cavaliers will beat the Golden State Warriors in the NBA Finals next year even though all evidence points against this happening.
- Faith is a reasoned response based on evidence. Growing assurance/conviction based on evidence
 - Cumulative case built by evidence
- We are to take a step of faith rather than a blind leap of faith.
- 100% certainty is not attainable. But a growing and reasonable basis for faith in God is.
- Doubt is normative to the human experience. In fact, without any doubt there is no place for faith.

Building a Case for God—Evidence

- We're not using the Bible as authoritative for this talk because most people in our culture don't look at it as authoritative. WE believe it's authoritative but most don't.

Pray!

Look Outside at the Universe!

Clue 1: The Origin of the Universe

- Either God created the universe, or it "just happened" – and both require faith. We're talking about the Mysterious Big Bang!
- Every group of people in the world thought the universe was eternal, with one exception which we'll get to later, until the 20th century. This includes the Enuma Elish creation story that so many claim is so similar to the Biblical account of the universe. <http://contradictionsinthebible.com/genesis-1-not-a-creatio-ex-nihilo/>

2nd Law of Thermodynamics—Rudolf Clausius and William Thomson (Kelvin) in 1850

- The Second Law of Thermodynamics was one reason scientists began to believe that perhaps our universe had a beginning. This law basically states that the amount of useable energy will decrease in a closed system. The universe is currently in process of burning up all its useable energy. The first formulation came in 1824.
- Our stars are at about mid-burn. They won't burn forever in the future. They knew and we know this to be true. That means they haven't burned forever in the past.
- Paul Davies (Agnostic physicist) "Chance or choice: *Is the Universe an Accident?*" *The New Scientist*. November 16th, 1978. 506. Studied under Fred Hoyle at Cambridge University.
 - "The Universe is like a clock slowly *winding down*. How did it get *wound up* in the first place?"

Theory of Relativity—Albert Einstein in 1917

- 1917, Albert Einstein's theory of relativity demonstrated that the universe was either in a state of expansion or contraction. Einstein resisted this conclusion and insisted that the universe was static. He later called this "the biggest blunder of my life." The universe wasn't static but was in a state of motion.
- Within a decade, two mathematicians developed a theory based on Einstein's gravitational formula that the universe was in a state of expansion. This would be the first such proposition ever, with the one exception I mentioned earlier and we'll get to later.

Cosmological Redshift—Edwin Hubble in 1929

- A few years later, in 1929, Edwin Hubble discovered the light of distant stars was red-shifted. This meant the stars were speeding away...extremely rapidly, as it turns out.

Cosmic Microwave Background—Robert Wilson and Arno Penzias in 1964

- Confirmed in 1989, a satellite detected a haze of background radiation, covering the entirety of the universe.
- “The most impressive direct piece of observational support for the Big Bang is the universal presence of radiation permeating space...” —Roger Penrose in *The Road to Reality: a Complete Guide to the Laws of the Universe*
- If the kids shoot off fireworks in a room and I walk in right afterwards, I may not see my kids scurrying away as fast as they can but I’ll see the residue of their activity.

The Origin of the Universe (The Facts of the Big Bang)

- The discovery of the Big Bang is not a religious theory.
- You could find this theory in any science textbook.
- This view is a consensus in modern cosmology, except for a few quacks.
- Stephen Hawking (Agnostic physicist) and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton, N.J.: Princeton University Press, 1996), 20. Lucasian Professor of Mathematics at the University of Cambridge for 30 years.
 - “Almost everyone now believes that the universe, and time itself, had a beginning at the Big Bang.”
- Paul Davies (Agnostic physicist) *Cosmic Jackpot: Why Our Universe Is Just Right for Life*. Boston: Houghton Mifflin, 2007. 66-69. Studied under Fred Hoyle at Cambridge University.
 - “In the past [the universe] was smaller. If we run the expansion in reverse for 13.7 billion years, then the ball shrinks to a single point, a single, sizeless dot. And then...? Nothing—the ball has vanished!”
- John Barrow (Agnostic physicist) and Frank J. Tipler. *The Anthropic Cosmological Principle*. Oxford [Oxfordshire: Oxford UP], 1986. 442. Research Professor of Mathematical Sciences at the University of Cambridge.
 - “At this singularity, space and time came into existence; literally nothing existed before the singularity, so, if the Universe originated at such a singularity, we would truly have a creation *ex nihilo* [or ‘out of nothing’].”

