

Foundations of Personal Finance: A Christian Perspective

Robert Brooks

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To my wife Ann,
as well as my children,
Joshua (and his wife Kaylee, sons Elijah, Matthew, and Ezra, and daughter Elizabeth),
Stephen (and his wife Kimberlee, sons Luke and John, and daughter Hanna),
Paul (and his wife Katelyn and daughter Natalie),
Rebekah (and her husband John),
Phillips (and his wife Chandler and son Peter),
and Rachael (and her husband Nathan)

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Opening Quote

“If God had perceived that our greatest need was economic, he would have sent an economist. If he had perceived that our greatest need was entertainment, he would have sent us a comedian or an artist. If God had perceived that our greatest need was political stability, he would have sent us a politician. If he had perceived that our greatest need was health, he would have sent us a doctor. But he perceived that our greatest need involved our sin, our alienation from him, our profound rebellion, our death; and he sent us a Savior.” D. A. Carson

Preface

Thank you for joining us for an exploration of personal finance foundations. My academic interest for over 40 years is finance. Based on extensive research and industry consulting, I have concluded that one key to human flourishing is improved financial decision-making. At its core, decision-making rests on philosophical presuppositions or one's worldview. Although covered in detail later in this material, a worldview is simply a conceptual arrangement by which we fit everything we believe and through which we interpret and judge reality. It is analogous to eyeglasses.

The goal here is an attempt to express reasons for the truthfulness of the Christian worldview. If the Christian worldview is true—and I believe it is—then those who embrace it will make significantly different financial decisions. Thus, we seek to establish the link between worldviews and finance. You will find here various arguments for the truthfulness of the Christian worldview. An apologist is simply a person that seeks to defend a particular worldview.

It is important to disclose the lack of formal theological or philosophical training. Rather for well over 35 years, my wife and I have been engaged in various apologetic encounters primarily with international students and visiting scholars.

Thus, my hope is that as C. S. Lewis notes, “It often happens that two schoolboys can solve difficulties in their work for one another better than the master can. When you took the problem to a master, as we all remember, he was very likely to explain what you understood already, to add a great deal of information which you didn't want, and say nothing at all about the thing that was puzzling you. ... The fellow-pupil can help more than the master because he knows less. The difficulty we want him to explain is one he has recently met. The expert met it so long ago that he has forgotten. He sees the whole subject, by now, in such a different light that he cannot conceive what is really troubling the pupil; he sees a dozen other difficulties which ought to be troubling him but aren't.”¹

The material presented here is taken from many sources and is just my compilation of the hard work of numerous other authors. Thus, one way to view this material is my effort to organize apologetic materials in a form that is personally useful to me—particularly in the context of personal finance. The hope is that you will also benefit from how this material is organized and gain your own insights.

Although not written initially for this purpose, one perspective is that this book was written as a response to other authors' who are grappling with philosophical foundations of personal finance, but from a non-Christian perspective. Examples of these books include:

Brian Portnoy, *The Geometry of Wealth: How to Shape a Life of Money and Meaning*, Harriman House, 2018.

David Dubofsky and Lyle Sussman, *Your Total Wealth: The Heart and Soul of Financial Literacy*, HSF Publishing, LLC, 2021.

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Any book of this length and of this nature will contain errors. I would be deeply grateful if you could help me locate them. Please email your feedback to rbrooks@frmhelp.com. If this material is ever made permanent in some form, an errata sheet will be available at www.robortebrooks.org. Further, you will find several other supporting materials at this website.

¹The idea for this approach is taken liberally from C. S. Lewis, *Reflections on the Psalms* (Orlando, FL: Harcourt, Inc., 1958), pages 1-2.

Tuscaloosa, Alabama
January 2024

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This work is based on more than forty years of interacting with students and scholars at universities, primarily internationals that had an interest in appraising the legitimacy of Jesus Christ's claims. Many people have provided insights that have helped improve communicating Christian perspectives on various topics. To paraphrase an ancient proverb, a short conversation over tea with a wise person is better than reading many books. I am deeply indebted to the many people that engaged me in conversation relating to the claims of Jesus Christ.

I am particularly grateful to one of my professors in graduate school that believed I should not be in a graduate finance program because I was a Christian. In his mind, being a finance professor was incompatible with being a follower of Jesus Christ. It was the first significant challenge to my worldview.

Further, I am grateful to a student, who over 30 years ago, asked permission to convert me to atheism. He had taken several of my classes and concluded that I was a rational person given his experiences in my finance classes. As before, in his mind, being a finance professor was incompatible with being a follower of Jesus Christ. He was a brilliant student, and his arguments were systematic, clear, but just not compelling against the sheer weight of evidence favoring the Christian worldview. The many hours we spent evaluating the arguments and considering the evidence was deeply beneficial to me. The effect was opposite from his intentions—it resulted in me having a much deeper understanding of the solid foundation upon which the Christian worldview rests.

I am also the beneficiary of numerous conversations with international scholars, many of whom were from countries openly hostile to followers of Jesus Christ. Many of them while in America desire to explore various worldviews, including the Christian worldview. It is a unique experience to share various Bible passages with thinkers who have no background in anything involving God.

I recall being with about eight scholars as the account of Lazarus' death and resurrection was being covered.² Most of these scholars did not know what was recorded in verse 44 when in verse 43 it was recorded that Jesus spoke at Lazarus's tomb, "Lazarus, come out." In verse 44, it is recorded, "The man who had died came out" One of the scholars turned and looked at me and said, "This changes everything." You know, he was right. It does change everything. C. S. Lewis said, "I believe in Christianity as I believe that the Sun has risen, not only because I see it, but because by it I see everything else."³ To me, everything else particularly includes finance.

Many people have invested time to improve this material. I am deeply indebted to Ann, my wife, for long hours of editing early drafts. Further, corrections and insights were provided by participants in several organizations, including members of various organizations at the University of Alabama, including the Christian Faculty Fellowship, Navigators International, and Living International Fellowship. Several individuals provided editorial insights, including Professor Don M. Chance, Scott Green, Andrew Southwell, and many others. This material has been taught in various forms at my home church, Emmanuel Baptist Church in Tuscaloosa, Alabama.

My hope is you will give this material serious consideration.

²See the Gospel According to John, Chapter 11.

³C. S. Lewis, *Is Theology Poetry?* (Samizdat University Press). Originally presented in 1944 at the Socratic Club, an Oxford debating society. Later published in the collection of essays entitled *They Asked for a Paper* (1962).

Chapter 1. Foundations⁴

Learning objectives

- Define and explain the foundational approach
- Personal finance outcomes are unavoidably based on the philosophical foundation
- Provide roadmap for the remaining materials

Opening quote

“The real trouble with this world of ours is not that it is an unreasonable world, nor even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite. Life is not an illogicality; yet it is a trap for logicians. It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait.”⁵

Overview

The goal of the material presented here is to provide an alternative way to explore personal finance. Personal finance rests on philosophical foundations; hence, we explore various candidate foundations and make the case for the truthfulness of the Christian perspective.

In this Chapter, we introduce Christian apologetics and provide a roadmap. We seek to help remove the fog in our thinking to be able to think appropriately about God. If successful, do not be surprised if you find yourself desiring heavenly treasure far more than earthly material possessions.

First, Christian apologetics is carefully defined, and its purpose and origins explored. Second, both negative and positive approaches to Christian apologetics is introduced. Finally, we explain the target audience of the material and provide an overview of remaining materials.

