Dr. James S. Spiegel, Philosophy of Religion, Session 14, Theism and Science Resources from NotebookLM

1) Abstract, 2) Audio podcast, 3) Briefing Document, 4) Study Guide, and 5) FAQs

1. Abstract of Spiegel, Philosophy of Religion, Session 14, Theism and Science, Biblicalelearning.org, BeL

Dr. Spiegel's Philosophy of Religion lecture explores the intricate relationship between theism and science. He examines prevalent perspectives, such as the conflict thesis, the independence thesis, and the interactive model, ultimately favoring the latter. The lecture critiques scientism and the "God of the gaps" mentality as problematic approaches. Drawing on Thomas Kuhn's philosophy of science, Spiegel highlights the theory-laden nature of observation and the underdetermination of scientific theories. Furthermore, the session discusses methodological naturalism and theistic science, weighing the arguments for each. Finally, it summarizes Alvin Plantinga's view that a deep concord exists between theism and science, while a deep conflict lies between naturalism and science, particularly regarding the reliability of cognitive faculties.

2. 21 - minute Audio Podcast Created on the basis of Dr. Spiegel, Philosophy of Religion, Session 14 – Double click icon to play in Windows media player or go to the Biblicalelearning.org [BeL] Site and click the audio podcast link there (Theology \rightarrow Apologetics \rightarrow Philosophy of Religion).



3. Briefing Document: Spiegel, Philosophy of Religion, Session 14, Theism and Science

Briefing Document: Theism and Science

Overview: This document summarizes the main themes and arguments presented by Dr. Jim Spiegel in Session 14 of his Philosophy of Religion course, focusing on the relationship between theism and science. Spiegel critiques problematic perspectives, outlines different models for understanding this relationship, emphasizes the philosophical underpinnings of science, discusses the role of theological considerations in scientific methodology, and concludes by highlighting Alvin Plantinga's argument for the deep concord between theism and science and the deep conflict between naturalism and science.

Main Themes and Important Ideas:

1. The Contemporary Controversy:

- The session begins by acknowledging the contemporary debate surrounding the relationship between science and religion, particularly the New Atheist claim that theism is incompatible with scientific knowledge and rational thought.
- **Quote:** "One of the controversial questions of our time has to do with the relationship between science and religion. Is science a threat to religion? Can religious beliefs be reconciled with scientific knowledge?"

2. Problematic Perspectives:

- Scientism/Positivism: The view that all knowledge must come from or be scientifically verifiable. Spiegel argues this view is self-refuting as the claim itself cannot be proven scientifically.
- Quote: "We've already noted that this view itself is problematic because it doesn't satisfy its own demands. It's self-refuting. You cannot prove the thesis of scientism scientifically."
- **God of the Gaps:** The idea that religion aims to explain what science cannot, filling the gaps in scientific understanding. Spiegel critiques this by stating it assumes something cannot have both scientific and theological explanations.
- **Quote:** "A major problem with this approach is that it assumes that something cannot have both a scientific and a theological explanation."

3. Models of Science and Theology Relationship:

- Conflict Thesis: Science and religion are inherently opposed, requiring a choice between them. Historical events like the Galileo controversy and the emergence of Darwinism are often cited. Spiegel notes that conflicts often arise at the level of interpretation and theory, not necessarily between the facts of the world and biblical truth.
- **Quote:** "The conflict thesis, which says that science and religion are inherently opposed to one another and that one must choose to either be scientific or religious. You can't be both."
- Independence Thesis (Non-Overlapping Magisteria): Science (natural order) and theology (supernatural, spiritual, moral realms) pertain to separate domains and cannot conflict. Spiegel, referencing Stephen Jay Gould, finds this problematic due to overlapping areas of inquiry like cosmic origins, human nature, etc., addressed by both.
- Quote: "Stephen Jay Gould...proposed a version of this, the idea of a nonoverlapping magisteria, that science has its concerns and religion and theology have other concerns and so they can't really ever conflict. The problem, though, is that there are some issues that both science and theology investigate..."
- Interactive Model: The preferred model, where science and theology are interactive approaches to the same reality. They may make competing claims at the theoretical level, requiring a case-by-case analysis to determine where one might correct the other.
- **Quote:** "The third model, which I would endorse and that I think most Christian philosophers of science would endorse, is an interactive model, which says that science and theology are interactive approaches to the same reality."

