

Forget Evolution? Are You Crazy?

Ralph Dave Westfall, PhD

rdwestfall@cpp.edu

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<http://www.forgetevolution.com/feslides.pdf>

Qualifications?

- Qualifications of speaker?
- Qualifications of audience?
- Goal: countering claims that evolution proves that God isn't necessary
 - finding ways to communicate without needing a lot of background knowledge
- Why "forget?"

Augustine's Warning

Usually, even a non-Christian knows something about the earth, the heavens, and the other elements of this world ... Now, it is a disgraceful and dangerous thing for an [unbeliever] to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn.

Augustine's Warning - 2

Reckless and incompetent expounders of holy Scripture bring untold trouble and sorrow on their wiser [brothers] when they are caught in one of their mischievous false opinions and are taken to task by those who are not bound by the authority of our sacred books.

Augustine, *The Literal Meaning of Genesis*,
Ch. 19, Sect. 39

Darwin on the Origin of Life

it is no valid objection that science as yet throws no light on the far higher problem of the essence or origin of life

Darwin, *The Origin of Species*, 1861 (third ed.)
p. 514

Demo 1: Intentional Versus Accidental Behavior

- Each table has tin can with 25 pennies
 - Shake well and dump on table
 - Count and report heads
 - Time how long takes to make all heads
- Odds against all 25 heads by chance?
 - 33,554,431 to 1 against
 - 22 years at two shakes per minute
 - Intelligent effort is faster

Demo 1 (continued)

- 25 out of 25 heads?
 - Odds are worse in lotteries but still winners
- Change task to having them all be heads and also all aligned into rows and columns
 - Rows, columns 100+ times harder?
- Joint probability = product of separate ones
 - 1 out 2 heads times 1 out of 6 to roll a four
 - = $1/2 \times 1/6 = 1/12$ to get both on first try

Demo1 (continued)

- All heads and arranged in rows/columns
 - = $1/33,554,432 \times 1/3,355,443,200$
= $1/112,589,990,684,262,400$
 - over 74 billion years to have a 50% chance
- Conclusion: way, way faster for something to get accomplished by intelligent action than by chance

Reverse-Engineering Analogy

- Good analogies match well
 - Water and electricity, for example
- Task: reverse engineer a Harley from basic materials: steel, copper, rubber, etc.
 - Can engineering team guarantee to do it with adequate budget and incentives?
 - Reverse engineering of mechanical products happens often and isn't hard

Reverse Engineer a Cell?

- Biology team gets to pick any cell
 - Success = reproduce for 100 generations
- Resources for biology team:
 - Knowledge, technologies and techniques, Federal funding
- No successes yet in creating life in lab

Other Approaches

- Take living cells apart and rebuild them to work, like could do with Harley?
 - Should be easier but no success with that either
- Reverse engineering is much easier than designing from ground up

Human Effort Task Difficulty

- Take apart and re-assemble a mechanical product like a Harley: *Easy*
- Reverse-engineer and construct a mechanical product from materials: *More difficult*
- Design and construct a new and different mechanical product: *Even more difficult*

Human Effort Task Difficulty - 2

- Take apart and re-assemble a living cell so it can live and reproduce itself: *Very hard; not accomplished yet*
- Reverse-engineer and construct a cell that can reproduce from chemical materials: *Even harder; not accomplished yet*
- Create a new design and construct a cell that can reproduce from it: *Much, much harder; not accomplished yet*

Random Natural Process "Tasks"

- Disassembled cell components spontaneously reassemble themselves: *Never observed; impossible?*
- A viable cell arises spontaneously through random natural processes without a design or any other assistance: *Much, much more unlikely than reassembly; never observed; impossible?*

What If Life Gets Created in Lab?

- Likely to be through an incredibly complex process that couldn't happen in nature
- Would only prove that intelligent design works

Materialist Counter Arguments

- Myth of Time: "anything" could happen with infinite time?
 - Already demonstrated that 4.5 billion year age of earth probably not enough to flip all heads and arrange them
- Fallacy of Jumping to Conclusions
 - Very small step successes guarantee much more difficult ones can succeed?

Another Counter Argument

- Past performance guarantees future outcomes?
 - Science has made all kinds of progress so eventually it will solve this problem?
 - Progress in some areas doesn't guarantee success in others
 - Moving target: increasing biological knowledge shows life's origin is much more complicated than realized before

Demo 2:



Demo 2: Construction by Accident?

- 5-10 minutes to create biggest, tallest, best house or tower of cards from your deck
- Afterwards vote for first, second and third, with prize for best
- Discuss: could your table's house of cards have been created by accidental processes? Why or why not?

Demo 2 (continued)

- Person called Accidentally Constructive Processes tries to build house of cards
- Others at table—Accidentally Destructive Processes—try to thwart that person
- Outcomes?

Energy and Construction

- It takes energy to construct things
- Energy is only constructive if harnessed
 - Nuclear bomb versus nuclear power plant
- Primitive organisms have mechanisms to capture energy from environment to grow
 - What harnessed energy to create first organisms? Where did this mechanism come from?
 - No egg, no chicken

Complexity

- Proteins composed of chains of hundreds of amino acids
- Complexity of Cell, Mystery of Life's Origin
- Chirality: amino acids in proteins in living organisms are always "left-handed," even though non-biological syntheses produce equal right- and left-handed mixes

Demo 3: Amino Acid Chirality

- Two cups to each table: each has a marshmallow, toothpicks, and gummi bears
- Push toothpick straight down into circular marshmallow side, press 2 half gummi bears onto it
- Turn marshmallow around, push second toothpick into 12 o'clock position of other side at an angle of 110° from first toothpick

Demo3 (continued)

- Push third toothpick into 4 o'clock position at angles of 110° from other two toothpicks
- Push fourth toothpick into 8 o'clock position at angles of 110° from other three
- Put red gummi bear sideways onto 12 o'clock toothpick
- Put yellow gummi bear sideways at 4 o'clock and orange sideways at 8 o'clock

Demo3 (continued)

- Follow exact same process with second marshmallow, except:
 - Put orange gummi bear sideways at 4 o'clock and yellow one sideways at 8 o'clock
- Compare your two model amino acids
 - Rotate them to see if you can get them into a position where they both look exactly the same

Concluding Argument

- Avoid Argument from Ignorance
 - Don't say if it can't be explained, God must have done it
- Use Inference to Best Explanation (abduction) instead
 - Which of possible explanations best fits the data?

Concluding Argument - 2

- Random processes are extremely unlikely to produce very complicated things
- Human beings can create very complex products by purposeful and intelligent activity using tools and knowledge accumulated over many years
 - But they are still unable to create life even with all the relevant resources that are now available

Concluding Argument - 3

- Since life is incredibly unlikely to have originated by accident, and humans can't intentionally create it either, the best explanation for its origin is that it was created by a being who is a lot more intelligent and powerful than human beings
 - God fits that description