What *were* your choices back in the day? The old atheistic polarity: God or Matter and Energy

What *are* your choices now? The new atheistic polarity: God or Nothing!

- Quentin Smith (Atheistic Philosopher)—Craig, William Lane., and Quentin Smith. *Theism, Atheism, and Big Bang Cosmology*. Oxford [England: Clarendon, 1993. 135. Professor of Philosophy at Western Michigan University.
 - “The most reasonable belief is that we came *from* nothing, *by* nothing, and *for* nothing.”
- Is this the most reasonable belief?
 - James Rochford, *Evidence Unseen*, “Is it more reasonable to believe that *something* created something or *nothing* created something? Atheists used to argue that the Bible was unreasonable because it said God could create something from nothing. But now, atheists are claiming that *no one* created *something* from *nothing*.”
 - As Christian scholar, William Lane Craig puts it, it’s easier to believe a magician pulled a rabbit out of a hat using real magic than to believe the atheistic account of the Big Bang. At least you already have a magician and a hat with which to work as opposed to no one pulling a rabbit from nothing!
 - Matter and energy can’t create matter and energy. Something truly supernatural must’ve created everything out of nothing.
 - BTW, once you believe that a supernatural God created everything out of nothing then it’s not nearly as difficult to believe in the miracles recorded in Scripture. That’s just a freebie.

The Ancient Jews—Early adopters to believing the Universe had a beginning!

- Remember the group of people I mentioned who long ago were the first to believe that the universe had a beginning, a belief held by all sane people today? I was referring to the Jews. They have always held the view that the universe had a beginning, long before scientific experiments were a thing. If you took a time machine

back three thousand years and asked a Jewish man, “How did you know that the universe had a beginning?” Know what he’d tell you? “God told us!”

- Robert Jastrow (agnostic physicist), *God and the Astronomers*, commenting on the discovery that the universe had a beginning says...
 - “This is an exceedingly strange development, unexpected by all *but the theologians*. They have always accepted the word of the Bible: In the beginning God created heaven and earth.”
 - “For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.”
 - **1 Corinthians 1:20** Where is the one who is wise? Where is the scribe? Where is the debater of this age? Has not God made foolish the wisdom of the world?
- The conclusions of the Big Bang were opposed by scientists early on because of the implications:
 - Arthur Eddington (astrophysics) wrote in 1931, “I have no axe to grind in this discussion [but] the notion of a beginning is repugnant to me... I simply do not believe that the present order of things started off with a bang... the expanding Universe is preposterous... incredible... it leaves me cold.”
 - Emotionless scientist? I think not.
 - Geoffrey Burbidge, late atheistic professor of astronomy at the University of California, San Diego, despised the theological implications of the Big Bang so much that he said anyone who held to it was joining “the first church of Christ of the Big Bang.”
 - Walter Nernst, German chemist and physicist, “To deny the infinite duration of time would be to betray the very foundations of science.”
 - Phillip Morrison of MIT wrote, “I find it hard to accept the Big Bang theory; I would like to reject it.”
 - Allan Sandage of Carnegie Observatories wrote, “It is a strange conclusion...it cannot really be true.”
- These atheistic scientists don’t seem too comfortable with the Big Bang, not because of the scientific facts, but because of the theological implications. They seem to have a lot of emotion wrapped up in their conclusions here. I can’t really blame them. I wouldn’t be too comfortable either...if I refused to believe in the God who created everything out of nothing...including me.
- Coming to the conclusion that a Creator God created the universe out of nothing continues to be opposed.
- In his book, *The Grand Design*, Stephen Hawking writes—“Because there is a law such as gravity, the universe can and will create itself from nothing. Spontaneous creation is the reason there is something rather than nothing, why the universe exists, why we exist. It is not necessary to invoke God to light the blue touch paper and set the universe going.”
- John Lennox (theistic mathematician) responds to this quote saying this statement proves that “Nonsense remains nonsense, even when spoken by famous scientists, even though the general public assumes, they are statements of science.”

Clue 1: The Origin of the Universe—Let’s keep the facts straight and put our faith in the most reasonable place.

Clue 2: The Fine-Tuning of the Universe

Tales from Tuttle—Story of being at Tuttle Creek Beach and being in awe of how much life was around me. I got the sense that it was just popping up everywhere. I couldn’t stop the life from springing up if I had tried. This planet is the only place in the entire universe that we know of where life pops up like this. How did this happen?