4. Lessons from Thomas Kuhn:

- Scientific Inquiry is Not Neutral (Theory-Laden): Observations are influenced by pre-existing theories and paradigms. Examples include the geocentric vs. heliocentric view and the creationist vs. Darwinist interpretation of animals in a zoo. The duck-rabbit illusion illustrates how preconceptions shape perception.
- **Quote:** "One is that scientific inquiry is not neutral. That all observation is, as he puts it, theory-laden. Our perceptions of the world are colored by our theories about the world."

- Scientific Theories are Underdetermined by the Data: Multiple theories can explain the same phenomena. Theory choice involves factors beyond strict deduction, including explanatory power, elegance, and beauty. Anecdotes like Kekulé's discovery of benzene's structure highlight the role of imagination.
- **Quote:** "Many different theories can consistently explain the same phenomena. Theories are chosen because of their explanatory power, things like their general fit, elegance, beauty, and so on. But they are not strictly deduced."

5. Presuppositions of Science:

- Science relies on fundamental assumptions that are not themselves scientifically provable, highlighting the limits of science and the falsity of scientism. These include:
- General reliability of sense perception
- Law of causality
- Uniformity of nature
- Reliability of the laws of logic
- These are presented as "philosophical articles of faith."
- **Quote:** "One of the assumptions that scientists make, because everybody makes, is what's called the general reliability of sense perception... The law of causality states that every effect must have a cause. Again, a faith commitment."

6. Methodological Naturalism vs. Theistic Science:

- Metaphysical Naturalism: Only the physical world exists, no supernatural beings.
- **Methodological Naturalism:** Scientific explanations should only refer to natural phenomena, without invoking supernatural agents. Spiegel notes that a theist can consistently hold this view but questions its necessity and superiority.
- Arguments for Methodological Naturalism: Science aims to explain natural phenomena naturally (appealing to supernatural causes is "cheating"). The concept of functional integrity (God made the world self-sufficient).
- **Critiques of Methodological Naturalism:** The "cheating" argument begs the question. Functional integrity arguments ironically rely on theological premises. Laws of nature are descriptive, not causal explanations themselves.

- **Theistic Science:** An alternative approach, advocated by figures like Alvin Plantinga and proponents of Intelligent Design, which allows for theological considerations to inform scientific inquiry. Interdisciplinary approaches are valued in academia, so why should science be an exception?
- **Quote:** "Theistic science takes into account theological considerations when doing science. And it's okay on this view to do scientific research in light of anything else that one knows, including theological truths."
- Intelligent Design Theory: Presented as an example of theistic science, considering evidence of design in both inanimate (fine-tuning) and animate (irreducible complexity) nature as potentially indicating supernatural causation.

7. Alvin Plantinga's "Where the Conflict Really Lies":

- Plantinga argues for a superficial conflict and deep concord between science and theistic religion, but a superficial concord and deep conflict between science and naturalism.
- Conflict between Science and Naturalism:Reliability of Cognitive Faculties: Naturalism, particularly when combined with Darwinian evolution, struggles to provide assurance that our cognitive faculties are aimed at producing true beliefs, as survival value doesn't necessitate truth-tracking. Examples of false beliefs with survival value are given.
- **Quote:** "Plantinga has noted that this is problematic for the naturalist because if you're a naturalist, you have to be a Darwinist...it does not guarantee that my cognition is aimed at truth."
- Uniformity of Nature: Naturalism offers no compelling reason to believe the laws of nature will remain constant. Theism, however, posits a consistent divine order.
- Efficacy of Mathematics: The remarkable ability of mathematics to accurately describe and predict the physical world is a mystery for naturalism. Theism explains this through God's design of both the world and human cognition.
- Quote: "The efficacy of mathematics in understanding the physical world, which is an absolute mystery to the naturalist...the theist has an explanation, and that is that God has set the world up this way, and he has fitted the human mind and human cognition to the world in such a way that we can be confident that thought reflects reality."

