

# Study Guide for **The Greatest Hoax on Earth?** By Jonathan Sarfati

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Sarfati's book (as mentioned earlier) is a conversation/response to a book by Richard Dawkins called "The Greatest Show on Earth"

## **Introduction:**

Primarily an introduction to Richard Dawkins and what he says, to which Sarfati is responding in this book.

This section is very self-explanatory

Who is Richard Dawkins and why is he and his work significant for this debate?

Why did Sarfati write this book?

## **Ch. 1 Bait and Switch**

This section is mostly self-explanatory - just a few terms and concepts

Advocates for defining terms consistently and honestly

Define "Evolution"

Define "GTE"

Define "Equivocation." What point does Sarfati make using the idea of equivocation? To what issues does the concept of equivocation address in this debate?

Describe the concept of a "straw man." What point does Sarfati make using the idea of equivocation?

How does Sarfati promise to deal with the ideas of equivocation and straw man in subsequent chapters?

Define "Theory" and "Theorum." What issue does Sarfati address by using these words? What point does he make?

How does Sarfati respond to the accusation of "deception"?

What is the problem of atheistic empiricism, according to Sarfati?

What are the difficulties of evolutionary theory, as admitted by Dawkins?

How do evolutionists deal with these difficulties? Contrast this with the way that creationists deal with difficulties.

## **Ch. 2 Species and Kinds**

Define "kind"

Describe the difference between "kinds" and "species"

How is the term "species" used in equivocation?

Describe the concept of "micro-evolution." How is this concept relevant to this debate? What does each side believe about the concept of micro-evolution?

What are the three models of species? Describe each.

Explain how creationists define 'kinds' and determine if animals are descended from the same kind.

Define "hybridization"

Define "Polytypic species" and describe how this concept is relevant

Define "Baraminology" and describe how this concept is relevant

Define and understand the concepts of "Monobaramin," "Apobaramin,"

"Holobaramin," "Allopatric speciation," and "Sympatric speciation"

What point does Sarfati make about the loss of genetic information? How does this contribute to the discussion?

### Ch. 3 Natural Selection

Defines natural selection - creature with a certain trait is more likely to survive

Illustrate basic genetics

### Ch. 5

Dawkins denial that God makes every organism directly, but rather created a recipe and got the process started

Note what Sarfati agrees with and does not in this section.

What about Dawkins' approach does Sarfati critique?

Dawkins uses the analogy of a flock of birds to try to explain how individual cells work together to form complex multi-celled organisms, but (he claims) being without overall plan, but just sticking to simple rules

Note how Sarfati critiques this.

Emerges - emergent properties - explain, illustrate with water or cookies

define

Serial differentiation, - original cells change into stem cells, which then change into transient amplifying cells over the development of the embryo

stem cells, more basic cells which contain the possibility of continually dividing and or specializing into different kinds of cells

transient amplifying cells - more specialized cells - cannot infinitely duplicate and more limited in the kind of cells can produce on the way to fully specialized cells i.e. skin cell, muscle cell, bone cell, brain cell, etc. no longer having the possibility to be another kind

Note Dilemma for evolutionists in changing from 1 cell to multi-celled organisms

Point about comparison to computer - relatively simple machines with simple rules (1s and 0s), but put in complex patterns make up emails and halo and online movies

2nd illustration is legos - simple blocks and pieces that can be put together in infinite varieties all potential with the nature of the blocks, but nothing in the nature of the blocks makes it necessary or even possible to be built into a certain creation without a plan and program to do so

## **Ch. 6**

Homology - defined in context - see especially the summary

Analogy - defined in context - see especially the summary

Homeomorphic - defined in context

Homeoplasy - defined in context

Non-homologous origin of homologies - demonstrate embryo development and problem of various homologous structures not coming from homologous embryo development

Non-homologous genes - demonstrate genes coding for certain traits and problem of various homologous structures not coming from same genes

Common designer - as alternate explanation of similarities - already talked about - which is better explanation

Molecular homologies - demonstrate mutually incompatible trees of genetics

## **Ch. 7 - Where are the transitional fossils?**

Lack of fossil evidence for evolution

Does lack of fossils disprove evolution? Is it evidence against it?

How are fossils made? What conditions make fossils?

Explain sedimentary geology and fossil dating

Which worldview best explains the evidence

Paraconformites - defined in context

Polystrate fossils - defined in context

Cambrian explosion - what is it and why is it a big deal for this debate?

Punctuated equilibria - what is it and why is it a big deal?

## **Ch. 8 - The Links are still missing**

Archaeopteryx - what is it and what is Sarfati's conclusion and arguments toward that conclusion?

Crocoducks and Fronkeys - What point does Sarfati make in this section?

What is the evidence of bats and dinosaurs in the fossil record? What conclusion does Sarfati draw from this evidence?

What features are characteristic of the fossils claimed as transitions between fish and amphibians? What arguments does Sarfati use in this topic? What conclusion does he reach?

What evidence is used to explain whale evolution? What does Sarfati make of this?

What evidence is used to explain turtle evolution? What does Sarfati make of this?

## Ch. 9 Ape men?

What is really distinctive between humans and apes, and how do evolutionists address these differences?

"recursion" in language - defined in context

What physical evidence does Dawkins claim for ape-man evolution?

What is the physical evidence? How is the physical evidence interpreted?

How does Sarfati respond to each of these questions?

Ardipithecus ramidus kadabba - scientific (Latin) name for certain fossil organism

Australopithecus - group of fossils (more than one claimed species)

Homo Erectus - certain fossil organism

What is the point Sarfati makes about there being two rival evolutionary views of how humans came from apes?