Certain forces in physics, laws, constants, and initial conditions of the universe, like gravity and the rate of expansion of our universe, must be perfectly fine-tuned for life to exist anywhere in the Universe.

- Gravity—When Jesus spoke the universe into existence billions of years ago (aka the Big Bang), the matter in the universe was randomly distributed. There were no stars, planets or galaxies—just atoms floating about in the dark void of space. As the universe expanded outwards from the Big Bang, gravity pulled ever so gently on the atoms, gathering them into clumps that eventually became stars and galaxies. But gravity had to have just the right force—if it was a bit stronger, it would have pulled all the atoms together into one big ball. The Big

Bang—and our prospects—would have ended quickly in a Big Crunch. And if gravity was a bit weaker, the expanding universe would have distributed the atoms so widely that they would never have been gathered into stars and galaxies. The strength of gravity has to be exactly right for stars to form. But what do we mean by “exactly”? Well, it turns out that if we change gravity by even a tiny fraction of a percent—enough so that you would be, say, one billionth of a gram heavier or lighter—the universe becomes so different that there are no stars, galaxies, or planets. And without planets, there would be no life. .From biologos.org

- The other constants of nature possess this same feature. Change any of them, and the universe moves along a very different path. And remarkably, every one of these different paths leads to a universe without life in it. Our universe is friendly to life, but only because the past fifteen billion years have unfolded in a particular way that led to a habitable planet with liquid water and rich chemistry.

Four Examples:

- gravitational force constant; expansion rate of the universe; mass density of the universe; velocity of light
- Agnostic Paul Davies documents roughly “thirty knobs” that need to be finely tuned in order for us to be here having this conversation.
- Each of these laws and constants have a number attached to them that represent the improbability of the law or constant occurring. So try to wrap your mind around one of the smaller improbabilities of 10^{37} .
 - Cover the entire North American continent in dimes all the way up to the moon, a height of about 239,000 miles. In comparison, the money to pay for the U.S. federal government debt would cover one square mile less than two feet deep with dimes (in 2001). Next, pile dimes from here to the moon on a billion other continents the same size as North America. Paint one dime red and mix it into the billions of piles of dimes. Blindfold a friend and ask him to pick out one dime. The odds that he will pick the red dime are on in 10^{37} . And this is one of the smaller improbabilities.
- This is just one of the dozens of laws and constants that must be finely tuned and calibrated together to come up with the universe as we know it.
- The odds that the universe just happens to be so finely-tuned by chance are so extremely tiny that it has forced everyone to desperately try to come up with possible explanations.

How is the Universe so Finely-Tuned? Possible Explanations:

Multiverse Theory

There’s a universe generator that’s spitting out multiple universes exist, having all possible combinations of characteristics, maybe even an infinite number of universes, and we inevitably find ourselves within a universe that allows us to exist. As yet, there is no evidence for the existence of a multiverse, but some versions of the theory do make predictions that some researchers studying Multiverse-theory hope to see some evidence soon. There’s no evidence but there’s hope that there will be a little bit of evidence. Even if there was evidence what would that tell us. We still have to explain how the Multi-verse generator got there in the first place.

Oscillating Universe Theory

- Big Bang followed by Big Crunch over and over again. Make weird sound effects.
- Again, no evidence.

Simulation Hypothesis

- Reality is in fact an artificial simulation (most likely a computer simulation) produced by people 50 years down the road or so.
- We better be interesting so “they” don’t shut down the simulation.
- And what happens when we create a simulation universe and there’s not enough computer to space to handle everything?
- Again, no evidence.

Alien Design

- One hypothesis is that the Universe may have been designed by extra-universal aliens. Some believe this would solve the problem of how a designer or design team capable of fine-tuning the Universe could come to exist. Some cosmologists believe humans will in time be able to generate new universes. By implication previous intelligent entities may have generated our Universe. This idea leads to the possibility that the extraterrestrial designer/designers are themselves the product of an evolutionary process in their own universe, which must therefore itself be able to sustain life. However it also raises the question of where that universe came from.
- There's way more evidence for the Tooth Fairy and the Easter Bunny and Bigfoot and the Loch Ness Monster and Tupac and Elvis putting out a record together next year than alien design.
- But yeah, an extraterrestrial designer. A supernatural creator? That's God, the supernatural engineer of the universe! It works because He designed it to work.