• **Concord between Science and Theism:** Theism provides a framework for understanding the reliability of our cognitive faculties, the uniformity of nature, and the efficacy of mathematics, which are foundational assumptions for scientific inquiry.

Conclusion:

Dr. Spiegel concludes by endorsing Plantinga's view, emphasizing the deep compatibility between theism and science while highlighting the inherent tensions between naturalism and the very foundations upon which scientific inquiry rests. He underscores that while science has achieved remarkable progress, it operates within certain philosophical frameworks and relies on assumptions that theism can coherently account for in a way that naturalism struggles to do.

4. Study Guide: Spiegel, Philosophy of Religion, Session 14, Theism and Science

Theism and Science: A Study Guide

Quiz

- 1. What is scientism or positivism, and what is the primary criticism against this viewpoint discussed in the text?
- 2. Explain the "God of the Gaps" mentality. What is the main problem associated with this perspective on the relationship between science and theology?
- 3. Describe the conflict thesis regarding science and religion. Provide a historical example often used to support this view.
- 4. What is the central idea of the independence thesis, as exemplified by Stephen Jay Gould's concept of non-overlapping magisteria? What is a key challenge to this thesis?
- 5. Explain the interactive model for understanding the relationship between science and theology, as endorsed by the author. How does this model address potential conflicts between them?
- 6. According to Thomas Kuhn, how does the concept of "theory-laden observation" influence scientific inquiry? Provide an example illustrating this idea.
- 7. What does Kuhn mean when he states that scientific theories are "underdetermined by the data"? Briefly describe one of the examples provided in the text to illustrate this point.
- 8. Identify three fundamental assumptions or "faith commitments" that scientists make when conducting scientific research, as discussed in the lecture.
- 9. Distinguish between metaphysical naturalism and methodological naturalism. Can a theist coherently affirm methodological naturalism? Explain.
- 10. What is Alvin Plantinga's main thesis in his book *Where the Conflict Really Lies* regarding the relationship between science, theism, and naturalism? Briefly explain one of his arguments supporting this thesis.

Quiz Answer Key

- Scientism or positivism is the view that all genuine knowledge must come from science or be empirically verifiable. The primary criticism is that this view is selfrefuting because the claim itself cannot be proven scientifically through empirical testing.
- The "God of the Gaps" mentality is the idea that religion exists to explain phenomena that science cannot. The main problem is that it assumes something cannot have both a scientific and a theological explanation, potentially leading to the erosion of religious explanations as science advances.
- 3. The conflict thesis asserts that science and religion are inherently opposed, forcing individuals to choose one over the other. The Galileo controversy, involving the geocentric versus heliocentric views, is a common historical example.
- 4. The independence thesis proposes that science and theology operate in separate realms—the natural and the supernatural/moral, respectively—thus precluding conflict. A key challenge is that scripture addresses topics like cosmic origins and human nature, which are also subjects of scientific inquiry, indicating an overlap.
- 5. The interactive model posits that science and theology are interactive approaches to the same reality. When their theories conflict, this model suggests a case-by-case evaluation, being open to correction from either side based on all available evidence.
- 6. Kuhn argues that all scientific observation is influenced by pre-existing theoretical frameworks or paradigms. For example, a creationist and a Darwinist might observe the same animals in a zoo but interpret their origins and significance through their different theoretical lenses.
- 7. Kuhn means that the available data can often be explained by multiple different scientific theories. The example of Kekulé's discovery of the benzene ring structure, which came about through a dream, illustrates that scientific breakthroughs are not always strictly logical deductions from data.
- 8. Three fundamental assumptions include the general reliability of sense perception, the law of causality (every effect has a cause), and the uniformity of nature (laws of nature remain constant).
- Metaphysical naturalism is the belief that only the physical world exists, with no supernatural entities. Methodological naturalism is the practice of limiting scientific explanations to natural phenomena without reference to the

supernatural. A theist can coherently affirm methodological naturalism by believing in the supernatural while still adhering to naturalistic explanations within scientific inquiry.

