

Study Guides for Faith & Science Integration

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Can We Explain Human Nature Using Evolutionary Psychology? (Participant's Guide)

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Participant's Guide to

Can We Explain Human Nature Using Evolutionary Psychology?

A Study of *The Social Conquest of Earth*

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Summer 2017

How to Use This Material?

This study of evolutionary psychology using E. O. Wilson's *The Social Conquest of Earth* consists of 5 modules. Each module contains two sections. The first section presents a set of Reading and Reflection questions that are to be completed before each meeting and are meant to help the participant wrestle with the concepts introduced in that week's chapters. The second section consists of two (or more) Discussion questions, which will be written by the participants and the leader as they read. Both sets of questions are meant to foster discussion, but your group should by no means limit itself to the questions contained in these sections.

This study is intended for **informal, small group** discussion, such as that of a Bible study or small group. The themes presented in each submodule may be unpacked on its own, but it is the hope of the authors that the entire study may be useful to the interested reader (leader and participant alike). The study is also aimed toward **high school students, college students, and post-college adults** with an interest in how science and the Christian faith interact.

As you read, it is our hope that you will come across (and come up with) questions which challenge you, both in understanding your personal faith and in understanding science. In these questions, you will have the opportunity to grow through asking and answering these questions: Why has the church historically believed in *this* answer or *that* answer? How might you be challenged to defend your answer?

Who is the author of *The Social Conquest of Earth*?

Edward Osborne Wilson is a naturalist who specializes in the study of ants (or myrmecology), in which he is considered the world's leading expert. He is also known for his work in sociobiology, a field that posits that human social behaviour is a result of human evolution. It is similar to evolutionary psychology, which examined human psychology from an evolutionary standpoint. *The Social Conquest of Earth* deals with sociobiology and evolutionary psychology.

Wilson earned his bachelor's of science and master's of science degrees in biology from the University of Alabama in 1950. He earned his Ph.D. in 1955, and served as a faculty of Harvard from 1956 to 1996. In 1978 won a Pulitzer Prize for his book on the evolution of human culture, called *On Human Nature*. Since his retirement from Harvard, Wilson has published nearly 20 books about ants, natural histories, and human evolution.

Wilson is not a Christian, though he was raised in a nominally Christian home. He calls himself a scientific humanist and an agnostic. Though his earlier works were not necessarily hostile towards religion, in recent years Wilson has concluded that religion must be eliminated for the sake of human progress. Wilson is not kind to religious people in *The Social Conquest of Earth*. But, he explores the implications of evolution for our understanding of human nature in a fairly accessible way.

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Module 1: Introduction to *The Social Conquest of Earth*

Chapters covered: “Prologue” and “The Human Condition”

Reading and Reflection

“Prologue”

1. What do you think Wilson means by “myth”?
2. Why do you think Wilson chose to frame his book around a painting by Paul Gauguin?
3. Look up some paintings by Gauguin. What do you think?

“The Human Condition”

1. How would you answer the three questions Gauguin poses in his painting?
2. What do you think Wilson means by saying that humanity is “caught between the fantasies of sleep and the chaos of the real world”?

3. What do you think of Wilson's assessment that religion (and, more specifically, creation myths) were essential in the evolutionary success of a tribe? How does it feel to have a fundamental belief about the world described as a vestige of evolution?

4. Wilson says that science and religion (or trust in empiricism and belief in the supernatural) can never be reconciled. What do you think of this statement? Why do you think Wilson feels this way?

5. What do you think of Wilson so far? What assumptions has he made? Do you agree or disagree with his assumptions? Why?

Discussion

In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week's assigned chapters.

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Module 2: The Path to Conquest

Chapters covered: “The Two Paths to Conquest,” “The Approach,” “The Arrival,” and “Threading the Evolutionary Maze”

Reading and Reflection

“The Two Paths to Conquest”

1. What do you think of Wilson’s assessment that the reason humans have become capable of destroying the earth is because we evolved quickly and spread quickly?

2. How does Wilson describe the human condition? Do you agree with this description? What human characteristics does Wilson note as particularly important in our evolutionary success?