Overarching all this material is the notion that your financial fruit depends on your philosophical roots. If you are rooted in a false worldview, then do not be surprised if the financial fruit is distasteful for a host of reasons. For example, no amount of budgeting will benefit if you lack the willpower to change your financial habits. It is true, however, that if we align our financial habits on the solid truthfulness of the correct worldview, then the resultant financial fruit will be sweet even if not monetarily large in value.

We turn now to illustrate one financial application that makes the connection between our philosophical roots and one of life’s many choices.

Home purchase illustration

One of the most long-lasting financial decisions we make relates to our homes. Although renting for a lifetime is increasingly popular due to mobility advantages, most U.S. families eventually seek to live in a place they can call their home.

Is the home purchase decision simply an analytical and rational choice or is there more that typically goes into it? Figure 1.1 illustrates four home choices—consider them carefully. What issues or objections come to mind if you and your family (assume young couple with two children) had to choose only one to live in for the next ten years? There are several issues involved and most of us would not choose any of these, if given other choices. The often unspoken but profound driving factor in home purchase decisions relates to how we believe we will be perceived among our peers. This is not a tangible, physical, or utilitarian issue, rather an issue of human pride.

⁴This material is produced by Robert E. Brooks. For more information about the author, see www.robertebrooks.org. Further, you can read his story at <https://meettheprof.com/view/professors/entry/robert-brooks/>.

⁵G. K. Chesterton, *Orthodoxy*, Chapter 6 “The Paradoxes of Christianity,” 1908, p. 148.

Figure 1.1 Illustration of four houses



Thus, is our home choice primarily physical or metaphysical in nature? Is it driven by human desire or rational analytics? Is it primarily a mental exercise or is it more driven by our will? Do we even have this choice because we are just dancing to our DNA? One objective for exploring this material is to think more deeply about the financial choices we make daily. The goal is to then make choices that are more in line with our worldview. Improving the alignment with the correct worldview will naturally lead to human flourishing. Finding the correct worldview requires careful analysis and assessment of various types of evidence.

We now turn to carefully defining Christian apologetics.

Christian apologetics defined

Apologetics refers, in part, to making a rational defense for a particular worldview. Every worldview must pass three tests for truth, answer four questions, and address five subjects. We will use the word “claim” here to simply be a statement, idea, or declarative proposition, such as, “Jesus Christ rose bodily from the dead.”

Three tests for truth

- 1) Is the claim logically consistent?
- 2) Is the claim empirically adequate?
- 3) Is the claim experientially relevant?

Four questions to be answered

- 1) Origins: Where did we come from?
- 2) Meaning: Is life meaningful?
- 3) Morality: Are there immutable moral laws?

4) Destiny: Where am I going?

Five subjects to be understood

- 1) God – theology
- 2) Reality – metaphysics
- 3) Knowledge – epistemology
- 4) Morality – ethics
- 5) Humankind – anthropology

It is important to emphasize that every worldview, such as Christianity or naturalism, must stand these three tests for truth, must answer these four ultimate questions, and integrate these five subjects. No worldview is exempt.

One's worldview makes a difference in how we feel, think, and act. There is an existential aspect to our worldview even if it is not central. That is, it impacts how we live and thus how we make financial decisions. There is an entailment or an inevitable consequence of our worldview to personal financial decisions. If we change our worldview from one that is wrong to the correct one, it is not surprising that our financial decision-making improves. Further, we may find ourselves no longer measuring life's choices in its transitory financial currency implications. There is wealth that is much more enduring.

Christian apologetics simply seeks to produce reasons for believing and addresses challenges to one's belief. More formally, Coulter defines Christian apologetics in the following way:

“The task of developing and sharing arguments for the truth and rationality of Christianity and the falsehood and irrationality of alternatives with the aim of strengthening the faith of believers and provoking non-believers to consider Christ.”⁶

Voddie Baucham Jr. defines apologetics simply as

“... knowing what we believe and why we believe it, and being able to communicate that to others effectively.”⁷

Cornelius Van Til's definition is simply,

“Apologetics is the vindication of the Christian philosophy of life against the various forms of the non-Christian philosophy of life.”⁸

The language of the New Testament is Koine (common) Greek. The Greek word *apologia* (ἀπολογία) from which we get our word apologetics carries the meaning of making a legal defense or a carefully reasoned defense of one's beliefs or actions.⁹ It is important to note that Christians were expected to be able to provide a carefully reasoned explanation for following Jesus Christ. The apostle Peter puts it this way.¹⁰

⁶Paul Coulter, *An Introduction to Christian Apologetics*, <https://www.bethinking.org/apologetics/an-introduction-to-christian-apologetics>.

⁷Voddie Baucham, Jr., *Expository Apologetics*, 2015, p. 20.

⁸See Baucham, p. 21.

⁹See Coulter.

¹⁰All scripture is taken from the *English Standard Version* unless otherwise noted.

1 Peter 3:15 ¹⁵But in your hearts honor Christ the Lord as holy, always being prepared to make a defense (ἀπολογία) to anyone who asks you for a reason (λόγον) for the hope that is in you; yet do it with gentleness and respect,

Thus, Christians need to be ready to give a defense of the Christian faith through well-reasoned or rational means (λόγον – words, reason). Thus, Christians need to provide evidence or arguments that provide rational justification for their Christian belief.

Purpose of apologetics

There are two main objectives for apologetics, draw seekers to faith in Jesus Christ and strengthen the faith of Jesus Christ's followers. These two objectives at times rely on different approaches, whereas followers of Christ can be strengthened using in-family arguments, such as biblically-based perspectives, seekers can be drawn using out-of-family arguments, such as empirical evidence and rational persuasion.

For many issues, the arguments are independent of whether a person is a Christ-follower or not. There are times, however, where an in-family perspective will not be relevant to a seeker.

Origins of apologetics¹¹

Christian apologetics has a very long history. As Christianity emerged in the second century AD, Justin Martyr (c. 100-165 AD) appeared to have the biggest impact as he was well versed in numerous philosophies prior to following Jesus. From its origins, apologist have been criticized. For example, Tertullian (c. 155-240 AD) who was also an early apologist himself argued that various philosophies and Christianity are incompatible, famously asked, “What has Athens to do with Jerusalem?”

The New Testament writer, Luke, documented several apologetic arguments made by Paul in Acts. Paul used rational arguments to support Christianity as fulfilling the Old Testament as well as demonstrate that Christianity was better than pagan philosophical ideas. Note in Acts 17:17 provided below, Luke describes Paul as using reason in both the Jewish synagogue as well as within the Athenian business marketplace.

Acts 17:17-21 ¹⁷So he reasoned in the synagogue with the Jews and the devout persons, and in the marketplace every day with those who happened to be there. ¹⁸Some of the Epicurean and Stoic philosophers also conversed with him. And some said, “What does this babbler wish to say?” Others said, “He seems to be a preacher of foreign divinities”—because he was preaching Jesus and the resurrection. ¹⁹And they took him and brought him to the Areopagus, saying, “May we know what this new teaching is that you are presenting? ²⁰For you bring some strange things to our ears. We wish to know therefore what these things mean.” ²¹Now all the Athenians and the foreigners who lived there would spend their time in nothing except telling or hearing something new.

Paul was able to defend the Christian perspective based on the context of the Old Testament as well as from strictly a philosophical perspective within the marketplace. In Acts 26, we find Paul making a rational defense of the truthfulness of the Christian perspective and requesting the King to be patient. Paul also speaks from his own personal experience. Following this approach, the material presented here seeks to make a rational defense while illustrating finance implications from one perspective as a finance professor. We provide the entire passage so you can understand the nature of Paul's deep-seated rationality.