Creator God

- **Psalm 19:1-6** The heavens declare the glory of God...
- **Romans 1:18-21** ¹⁸For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who by their unrighteousness suppress the truth. ¹⁹For what can be known about God is plain to them, because God has shown it to them. ²⁰For his invisible attributes, namely, his eternal power and divine nature, have been clearly perceived, ever since the creation of the world, in the things that have been made. So they are without excuse. ²¹For although they knew God, they did not honor him as God or give thanks to him, but they became futile in their thinking, and their foolish hearts were darkened.
- God created the universe! Jesus Christ, the Word of God, spoke and the universe came into being. Or multiple universes came into being.
- Paul Davies (agnostic physicist) writes, "In the end it boils down to a question of belief. Is it easier to believe in a cosmic designer than the multiplicity of universes necessary? ...If we cannot visit the other universes or experience them directly, their possible existence must remain just as much a matter of faith as belief in God... The seemingly miraculous concurrence of numerical values that nature has assigned to her fundamental constants must remain the most compelling evidence for an element of cosmic design."
- I'd argue it takes much more faith to believe in the Multiverse than to believe in the God who has spoken. Oh wait, that's next week.

What do you think is the most reasonable place to put your faith?
Look for God-sightings as Kate puts it.

Illus: Shake up a box of Legos.

Clue 2: Fine-Tuning of the Universe

Now, Let's Look Inside!

Clue 3: Morality

The Moral Argument Based upon Moral Values and Duties

- Or ever watch the Nature Channel and see a lion violently pursue a gazelle and murder without thought for the gazelle's family. Blood and guts everywhere! It's gruesome. Yet why don't we condemn the lion for his premeditated and disgusting murder?
- Now what if someone broke into your home and ruthlessly murdered your child? What's the difference? The gazelle has more body hair and can run faster. Your child has a larger brain, walks upright, and can use an iPhone. But other than these physical differences, what's the moral difference between them? And we all know there's a moral difference...except for really crazy people!

So where does morality come from? Possible explanations:

Morality from Evolution?

- Morality is just hard-wired into us.
- Then there's no difference between Mother Teresa and her set of urges to take care of thousands dying of Aids in India over several decades and Jeffrey Dahmer and his set of urges to rape, murder, dismember, and eat the bodies of 17 men and boys from 1978 to 1991. Oh yeah, he didn't eat all of them. He preserved some of their body parts.
- Evolution is not a satisfactory explanation for morality.

Morality from Culture?

- Who's culture determines right and wrong?
- As I've talked with some soldiers who've come back from serving in different cultures I've learned that pederasty is pretty common place in different cultures. What's pederasty? Sexual activity between men and young boys. We call those men pedophiles and we put them in prison for long periods of time...but that's just us and our culture. Over there it's cool...right?
- If you want to look at an interesting culture with a unique sense of morality then checkout the Etoro ethnic group of Papua New Guinea. For further research.
- Culture is not a satisfactory explanation for morality.

Morality from Maximal Happiness?

- Famous atheist Richard Dawkins (atheistic biologist) writes in *The God Delusion*, "The greatest happiness of the greatest number is the foundation of morals and legislation."
- The greatest number of who? There are an estimated 10 quintillion individual insects alive on the earth. Whereas there are about 7.4 billion individual homo sapiens alive on the earth. There are 1,343,724,805 times more bugs than people on earth. So, why not pour all of humanities efforts into the greatest happiness of bugs? There's no way to determine that a human's value is greater than a bugs. How would you determine that? You can't.
- Example: Seven people dying in a hospital waiting on organs. One needs a heart, one a kidney, one a liver. The most moral thing to do would be to find a healthy young man in the lobby and to harvest his organs. Take one life to save seven!
- On a global scale some would argue we should free up resources for more people by executing the mentally handicapped and elderly. This would allow for the greatest happiness of the greatest number. So, we're left with Hitler!
- Something about that doesn't quite seem right, does it?

Morality from God?

- If God did exist then morality would be based on His moral nature. We would have a basis for moral values, duty, and accountability.
- Everyone seems to become an absolute moralist in their day to day living...especially when someone owes them money. And when it pertains to sex or violence and your kids.
- **Romans 2:12-16** ...the law is written on their hearts...

