

# CREATION *or Chaos*

*Modern Science and the Existence of God*

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RC SPROUL

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LIGONIER MINISTRIES

*Renew your Mind.*

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# Introduction

For many centuries theology was considered to be the queen of the sciences. Today theology is often considered to be the sworn enemy of science — that is if theology is considered at all. To teach that the universe is the creation of God is to invite scorn and derision from scholars and scientists. Ironically, many of the same men who ridicule the doctrine of divine creation have adopted a theory of origins that is not only far more implausible than divine creation — it is logically impossible.

The idea that the universe was caused by chance is one of the most deeply ingrained and widespread theories in modern science. Yet when considered rationally it is seen to be the modern equivalent of the myths of old for it attributes causal power to a non-existent entity. The apostle Paul had to learn to battle such mythology in the ancient world, and Christians today must learn to recognize and combat such mythology in the modern world.

May this series encourage you to take every thought captive to the Lord Jesus Christ for all things were created through Him and for Him.

Sincerely,

A handwritten signature in black ink that reads "R.C. Sproul". The signature is written in a cursive style with a large, sweeping initial "R" and "C".

RC Sproul

# 1

## Saving the Phenomena

### MESSAGE INTRODUCTION

In previous centuries something of a cooperative enterprise existed between theology and science. Yet in the modern era there is a fierce sense of conflict between faith and science. The shift in thinking began with the Copernican Revolution and continues to this day. In this lesson, Dr. Sproul provides background to the contemporary debate and explains why the rift between true theology and true science is unnecessary.

### LEARNING OBJECTIVES

1. To be able to explain how the division between theology and science originated and what has brought it to where it is today.
2. To be able to summarize some of the common interests and common goals of theology and science.
3. To grasp the significance of the Copernican Revolution in the history of the relationship between theology and science.

### QUOTATIONS

*I believe in God, the Father almighty, creator of heaven and earth.*

— The Apostles' Creed

*It pleased God the Father, Son, and Holy Ghost, for the manifestation of the glory of His eternal power, wisdom, and goodness, in the beginning, to create, or make of nothing, the world, and all things therein whether visible or invisible, in the space of six days; and all very good.*

— The Westminster Confession of Faith, Ch. IV:1

### LECTURE OUTLINE

- A. In the modern era there is a fierce sense of conflict between faith and science.

1. Modern man has a sense of awe for science.
  2. In earlier centuries there was something of a cooperative enterprise between theology and science.
  3. The Copernican Revolution drove a wedge between the two that exists to this day.
- B. Science and theology actually have many things in common.
1. Both theology and science are interested in salvation.
    - a. Salvation in theology has to do with man's reconciliation with God.
    - b. Salvation in science has to do with "saving the phenomena."
  2. Plato articulated the concept of salvation in which science is interested.
    - a. At the entrance to his academy, he had these words posted on the door: "Let none but geometers enter here."
    - b. We usually think of Plato as a philosopher, not a mathematician, so why the inscription?
    - c. What Plato meant by "geometer" was one who is interested in the concept of "form," or what we call formal truth.
    - d. As a philosopher, he was interested in those ideas that would somehow make sense of all the disparate elements of the material world that we encounter every day.
    - e. Plato was looking behind matter for ultimate truth; for him geometry was a kind of philosophy.
  3. In the history of philosophy and the history of theology many important insights have come from those who were also mathematicians or scientists.
    - a. Men such as Spinoza, Descartes, Pascal, and Kant saw a unity between the material world and the world of ideas.
    - b. They did not see philosophy and science in competition or disjunction.
- C. According to Plato, the overarching concern of the scholar is to "save the phenomena."
1. "Phenomena" refers to those things that appear to the external senses.
  2. Anything we see, hear, taste, touch, or smell is part of the phenomena of reality.

3. As a scientist or philosopher Plato was interested in coming up with a philosophical system or theoretical system that could explain in a coherent and rational way all of the particulars of life as we experience it.
  4. This is the task of the scientist — to save the phenomena — to make sense out of the world around us.
- D. In every generation there are changes in the theories (or paradigms) of the time.
1. Sometimes the changes are gradual; at other times they are catastrophic and revolutionary.
  2. When a paradigm shift occurs, a theory that better explains the phenomena is constructed.
  3. The shift that created the greatest upheaval was the Copernican Revolution of the sixteenth century.
  4. For centuries all scientists had worked within the same geocentric framework in which the earth was considered to be the center of the universe.
  5. Copernicus challenged this idea.
    - a. Ptolemy had developed the geocentric theory with the sky like a crystal canopy, and although the theory couldn't account for the movement of the planets very well, it still worked.
    - b. Copernicus claimed that the sun was at the center of the solar system, and ironically his theory did not initially produce results as accurate as those of the Ptolemaic model.
  6. As we learn more about the world, we discover anomalies that do not fit the current system.
  7. If the anomalies become irritating enough and numerous enough, they begin to raise questions about the whole structure, and this is what causes the structures to change.
  8. Today the theories change rapidly.
- E. Science and theology share the common pursuit of making sense out of the world in which we live.
1. Both science and theology study the sphere of nature.

2. God reveals Himself not only in the Bible but also through the medium of nature — general revelation.
3. All truth is God's truth, and all truth meets at the top.
4. Augustine said that all Christians should seek to learn as much as they can about as many things as they possibly can because if something is true, it points to God.
5. The scientific enterprise can be an enormous benefit to theology.