¹¹See Coulter.

Acts 26:1-32 ¹So Agrippa said to Paul, “You have permission to speak for yourself.” Then Paul stretched out his hand and made his defense: ²“I consider myself fortunate that it is before you, King Agrippa, I am going to make my defense today against all the accusations of the Jews, ³especially because you are familiar with all the customs and controversies of the Jews. Therefore I beg you to listen to me patiently.

⁴“My manner of life from my youth, spent from the beginning among my own nation and in Jerusalem, is known by all the Jews. ⁵They have known for a long time, if they are willing to testify, that according to the strictest party of our religion I have lived as a Pharisee. ⁶And now I stand here on trial because of my hope in the promise made by God to our fathers, ⁷to which our twelve tribes hope to attain, as they earnestly worship night and day. And for this hope I am accused by Jews, O king! ⁸Why is it thought incredible by any of you that God raises the dead?

⁹“I myself was convinced that I ought to do many things in opposing the name of Jesus of Nazareth. ¹⁰And I did so in Jerusalem. I not only locked up many of the saints in prison after receiving authority from the chief priests, but when they were put to death I cast my vote against them. ¹¹And I punished them often in all the synagogues and tried to make them blaspheme, and in raging fury against them I persecuted them even to foreign cities.

¹²“In this connection I journeyed to Damascus with the authority and commission of the chief priests. ¹³At midday, O king, I saw on the way a light from heaven, brighter than the sun, that shone around me and those who journeyed with me. ¹⁴And when we had all fallen to the ground, I heard a voice saying to me in the Hebrew language, ‘Saul, Saul, why are you persecuting me? It is hard for you to kick against the goads.’ ¹⁵And I said, ‘Who are you, Lord?’ And the Lord said, ‘I am Jesus whom you are persecuting. ¹⁶But rise and stand upon your feet, for I have appeared to you for this purpose, to appoint you as a servant and witness to the things in which you have seen me and to those in which I will appear to you, ¹⁷delivering you from your people and from the Gentiles—to whom I am sending you ¹⁸to open their eyes, so that they may turn from darkness to light and from the power of Satan to God, that they may receive forgiveness of sins and a place among those who are sanctified by faith in me.’

¹⁹“Therefore, O King Agrippa, I was not disobedient to the heavenly vision, ²⁰but declared first to those in Damascus, then in Jerusalem and throughout all the region of Judea, and also to the Gentiles, that they should repent and turn to God, performing deeds in keeping with their repentance. ²¹For this reason the Jews seized me in the temple and tried to kill me. ²²To this day I have had the help that comes from God, and so I stand here testifying both to small and great, saying nothing but what the prophets and Moses said would come to pass: ²³that the Christ must suffer and that, by being the first to rise from the dead, he would proclaim light both to our people and to the Gentiles.”

²⁴And as he was saying these things in his defense, Festus said with a loud voice, “Paul, you are out of your mind; your great learning is driving you out of your mind.” ²⁵But Paul said, “I am not out of my mind, most excellent Festus, but I am speaking true and rational words. ²⁶For the king knows about these things, and to him I speak boldly. For I am persuaded that none of these things has escaped his notice, for this has not been done in a corner. ²⁷King Agrippa, do you believe the prophets? I know that you believe.” ²⁸And Agrippa said to Paul, “In a short time would you persuade me to be a Christian?” ²⁹And Paul said, “Whether short or long, I would to God that not only you but also all who hear me this day might become such as I am—except for these chains.”

³⁰Then the king rose, and the governor and Bernice and those who were sitting with them.

³¹And when they had withdrawn, they said to one another, “This man is doing nothing to deserve

death or imprisonment.”³² And Agrippa said to Festus, “This man could have been set free if he had not appealed to Caesar.”

Later in Paul’s ministry, he continues repeatedly to serve as an apologist making a defense of the gospel. One illustration is in Philippians illustrated here.

Philippians 1:7, 16 ⁷It is right for me to feel this way about you all, because I hold you in my heart, for you are all partakers with me of grace, both in my imprisonment and in the defense and confirmation of the gospel. ... ¹⁶The latter do it out of love, knowing that I am put here for the defense of the gospel.

Approaches to apologetics

There are two core approaches to apologetics, defense and offense. Within these approaches, the key task of a Christian apologist is to serve as an ambassador for Jesus Christ. Remember too that an ambassador does not seek to represent herself, rather she represents the King whom she serves.

Defense (negative apologetics)

The goal of negative apologetics is to address challenges to the Christian faith. The apologist seeks to defend Christianity in a winsome way. An apologist seeks to remove boulders from the path that hinders seekers from finding the truthfulness of Christianity. For example, the role of defense would seek to address the rationality of creation over naturalistic evolution. The apologist might ask the opposition the source of his belief. For example, how does nothing create something?

Further, there are numerous misconceptions about 1) what it means to be a follower of Jesus Christ, 2) proper interpretation of the Bible, 3) interpreting various scientific claims, 4) refuting historical and archeological assertions, and 5) rightly interpreting the Bible with respect to personal finance. With defense, the apologist seeks to defend Christianity against various charges in a logical way without being offensive. Thus, we seek to provide a rational defense for the personal finance implications of the Christian worldview.

Offense (positive apologetics)

The goal of positive apologetics is to produce reasons to believe the Christian faith. An apologist seeks to demonstrate the rationality of Christianity. The role of offense is to seek evidence for the existence of God and the bodily resurrection of Jesus Christ. For example, the apologist could address differing explanations for what happened to Peter after Jesus’ crucifixion. With offense, the apologist seeks to exalt Christianity in a logical way without being offensive.

With our focus, we seek to exalt the Christian worldview, particularly how it applies to personal finance. If we conclude that the Bible is in fact God’s divine communication, then it would not be surprising at all that the Bible provides a truthful perspective of all things related to wealth.

Financial management

Financial management is categorized as a subfield of microeconomics within the broad field of economics. Economics is a subfield of the social sciences, and the social sciences are a subfield of science itself. Often Christian apologist find themselves interacting with formal sciences like logic or mathematics categories or the natural sciences like the physical or biological categories.

The unique approach taken here is to intentionally intersect Christian apologetics with finance, mainly personal finance. When Christianity and finance are raised in the same sentence, many immediately think of the word of faith movement that is also known as the health and wealth gospel, the prosperity gospel, or the name it and claim it gospel. This movement in various forms asserts that it

is always God's will to be healthy and wealthy. Based on clear biblical teaching as well as casual empirical observation, it is simply false.

The existence of counterfeits is often an indication of something valuable. Thieves counterfeit \$100 bills because the true \$100 bill is valuable. Thus, the true gospel of Jesus Christ has had numerous counterfeits over the centuries.

By intersecting Christian apologetics and finance, the goal is to demonstrate the truthfulness of the Christian worldview. The goal is not to give you ten tips on how to die rich. Remember, you will eventually one day die—rich or not. Rather, based on a review of the Bible and experience, the decision to follow Jesus Christ will result in suffering. You may wake up one day and find yourself making disciples in a place that is rather hostile to Christianity. Many followers of Jesus Christ have discovered that as stewards of God's resources money is a great servant but a horrible master. Simply put, the Christian worldview has a completely different perspective on wealth management. This Christian perspective is either true or false. So let us investigate.

Christian financial management

Early in my PhD coursework, I began to make the connection between Christianity and personal finance. One early connection occurred after acquiring an old copy of an English translation of Max Weber's *The Protestant Ethic and the Spirit of Capitalism* first published in 1904. He made a compelling argument for the link between free markets and the Christian worldview.