Clue 3: Morality

What's most reasonable?

- Clue 1: Origin of the Universe—Are you gonna put your faith in NOTHING or GOD?
- Clue 2: Fine-Tuning of the Universe—Are you gonna put your faith in the MULTIVERSE or GOD?
- Clue 3: Morality—Are you gonna put your faith in HUMANITY or GOD?
- There's absolutely no problem embracing science and faith in the God of the Bible. In fact, the scientific evidence would lead you to such faith!

Final Clue TONIGHT—Clue 4: Beauty and love! We all long for beauty/love!

C.S. Lewis (theistic scholar) writes, "If we find ourselves with a desire that nothing in this world can satisfy, the most probable explanation is that we were made for another world."

Application:

Hebrews 11:1-3 ^{ESV} ¹ Now faith is the assurance of things hoped for, the conviction of things not seen. ² For by it the people of old received their commendation. ³ By faith we understand that the universe was created by the word of God, so that what is seen was not made out of things that are visible.

- Evidence given by the author of Hebrews is all the Old Testament stories. The OT was authoritative for that audience. The Bible is authoritative for those of us who believe in Jesus too but that's not the evidence we're looking at today. We've looked at evidence, or clues, from elsewhere tonight.
- We all place our faith in something. The question is where is the most reasonable place to put my faith?
- The Bible has been saying from the beginning what science has discovered just recently.

Hebrews 11:6 ^{ESV} And without faith it is impossible to please him, for whoever would draw near to God must believe that he exists and that he rewards those who seek him.

1. Faith is what's required.
 - a. God could've required anything He wanted—religious ritual, do 10 pushups, say, "Supercalifragilisticexpialidocious", offer your firstborn to be sacrificed, etc.—but what God ACTUALLY requires is faith in Him. Trust in Him. He simply wants you to trust Him. To look to Him to meet your greatest need for relationship.
2. Faith in Him, the God who is actually there, the God who created this universe, not just an idea of a god.
 - a. The goal of faith is relationship! Example: I have faith in my wife. I know MY wife. I know HER. Not just that she exists but WHO she is. I trust her. Without trust the relationship suffers greatly. If our relationship involved faith in each other just when we had the feels then we're in for a world of trouble because the feels come and go. A strong relationship is when trust occurs even when the feels aren't there. That's a strong relationship, a strong marriage.
3. Faith that God rewards those who seek Him. Basically, belief that God is good. All of our problems in life come back to lack of faith in the Creator God.
 - a. Why do people reject God even when they know He's there? Because they don't have faith that He rewards those who seek Him? Why do people murder? Steal? Commit adultery? Because they want something that they don't believe is being provided for them. They don't believe God is the rewarder of those who seek Him.
 - b. Why do we have so much anxiety? Why do we complain? Why do we gossip? Because we want something that we don't believe is being provided for us.
 - c. Why not cry out to God? What's the worst that could happen? He doesn't answer? Well, that just leaves exactly where you're at. Maybe it's scarier that God does respond to you.

Resources:

- *The Reason for God: Belief in an Age of Skepticism*, Tim Keller—\$10
- *Discovering God: Exploring the Possibilities of Faith*, Dennis McCallum—\$FREE.99
- *Evidence Unseen: Exposing the Myth of Blind Faith*, James Rochford (www.evidenceunseen.com)
- *Mere Christianity*, C.S. Lewis
- *Jesus Among Secular Gods: The Countercultural Claims of Christ*, Ravi Zacharias and Vince Vitale

Pray!

Questions/Comments/Testimonies

Chopping Block:

Extra Resources:

- *The Case for Christ: A Journalist's Personal Investigation of the Evidence for Jesus*, Lee Strobel
- John Lennox—Integration of science and faith
- *The Case for the Resurrection for Jesus*, Gary Habermas
 - Minimal Facts
 - Authority of Scripture from historical text perspective
- *Song of a Wanderer* by Li Cheng
- *Two Dozen (or so) Arguments for God: The Plantinga Project*
- Watchman Nee, *Fact, Faith, and Experience*

Haunting Questions:

