

Session 6: Expanding On The Scientific Evidences

Welcome

- In the 1st session we talked about why it's important to be able to defend our faith carry out the Great Commission, disciple others.
- 2nd session we learned about critical thinking skills/ how biases / logical fallacies work.
- 3rd session we learned comprehensive presentation of how to defend our faith from from a purely scientific / rational position, why theism makes better sense in answering the biggest questions in history, universe and humanity.

We also learned about 8 points which fall in categories:

cosmological, biological, mental, and moral.

- 4th session we learned tactics for effective conversations. Being gracious, but persuasive. We talked about :
 - Conversation starters
 - Having the RIGHT motive
 - Asking "What do you mean by that?" and "How did you come to that position?"
 - Intellectual / emotional barriers
 - Being an invisible target - not focusing on our position/opinion initially
 - The secret weapon - truth on our side
 - Mirroring back what others are saying to us
 - Leaving the door open (& several other things)
 - Transfer of affect - we give others one of 2 impressions. We like them or we don't.
- 5th session we learned how to bridge the gap from theism to Christianity. The session 3 material left us with the conclusion that its rational to believe in an intelligent Creator/ Designer of the universe. But that there were several candidates or worldviews that fit these overarching terms "Creator" / "Designer".

Nolan helped us narrow down some of the candidates (what were the candidates?).

* **Last week's RMR:** Explain to someone you know that your learning that there's a completely scientific/philosophical case for an intelligent designer, and that you're learning to then narrow down that 'designer' to the most reasonable of the 5 worldviews. Ask if you could take a 3 or 4 minutest to see if you can present it to them in a way that makes sense to them.
(Who was intentional to try to do this?)

Ok, Daryl's going to dig a little deeper and connect several of the things we've covered in previous sessions, so...let's get into it.

Today's session:

In session 3 we learned the basic 8 evidences for existence of God. Now we want to expand on some of them & give you some knowledge and insight to prepare you for some responses you may get during discussions. This will better equip you to have a meaningful conversation. We are also going to tie this into some of the techniques and tactics that we've learned in other sessions about how to handle ourselves in these conversations.

There will be a lot of interaction with you in this session.

1. Origin Of The Universe

The first evidence we may give is the origin of the universe. So we'll expand on this subject first. Here's an example of a dialog that may happen.

- In addition to the evidence being discussed, examine the way the Christian handles himself based on some of our other sessions and tactics we've learned.

Example dialog:

Discuss:

Evidentially, here's some info we may wanna have:

1. In the early 1900's many scientists did believe the universe was eternal, which was a big problem for believers as it goes directly against the Bible which says the universe was created. Gen 1:1
2. In 1929 Edwin Hubble discovered redshift in light coming from distant stars. This was evidence that everything in the universe was spreading out away from everything else. This is the same principle as you experience with a train that is coming toward you and then going away, the sound waves get stretched out.
They knew if you extrapolate back in time, there had to be a single infinite point (called a singularity) and a beginning of space, matter and time.
3. Later this became known as the Big Bang Theory which was actually coined by a Belgian priest/astronomer (George Lemaitre).
4. Many secular scientists did not like the idea of a beginning of the universe because of its theological implications (so they resisted it). This is a great example of naturalistic bias stunting science, not religion/theology stunting science.
5. Today the Big Bang is considered, by far, the best explanation for the universe and is backed up by an overwhelming amount of evidence and many papers from prominent scientists including Stephen Hawking.

Quotes:

...the universe has not existed forever. Rather, the universe, & time itself, had a beginning in the Big Bang,..."

- **Stephen Hawking**

"We know our observable universe had a beginning. We *know* that. That's not a philosophical statement; it's a scientific one."

- **Lawrence Krauss**

New Scientist.com even has an article called:

"Why physicists can't avoid a creation event "

6. A beginning of matter, energy, space, and time requires an immaterial, all powerful, timeless, spaceless, causal agent.
7. The Big Bang completely supports the Christian worldview and is evidence against an atheistic/naturalistic/gradualistic view.

REFERENCE VIDEO: rdof.org/Origin_Universe

OBJECTIVE:

Remember this is a cumulative case. We are not claiming to prove God here, just that the evidence points to a immaterial, powerful, timeless, spaceless, personal causal agent.

PIP 1

Discussion:

Leader Interaction:

2. Fine Tuning

Example Dialogs:

Discussion:

Fine tuning - What do we mean when say fine-tuned?