The first major challenge to this connection arrived in a PhD classroom. A world famous professor asked the class of four PhD students the following: Suppose you were offered the following game. The professor would flip a coin and if it lands heads, we receive \$100 and if it lands tails, we receive \$0. The objective was to estimate the maximum amount we would be willing to pay to play the game only once. As the discussion surrounded investor risk aversion, the expected answer was some number less than \$50, but each student's answer would vary. For example, a married student with two children might say \$40 as she would be highly risk averse, whereas a rich single student may say \$49.5 as he is less risk averse.

As students gave their respective answers, I found myself saying that I would not play as I do not gamble. The goal was not to be self-righteous, rather I was wrestling with the notion that as a follower of Jesus Christ, I was a manager of God's resources, and this game did not seem to serve a redemptive purpose. At the time, it seemed clear that the actual existence of God changes our relationship with money. Needless to say, my response sparked an intense discussion.

Money serves a useful purpose in fulfilling God's purposes. Alternatively, money is a horrible task master when enlisted for the purpose of fulfilling our own purposes. As we have witnessed, the materialism addiction is deadly.

Around this same time in the early 1980s, I came across Larry Burkett's Christian Financial Concepts ministry and books. Nearing the end of my PhD training, I began an intense study of what the Bible communicated related to finance. Over the past several decades, we have taught a wide variety of Bible-based personal finance classes. We have seen firsthand how Bible-based finance concepts effectively transforms lives. College aged people are enlightened to realize it is easily possible to never make a car payment in their lifetime through financial saving discipline. Young couples drowning in debt are radically delivered from materialism to go on to be courageous followers of Jesus Christ. Older adults' transition from an owner-perspective to God's manager-perspective and are liberated from crushing finance-related stress.

Over the past 40 years or so, we have seen numerous organizations emerge within the Christian personal finance advisory space. From Crown Ministries (current organization from the legacy of Larry Burkett) that has served over 50 million people to Dave Ramsey's Financial Peace University,

these and many other related organizations provide helpful materials in aiding people of the journey seeking Bible-based financial principles.¹²

Our objective here is not to recreate the fine work of numerous Christian-based finance organizations. Rather, our objective is to provide the philosophical foundation for the merits of Bible-based financial decision making.

According to Faith Driven Investor, Christians manage over \$150 trillion comprising over half of the world's wealth.¹³ Faith Driven Investor makes a compelling argument for the necessity to use this wealth to influence the world for good. The idea that where we invest our wealth is somehow separate from how we seek to influence culture is robustly rejected.

Ideas have consequences. The idea that the Bible addresses personal finance has a direct consequence to those of us who are biblically responsive. Can we really trust the biblical perspective, or should we turn to naturalism and modern sages?

As we will see, not only do ideas have consequences, but ideas also have antecedents. Why should we entrust the weight of our lives to the biblical perspective for the purpose of taking us across life's harrowing bridge? Will the bridge fail us just when our children head off to college and depend on our help? Thus, our focus is primarily foundational. For example, although budgeting is addressed in the next few chapters, we will refer you to other quality sources for the practical issues related to establishing a budget and the challenges of living within it.

We focus on foundational issues that get at the heart of why budgeting often fails to achieve the desired objective. We believe that if the foundation is firmly established on the biblical rock, then the unique strategies adopted will withstand the withering pressures of the day. One's grasp on a particular biblically-based strategy may weaken if it is not firmly gripped with a robust understanding of its deep truthfulness. The Christian-based finance perspective is radically different from alternative approaches, particularly those taught in academic institutions. Thus, we seek to provide a robust philosophical foundation to the Christian-based finance approach.

Target audience

The target audience for this material is not the evangelical atheist and others deeply committed to the expulsion of Christianity from the marketplace of ideas. Rather, the target audience includes two categories, maturing believers and genuine seekers.

Apologetics serves a useful role in helping young believers as they seek to grow in their newfound Christian faith. Clearly, the greater the confidence we have in the truthfulness of Jesus Christ, the more fully we embrace his lordship. Interestingly, the more fully we embrace his lordship, the easier it is to return from our natural tendency to wander away. As we realize that he was in fact who he claimed to be, then we better understand his unique position in world history. I personally found great benefit from being introduced to and studying numerous apologetic materials as a young Christian while in the PhD program at the University of Florida.

Apologetics is also beneficial for genuine seekers considering the truthfulness of Christianity. As a faculty member for over 35 years, it is amply evident that there has been a concerted effort to remove Christianity from the academic marketplace of ideas. Thus, genuine seekers find it difficult to locate unbiased materials when considering various perspectives. It is interesting to watch intellectuals, particularly PhD students from countries deeply hostile to Christianity, begin to explore the truth claims of Christianity. They are typically deeply surprised at Christianity's logical foundation, its deep

¹²See <https://www.crown.org> and <https://www.daveramsey.com>. For a more related organizations, see <https://www.sharefaith.com/blog/2015/07/top-10-christian-based-financial-organizations/>. For a listing of related books, see <https://www.lifeway.com/en/shop/books/christian-living/life-issues/personal-finance>.

¹³See the video at <https://www.faithdriveninvestor.org/executivesummary>.

empirical and rational support for various claims, ability to address life’s main questions, and the resultant ethic’s ability to navigate life’s difficult challenges.

One goal here, regardless of which category you are in, is to find common ground. We seek to identify foundational beliefs that most people share. For example, most people are deeply interested in and desire to know the truth. Further, we recognize that we believe many things unproven as will be demonstrated later. All human knowledge rests on many things that we accept by faith. That is, we presuppose. For example, rational humans believe the law of non-contradiction. In general, the law of non-contradiction states that two mutually exclusive propositions cannot both be true at the same time in the same sense.¹⁴ Thus, Christianity and any one of numerous other perspectives cannot both be true. It is deeply disingenuous to make assertions such as truth depending on whether you believe it or not. Truth is objective in nature.

Finally, quality Christian apologetic approaches assert various truth claims with as much rational support as possible, but it is not appropriate for the Christian apologist to be antagonistic. Jesus’ approach to seekers was genuine as well as gentle.

Where do we go from here?

One objective is to demonstrate conclusively that our philosophical foundation is the driving force for personal financial decision-making. Further, the Christian foundation is the most logically coherent and further the perspective that best corresponds with financial realities.

The following table provides a sketch of the thirteen Chapter covered within this material.

Chapter	Topic
1	Foundations
2	Philosophy: Logic and epistemology
3	Philosophy: Metaphysics and ethics
4	Nature of information
5	Existence of God
6	Competing worldviews
7	Naturalism, Christianity, and Science
8	Problem of suffering
9	The Bible as hearsay or heresy
10	The Bible as history
11	Miracles
12	The grand miracle: The resurrection of Jesus Christ
13	Loving your neighbor and apologetics

One’s philosophical foundation matters greatly. With an eye toward the following thirteen chapters, we sketch the profound contrast between the Christian worldview and atheistic naturalism (existence exists and that is all that exists).

¹⁴For a more complete discussion, see Logic section of Session 2.

Chapter	Christianity	Naturalism
1	Manager of God’s resources	Owner of my resources
2	Intricate design and order	Chaos
3	Immutable ethics	Mutable and tentative social arrangements
4	Objective reality	Subjective perceptions, never sure real
5	Beauty	Preference
6	Particularism—know particular claims	Skepticism—somehow sure no absolutes
7	Economic abundance	Dwindling scarcity
8	Meaningful life	Meaninglessness of all of life
9	Transcendent reality pervades everything	Existence is all that exists and that is it
10	Truth is known with certainty	Truth is not knowable
11	Divine declared communication	Divine silence
12	Deep and abiding hope in life	Hopelessness
13	Loved deeply by God and others	At best tolerated by others

Summary

Again, the goal of this material is to spark discussion. Being a good discussant is a lost art in today’s American culture.