- Does God exist? Does God want to know us, or to be hidden from us? Does my life have purpose? Will I continue to live after death? Or is this all there is? Are there any answers to questions, or is it all speculation?
- What questions do you lay awake at night thinking about?
- What if I grew up in another part of the world? Wouldn't I just believe what that culture/society believes?
- What are good reasons to believe something? Because my parents believe it? There are some dirt bag parents out there. Surely that's not a good reason to believe something.
- What if there is no God? Then my life is meaningless. What if there IS a God? Then I may be accountable for my life.
- If God is good then why did [fill in the blank] happen?
- Isn't the Bible corrupted? Why are there so many different translations? Aren't there contradictions in it? Isn't it an ancient text that can't be trusted?
- What about the dinosaurs? What about evolution? What about all the miracles?
- Jesus was a good teacher but He wasn't more than that...right?
- I'll believe it when I see it.
- Why take a blind leap of faith?

Expanding Universe:

- **Psalm 104:2b** ...stretching out the heavens like a tent.
- **Isaiah 40:22b** ...who stretches out the heavens like a curtain...
- **Isaiah 9:7a** Of the increase of his government and of peace there will be no end...

More on Fine Tuning Parameters for the Universe

Taken from *Big Bang Refined by Fire* by Dr. Hugh Ross, 1998. Reasons To Believe, Pasadena, CA.

1. strong nuclear force constant
 - if larger*: no hydrogen would form; atomic nuclei for most life-essential elements would be unstable; thus, no life chemistry
 - if smaller*: no elements heavier than hydrogen would form: again, no life chemistry
2. weak nuclear force constant
 - if larger*: too much hydrogen would convert to helium in big bang; hence, stars would convert too much matter into heavy elements making life chemistry impossible
 - if smaller*: too little helium would be produced from big bang; hence, stars would convert too little matter into heavy elements making life chemistry impossible

3. gravitational force constant
 - if larger*: stars would be too hot and would burn too rapidly and too unevenly for life chemistry
 - if smaller*: stars would be too cool to ignite nuclear fusion; thus, many of the elements needed for life chemistry would never form
4. electromagnetic force constant
 - if greater*: chemical bonding would be disrupted; elements more massive than boron would be unstable to fission
 - if lesser*: chemical bonding would be insufficient for life chemistry
5. ratio of electromagnetic force constant to gravitational force constant
 - if larger*: all stars would be at least 40% more massive than the sun; hence, stellar burning would be too brief and too uneven for life support
 - if smaller*: all stars would be at least 20% less massive than the sun, thus incapable of producing heavy elements
6. ratio of electron to proton mass
 - if larger*: chemical bonding would be insufficient for life chemistry
 - if smaller*: same as above
7. ratio of number of protons to number of electrons
 - if larger*: electromagnetism would dominate gravity, preventing galaxy, star, and planet formation
 - if smaller*: same as above
8. expansion rate of the universe
 - if larger*: no galaxies would form
 - if smaller*: universe would collapse, even before stars formed
9. entropy level of the universe
 - if larger*: stars would not form within proto-galaxies
 - if smaller*: no proto-galaxies would form
10. mass density of the universe
 - if larger*: overabundance of deuterium from big bang would cause stars to burn rapidly, too rapidly for life to form
 - if smaller*: insufficient helium from big bang would result in a shortage of heavy elements
11. velocity of light
 - if faster*: stars would be too luminous for life support
 - if slower*: stars would be insufficiently luminous for life support
12. age of the universe
 - if older*: no solar-type stars in a stable burning phase would exist in the right (for life) part of the galaxy
 - if younger*: solar-type stars in a stable burning phase would not yet have formed
13. initial uniformity of radiation
 - if more uniform*: stars, star clusters, and galaxies would not have formed
 - if less uniform*: universe by now would be mostly black holes and empty space
14. average distance between galaxies
 - if larger*: star formation late enough in the history of the universe would be hampered by lack of material
 - if smaller*: gravitational tug-of-wars would destabilize the sun's orbit
15. density of galaxy cluster
 - if denser*: galaxy collisions and mergers would disrupt the sun's orbit
 - if less dense*: star formation late enough in the history of the universe would be hampered by lack of material
16. average distance between stars
 - if larger*: heavy element density would be too sparse for rocky planets to form
 - if smaller*: planetary orbits would be too unstable for life
17. fine structure constant (describing the fine-structure splitting of spectral lines) *if larger*: all stars would be at least 30% less massive than the sun