3. What are the two paths to conquest Wilson references in the title of this chapter?

“The Approach”

1. What do you think of Wilson’s description of how the human body evolved from a prehistoric human common ancestor?

“The Arrival”

1. What do you think of the role carnivory has played in humanity’s evolutionary success? If this is an accurate description of how early humans developed, what ethical implications does humanity’s dependence on killing and consuming animals have?

2. What role does Wilson suggest that social intelligence played in humanity’s ability to eat?

“Threading the Evolutionary Maze”

1. Wilson cites cooking as a “universal means of social bonding” (47). Cooking seems to have played an important role in human evolutionary history. What role does cooking play in communities today? Why do you think that is?

Discussion

In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week’s assigned chapters.

1.

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Module 3: Tribalism

Chapters covered: “The Creative Forces,” “Tribalism is a Fundamental Human Trait,” “War as Humanity’s Hereditary Curse,” “The Breakout,” “The Creative Explosion, and “The Sprint to Civilization”

Reading and Reflection

“The Creative Forces”

1. On page 51, Wilson says, “In order to bring the human condition into being, a divine Creator would have had to sprinkle an astronomical number of genetic mutations into the genome while engineering the physical and living environments over millions of years to keep the archaic prehumans on track. He might as well have done the same job with a row of random number generators.” What do you think of this statement? What assumptions about a divine Creator does Wilson make? Why do you think Wilson has made those assumptions?

2. What is eusocial evolution and how does it relate to Wilson’s understanding of human nature?

“Tribalism Is a Fundamental Human Trait”

1. Where do you see “tribalism” in today’s world? What “tribes” do you belong to? In what ways does tribalism impact the way you view your identity?

2. What can we (or should we) do about in-group bias? What do you think about Wilson's use of the "Shibboleth" passage to support his point?

"War as Humanity's Hereditary Curse"

1. What do you think of Wilson's portrayal of modern (or relatively modern) wars as an animalistic defense of the tribe? What do you think of the idea that violence on a grand scale has always been part of human nature?

2. What do you think of Wilson's suggestion that humans have used God as a convenient excuse for bloodbaths of no other legitimate excuse presented itself? What do you think of Wilson's quoting of Luther?

3. On page 68, Wilson says that both Christianity and Buddhism profess "peace, nonviolence, and brotherly love" as core values, but threat to their laws "is an evil that must be defeated." Is this a fair assessment? Why or why not? What does Wilson use to support his claims?

"The Breakout"

1. What do you think of the list of traits unique to humans that Wilson lists on page 79? Would you add any traits to the list?

2. What do you think of the approach to diversity Wilson suggests on page 81? How does this biology-centric description fit with social understandings of diversity?

“The Creative Explosion”

1. What are the three hypotheses that address the “creative explosion of culture”? Which do you find most compelling? (Or do you like Wilson’s suggestion that the three fit together?) Why?

“The Sprint to Civilization”

1. How does the statement, “no matter how old the earliest known fossil or evidence of a human activity is, there is always somewhere and remaining to be discovered evidence of something at least a bit older” influence the way you perceive archeology or paleontology?

Discussion

In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week’s assigned chapters.

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Module 4: All About Ants (and Other Eusocial Insects)

Chapters covered: “The Invention of Eusociality,” “Inventions that Advanced the Social Insects,” “The Scientific Dilemma of Rarity,” “Insect Altruism and Eusociality Explained,” “Insects Take the Giant Leap,” “How Natural Selection Creates Social Instincts,” “The Forces of Social Evolution,” and “The Emergence of a New Theory of Eusociality”

Reading and Reflection

“The Invention of Eusociality”

1. Do you consider humankind to be an animal species? Why or why not? How does that impact your view of our relationship with the created world?

“Inventions that Advanced the Social Insects”

1. What relevance does Wilson’s discussion of ant eusociality have for his discussion of human sociobiology? Did you find his discussion of ants to be helpful?

“The Scientific Dilemma of Rarity”

1. On page 138, Wilson gives an illustration depicting “what might have happened” if a bipedal dinosaur had attained eusociality. What do you think of this speculation? What might the world look like today if dinosaurs had become social creatures like humans are? Are these speculations interesting to you? Are they worthwhile? What do they achieve?

“Insect Altruism and Eusociality Explained”

1. Wilson says that humanity is “a biological species in a biological world” (139). What do you think of this assessment? Is it accurate?