Personal finance rests on philosophical foundations and in future chapters we will explore several different philosophical foundations. In this Chapter, we introduced the Christian foundations and the concept of apologetics as well as provide a roadmap on where we will be going over the next several chapters.

Christian apologetics was defined, and its purpose and origins explored. Second, both negative and positive approaches to Christian apologetics was introduced. Finally, the target audience was identified for using this material and concludes with an overview of the thirteen Chapters. We will intentionally integrate various financial issues as part of appraising different worldviews.

As you begin to work your way through this material, what questions would you like to have answered or what issues would you like to have addressed? Your feedback will help improve this material.

Further resources

Books

Craig, William Lane, *Reasonable faith: Christian truth and apologetics*, 3rd edition (Crossway, 2008)

Keller, Tim, *The reason for God: Belief in an age of skepticism* (Dutton, 2008)

Lennox, John C., *God’s undertaker: Has science buried God?* (Lion, 2007)

Lewis, C. S., *Mere Christianity* (Harper Collins, 1952)

Lewis, C. S., *Miracles* (Harper Collins, 1947)

Lewis, C. S., *The problem of pain* (Harper Collins, 1940)

McDowell, Josh, *A ready defense* (Thomas Nelson, 1990).

Strobel, Lee, *The case for a creator* (Zondervan, 2004)

Strobel, Lee, *The case for Christ* (Zondervan, 1998)

Strobel, Lee, *The case for faith* (Zondervan, 2000)

Useful websites

<https://www.bethinking.org/apologetics>: Managed by the Universities and Colleges Christian Fellowship (UCCF) whose goal is to “make disciples of Jesus Christ in the student world.”

<https://carm.org>: Christian Apologetics and Research Ministry—contains a wide array of useful materials.

Chapter 2. Philosophy: Logic and Epistemology

Learning objectives

- Brief introduction to philosophy
- Illustration of basic concepts in logic and how it is used in apologetics
- Define epistemology and demonstrate its importance in apologetics
- Explore important connections between logic and epistemology with financial budgeting

Opening quotes

“(T)o be ignorant and simple now—not to be able to meet the enemy on their own ground—would be to throw down our weapons, and to betray our uneducated brethren who have, under God, no defense but us against the intellectual attacks of the heathen. Good philosophy must exist, if for no other reason, because bad philosophy needs to be answered.” C. S. Lewis, *The Weight of Glory*, p. 58.

“Our economic future is not now and never has been tied to the physical assets we now see, but to the vast untapped potential of creative thinking—the metaphysical process which can show us entirely new reserves and new and easier ways of doing things, extending value and increasing wealth without depleting our planet.” (Warren T. Brookes, *The Economy in Mind* (NY: Universe Books, 1982), p. 36.)

Overview

In this Chapter, we begin a quick tour through the field of philosophy. We apply learned concepts to the often not-so-popular topic of budgeting. After exploring definitions of philosophy and philosophical worldview, we quickly journey through philosophy’s four pillars, logic, epistemology, metaphysics, and ethics. In this Chapter we will look closely at the first two pillars—logic and epistemology. In the next Chapter, we will conclude our brief review with the final two pillars of metaphysics and ethics.

The material in these two chapters is rather dense. It will be challenging and likely frustrating at times. To provide encouragement, consider the following quote, “The primary and essential character of wealth is metaphysical, not physical, and is the direct result of the creativity of mind, not the availability of raw materials—the sum product of individual efforts, not the manipulated static resources of collective nations or governments or lands.”¹⁵ What is Warren T. Brookes asserting here?

Most of us have been educated to believe that the primary and essential character of wealth is physical. It is our nice house and car, and if things go well, then houses and cars. One objective here is to seek more deeply to understand the dominant role the non-physical plays in each of our lives. With this new understanding, we are better able to make financial decisions that lead to human flourishing.

Philosophy defined

Philosophy is derived from two Greek words (phileos or φίλος “to love” and Sophia or σοφία “wisdom”) meaning loving wisdom. (GF, 13)¹⁶ “Philosophy is ... the critical analysis of fundamental concepts of human inquiry, and the normative discussion of how human thought and action ought to function, as well as the description of the nature of reality.” (GS, 17) “Philosophy is just thinking hard about something.” (Alvin Plantinga quoted in MC, 28)

We inherently know that there is something amiss between say normative behavior and positive behavior. Normative is defined as what ought to be. Positive is defined as what actually is. We easily observe in other people’s lives and even within our own lives a significant disconnect between what ought to be (normative) and what actually is (positive). In today’s intellectual culture, there is a heavy focus on the positive informing the normative. For this study, with an emphasis on finance, we can see

¹⁵Warren T. Brookes, *The Economy in Mind* (NY: Universe Books, 1982), p. 12.

¹⁶Source abbreviations defined in this Chapter’s references.

this contrast played out in that the mantra for finance in today’s culture is “data rules.” From a Christian perspective, perhaps the mantra should be “data fools” as history repeatedly demonstrates that those things that have never happened in history do happen. The closer one’s worldview is to the truth; your financial management decisions will improve. For example, a deep understanding of what it really means to be human will solve numerous problems when entering financial contracts.

When budgeting, we clearly need to keep our earning above our yearning (normative). Unfortunately, we will struggle when our yearning results in actual spending exceeding our earning (positive).

Philosophical worldview

A worldview is an ordered set of propositions that one believes, especially propositions about life’s most important questions. (MC 13) In the context here, a philosophical worldview means a perspective based on an ordered set of propositions that govern all aspects of life. Worldview is derived from a German word, Weltanschauung that means wide world perspective. Specifically, from Welt (world) and anschauung (perspective).

These propositions tend to be presuppositions and core assumptions as opposed to the particular decision-making process taken for a particular task. Presuppositions are implicit assumptions about the world for it to make sense. It is often core to any argument to posit a philosophical worldview. One’s worldview is like a pair of glasses used to see the world as illustrated in Figure 2.1.

Figure 2.1. One’s worldview illustrated with eyeglasses



Once a person has established their philosophical worldview—knowingly or not—then one has the capacity to make decisions that are coherent as an outcome stemming from their worldview. We will examine various worldviews in more detail in Chapters 6 and 7. Once one has adopted a particular philosophical worldview, then the analytical process of making decisions are better grounded by reason.

If our identity is linked to our material possessions, then the budgeting process will be a lifelong challenge. If our identity is not linked to our material possessions, then the budgeting process will simply be a part of the decision-making process involved to achieve our purpose.

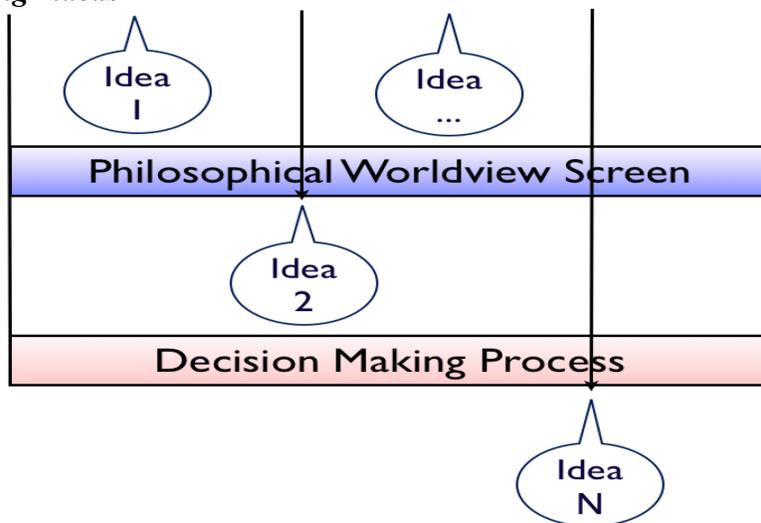
Decision-making process

In the context here, the decision-making process means any method of assessing the “correctness” of a particular “idea” within a particular worldview. Ideas, or more precisely, propositions, are essentially

truth claims. For example, one proposition is “Jesus Christ rose bodily from the dead.” Whether or not this proposition is deemed “valid” will depend on both the particular decision-making process deployed as well as the philosophical worldview.