- if larger* than 0.06: matter would be unstable in large magnetic fields
if smaller: all stars would be at least 80% more massive than the sun
18. decay rate of protons
if greater: life would be exterminated by the release of radiation
if smaller: universe would contain insufficient matter for life
 19. ^{12}C to ^{16}O nuclear energy level ratio
if larger: universe would contain insufficient oxygen for life
if smaller: universe would contain insufficient carbon for life
 20. ground state energy level for ^4He
if larger: universe would contain insufficient carbon and oxygen for life
if smaller: same as above
 21. decay rate of ^8Be
if slower: heavy element fusion would generate catastrophic explosions in all the stars
if faster: no element heavier than beryllium would form; thus, no life chemistry
 22. ratio of neutron mass to proton mass
if higher: neutron decay would yield too few neutrons for the formation of many life-essential elements
if lower: neutron decay would produce so many neutrons as to collapse all stars into neutron stars or black holes
 23. initial excess of nucleons over anti-nucleons
if greater: radiation would prohibit planet formation
if lesser: matter would be insufficient for galaxy or star formation
 24. polarity of the water molecule
if greater: heat of fusion and vaporization would be too high for life
if smaller: heat of fusion and vaporization would be too low for life; liquid water would not work as a solvent for life chemistry; ice would not float, and a runaway freeze-up would result
 25. supernovae eruptions
if too close, too frequent, or too late: radiation would exterminate life on the planet
if too distant, too infrequent, or too soon: heavy elements would be too sparse for rocky planets to form
 26. white dwarf binaries
if too few: insufficient fluorine would exist for life chemistry
if too many: planetary orbits would be too unstable for life
if formed too soon: insufficient fluorine production
if formed too late: fluorine would arrive too late for life chemistry
 27. ratio of exotic matter mass to ordinary matter mass
if larger: universe would collapse before solar-type stars could form
if smaller: no galaxies would form
 28. number of effective dimensions in the early universe
if larger: quantum mechanics, gravity, and relativity could not coexist; thus, life would be impossible
if smaller: same result
 29. number of effective dimensions in the present universe
if smaller: electron, planet, and star orbits would become unstable
if larger: same result
 30. mass of the neutrino
if smaller: galaxy clusters, galaxies, and stars would not form
if larger: galaxy clusters and galaxies would be too dense
 31. big bang ripples
if smaller: galaxies would not form; universe would expand too rapidly
if larger: galaxies/galaxy clusters would be too dense for life; black holes would dominate; universe would collapse before life-site could form

32. size of the relativistic dilation factor
 - if smaller:* certain life-essential chemical reactions will not function properly
 - if larger:* same result
33. uncertainty magnitude in the Heisenberg uncertainty principle
 - if smaller:* oxygen transport to body cells would be too small and certain life-essential elements would be unstable
 - if larger:* oxygen transport to body cells would be too great and certain life-essential elements would be unstable
34. cosmological constant
 - if larger:* universe would expand too quickly to form solar-type stars

- Fred Hoyle argued for a fine-tuned Universe in his 1984 book *Intelligent Universe*. He compares "the chance of obtaining even a single functioning protein by chance combination of amino acids to a star system full of blind men solving Rubik's Cube simultaneously".

More on Morality:

- Under a naturalistic worldview think of the audacity of a society that would ruthlessly slaughter millions of mosquitos during the months of May through August year after year. Those mosquitos should be fed and nourished.
- Here's another way to put it. As the atheistic comedian George Carlin puts it, "How come, when it's us, it's an abortion? And when it's a chicken, it's an omelet?" That's an offensive joke. But, under a purely naturalistic worldview there is no difference. Both the baby within the womb and the chick in the egg are physical organisms scrambling to survive in a hostile world.

Morality from Social Contracts?

- You scratch my back and I'll scratch yours, cool? Or, you don't murder me and I won't murder you, cool?
- What if I don't want to scratch your back and I don't sign the social contract?
- What if you call the cops on a guy for beating his wife? The cops show up and the guy says, "I never signed the social contract saying I wouldn't beat my wife." No worries, bro. Sorry to bug you!

But Morality is Complex!

- Some atheists argue that morality can't be objective because it's not always clear. Like if is right to torture a psychopathic criminal for information if it leads to saving many lives? Is it merciful or mean to pull the plug on a 95 year old man in extreme pain?
- However, just because the answers to some of these questions are unknown to us doesn't mean that there isn't an answer. The fact that we're wrestling to determine an answer is a clue in and of itself that there is objective morality.
- It's helpful to move from black and white questions of morality to the more gray areas.
- There are clear answers to these questions: Is it wrong to rape women for pleasure? Is it wrong to torture babies? Is it wrong to hunt humans for sport?