2. Does the “well-flavoured vegetable” metaphor make sense to you? How does it illustrate altruism?

“Insects Take the Giant Leap”

1. What do you think of viewing a colony as a “superorganism”? How would you define the term *organism*? Could human societies be viewed as superorganisms?

“How Natural Selection Creates Social Instincts”

1. Summarize how natural selection creates social instincts.

“The Forces of Social Evolution”

1. Do the ideas of kin selection, multilevel selection, and inclusive fitness make sense to you, after reading Wilson’s elaborations on each?

“The Emergence of a New Theory of Eusociality”

1. What are the stages of the new theory of eusocial evolution (as applied to insects)?

Discussion

(Congratulations! You have made it through the 78 pages of relatively science-heavy—and undoubtedly insect-heavy—assigned readings!) In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week’s assigned chapters.

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Module 4: What Are We?

Chapters covered: “What Is Human Nature?,” “How Culture Evolved,” “The Origins of Language,” “The Evolution of Cultural Variation,” and “The Origins of Morality and Honor”

Reading and Reflection

“What Is Human Nature?”

1. How do you define human nature? What do you think of Wilson’s description of how the religious and theologians go about understanding human nature?

2. What do you think of Wilson’s suggestion that human nature is produced by the interaction of genetics and of cultural evolution? Is this idea compatible with your definition of human nature?

“How Culture Evolved”

1. Have you ever thought of non-human creatures as having culture? Does this idea make sense to you? Do you agree with it?

2. What do you think of the sentence Wilson uses to conclude the chapter? (“Morality, conformity, religious fervor, and fighting ability combined with imagination and memory to produce the winner” (224).) What role do you think these traits or behaviour played in humanity’s success? Do they still play a role in human cultures?

“The Origin of Language”

1. Did you find Wilson’s description of the Origin of language satisfactory? Were you familiar with the points he made, or were they new?

“The Evolution of Cultural Variation”

1. What two factors contribute to cultural variation in humans (239)?

“The Origins of Morality and Honor”

1. Can the idea that the “dilemma between good and evil” is a product multi-level selection be compatible with a Christian understanding of good and evil? Is this perspective necessarily non-theistic just because it is naturalistically biological (i.e. relies wholly on science for a description of the way things are)? Can Christians learn something about the nature of humankind from the biological principle of multi-level selection?

2. Do you agree that humans are “prone to be moral” (247)? Why or why not?

3. What do you think of the statement that “A society that condemns homosexuality harms itself” (254)? How does Wilson support this claim?

4. What do you think of the idea that morals have their roots in biology? Is that compatible with a Christian view of morality?

Discussion

In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week's assigned chapters.

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Module 5: Wilson on Religion, Art, and What's Next for Humankind

Chapters covered: "The Origins of Religion,"

Reading and Reflection

"The Origins of Religion"

1. Why do you think there are so few Christians in the elite ranks of scientists? Is it a matter of incompatibility between science and faith? A perceived incompatibility between the two? A bias against Christians in the field?

2. What do you think Wilson means by the statement, "There are circumstances under which intelligent, well-educated people equate their identity and the meaning of their lives with their religion, and this is one of them" (257)? Do you think that this is true?

3. What do you think of the statement, "The illogic of religions is not a weakness in them, but their essential strength" (259)? Is this accurate? Does Wilson substantiate his claims? Do you think that the summary of Christianity he includes later in this paragraph is accurate?

4. What do you think of Wilson's assessment of John's vision and the book of Revelation? Have you heard that Revelation is a product of a drug-induced fantasy (or mental unbalance) previously?

“The Origins of the Creative Arts”

1. What do you think of Wilson’s assertion that modern humans are still drawn to the environments that our early human ancestors developed in?

“A New Enlightenment”

1. What do you think of the idea that religions are an aspect of tribalism?

2. Are religions necessarily “stultifying and divisive” (292)?

3. What do you think of E. O Wilson? What do you think of the way he ends his book? Do you think that Wilson’s strong feelings against religion are necessarily a part of evolutionary psychology?

Discussion

In addition to answering the Reading and Reflection questions, please write two of your own questions about ideas presented in this week’s assigned chapters.

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- 2.

Bibliography

Wilson, Edward O. *The Social Conquest of Earth*. New York: Liveright Publishing Corporation, 2012. Print.