10. Plantinga's main thesis is that there is superficial conflict but deep concord between science and theistic religion, while there is superficial concord and deep conflict between science and naturalism. One argument supporting this is that naturalism struggles to account for the reliability of our cognitive faculties for attaining truth, a necessary assumption for scientific inquiry, whereas theism, with its concept of a truth-oriented creator, provides a coherent explanation.

Essay Format Questions

- Critically evaluate the three models for the relationship between science and theology presented in the lecture: the conflict thesis, the independence thesis, and the interactive model. Which model do you find most compelling and why? Support your answer with specific arguments and examples from the source material.
- 2. Discuss the significance of Thomas Kuhn's ideas on the nature of science, particularly the concepts of theory-laden observation and the underdetermination of theories by data, for understanding the relationship between scientific and religious perspectives. How might these concepts foster either conflict or dialogue?
- 3. Analyze the arguments for and against methodological naturalism as a guiding principle for scientific inquiry, especially from a theistic perspective. What are the potential benefits and drawbacks of this approach for both science and religious belief?
- 4. Explain Alvin Plantinga's argument that there is a "deep conflict between science and naturalism." Focus on his points regarding the reliability of cognitive faculties, the uniformity of nature, and the efficacy of mathematics. How does theism, according to Plantinga, offer more coherent explanations for these aspects that are foundational to science?
- 5. Consider the implications of the "interactive model" for addressing disagreements between scientific findings and theological interpretations. Describe the process of navigating such conflicts according to this model, and discuss the importance of intellectual humility and openness to revision on both sides.

Glossary of Key Terms

- **Scientism/Positivism:** The view that the only valid form of knowledge is scientific knowledge, obtainable through empirical observation and testing.
- **God of the Gaps:** An approach that uses theological explanations to fill in the gaps in scientific understanding.
- **Conflict Thesis:** The idea that science and religion are fundamentally opposed and irreconcilable.
- **Independence Thesis:** The view that science and religion deal with separate, non-overlapping realms of inquiry, thus preventing conflict.
- Non-Overlapping Magisteria (NOMA): Stephen Jay Gould's concept that science and religion each have their own distinct "magisteria" or domains of teaching authority. Science covers the empirical world, while religion deals with meaning and values.
- Interactive Model: The perspective that science and theology are both approaches to the same reality and can interact, potentially correcting or informing one another.
- **Theory-Laden Observation:** The idea, proposed by Thomas Kuhn, that all scientific observation is influenced by the observer's pre-existing theoretical beliefs and frameworks.
- **Underdetermination of Theories:** The concept that the available empirical data can often be explained by multiple different scientific theories.
- **Paradigm:** A dominant theoretical framework or model within a scientific discipline that shapes how scientists perceive and interpret data.
- **Metaphysical Naturalism:** The philosophical belief that only the physical world exists and that there are no supernatural entities or phenomena.
- **Methodological Naturalism:** The principle that scientific inquiry should restrict itself to natural explanations and avoid appealing to supernatural causes.
- **Theistic Science:** An approach to science that allows for the consideration of theological insights and beliefs in the process of scientific inquiry.

- Intelligent Design (ID): A theory arguing that certain features of the universe and living things exhibit characteristics of design and therefore imply an intelligent cause, rather than solely undirected natural processes.
- Irreducible Complexity: A concept in intelligent design theory referring to biological systems composed of multiple interacting parts where the removal of any one essential part would cause the system to cease functioning.
- **Functional Integrity:** The idea that God created the natural world to be selfsufficient and capable of operating through natural laws without the need for supernatural intervention.

5. FAQs on Spiegel, Philosophy of Religion, Session 14, Theism and Science, Biblicalelearning.org (BeL)

Science and Religion: An FAQ

1. Is science inherently in conflict with theistic religion? The "conflict thesis" suggests that science and religion are fundamentally opposed, forcing individuals to choose one over the other. Historical events like the Galileo controversy and the emergence of evolutionary theory are often cited to support this view. However, simply because scientific theories and theological interpretations sometimes clash does not mean that the underlying truths of the world and religious scripture are contradictory. Conflicts often arise at the theoretical level as we interpret data from both the natural world and religious texts.