The philosophical worldview always precedes the decision-making process. Note the biggest influence on how decisions are made is often not the decision-making process, rather the philosophical worldview. Figure 2.2 illustrates how “ideas” are evaluated first through the philosophical worldview and then through a decision-making process. When understanding how we make financial decisions, it is crucial to understand our worldview as it will explain these decisions better than a particular decision-making process.

Figure 2.2. Processing “ideas”



When our decisions fail to correspond to reality; that is, when we consistently make poor financial decisions often the culprit is a faulty worldview. Hence, our own decisions are an important piece of evidence regarding the truthfulness of our worldview. Note when “ideas” are evaluated, there are two key considerations, coherence and correspondence.

Budgeting is a key component for performance analysis. Budgeting is not a process of checks and balances—the checks wiping out the balances! The budgeting process is deeply helpful when first seeking to understand the flow of finance throughout any organization, including a family.

Coherence

Is an “idea” coherent within a particular philosophical worldview? Coherence is focused on the internal consistency of the “idea” with one’s philosophical worldview. The focus is not on whether the “idea” is true, but rather whether there are any inconsistencies between the “idea” and the philosophical worldview. These inconsistencies are often known as defeaters. Absent any defeaters, then the “idea” is likely to be coherent.

Selected examples:

“I am absolutely certain that there are no absolutes.” (Incoherent)

“In the beginning, God created the heavens and the earth.” (Coherent within a theist’s worldview)

Coherence is normative, what ought to be, in flavor. For example, suppose you were considering the lunar cycle stock investing strategy. Specifically, the strategy involves buying stocks during the 15 days surrounding the new moon dates and shorting stocks (a process where one sells stocks they do not own) during the 15 days surrounding a full moon. For most people, including investment professionals,

this lunar cycle investing strategy does not fit their philosophical worldview. Thus, the empirical evidence or any other decision-making process is never considered.

Correspondence

Does an “idea” correspond to reality? Correspondence is focused on how well an “idea” aligns with observations within the space-time universe. Here the focus is on whether an “idea” is more likely to be true in light of empirical observations when compared with a contrary “idea.”

Selected examples:

“All swans are white.” (Lacks correspondence)

“All swans are not white.” (Correspondence)

Correspondence is positive in flavor. For example, Yuan, Zheng, and Zhu (2006)¹⁷ find significantly positive returns to the lunar cycle investing strategy identified above across 48 countries. These positive returns cannot be explained by standard approaches. Thus, an empiricist may adopt this strategy only if it initially passed through their philosophical worldview screen.

Similarly, budgeting aids in identifying lack of correspondence. The amazing features of that new car, even though \$40,000 over budget, spark the idea of acquisition. The lack of correspondence to the budget-driven plan hopefully negates an impulsive purchase.

One particularly nasty yet common mistake is to confuse an “idea” with the evidence related to it.

Ontic referent error

The ontic referent error relates to confusing an “idea” with the underlying reality either supporting or refuting the “idea”? Ontic is defined as “relating to entities and the facts about them; relating to real as opposed to phenomenal existence.” Phenomenal is defined as “perceptible by the senses or through immediate experience.” A referent is “the thing that a word or phrase denotes or stands for.”¹⁸ Thus, the ontic referent is the actual approach one uses as the basis to evaluate an “idea.”

For example, consider the “idea” that the “grass outside my front door, on the date of writing this sentence, is green.” Thus, the ontic referent would be evaluating whether the grass exhibits a dominant color wavelength around 495-570 nanometers (does it look green?).

Emmanuel Derman, a famous finance practitioner and professor, makes the ontic referent error in his book *Models. Behaving. Badly*. He states,

“A theory is not a fetish; when it is successful ... it describes the object of its focus so accurately that the theory becomes virtually indistinguishable from the object itself. Maxwell’s equations are electricity and magnetism; the Dirac equation is the electron; the Weinberg-Salam model of weak and electromagnetic interactions matches the electrons and quarks in almost every detail, as closely as one can measure. You can layer metaphors on top of the equation, but the equation is the essence. (Italics in original. p. 61)”

If the Dirac equation is the electron, then do we say that Dirac created the electron? I think not! We make a strong distinction here between an “idea” and its corresponding reality. For our purposes, an “idea” is not the corresponding object itself. An “idea” is normative, but the corresponding object is positive.

¹⁷Yuan, K., Z. Lu, and Q. Zhu, (2006). “Are investors moonstruck? Lunar phases and stock returns.” *Journal of Empirical Finance* 13(1), (January), 1-23.

¹⁸Dictionary on Mac computer (New Oxford American Dictionary).

The process of budgeting aids in avoiding the ontic referent error. The idea that we will grow our income in the future to pay off current debts is attractive. Unfortunately, often due to unanticipated events, though rationally expected, result in lack of correspondence to future income.

As we move through philosophy, we heed the warning of the Apostle Paul:

Colossians 2:6-10 ⁶Therefore, as you received Christ Jesus the Lord, so walk in him, ⁷rooted and built up in him and established in the faith, just as you were taught, abounding in thanksgiving. ⁸See to it that no one takes you captive by philosophy and empty deceit, according to human tradition, according to the elemental spirits of the world, and not according to Christ. ⁹For in him the whole fullness of deity dwells bodily, ¹⁰and you have been filled in him, who is the head of all rule and authority.

Philosophy rests on four main pillars, logic, epistemology, metaphysics, and ethics. We conclude this Chapter with a brief journey through logic and epistemology.

Logic

Logic lies at the core of all intellectual activity. We seek to avoid logically absurd “ideas”, such as a married bachelor, a square circle, and the smell of red. Other ideas must be studied more carefully to arrive at whether the “idea” is true or false. Logic is deeply objective—feelings are not involved in the reasoned result. At the core, budgeting is inherently logical. If the expenses exceed the revenue for sustained periods of time, then financial trouble is in the offing most of the time.

There are three fundamental laws of logic:

- Law of identity – declarative proposition, P (e.g., two is even number) is identical to itself and different from other things, say, Q (e.g., the grass is green).
- Law of noncontradiction – P cannot be both true and false in the same sense at the same time.
- Law of excluded middle – P is either true or false, either P is true or its negation, not-P is true. (MC, 132)

Given the tasks addressed later, we expand on the law of non-contradiction.

Law of non-contradiction

“In some ways the most fundamental area of philosophy is logic, since philosophy is a rational inquiry and since logic systematically sets forth the laws of thought and argument.” (GF, 27) Logic is the study of the rules of reasoning. (MC, 29) The goal of logic is to reach a conclusion, specifically to improve one’s ability to form good arguments as well as critically evaluate others’ arguments. Expressing oneself logically requires the hard work of carefully crafting every statement. It should not be surprising then that the presentation of logical concepts is typically done with great care and precision.