1. In order for human life to be even possible, the laws and constants of universe must be perfectly set or fine tuned to a precision that's beyond comprehension.
2. There are hundreds of finely tuned parameters and they must all be extraordinarily fine tuned for life to be possible and even for the periodic table of elements to exist.
3. These settings could have been set to a near infinite # of other possible values, and yet they're all set to the exact, single values that allow for human life.
4. Gravity example:
 - ❖ Gravity is said to be fine tuned to 1 part 10^{40} . (1 with 40 zeros)
 - ❖ To get an idea, all the grains of sand on earth = 1 quintillion, now take that # and multiply it by another **quintillion**
 - ❖ If all those grains of sand represent the value of gravity, changing only 1 grain would make life impossible.
 - ❖ Gravity could have been set to any value between 1 and a **quintillion, quintillion** and yet is set to the single value that allows life to exist.
 - ❖ Another way to look at it is to imagine a dial the size of the earth, now imagine each increment of that dial is as small as a hair's width. If this dial was changed by a even hair's width, life would be impossible.
 - ❖ That's how precisely gravity has to be set for life to be possible.
 - ❖ That's less of a chance winning the lottery every second in history.
3. Other examples:
 - A. Cosmological Constant = $1:10^{120}$
 - B. Ratio of electrons & protons = $1:10^{23}$
 - C. **Expansion Rate of the Universe** = $1:10^{55}$ (prevents contraction)
 - D. **Mass Of The Universe** = $1:10^{59}$
 - E. **Distance to the Sun** (5% farther, 5% closer)
 - F. Distance to the moon
 - G. **The magnetic core of the Earth**, (protection from radiation)
 - H. **The oxygenated atmosphere on Earth**, (extremely rare)
 - I. **Our position in the galaxy**, (protection from radiation)
 - J. **The protection by Jupiter from meteors** (allowing advanced life)
 - K. And literally over 300 more....

Quotes:

- *“The laws of science, as we know them at present, seem to have been very finely adjusted to make possible the development of life.”*
-Stephen Hawking, *Theoretical Physicist (atheist)*

- *“Everyone agrees that the universe looks as if it was designed for life.”*
- Paul Davies, *Theoretical Physicist (agnostic) - winner of Templeton Prize & Kevlin Medal*

- *“A common sense interpretation of the facts suggests that a super-intellect has monkeyed with physics, as well as with chemistry and biology, and that there are no blind forces worth speaking about in nature”*
- Fred Hoyle - *Astrophysicist, Cosmologist*

- *“Wherever physicists look, they see examples of fine tuning:”*
- Sir Martin Rees, *Professor Cosmology & Astrophysics -Univ Cambridge*
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OBJECTIVE:

Remember this is a cumulative case. Our objective here is not to “prove God” but to show how the extraordinary fine tuning of the laws and constants in the universe are better explained by a designer rather than mere chance. When we discuss this, it’s really good to have good examples.

Common Atheistic Responses:

The most common atheistic explanation is the **multiverse**. I.e
 .Our universe is just 1 in an infinite # universe’s just as real as ours.

In these universes every possible event has occurred. So by chance, somewhere in this vast # universes, our finely tuned universe just happened to emerge.

Our Replies:

1. This is not a scientific fact, but a metaphysical assumption: It cannot be tested or observed and is only theoretical, so it would require faith from the atheist and it goes in direct contradiction to the atheistic claim that a statement must be empirically and scientifically verifiable in order to be true.

2. The multiverse itself requires both a causal agent and a designer (as it would have to have a beginning and would have to be fine tuned itself). So the explanatory problem doesn't go away with the multiverse.

3. Many scientists do not accept multiverse.

4. The philosophical problem: If anything is possible in all these universes then it follows logically that there's also a universe where there is a cosmic designer of the universe.

5. The fact that they must resort to this kind of explanation shows the power of the design argument. What is a more reasonable explanation?

Leader Interaction:

REFERENCE VIDEO: rdof.org/fine_tuned_universe

Remember these parameters must be fine tuned in order for life to even have a "chance". Doesn't mean life is guaranteed, so this sets up the next one, Origin of biological life.

We will cover this in a later session.

Q & A

RMR

Look over the notes and watch the videos for each topic this week this and again next week. Get a few of the points memorized and make a case for each topic to a friend or family member.