### **STUDY QUESTIONS**

1. What paradigm shift drove a wedge between science and theology that continues to exist to this day?
  - a. Quantum physics
  - b. The Copernican Revolution
  - c. Ptolemaic geocentricity
  - d. The Darwinian theory of natural selection
2. Both theology and science are interested in \_\_\_\_\_.
  - a. Salvation
  - b. Reconciliation with God
  - c. Quantum physics
  - d. All of the above
3. Salvation in science has to do with \_\_\_\_\_.
  - a. Saving reputations
  - b. Saving the phenomena
  - c. Saving the planet
  - d. Saving the theory

4. At the entrance to his academy, Plato had these words posted on the door:  
“Let none but \_\_\_\_\_ enter here.”
  - a. Theologians
  - b. Academics
  - c. Philosophers
  - d. Geometers
5. What word describes those things that appear to the external senses?
  - a. Forms
  - b. Noumena
  - c. Phenomena
  - d. None of the above
6. Who developed the geocentric theory of the solar system?
  - a. Ptolemy
  - b. Plato
  - c. Copernicus
  - d. Galileo
7. Who challenged the geocentric idea and claimed that the sun was at the center of the solar system?
  - a. Plato
  - b. Copernicus
  - c. Ptolemy
  - d. Calvin
8. What word is used to describe those phenomena that do not fit into an accepted paradigm?
  - a. Paradoxes
  - b. Theories

c. Hypotheses

d. Anomalies

### **BIBLE STUDY**

1. Read Romans 1:18–21. What does Paul say about the knowledge of God in verse 19? What does he say has been revealed about God in verse 20? According to verse 18 and verse 21, what has unregenerate man done with God’s general revelation of Himself?
2. According to Romans 2:14–15, what has been written on the hearts of Gentiles? Is it significant that Paul says “the work of the law” rather than “the law”? Why or why not? Is “the work of the law” written on the heart synonymous with the conscience?
3. In John 1:9, we read, “That was the true Light which gives light to every man coming into the world.” According to the context, who is the “true Light”? Is this verse speaking of a general revelation given by this true Light?
4. Read Acts 14:17 and 17:28. How did Paul incorporate the truth of general revelation into his preaching of the Gospel?
5. What do the following texts say about the state of the natural man who, although he has general revelation, is without special revelation?
  - a. Luke 1:79
  - b. Romans 1:18
  - c. Romans 1:24–25
  - d. Romans 3:9–18
  - e. Ephesians 4:18
6. How do the following passages either teach or imply the insufficiency of general revelation?
  - a. Matthew 11:27
  - b. John 14:6
  - c. John 17:3

d. Acts 4:12

e. 1 Corinthians 1:21

### **DISCUSSION QUESTIONS**

1. Discuss the main personalities and theories involved in the Copernican Revolution. Try to imagine yourself in the shoes of those alive at the time. Why did they react the way they did? Do the reactions on all sides provide Christians today with any lessons we can learn?
2. What are some of the positive accomplishments of science that have benefited mankind as a whole? What are some of the accomplishments of science that have had negative or even disastrous consequences?
3. What are some ways in which Christians could contribute to the lessening of hostility between science and theology without compromising scriptural truth? What are some ways in which scientists could contribute to the lessening of hostility?
4. According to R.C., Augustine said that all Christians should seek to learn as much as they can about as many things as they possibly can because if something is true, it points to God. Should Christians follow Augustine's advice? Why or why not?

### **APPLICATION**

1. Have you ever struggled to reconcile the claims of science with the claims of Christianity? If so, how did you resolve the conflict?
2. Paradigm shifts occur not only in the scientific community but also within our personal lives at times. Have you ever gone through a personal "paradigm shift" in your thinking? Was the shift the result of a gradual accumulation of anomalies, or was it a sudden shift? Reflect on how God used this shift to further your growth in Christ.
3. How has this lesson given you a new appreciation for the work of natural scientists? List some of the accomplishments of scientists for which you can thank God.
4. Consider some ways in which you could begin to follow Augustine's advice in your own life. In the next month read a book or two on a subject about which you know little or nothing. Try doing this every few months.

*Creation or Chaos* by R.C. Sproul

**SUGGESTED READING FOR FURTHER STUDY**

Pearcey, Nancy R. and Charles Thaxton. *The Soul of Science*

NOTES

## 2

# Faith and Reason

### MESSAGE INTRODUCTION

There is a perception today that theology involves a leap of faith whereas science involves a rational pursuit of truth. The assumption is that faith and reason have been completely divorced. In this lesson, Dr. Sproul examines the relationship between faith and reason, explaining that both theology and science are involved in a pursuit of truth and knowledge and that both theology and science face the danger of abandoning reason.

### LEARNING OBJECTIVES

1. To be able to define the concept of phenomenological language.
2. To be able to explain the two main aspects of the scientific method.
3. To understand that both science and theology are involved in a rational pursuit of truth.

### QUOTATIONS

*Although reason and faith are of different classes (the one natural, the other supernatural), they are not however opposed, but hold a certain relation and are subordinate to each other. Reason is perfected by faith and faith supposes reason, upon which to found the mysteries of grace.*

— Francis Turretin

*Christians, in repudiating Rationalism in all its forms, do not reject the service of reason in matters of religion. . . . Reason is necessarily presupposed in every revelation. Revelation is the communication of truth to the mind. But the communication of truth supposes the capacity to receive it. . . . Truths, to be received as objects of faith, must be intellectually apprehended.*