Let us now carefully define several words:

- Statement – a single assertion, an expressed concept that can be either true or false (identified with capital letters, such as, P, Q, R, and S with possibly some logical symbols introduced later)
- Premise – a set of statements, prior statements from which another statement possibly follows as a conclusion
- Conclusion – a statement that is reached from given premises
- Argument – a set of statements that serve as premises leading to a conclusion (MC, 29)
- Contradictory – the negation of a statement

Example:

P – There is no resurrection from the dead

Q – Christ has not been raised from the dead

Premise #1: If P, then Q (denoted symbolically as $P \rightarrow Q$) (Read: If there is no resurrection from the dead, then Christ has not been raised from the dead. **1 Corinthians 15:13**)

Premise #2: P (There is no resurrection from the dead.)

Conclusion #3: Q (Christ has not been raised from the dead.)

Contradictory: not P (denoted $\neg P$), there is a resurrection from the dead.

Nature of arguments

We now review three different types of logical arguments involving a set of statements with the goal of improving our ability to reach a correct conclusion.

- Deductive argument – the premises guarantee the truth of their conclusions (MC, 29), “first systematically set down by Aristotle (383-322 B.C.)” (GF, 28)
- Inductive argument – the premises render the conclusion more probable than its competitors (MC, 29)
- Abductive argument – identifying the set of premises that best explain the conclusion (or observation)

Deductive arguments

There are several important concepts related to deductive arguments.

- Formally valid – an argument whose conclusion must follow from the premises in accord with the rules of logic (MC, 29)
- Informally valid – an argument where there are no fallacies in reasoning (MC, 29)
- Logically valid – an argument that is both formally valid and informally valid
- Invalid – an argument whose conclusion does not follow from the premises in accord with the rules of logic (MC, 29)
- Sound argument – an argument that is both logically valid and has true premises (MC, 29)
- Unsound argument – an argument is either invalid or else has a false premise (MC, 29)
- Epistemically possible – a premise is not known to be false with certainty (MC, 30)
- Plausible – a premise that seems to be reasonable
- Good argument – a logically valid argument that has more plausible premises than contradictories
- Sentential logic (propositional logic) – inferences based on sentential connectives like “if ..., then,” “or,” and “and”

The following are a few selected deductive logic rules. This symbolic logical presentation was developed by Gottlob Frege (1848-1925), Bertrand Russell (1872-1970), and Alfred North Frege (1861-1947). (GF, 28)

Rule 1: modus ponens

1. $P \rightarrow Q$
2. P
3. Q

modus ponens – (Latin) method of placing, method of affirming, abbreviation for modus ponendo ponens, the method that affirms by affirming.

Recall $P \rightarrow Q$ symbolically denotes “if P, then Q.”

Example: modus ponens

P – Christ has been raised from the dead

Q – There is a resurrection from the dead

Premise #1: If P, then Q (denoted symbolically as $P \rightarrow Q$) (Read: If Christ has been raised from the dead, then there is a resurrection from the dead. (**1 Corinthians 15:20-22**))

Premise #2: P (Christ has been raised from the dead.)

Conclusion #3: Q (There is a resurrection from the dead.)

Rule 2: modus tollens

1. $P \rightarrow Q$

2. $\neg Q$

—

3. $\neg P$

modus tollens – (Latin) method of removing, method of denying, abbreviation for modus tollendo tollens, the method that denies by denying

Recall $\neg Q$ symbolically denotes “not Q.”

Example: modus tollens

P – Apostles’ statements are true

Q – Christ has been raised from the dead

Premise #1: If P, then Q (denoted symbolically as $P \rightarrow Q$) (If the Apostles’ statements are true, then Christ has been raised from the dead. (**1 Corinthians 15:15**))

Premise #2: Not Q (denoted $\neg Q$) (Christ has not been raised from the dead.)

Conclusion #3: Not P (denoted $\neg P$) (Apostles’ statements are false.)

Rule 3: Hypothetical Syllogism

1. $P \rightarrow Q$

2. $Q \rightarrow R$

—

3. $P \rightarrow R$

hypothetical – “denoting or containing a proposition of the logical form if p then q” (Mac Dictionary)

syllogism – “an instance of a form of reasoning in which a conclusion is drawn (whether validly or not) from two given or assumed propositions (premises), each of which shares a term with the conclusion, and shares a common or middle term not present in the conclusion” (Mac Dictionary)

Example: Hypothetical Syllogism

P – There is no resurrection from the dead

Q – Christ has not been raised from the dead

R – Apostles’ preaching is false

Premise #1: $P \rightarrow Q$ (If there is no resurrection from the dead, then Christ has not been raised from the dead. **(1 Corinthians 15:13)**)

Premise #2: $Q \rightarrow R$ (If Christ has not been raised from the dead, then the Apostles’ preaching is false. **(1 Corinthians 15:14)**)

Conclusion #3: $P \rightarrow R$ (If there is no resurrection from the dead then the Apostles’ preaching is false. **(1 Corinthians 15:15)**)

Note that Paul often used strict logical arguments when presenting the truthfulness of Christianity.

Jesus used laws of logic to refute opponents

Jesus was a master logician. Consider the following passage in Matthew.

Matthew 22:23-33 ²³The same day Sadducees came to him, who say that there is no resurrection, and they asked him a question, ²⁴saying, “Teacher, Moses said, ‘If a man dies having no children, his brother must marry the widow and raise up offspring for his brother.’ ²⁵Now there were seven brothers among us. The first married and died, and having no offspring left his wife to his brother. ²⁶So too the second and third, down to the seventh. ²⁷After them all, the woman died. ²⁸In the resurrection, therefore, of the seven, whose wife will she be? For they all had her.” ²⁹But Jesus answered them, “You are wrong, because you know neither the Scriptures nor the power of God. ³⁰For in the resurrection they neither marry nor are given in marriage, but are like angels in heaven. ³¹And as for the resurrection of the dead, have you not read what was said to you by God: ³²‘I am the God of Abraham, and the God of Isaac, and the God of Jacob’? He is not God of the dead, but of the living.” ³³And when the crowd heard it, they were astonished at his teaching.

More on the law of non-contradiction

Law of non-contradiction (LNC) – P cannot be both Q and not-Q at the same time and in the same sense. Can you prove the LNC? No. Any argument whatsoever must rely on the LNC. Further, you need argument to prove the LNC. Aristotle noted indirect proofs. He shows you have nonsense if the LNC is repudiated. The LNC is therefore necessary, presupposed, and used for any significant thinking. You cannot think properly if you deny the LNC. For example, you cannot use language until you presuppose the LNC, assuming predicate, noun, adjective means what it means and not something else.

New age religion repudiates the LNC. Eastern religions often allow contradictory beliefs. Both contradictory beliefs, however, cannot both be true as it requires the sacrifice of reason and the LNC. If you believe arguments are possible, then at least implicitly you are affirming the LNC.

LNC is basic. It is presuppositional. As Christians, we should accept the responsibility to adhere to the LNC. Based on the following passage, we see again Paul’s use of formal logic. (MC 115-120)

1 Corinthians 15:12-19 ¹²Now if Christ is proclaimed as raised from the dead, how can some of you say that there is no resurrection of the dead? ¹³But if there is no resurrection of the dead, then not even Christ has been raised. ¹⁴And if Christ has not been raised, then our preaching is in vain and your faith is in vain. ¹⁵We are even found to be misrepresenting God, because we testified about God that he raised Christ, whom he did not raise if it is true that the dead are not raised. ¹⁶For if the dead are not raised, not even Christ has been raised. ¹⁷And if Christ has not

been raised, your faith is futile and you are still in your sins. ¹⁸Then those also who have fallen asleep in Christ have perished. ¹⁹If in Christ we have hope in this life only, we are of all people most to be pitied.

