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Participant's Guide to

Have Science and Religion Conflicted in the Past?

A Study of That Galileo Went to Jail and Other Myths About Science and Religion

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How to Use This Material?

This study of the way the relationship between science and faith has been understood and interpreted historically using Ronald Number's *That Galileo Went to Jail* consists of five 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?

Planning and Preparing for a Session

The material assumes that each session will last for about 30-45 minutes. It also assumes that each participant will have read the assigned chapter(s) and considered the Reading and Reflection questions ahead of time.

It must also be noted that the provided discussion questions are intended as a guide for your discussion, but you should by no means restrict your discussion to these questions. Try to keep your group's discussion relevant to the general themes addressed in the module, but be flexible.

Who are the authors of That Galileo Went to Jail?

That Galileo Went to Jail is a compilation of essays by individuals who have "no obvious scientific or theological axes to grind" (p. 6). Some are agnostic, some are atheists, some are protestants, one is Roman Catholic, one is a Jew, one is a Muslim, one is a Buddhist, and two are unconventionally spiritual. The editor of this book, Ron Numbers, was raised as a Seventh-day Adventist, but now describes himself as an agnostic. He has written much on creationism and the history of science. David Lindberg specialized in the history of early modern science.

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Module 1: Medieval Christianity and Science

Chapters covered: "Introduction," "Myth 1," "Myth 2," "Myth 3," "Myth 4," and "Myth 5" Reading and Reflection

"Introduction"

- 1. Do you think that science and religion are in conflict? Why or why not?
- 2. What factors contribute to the way Draper and White viewed religion and its relationship with science? What factors have contributed to the way you view science and religion?

Suggested Answer: White was criticized by certain Christians for promoting the pursuit of science "unfettered" by religion, and Draper had negative experiences with specific religious individuals (namely his Catholic sister).

3. Have you seen Draper's and White's "conflict model" represented in modern discussions of science and religion? What effect might such a model have on how we view religion and how we pursue science?

"That the Rise of Christianity was Responsible for the Demise of Ancient Science"

- 1. What is history? Who determines what interpretation of the facts is presented as the history of any given event?
- 2. Do you think that science is to be loved or to be used?

"That the Medieval Christian Church Suppressed the Growth of Science"

1. What do you think of the idea that theology is the "queen of the sciences"? Do you think theology is a science?

"That Medieval Christians Taught That the Earth was Flat"

1. Why do you think that the myth discussed in this chapter (as well as the other myths about the Catholic Church in this book) are so popular?

"That Medieval Islamic Culture was Inhospitable to Science"

1. Do you think that certain religions are more hospitable to science than others? Why or why not?

"That the Medieval Church Prohibited Human Dissection"

- 1. Why do you think that apparently new myths (such as the one discussed in this chapter) gained traction and eventually wide acceptance?
- 2. What do you think of human dissections?

Discussion

In addition to thinking about the above reading questions, please write two questions of your own regarding the chapters you read for today.

1.

2.

Module 2: Astronomy and the Scientific Revolution

Chapters covered: "Myth 6," "Myth 7," "Myth 8," "Myth 9," and "Myth 9"

Reading and Reflection

"That Copernicanism Demoted Humans from the Center of the Cosmos"

1. What sources of authority do you trust? What do you think about the idea that the *Britannica Concise Encyclopedia* cites a myth as fact?

"That Giordano Bruno was the First Martyr of Modern Science"

1. How did the association between pagan natural philosophy and pagan cosmology influence the way the Catholic Church perceived Bruno's philosophical positions?

"That Galileo was Imprisoned and Tortured for Advocating Copernicanism"

1. Based on what you've read so far, and anything you've learned previously, what was the relationship between the Catholic Church and society and academic studies in the Middle Ages? What is the relationship between the Christian church and society today?

"That Christianity Gave Birth to Modern Science"

1. How does an understanding of the many factors that contributed to the development of modern science influence the way you view science, and the relationship between science and religion?