## Ch. 10 Geographical Distribution

What is the supposed problem that this chapter addresses? Why is it a problem?

What are the facts? What species are usually used as examples of this problem?

What are the interpretations of the facts?

What are Plate tectonics? What are the two approaches? And how does this contribute to the scientific understanding in the area of species distribution?

What are the problems of standard plate tectonic models which Sarfati highlights?

What alternate explanations does he give? Which makes better sense?

What is the CPT model and how does it correspond to the Biblical data? What are the strengths and weaknesses of this model?

## Ch. 11 Is the earth ancient?

How are the controversies of Biology (evolution) and geology (old earth/new earth) related?

Explain nuclear physics and radioactive decay

What are the assumptions that radiometric dating makes? Are these good assumptions or not? How does Sarfati explain and respond to each of these assumptions?

How is radiometric dating used in actual practice in science? How does Sarfati respond to this?

What argument is made based on radioactive isotopes with short half-lives? How does Sarfati respond to this argument?

What argument is made from annual changes such as tree rings? How does Sarfati respond?

## Ch. 12 Young World Evidence

What does this chapter attempt to do? (Sarfati explicitly says)

What are the four main points?

What evidence does Sarfati give that calls old age universe into question?  
Most of this evidence is self explanatory, if not, read the footnotes.

### **Ch.13 Origins of life**

What is the issues of this chapter? Why is it a problem for naturalists? How do they explain it?

"The Simple Cell?" understand how complex the cell actually is, and how difficult it is to explain naturalistically

DNA as information, not just material - we have already covered this enough for you to understand this chapter

Why does Sarfati distinguish between hardware and software? What point is he making?

What does natural selection tell us about the first living organisms? What point does Sarfati make from this? What explanations have been offered by naturalists? How does Sarfati respond?

What is Darwin's explanation of the first life? Why does Sarfati talk about this? What point does he make?

"RNA World" - understand this possible explanation of the origin of life. What are the problems, according to Sarfati?

"abiotic" without life - used in a context that shows "abiotic" does not work, therefore need to assume "biotic" environments or products or processes to make the first life work - anyone see the problem?

"polymers" or "polymerization" - chemical process by which more basic chemicals (called monomeres) are chemically bound together into larger strings of chemicals, which have different characteristics, e.g. ethylene gas is combined (polymerized) to create common plastic, vinyl chloride is polymerized to create PVC plastic (polyvinylchloride)

Describes chemical experiments that seem to simulate the kind of chemical reactions needed to start first life. How does Sarfati describe and critique these experiments? What is the main problem he claims?

What are enzymes and how are they important for this discussion?

ATP synthase - understand what it is and does, even if you don't understand all the details of how it works. How is it important for life?

What point does Sarfati make from this discussion?

What does Sarfati conclude about the evidence for chemical evolution?

### **Ch. 14 Loss of structures: Evolution or devolution**

1 key idea, Dawkins brings up examples of change as examples of evolution, Sarfati argues that they are all examples of devolution - decay caused by the fall.

4 main categories of evidence - read for yourself

1 term - pleiotropy - 1 gene responsible for more than one attribute

Some examples -

gene that causes red hair also causes people to be more sensitive to pain

Men whose index finger is longer than their ring finger are 1/3 less likely to get prostate cancer

Women whose index finger is shorter than ring finger are more likely to get osteoarthritis

Women with smaller calves have higher risk of stroke

## Ch. 15 Bad Design: Evidence for Evolution?

What point does Dawkins make from what he considers "bad design"? How does Sarfati respond?

What are the philosophical problems, arguments of principle that Sarfati uses against this approach?

Define ontogeny - development in womb from one cell to baby ready for birth

Define phylogeny - supposed evolutionary history

Ontogeny recapitulates phylogeny - once a slogan, not completely discredited

Examples of Bad design, according to Dawkins, and Sarfati's response

Eyes - many strange terms and concepts, but all defined in context - read carefully

Recurrent laryngeal nerve (RLN) - its routing and function

"Messy design"- our insides are not neat and tidy

Testes tubing

Bad Back

Koala Pouch

## Ch. 16 "Nature, Red in Tooth and Claw"

What point does Dawkins make from violence, predation and pain in the world?

How does Sarfati respond?

Notice what kind of argument this is. Is it a matter of science or worldview that drives this chapter?

What responses does Sarfati use to explain pain in general?

What specific examples from nature does Dawkins use? How does Sarfati respond

Notice that Chesterton is brilliant and desire to read him.

Notice how Sarfati addresses Christians who try to reconcile Christianity and Evolution, using the topic of this chapter.

## Ch. 17 - Evolution, Science, History and Religion

What is the point that Dawkins is attempting to make? How does Sarfati respond?

What is meant by the term "History Deniers"? What is the intended purpose of using this term? How does Sarfati respond?

What evidence does each side in this debate give that their side is advantageous for the scientific enterprise?

What does the history of science tell about the influence of Christian ideas on science?

What does the idea of evolution contribute to the everyday discoveries of science?

What evidence is given for this?

According to Sarfati, what are the presuppositions necessary for science that come directly from a Biblical worldview?

What are the problems for a naturalist claiming their worldview gives a basis for scientific investigation and discovery?

What did the Reformation contribute to the growth of science?

What is the specific duplicity/hypocrisy of which Sarfati accuses Dawkins in this section? Is this a fair accusation? Why is that an important issue?