2. What is the "God of the Gaps" mentality, and why is it problematic? The "God of the Gaps" approach posits that religion serves to explain phenomena that science cannot. Theology fills the explanatory gaps left by scientific inquiry. This view is problematic because it assumes that a phenomenon cannot have both a scientific and a theological explanation. Furthermore, as science progresses, the "gaps" tend to shrink, potentially leaving less and less for theology to explain, which can be seen as a weakening of religious claims.

3. What are the different models for understanding the relationship between science and theology? There are three main models discussed: * Conflict Thesis: Science and religion are inherently opposed. * Independence Thesis: Science and theology operate in entirely separate realms with no overlap (e.g., Stephen Jay Gould's non-overlapping magisteria). This view is challenged by the fact that both fields do address some of the same issues, such as cosmic origins and human nature. * Interactive Model: Science and theology are interactive approaches to the same reality. They can sometimes make competing claims, requiring a careful examination of the theories on both sides to determine where correction might be needed. This model suggests that either scientific inquiry or theological understanding can potentially refine the other. **4.** How do the ideas of Thomas Kuhn influence our understanding of the relationship between science and religion? Thomas Kuhn argued that scientific inquiry is not neutral and that all observation is "theory-laden." Our perceptions are shaped by our existing theoretical frameworks or paradigms. For example, a creationist and a Darwinist might observe the same animal but interpret its existence through different theoretical lenses. Kuhn also pointed out that scientific theories are "underdetermined by the data," meaning multiple theories can often explain the same phenomena, and theory choice involves factors beyond strict deduction, such as elegance and explanatory power. These ideas highlight that both scientific and religious interpretations involve frameworks and are not purely objective readings of data.

5. What are some of the fundamental assumptions or "faith commitments" that underlie scientific inquiry? Science relies on several fundamental assumptions that cannot themselves be scientifically proven. These include: * The general reliability of sense perception. * The law of causality (every effect has a cause). * The uniformity of nature (natural laws remain constant). * The reliability of the laws of logic. These presuppositions are akin to philosophical articles of faith necessary to even begin scientific investigation, demonstrating that science is not entirely self-sufficient in its foundations.

6. What is the difference between metaphysical naturalism and methodological naturalism, and how might a theist view methodological naturalism? Metaphysical naturalism is the belief that only the physical world exists and there are no supernatural entities. Methodological naturalism, on the other hand, is the view that scientific explanations should only refer to natural phenomena without invoking supernatural agents. A theist can coherently affirm methodological naturalism, believing in God and the supernatural while still maintaining that scientific inquiry into the natural world should be limited to natural explanations. However, the question remains whether this is the best approach for a theist, as it potentially restricts the scope of explanation and might prematurely rule out the possibility of supernatural causation in certain domains.

7. What is "theistic science," and how does it differ from methodological naturalism? "Theistic science" is an approach that explicitly allows for theological considerations to inform scientific inquiry. Proponents argue that science should be open to input from all relevant fields, including theology, just as other academic disciplines engage in interdisciplinary approaches. Theistic science permits the inference of supernatural causes based on evidence, whether in cosmology, biology (e.g., intelligent design theory), or other areas. This contrasts with methodological naturalism, which strictly limits scientific explanations to natural causes. 8. According to Alvin Plantinga, where does the real conflict lie regarding science and religion? Alvin Plantinga argues that the real conflict is not between science and theistic religion, but rather between science and metaphysical naturalism. He suggests a deep concord between science and theism because theism can account for certain fundamental assumptions of science that naturalism struggles with. These include: * The reliability of our cognitive faculties for inquiry and their tendency to produce true beliefs. Theism posits a God who designed humans with truth-seeking minds, whereas naturalism, focusing on survival and adaptation, offers no guarantee that our thoughts accurately reflect reality. * The uniformity of nature, which is readily explained by a consistent creator God but is an unexplained assumption within naturalism. * The efficacy of mathematics in understanding the physical world, which seems less mysterious if one believes in a divinely ordered cosmos and minds attuned to its structure.