Extra Quotes:

- Madeleine L'Engle—"Those who believe they believe in God, but without passion in the heart, without anguish of mind, without uncertainty, without doubt, and even at times without despair, believe only in the idea of God, and not in God."
- Annie Dillard in *Pilgrim at Tinker Creek*—"There is not a person in the world that behaves as badly as praying mantises. But wait, you say, there is no right or wrong in nature; right and wrong is a human concept! Precisely! We are moral creatures in an amoral world . . . Or consider the alternative...it is only human feeling that is freakishly amiss . . . All right then – it is our emotions that are amiss. We are freaks, the world is fine,

and let us all go have lobotomies to restore us to a natural state. We can leave...lobotomized, go back to the creek, and live on its banks as untroubled as any muskrat or reed. You first.”

- Pope Pius XII (1951)—“It is undeniable that a mind illuminated and enriched by modern scientific knowledge, which calmly evaluates this problem, is led to break the circle of a matter preconceived as completely independent and autonomous – either because uncreated or self-created – and to acknowledge a Creative Spirit. With the same clear and critical gaze with which he examines and judges facts, he also catches sight of and recognizes the work of the omnipotent Creator, Whose power, aroused by the mighty ‘fiat’ pronounced billions of years ago by the Creative Spirit, unfolded itself in the universe and, with a gesture of generous love, called into existence matter, fraught with energy. Indeed, it seems that the science of today, by going back in one leap millions of centuries, has succeeded in being a witness to that primordial Fiat Lux, when, out of nothing, there burst forth with matter a sea of light and radiation, while the particles of chemical elements split and reunited in millions of galaxies.”

More Clues:

Significance

Illus: $(32 + 16 - 84 + 352 - 63 + 952) \times 0 = ?$

Illus: Photo of my great-great grandfather. Who’s that? Who’s she? Who cares?

Illus: Linder’s tree

Equality

Illus: Stephen Hawking is not equal intellectually to LeBron James and LeBron James is not equal athletically to Stephen Hawking.

Free Will

We Trust Our Belief-Forming Faculties

The belief that all of our beliefs and values are naturally selected and not to be trusted—is not to be trusted. The fact that we do trust our belief-forming faculties is a clue to God.

The Regularity of Nature

Continued regularity is a matter of faith. There is nothing guaranteeing the universe will be here tomorrow, or that it will operate according to all the cycles we’ve been observing throughout the years, with all its laws.

Hebrews 1:1-4

The Kalam Cosmological Argument:

1. Everything that begins to exist has a cause.
2. The universe began to exist.
3. Therefore, the universe has a cause.

The Cosmological Argument from Contingency:

1. Everything that exists has an explanation of its existence, either in the necessity of its own nature or in an external cause.
2. If the universe has an explanation of its existence, that explanation is God.
3. The universe exists.
4. Therefore, the universe has an explanation of its existence (from 1, 3).
5. Therefore, the explanation of the universe’s existence is God (from 2, 4).

The Ontological Argument from the Possibility of God's Existence to His Actuality:

1. It is possible that a maximally great being exists.
2. If it is possible that a maximally great being exists, then a maximally great being exists in some possible world.
3. If a maximally great being exists in some possible world, then it exists in every possible world.
4. If a maximally great being exists in every possible world, then it exists in the actual world.
5. If a maximally great being exists in the actual world, then a maximally great being exists.
6. Therefore, a maximally great being exists.

Re: Atheism:

- Stats—<http://www.pewresearch.org/fact-tank/2016/06/01/10-facts-about-atheists/>
- The Bible says, "There is no God!" See Psalm 14 and 53.

Fact. Faith. Feeling. Or Feeling. Faith. Fact.?

- <https://www.desiringgod.org/articles/fact-faith-feeling>
- Wachtman Nee—"Fact, Faith and Experience were walking along the top of a wall. Fact walked steadily on, turning neither to right nor left and never looking behind. Faith followed, and all went well so long as he kept his eyes focused upon Fact; but as soon as he became concerned about Experience and turned to see how he was getting on, he lost his balance and tumbled off the wall, and poor old Experience fell down after him."