— Charles Hodge

## **LECTURE OUTLINE**

- A. The perception today is that theology involves a leap of faith whereas science involves the rational pursuit of truth.
  - 1. This perception assumes that faith and reason are completely divorced.
  - 2. This perception also raises the question of method.
    - a. Every investigation involves the application of some kind of method.
    - b. The method may or may not include a dependence upon reason.
- B. The Copernican Revolution caused a fierce reaction from the church.
  - 1. Galileo was placed under the papal ban.
  - 2. Luther and Calvin both thought Copernicus' theories were ridiculous and opposed his ideas.
- C. Why did Copernicus' theory cause such a reaction?
  - 1. Many Christians believed that the integrity of the Bible was at stake and that human opinions were now going to supplant divine revelation.
  - 2. They believed this because Scripture says that the sun moves across the sky.
  - 3. The Bible seems to endorse a geocentric view of the universe.
  - 4. Eventually people calmed down and realized that the Bible uses phenomenological language — it describes things the way they appear to the naked eye.
  - 5. The Bible uses commonsense — universal sensation — language.
  - 6. We should not expect the biblical writers to expound technical scientific theories when their main concern is the work of redemption.
- D. The scientific method was fine-tuned as a result of the Copernican Revolution.
  - 1. One of the most important breakthroughs that occurred as a result of the Copernican Revolution was some fine-tuning in the method of approaching the data of scientific inquiry.
  - 2. Two critically important and distinct elements are married in the quest for truth — induction and deduction.
  - 3. Taken together, these elements constitute the analytical method, which asserts that it is the scientist's task to discover the logic of the facts.

4. In the process of induction we move from the particular to the general — information and data are gathered, generalizations are made, and conclusions are drawn.
  5. In the process of deduction the movement is from the universal to the particular.
    - a. The syllogism is an example of deduction.
    - b. Arguments are neither true nor false; they are valid or invalid.
    - c. Propositions are true or false.
  6. Deduction is the formal side of the method, and it makes use of logic.
  7. Induction is the material side, and it makes use of the senses to observe the particulars.
- E. The crisis today between theology and science is not really a crisis between faith and reason.
1. “Science” means “knowledge.”
  2. Theology pursues truth and knowledge.
  3. People today want theology to abandon reason.
  4. The crisis has also infected the scientific community: half of the scientific method is often negotiated.

### **STUDY QUESTIONS**

1. What scientist was at the center of the controversy during the Copernican Revolution and was eventually placed under a papal ban?
  - a. Ptolemy
  - b. Kepler
  - c. Galileo
  - d. None of the above
2. The controversy of the Copernican Revolution began to calm down when people began to realize that the Bible uses \_\_\_\_\_.
  - a. Phenomenological language

- b. Erroneous language
  - c. Scientifically precise language
  - d. None of the above
3. Taken together, induction and deduction make up the \_\_\_\_\_.
- a. Hypothetical method
  - b. Analytical method
  - c. Synthetic method
  - d. None of the above
4. In the process of \_\_\_\_\_ we move from the particular to the general.
- a. Observation
  - b. Deduction
  - c. Syllogism
  - d. Induction
5. In the process of \_\_\_\_\_ the movement is from the universal to the particular.
- a. Observation
  - b. Deduction
  - c. Induction
  - d. Experimentation
6. \_\_\_\_\_ is an example of deduction.
- a. Observation
  - b. The syllogism
  - c. Experimentation
  - d. All of the above

7. Deduction is the formal side of the scientific method, and it makes use of \_\_\_\_\_.
  - a. Experimentation
  - b. The senses
  - c. Logic
  - d. Observation
8. Induction is the material side of the scientific method, and it makes use of \_\_\_\_\_.
  - a. The senses
  - b. Logic
  - c. Syllogisms
  - d. Mythology

#### **BIBLE STUDY**

1. Consider each of the following passages and note briefly what each teaches about the reasoning abilities of the unregenerate man.
  - a. Ephesians 4:17–18
  - b. Romans 1:27–28
  - c. Romans 8:7
  - d. Ephesians 5:8
  - e. 1 Corinthians 2:14
2. Does 2 Corinthians 10:3–5 offer any guidance on the relationship between faith and reason? What does this passage imply?
3. What do Matthew 11:25 and 1 Corinthians 1:19–20 have to teach those who would unduly exalt reason?
4. Do passages such as Romans 8:7 and 1 Corinthians 2:14 teach that reason is opposed to faith? Explain what these Scriptures actually say.

5. Must a doctrine or work of God be comprehensible in order to be considered reasonable? Explain in light of Romans 11:33, Ephesians 3:20, and Matthew 19:26.
6. How significant is it to our understanding of the true relationship between faith and reason that Paul often appeals to the judgment of his readers? Examine 1 Corinthians 10:15 and 11:13 as you answer.

### **DISCUSSION QUESTIONS**

1. Many people believe that theology involves a leap of faith while science is pursued solely on the basis of reason. Is this a proper evaluation of the situation? Should theology and science differ in this respect?
2. What are some conflicts (other than geocentricity) between science and theology that have caused a divide between the two communities? Which of these conflicts might be the result of a wrong interpretation of the facts (either biblical or scientific misinterpretation)? Which of the conflicts are the result of foundational principles?
3. Why are both induction and deduction absolutely necessary to the scientific method?
4. Is it possible to “do” theology without using reason and logic? If not, explain. If so, is it possible to explain your answer without using or assuming the law of non-contradiction? In other words, is it possible to explain your answer if every word and assertion in your answer may possibly mean the opposite of what it says?

### **APPLICATION**

1. Have you ever thought that your faith was irrational? Have you ever thought that in order for your faith to be faith, it had to be irrational? How has this lesson affected your understanding of this issue?
2. Have you personally been involved in any debates or arguments with those who argue that science is rational and religion is irrational? How did you respond? How would you respond today?
3. Are you ever reluctant to study the work of natural scientists? Do you fear that you will discover something irreconcilable with your faith? Should you have such a fear?