"That the Scientific Revolution Liberated Science from Religion"

1. Does the way you view the relationship between science and theology differ from the way you view the relationship between science and faith? Is either pair more compatible than the other (e.g. do science and faith get along better than science and theology?)?

Discussion

In addition to thinking about the above reading questions, please write two questions of your own regarding the chapters you read for today.

1.

2.

Module 3: The Scientific Revolution (contd.) and the Enlightenment

Chapters covered: "Myth 11," "Myth 12," "Myth 13," and "Myth 14"

Reading and Reflection

"That Catholics Did Not Contribute to the Scientific Revolution"

1. Draper (and White) have come up quite regularly in the essays you've read. What do you think of these two individuals? Why do you think that the opinions they promoted seem to be so widely accepted by modern historians, scientists, and laypeople alike?

2. In what ways might modern politics influence the way we approach and perceive science and religion today? Give some specific examples to illustrate your ideas.

"That Rene Descartes Originated the Mind-Body Distinction"

1. What do you think of dualism?

"That Isaac Newton's Mechanistic Cosmology Eliminated the Need for God"

1. What do you think of Newton's belief that God governs the world actively but indirectly?

"That the Church Denounced Anesthesia in Childbirth on Biblical Grounds"

1. What do you think of Meigs' justification for being wary of using anesthesia in childbirth?

Discussion

In addition to thinking about the above reading questions, please write two questions of your own regarding the chapters you read for today.

1.

2.

Module 4: Evolution

Chapters covered: "Myth 15," "Myth 16," "Myth 17," "Myth 18," "Myth 19," and "Myth 20"

Reading and Reflection

"That the Theory of Organic Evolution is Based on Circular Reasoning"

1. In what ways do you think that the various -isms Rupke lists in his last paragraph influenced Victorian geology and paleontology?

"That Evolution Destroyed Darwin's Faith in Christianity—Until He Reconverted on His Deathbed"

1. Do you agree with Moore's assertion that "Darwin kept the faith of Victorian England"?

"That Huxley Defeated Wilberforce in Their Debate over Evolution and Religion"

1. The debate between Huxley and Wilberforce took place a few decades before Draper and White published their works. How might have this debate and other contemporary "clashes between Science and the Church" have contributed to Draper's and White's views?

"That Darwin Destroyed Natural Theology"

1. What do you think of natural theology? Is it a useful strategy?

"That Darwin and Haeckel Were Complicit in Nazi Biology"

1. Are scientists responsible for what someone does with the scientific principles or innovations they developed? Is science morally neutral?

"That the Scopes Trial Ended in Defeat for Antievolutionism"

1. Have you heard of the Scopes Trial previously? What is your experience with creationism in America?

Discussion

In addition to thinking about the above reading questions, please write two questions of your own regarding the chapters you read for today.

1.

2.

Module 5: Twentieth and Twenty-First Century Science

Chapters covered: "Myth 21," "Myth 22," "Myth 23," "Myth 24," and "Myth 25"

Reading and Reflection

"That Einstein Believed in a Personal God"

1. What do you think about Einstein's ideas of religious evolution? Is religiosity an evolved capacity?

"That Quantum Physics Demonstrated the Doctrine of Free Will"

1. Is it important that science demonstrates theological principles?

"That 'Intelligent Design' Represents a Scientific Challenge to Evolution"

1. What criteria mark ID as unscientific? Who defines what science is? Is it valid to impose such limits on a field of study? Might discussions about different "forms" of science reflect a postmodern approach to knowledge?

"That Creationism is a Uniquely American Phenomena"

- 1. Why do you think that different views of creationism and origins (etc.) seem to be somewhat regional?
- 2. Why do you believe what you believe about creationism and the origins of creation?

Suggested Answer: Social and cultural contexts (likely) play a sizable role.

"That Modern Science Has Secularized Western Culture"

1. How do you choose whom (and what) to believe?

Discussion

In addition to thinking about the above reading questions, please write two questions of your own regarding the chapters you read for today.

1.

2.

Bibliography

Numbers, R. L. (2009). *That Galileo went to jail and other myths about science and religion*. Cambridge: Harvard University Press.