**SUGGESTED READING FOR FURTHER STUDY**

Nash, Ronald. *Faith and Reason*

NOTES

## 3

# Chance: The Modern Myth

### MESSAGE INTRODUCTION

In every age, mythology abounds. Today we have a tendency to smile at ancient myths for their naiveté and lack of sophistication, but we sometimes fail to realize that there are myths hidden within our own views. In this lesson, Dr. Sproul explains the idea of chance — the great myth of twentieth-century thought.

### LEARNING OBJECTIVES

1. To be able to explain the concept of mythology.
2. To be able to summarize the concept of chance.
3. To be able to explain why chance is the twentieth century's great myth.

### QUOTATIONS

*[Chance] has become for me a soft pillow like the one which . . . only ignorance and disinterest can provide, but this is a scientific pillow.*

— Pierre Delbet

*Chance, when strictly examined, is a mere negative word, and means not any real power which has anywhere a being in nature.*

— David Hume

### LECTURE OUTLINE

- A. Modern man has a tendency to look down his nose at mythology.
  1. Rudolf Bultmann claimed that the Christian's task is to "demythologize" the Bible.
    - a. He argued that the Bible was basically a collection of myths interspersed with real history.

- b. The modern man must cut through the “husk” of the myths to get to the “kernel” of truth.
  2. In every age there is an abundance of mythology, and it is sometimes valuable.
  3. Today we have a tendency to laugh at these ancient myths for their naiveté and lack of sophistication.
  4. But are any myths hidden within our own views today?
  5. The problem with mythology is that it tends to obscure reality.
  6. We make the distinction between myth and reality precisely because we believe myths do not describe real states of affairs.
- B. If there is any glaring myth that has wormed its way into modern life and worldview thinking, even penetrating some of the finest institutions of academia and scientific investigation, it is the grand myth of chance.
1. Chance is the great myth of twentieth-century thought.
  2. In 1913, Pierre Delbet wrote in his book *Science and Reality*, “Chance appears today as a law, the most general of all laws. It has become for me a soft pillow like the one which in Montaigne’s words only ignorance and disinterest can provide, but this is a scientific pillow.”
  3. Chance is the soft pillow of our day that has caused scientific geniuses to fall asleep at the switch.
  4. Stanley Jaki said that chance “has become the softest pillow in all of scientific history. It serves as a magic tool for making shabby philosophizing a most respectable attitude.”
  5. The concept of chance not only serves as a myth in modern science, but also serves as magic, undercutting the science of science.
  6. This concept poses a danger, not only for theology, but also for science.
  7. Theologians and scientists should stand shoulder to shoulder against this common enemy of truth and reality.
- C. Arthur Koestler said, “As long as chance rules, God is an anachronism.”
1. The idea of chance coexisting in a universe ruled by a sovereign God is a self-contradictory idea.

2. If God is sovereign, there can be no such thing as chance, and if chance rules, there cannot be a sovereign God.
  3. In fact, chance doesn't have to rule for God to be an anachronism; all chance has to do to make God irrelevant, to banish God from serious thought, is to exist.
  4. If chance exists, God is finished.
- D. Chance becomes central to the conflict between faith and science principally at the point of the doctrine of creation.
1. The primary target is the very idea of creation.
  2. The very first assertion made in the Bible is: "In the beginning God created the heavens and the earth."
  3. We may argue for decades about how and when creation took place, but an even more fundamental question is *whether* it took place at all.
  4. Every atheist understands that if one can disprove this concept of creation, then Christianity, Judaism, and Islam are finished.
  5. Chance functions mythologically chiefly as a substitute or alternative for creation.
  6. Chance is a concept that is appealed to relentlessly to save the phenomenon of the universe without an appeal to theology.
- E. Nothing can happen by chance.
1. Chance cannot *do* anything because chance *is* nothing.
  2. In order for something to act, it must be something, and chance is nothing.
  3. To say that the universe was created by chance is to say that the universe was created by nothing.
  4. One of the basic axioms of science as well as theology is *ex nihilo, nihil fit* — "out of nothing, nothing comes."
  5. The myth is that out of chance everything comes, but that simply means that out of nothing everything comes.

**STUDY QUESTIONS**

1. Who claimed that the Christian's task is to "demythologize" the Bible?
  - a. Rudolf Bultmann
  - b. Stanley Jaki
  - c. Karl Barth
  - d. Arthur Koestler
2. The problem with mythology is that it tends to \_\_\_\_\_.
  - a. Take the place of reality
  - b. Be confused with reality
  - c. Obscure reality
  - d. All of the above
3. \_\_\_\_\_ is the great myth of twentieth-century thought.
  - a. Chance
  - b. Theism
  - c. Creation
  - d. Science
4. Who said, "As long as chance rules, God is an anachronism"?
  - a. Rudolf Bultmann
  - b. Pierre Delbet
  - c. Stanley Jaki
  - d. Arthur Koestler
5. All chance has to do to make God irrelevant, to banish God from serious thought, is to \_\_\_\_\_.
  - a. Be used in our vocabulary

- b. Exist
  - c. Rule
  - d. None of the above
6. Chance becomes central to the conflict between faith and science principally at the point of the doctrine of \_\_\_\_\_.
- a. Providence
  - b. Creation
  - c. God
  - d. None of the above
7. \_\_\_\_\_ can happen by chance.
- a. Nothing
  - b. Everything
  - c. Some things
  - d. Creation
8. One of the basic axioms of science as well as theology is \_\_\_\_\_.
- a. *sensus divinitatis*
  - b. *semper reformanda*
  - c. *ex nihilo, nihil fit*
  - d. *revelatio generalis*

#### **BIBLE STUDY**

1. Read Proverbs 16:33. What does this verse suggest about the existence of chance in the universe?
2. Consider the actions of the apostles in Acts 1:23–26. Do these men act as if they believe in the existence of chance? Does Proverbs 16:33 help to evaluate the morality of the apostles' action?

3. Read the following passages and briefly state what is said or implied concerning God's control, or lack thereof, of the universe.
  - a. Nehemiah 9:6
  - b. Colossians 1:17
  - c. Hebrews 1:3
4. Read Psalm 135:5–7 and Matthew 5:45. Is something as seemingly arbitrary as the weather the result of chance, according to these Scriptures?
5. How far does the providential control of God extend? Read Matthew 10:28–29 before answering.
6. Does the providential control of God extend to the seemingly arbitrary actions of human governments? Read Daniel 2:21 and 4:24–25.

#### **DISCUSSION QUESTIONS**

1. Stanley Jaki criticized the scientific use of chance, calling it a “magic tool.” Why did he make such a strong criticism?
2. Arthur Koestler said, “As long as chance rules, God is an anachronism.” R.C. went even further, saying that all chance has to do to make God irrelevant is to exist. Is this true? Why or why not?
3. Why is it absolutely impossible for anything to be caused by chance?
4. What is meant by the Latin phrase *ex nihilo, nihil fit*? Does this axiom contradict the Christian doctrine of creation *ex nihilo*? Explain.

#### **APPLICATION**

1. Are there myths in the Bible? How would you respond to someone who advocated Rudolf Bultmann's program of biblical demythologization?
2. Do you ever find yourself attributing events to chance and luck, as if these were existing entities?
3. Why is it an affront to God to attribute anything to chance? What does it imply about His sovereignty? His providence?

*Creation or Chaos* by R.C. Sproul

**SUGGESTED READING FOR FURTHER STUDY**

Sproul, R.C. *Not A Chance*

NOTES

## 4

# What Is Chance?

### MESSAGE INTRODUCTION

Scientists commonly assert that the universe was caused by chance. If Christians are students of logic and language, they should be able to evaluate this kind of claim regardless of the position of the one making the assertion. When analyzed by the rules of logic, the assertion that the universe was caused by chance is seen to be a nonsensical statement. In this lecture, Dr. Sproul explains the legitimate and illegitimate uses of the word “chance.”

### LEARNING OBJECTIVES

1. To be able to explain how logic is used to evaluate arguments.
2. To be able to distinguish between the proper and improper uses of the word “chance.”
3. To understand and be able to show why the assertion that “chance” caused the universe is irrational.

### QUOTATIONS

*Chance is a word void of sense, invented by our ignorance.*

— Paul Janet

*Alice laughed. “There’s no use trying,” she said. “One can’t believe impossible things.”  
“I dare say you haven’t had much practice,” said the queen. “When I was your age I did it for half an hour a day. Why sometimes I’ve believed as many as six impossible things before breakfast.”*

— Lewis Carroll

## LECTURE OUTLINE

- A. The formal side of the scientific method — the deductive side — involves logic and language.
  - 1. Logic has no content; it gives us no information.
  - 2. The only thing logic does is to measure the rational relationship between propositions.
  - 3. Aristotle argued that logic is not a science; it is the *organon*, or “tool,” for all scientific inquiry.
  - 4. Logic is necessary for all intelligible discourse.
  
- B. All of us are engaged in a form of science called taxonomy — the science of classification.
  - 1. In the final analysis, all of science is nothing more and nothing less than taxonomy at varying degrees of precision.
  - 2. We observe, measure, and experiment in order to understand similarities and distinctions among things.
  - 3. Logic cannot prove anything, but it can falsify assertions.
  - 4. In the process of taxonomy we are involved in the process of individuation.
  
- C. The Language of Chance
  - 1. Chance has no power because it has no being, yet people speak as if chance were indeed a thing.
  - 2. “Chance” is a perfectly useful word to describe mathematical possibilities.
  - 3. The fallacy of equivocation takes place when the meaning of a term changes in the middle of a discussion.
  - 4. Paul Janet writes, “Chance is a word void of sense, invented by our ignorance.”
  - 5. Jacques Bossuet writes, “Let us stop talking of chance or luck or at most speak of them as mere words that cover our ignorance.”
  - 6. David Hume writes, “Chance is only our ignorance of real causes.”
  - 7. When we say that something is caused by chance, what we are saying is that we do not know what caused it.

D. How has this happened?

1. R.C. heard a broadcaster on the radio quote a world-renowned physicist as saying, "Fifteen to eighteen billion years ago the universe exploded into being."
2. The statement is nonsensical because if the universe did not exist before the explosion, what was it that exploded?
3. A Nobel-prize-winning scientist said, "In this day and age we can no longer believe in spontaneous generation," but he continued, "Now science requires us to believe in gradual spontaneous generation."
4. Another Nobel laureate said, "One has only to wait; time itself performs the miracle. The impossible becomes possible; the possible, probable; and the probable, certain."
5. But time is not a thing.
6. The common scientific claim is: Space + Time + Chance = The Universe.
7. What this actually amounts to is: Nothing + Nothing + Nothing = Everything.
8. The nadir of the discussion came when R.C. received a letter from a scientist who had read *Not A Chance*. He wrote, "Science has now been able to isolate and identify five distinct types of nothing."

**STUDY QUESTIONS**

1. \_\_\_\_\_ has no content; it gives us no information.
  - a. Theology
  - b. Science
  - c. Logic
  - d. Language
2. The only thing logic can do is to measure the rational relationship between \_\_\_\_\_.
  - a. Propositions
  - b. Observations
  - c. People

- d. Experiments
- 3. Who argued that logic is not a science; it is the *organon*, or “tool,” for all scientific inquiry?
  - a. Jacques Bossuet
  - b. Niels Bohr
  - c. Aristotle
  - d. David Hume
- 4. \_\_\_\_\_ is the science of classification.
  - a. Logic
  - b. Taxonomy
  - c. Epistemology
  - d. Bibliology
- 5. In the process of taxonomy we are involved in the process of \_\_\_\_\_.
  - a. Mathematics
  - b. Metaphysics
  - c. Epistemology
  - d. Individuation
- 6. “Chance” is a perfectly useful word to describe \_\_\_\_\_.
  - a. Mathematical possibilities
  - b. Ontological reality
  - c. Causal power
  - d. None of the above
- 7. The fallacy of \_\_\_\_\_ takes place when the meaning of a term changes in the middle of a discussion.

- a. Denying the antecedent
  - b. Equivocation
  - c. Amphiboly
  - d. Affirming the consequent
8. When we say that something is caused by chance, what we are saying is:
- a. It was caused by mathematical probability.
  - b. It was caused by luck.
  - c. We do not know what caused it.
  - d. None of the above

#### **BIBLE STUDY**

1. Carefully read Genesis 1. Does the first chapter of the Bible allow for the possibility that the universe was caused by chance or by anything else other than God?
2. Some argue that the first chapters of Genesis are not meant to be taken literally. Leaving that question aside for the moment, examine the following New Testament passages from a Gospel, an Epistle, and an Apocalypse, respectively. Do these passages confirm or contradict a more literal reading of Genesis 1?
  - a. John 1:1–3
  - b. Hebrews 11:3
  - c. Revelation 4:11
3. Examine the following passages and briefly restate what they imply about whether the universe is eternal.
  - a. Matthew 13:35
  - b. John 17:24
  - c. Ephesians 1:4
  - d. Matthew 19:4, 8

- e. Hebrews 1:10
- 4. Read Romans 4:17 and Hebrews 11:3. What do these passages of Scripture teach about the nature of creation?
- 5. Is there anything that exists that was not created by God? Consider the following passages in your answer.
  - a. John 1:3
  - b. Colossians 1:16
  - c. Revelation 4:11

#### **DISCUSSION QUESTIONS**

1. Why is logic necessary for all intelligible discourse?
2. Explain the differences between the legitimate uses of “chance” and the illegitimate uses of “chance.”
3. Why is it completely illogical to assert that the universe exploded into being?
4. How should we respond if confronted with the claim that science has distinguished between five kinds of nothing?

#### **APPLICATION**

1. Over the next several weeks, watch for stories in the media involving scientific “creation” claims. Note how many resort to theories of self-creation.
2. Consider the fact that logic is absolutely necessary for all intelligible discourse. Does it cause any problems when we realize that this includes theological discourse?
3. Think about how easily normally brilliant individuals can fall into absurdity when trying to evade and suppress the truth. What lessons should this teach all of us?

#### **SUGGESTED READING FOR FURTHER STUDY**

Sproul, R.C. *Not A Chance*

NOTES

# 5

## Truth and Its Contrary

### MESSAGE INTRODUCTION

The big debate between atheism and theism has to do with creation. Some atheists have argued for a self-creating universe even though such an argument is illogical and unscientific. Others have argued that the universe itself is eternal. Many have retreated into a relativism claiming that truth itself can be contradictory. In this lesson, Dr. Sproul critically discusses this relativism and explains why it is fatal not only to science and theology, but to knowledge itself.

### LEARNING OBJECTIVES

1. To examine the concept of self-creation.
2. To be able to summarize the arguments that are used to support the concept of self-creation.
3. To be able to explain the absolute necessity of the law of non-contradiction for theology, science, and knowledge itself.

### QUOTATIONS

*A great truth is a truth of which the contrary is also a truth.*

— Niels Bohr

*God does not play dice.*

— Albert Einstein

### LECTURE OUTLINE

- A. The big debate between atheism and theism has to do with creation.
  1. A fundamental axiom of both science and philosophy is *ex nihilo, nihil fit* — “out of nothing, nothing comes.”

2. If something exists now, then there always had to be something in reality or else nothing would exist today.
  3. If there ever was a time when there was nothing, what could there possibly be now? Absolutely nothing, unless something had the power to create itself.
- B. The concept of self-creation is illogical and unscientific.
1. For something to create itself, it would have to antedate itself; it would have to be before it was; it would have to be and not be at the same time and in the same relationship.
  2. Not everyone who denies creation retreats into self-creation; some argue for an eternal universe.
  3. In correspondence with Carl Sagan, R.C. asked, "If for all eternity all energy and matter were compressed into an infinitesimal point of singularity and then one day it exploded, what caused the explosion?"
  4. Sagan said that he did not feel the need to explore anything beyond that first dawning moment of creation or to ask any questions about it.
  5. The most fundamental question is: Why is there something rather than nothing?
- C. Advocates of self-creation have to justify a thesis that is fundamentally irrational, and they usually argue on the basis of one of the two following processes:
1. Those who are knowledgeable about philosophy argue that we do not have to attribute an antecedent cause to an effect because David Hume annihilated the whole idea of cause and effect.
  2. Others argue on the basis of quantum physics and Werner Heisenberg's Indeterminacy Principle that science has now proved the possibility of self-creation.
- D. Niels Bohr made famous the dictum: "A great truth is a truth of which the contrary is also the truth."
1. He even had his family coat of arms emblazoned with the Latin phrase *Contraria sunt complementaria*, which means, "Contraries are complementary."
  2. One of the most fundamental principles of logic is the impossibility of the contrary.

3. Bohr's dictum is not simply the end of philosophy and theology, it is the end of knowledge and the end of science.
4. Carl Sagan, commenting on Bohr's statement, said, "If this statement were true, its consequences might be at least a little perilous."
5. Sagan's critique is an incredible understatement.
6. Bohr's idea that truth itself can be contradictory has infatuated twentieth-century students.
7. Albert Einstein objected to Bohr's understanding of physics and made the statement, "God doesn't play dice."
8. The problem is not with the data; it is with the inferences that are drawn and the way they are stated.

### **STUDY QUESTIONS**

1. If there ever was a time when there was nothing, the only thing that there could possibly be now is \_\_\_\_\_.
  - a. Everything
  - b. Nothing
  - c. Necessary beings
  - d. Contingent beings
2. The concept of self-creation is \_\_\_\_\_.
  - a. Logically valid
  - b. Scientific
  - c. Illogical
  - d. Not accepted in the scientific community
3. Not everyone who denies creation retreats into self-creation; some argue for \_\_\_\_\_.
  - a. An eternal universe
  - b. Spontaneous generation

- c. Mythology
  - d. None of the above
4. The most fundamental scientific question is:
- a. How do we know what we know?
  - b. Does anything exist?
  - c. Why is there something rather than nothing?
  - d. None of the above
5. Many advocates of self-creation attempt to justify their position by appealing to \_\_\_\_\_ Indeterminacy Principle.
- a. Bohr's
  - b. Heisenberg's
  - c. Einstein's
  - d. Hume's
6. Who made the famous statement: "A great truth is a truth of which the contrary is also the truth"?
- a. Carl Sagan
  - b. David Hume
  - c. Albert Einstein
  - d. Niels Bohr
7. One of the most fundamental principles of logic is \_\_\_\_\_.
- a. The *non sequitur*
  - b. Induction
  - c. Chance
  - d. The impossibility of the contrary

8. Who objected to Bohr's understanding of physics and made the statement, "God doesn't play dice"?
  - a. Werner Heisenberg
  - b. Carl Sagan
  - c. Stephen Hawking
  - d. Albert Einstein

### **BIBLE STUDY**

1. How do 1 Thessalonians 5:21 and 1 John 4:1 presuppose the validity of the law of noncontradiction?
2. Read the following passages and explain how they confirm the truth and necessity of the law of noncontradiction.
  - a. Matthew 7:15
  - b. Colossians 2:8
  - c. Hebrews 5:14
3. How do the examples of biblical saints confirm the necessity of the law of noncontradiction?
  - a. Acts 17:11
  - b. 1 Corinthians 10:15
4. In what way does the overall design of Scripture teach the necessity of noncontradiction? Consider 2 Timothy 3:16 and Titus 1:9.

### **DISCUSSION QUESTIONS**

1. R.C. asserted that if anything exists now, there always had to be something. Why is this necessarily true?
2. Niels Bohr made famous the dictum: "A great truth is a truth of which the contrary is also the truth." Why is this aphorism so attractive to many today? Why is it fatal to the possibility of knowledge?
3. What did Albert Einstein mean when he said that God does not play dice?

4. If the law of noncontradiction is not valid, do the biblical warnings against heresy make any sense? Can heresy even exist if the law of noncontradiction is not valid?

#### **APPLICATION**

1. Meditate upon R.C.'s statement that if there was ever a time when there was absolutely nothing, all that there could be now is absolutely nothing. Consider what this means scientifically and theologically.
2. Have you ever been attracted to a philosophy identical or similar to the one summarized by Niels Bohr on his family coat of arms? Do you still espouse a view of truth similar to Bohr's? How has this lesson challenged or strengthened your understanding of the necessity of the law of noncontradiction?
3. Consider what it would mean to Christianity if the law of noncontradiction were not valid. It would be valid to say both that God exists and that God does not exist; that Jesus is the only Savior and that Jesus is not the only Savior; that faith in Christ saves and that faith in Christ damns. Contemplate the importance of maintaining the necessity of the law of noncontradiction for the Christian faith.

#### **SUGGESTED READING FOR FURTHER STUDY**

Sproul, R.C. *Not A Chance*

## NOTES

# 6

## The Necessity of God's Existence

### MESSAGE INTRODUCTION

One of the nonnegotiable premises of epistemology is the law of causality, yet many have retreated into a critique of causality in order to maintain their denial of divine creation. In this lesson, Dr. Sproul examines the criticisms of causality raised by scientists and others and analyzes their appeal to David Hume. In doing so he demonstrates that not only is God's existence possible, it is logically necessary if anything exists at all.

### LEARNING OBJECTIVES

1. To be able to define the law of causality.
2. To be able to summarize Hume's critical analysis of causality.
3. To be able to defend the assertion that God's existence is logically necessary once we grant that anything exists.

### QUOTATIONS

*This most beautiful system of sun, planets, and comets could only proceed from the counsel and dominion of an intelligent and powerful Being.*

— Isaac Newton

*I myself am convinced that the theory of evolution, especially the extent to which it's been applied, will be one of the great jokes in the history books in the future. Posterity will marvel that so very flimsy and dubious an hypothesis could be accepted with the incredible credulity that it has.*

— Malcolm Muggeridge

## **LECTURE OUTLINE**

- A. Epistemology requires four nonnegotiable premises.
  - 1. The law of noncontradiction
  - 2. The law of causality
  - 3. The basic reliability of sense perception
  - 4. The analogical use of language
  
- B. Most critics of divine creation retreat either into indeterminacy or into a philosophical critique of causality.
  - 1. The argument usually begins with an appeal to David Hume.
  - 2. Hume's basic idea is that we never have a direct, immediate perception of causality.
    - a. We think we do, and we are constantly looking for the causes of things.
    - b. All we really see is a relationship of contiguity — a customary relationship.
    - c. The relationship of contiguity means that one event follows in sequence after another.
  - 3. Hume used his famous illustration of a pool table and pool balls.
  - 4. When we see a person strike a cue ball and see it strike another ball, which then moves, how do we know that God didn't decree that the moment the cue stick hit the ball, He would make the ball move?
  - 5. According to Hume, we do not perceive immediate causes, only the events that follow each other; we supply the assumption of causality.
  
- C. Some assume that Hume demolished the law of causality to the extent that anything can happen and that things can happen without a cause.
  - 1. Hume did not destroy causality or the law of causality.
  - 2. Hume did not deny that there are causes for things; he simply said that we don't know what a particular cause is at a particular moment.
  - 3. There can be no such thing as an uncaused effect because the word "effect" by definition is that which is produced by an antecedent cause.

- D. Bertrand Russell wrote a book entitled *Why I Am Not a Christian*.
1. At the age of 18, Russell read an essay by John Stuart Mill challenging the cosmological argument.
  2. Mill wrote, "If everything must have a cause, then God must have a cause."
  3. Russell writes, "And if there can be anything without a cause, it may just as well be the world as God."
  4. The problem is that the law of causality does not say that everything must have a cause.
    - a. Every effect must have a cause.
    - b. Every contingent being must have a cause.
    - c. The law does not say that everything that exists is contingent or is an effect.
    - d. Self-creation is a logical impossibility; self-existence is not.
  5. Christianity asserts that God is an eternal Being who exists in and of Himself.
  6. There is nothing inherently irrational about the idea of an eternal uncaused Being.
- E. If anything exists, it is logically necessary that such a self-existent Being exists.
1. Something must have the power of being independent from some antecedent causal agent or nothing could exist.
  2. God cannot create Himself.
  3. Anything that exists either exists in and of itself or is produced by something else.
  4. Every physical thing lacks the power of necessary being.
  5. What must exist, if anything exists, is an eternal, self-existent, independent Being who is not an effect.
  6. Nothing less can save the phenomena of the universe in which we live.

**STUDY QUESTIONS**

1. Epistemology requires four nonnegotiable premises. Which of the following is *not* among these four premises?
  - a. The law of causality
  - b. The innate knowledge of God
  - c. The law of noncontradiction
  - d. The basic reliability of sense perception
2. Hume's basic idea is that:
  - a. We never have a direct and immediate perception of causality.
  - b. God directly causes everything.
  - c. There is no law of cause and effect.
  - d. Effects do not necessarily have causes.
3. Hume referred to a customary relationship as a relationship of \_\_\_\_\_.
  - a. Contiguity
  - b. Cause and effect
  - c. Continuity
  - d. Chance
4. There can be no such thing as \_\_\_\_\_ effect.
  - a. A caused
  - b. An uncaused
  - c. A real
  - d. None of the above
5. Who wrote *Why I Am Not a Christian*?
  - a. John Stuart Mill
  - b. Bertrand Russell

- c. David Hume
  - d. Immanuel Kant
6. What notable philosopher stated the law of causality as follows: “If everything must have a cause, then God must have a cause”?
- a. John Stuart Mill
  - b. David Hume
  - c. Immanuel Kant
  - d. Rene Descartes
7. The law of causality does not say that everything that exists is \_\_\_\_\_.
- a. An effect
  - b. Ontologically real
  - c. A cause
  - d. None of the above
8. Self-creation is a logical impossibility; \_\_\_\_\_ is not.
- a. Gradual spontaneous creation
  - b. Chance creation
  - c. Self-existence
  - d. All of the above

#### **BIBLE STUDY**

1. What does Scripture tell us about those who deny the existence of God? See Psalm 14:1 and 53:1.
2. According to Romans 1:19–21, do those who deny the existence of God have any excuse? Explain.
3. What does the author of Hebrews tell us about the existence of God in Hebrews 11:6? Why is this important?

4. Does Scripture ever explicitly seek to prove God's existence, or is it implicitly assumed throughout?
5. How does Exodus 3:13–14 shed light on the nature of God's existence?
6. Read James 2:19. Is belief in the existence of God sufficient for salvation?

#### **DISCUSSION QUESTIONS**

1. What did David Hume mean when he said that we never have a direct, immediate perception of causality? Did he mean that there are no causes? Explain.
2. John Stuart Mill wrote, "If everything must have a cause, then God must have a cause." How should we respond to those who use this argument against theism?
3. If self-creation is inherently irrational, why is the same not also true for the concept of self-existence?
4. Could God have created Himself? Why or why not?

#### **APPLICATION**

1. Have you ever been asked the question that John Stuart Mill raised? How has this lesson prepared you to respond more effectively the next time someone raises this objection to theism?
2. Have you personally wrestled with the same kind of questions that the young Bertrand Russell found so overwhelming? What effect did these struggles have on your faith?
3. Do you find R.C.'s argument for the necessary existence of God persuasive? Encouraging? Why?
4. In what ways has this series helped you in your Christian life? What questions has it resolved? What questions has it raised? Have you been encouraged to do further study on the subject?

#### **SUGGESTED READING FOR FURTHER STUDY**

Sproul, R.C. *If There Is a God, Why Are There Atheists?*

NOTES

*Creation or Chaos* by R.C. Sproul