Inductive arguments

With inductive arguments, the premises do not guarantee the truth of the conclusion, but merely provide support or grounds for the truth of the conclusion. Inductive arguments originated with Francis Bacon (1561-1626) and John Stuart Mill (1806-1970). (GF, 28)

Abductive arguments

Abduction is the process of identifying the best set of premises that support the given observation (or conclusion) from what you know. For example, if you encounter the situation where a well-functioning individual's personal expenses exceed their personal revenues over long periods of time, then you can use abduction to conclude that somewhere their beliefs and behaviors are wrong. Most financial decisions fall within abductive reasoning.

We now apply logic to the traditional budgeting process.

Logic and budgeting

One key area of finance is related to the discipline of budgeting. Budgeting is the process of estimating income and expenses over a period such as a month or year. Some have jokingly observed that budgeting involves checks and balances: The checks wipe out the balances. Given the calendar seasonality often observed in family income and expenses, most budgets include calendar months as well as the overall year.

There are numerous resources available from expensive apps to freely available forms. One free resource is provided by Crown Ministries.¹⁹ In my experience, there is a tactile benefit to working with pencil and paper or a simple spreadsheet. When later temptations arrive to stray from then agreed budget, the labor of documenting the numbers proves beneficial. Further, there is no risk of misappropriation by the app vendor of your personal information.

The practice of budgeting is extremely logical, especially when documenting historical financial activities. If your expenses exceed your revenues in a particular month, then additional resources must be found to fill the gap. There is simply no way to avoid it.

Table 2.1 illustrates just such a case. Note in Panel A that this couple with two children have an expected income of \$100,000. This income places them in the top third of the U. S. households. Unfortunately, between taxes, insurance, retirement savings, and debt this couple only has \$10,000 per year for household items. As Panel B illustrates, household consumption puts them into a deficit. The logical implications are clear. Either generate more income or eliminate expenses as this family simply cannot continue deficit spending over the long term. Gaining the knowledge and understanding of our family's income and expenses is something significantly different from having the wisdom to make the appropriate financial alterations.

¹⁹For example, numerous downloadable documents are freely available at <https://www.crown.org/resources/fillable-forms-worksheets/>.

Table 2.1. Sample income statement for couple with two children
Panel A. Income and major expenses

Income	Expected Annual	TI Percentage	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Source 1	\$84,000	84%	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Source 2	\$15,000	15%	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250
Source 3	\$1,000	1%	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83	\$83
Source 4	\$0	0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Source 5	\$0	0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Income	\$100,000	100%	\$8,333											
Tax and Deductions														
Tithe/Giving	\$5,000	5.0%	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417
Fed Tax 1	\$7,000	7.0%	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583
Fed Tax 2	\$3,000	3.0%	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Fed Tax 3	\$20,000	20.0%	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667	\$1,667
State Tax	\$5,000	5.0%	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417
Insurance 1 (Health)	\$6,000	6.0%	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Insurance 2 (Dental)	\$1,200	1.2%	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Insurance 3 (Vision)	\$600	0.6%	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Retirement 1 (Matching)	\$5,000	5.0%	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417	\$417
Retirement 2 (Supplemental)	\$0	0.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Takehome Pay	\$47,200	47%	\$3,933											
Major Items														
Mortgage/Rent	\$24,000	24.0%	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Insurance 1 (Life)	\$2,000	2.0%	\$167	\$167	\$167	\$167	\$167	\$167	\$167	\$167	\$167	\$167	\$167	\$167
Insurance 2 (Auto)	\$700	0.7%	\$58	\$58	\$58	\$58	\$58	\$58	\$58	\$58	\$58	\$58	\$58	\$58
Insurance 3 (Disability)	\$100	0.1%	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8
Debt 1 (Auto)	\$4,800	4.8%	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400
Debt 2 (Student Loans)	\$3,600	3.6%	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300
Debt 3 (Other)	\$1,900	1.9%	\$158	\$158	\$158	\$158	\$158	\$158	\$158	\$158	\$158	\$158	\$158	\$158
Other	\$100	0.1%	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8
Net Before Household	\$10,000	10%	\$833											

Panel B. Household expenses

Household	Year	TI Percentage	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Spiritual (Books, Retreats)	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Auto 1 (Repair/Replacement)	\$600	0.6%	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Auto 2 (Gas and Oil)	\$600	0.6%	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Auto 3 (Other-License/Taxes)	\$100	0.1%	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8
Dining Out/Entertainment	\$400	0.4%	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$33	\$33
Vacation	\$1,200	1.2%	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Pets	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Cleaning (Laundry)	\$600	0.6%	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Clothing	\$670	0.7%	\$56	\$56	\$56	\$56	\$56	\$56	\$56	\$56	\$56	\$56	\$56	\$56
Healthcare (Copays, OTC Drugs)	\$240	0.2%	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20
Electric	\$3,000	3.0%	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Garbage	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Gifts	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Groceries	\$6,000	6.0%	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Education (Lessons, Sports)	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Mart Items	\$1,200	1.2%	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Communication (Phone, Internet)	\$1,200	1.2%	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Cable	\$500	0.5%	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42
Subscriptions (Apps, Clubs)	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Other Personal	\$150	0.2%	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13
Allowances	\$120	0.1%	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10
Postage	\$120	0.1%	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$10
Beauty/Hair	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Home Maintenance	\$600	0.6%	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Miscellaneous	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Other Household	\$300	0.3%	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Total Household	\$20,000	20%	\$1,667											
Surplus/Deficit	(\$10,000)	-10%	(\$833)											

Note: TI Percentage denotes the yearly line item as a percentage of total income.

Remember, if your outflow exceeds your inflow, then your upkeep will be your downfall. There is a lot of analysis available regarding family financial structure, such as size of a home mortgage. Unfortunately, every family is unique, and averages often fail to provide appropriate guidance. Through careful analysis and honest reflection, this family needs more than deductive or inductive logic. Through abduction, we can seek the set of premises that best explain this difficult financial situation. One possible false premise is the belief that the family's income will grow to match its expenses. As we know, one's unrestrained yearning will consume whatever income is available. Economics generally includes the notion of scarce resources seeking to satisfy unlimited desires. It is assumed that humans will always want more.

There is always the challenge of gleaning a reasonable view of historical financial decision-making patterns. A set of premises consistent with the Christian worldview often provide the best explanation as well as a straightforward path to financial health. For example, in the case presented above, adequate preparation needs to be vigorously pursued in preparation for the situation where the family's

income takes a significant drop. It is not unreasonable to experience significant revenue declines over one's lifetime. Companies fail, jobs are lost, health is not assured, and pandemics happen just to name a few.

Clearly, there is a lot more going on than simple logic when it comes to navigating personal finance. Also, there is a lot more to the field of logic, but we will now leave it. With this foundation in logic, we now turn to explore knowledge through the field of epistemology.

Epistemology

Moreland and Craig define epistemology as the “branch of philosophy that tries to make sense out of knowledge, rationality and justified or unjustified beliefs.” Epistemology addresses “how we know” reality (GF, 20), the philosophical positions on the nature of knowledge, or a branch of philosophy that studies knowledge (RN).

Reformed epistemology “... is the idea that belief in God is a ‘properly basic belief’: it doesn’t need to be inferred from other truths in order to be reasonable.” Based on John Calvin’s doctrine of “sensus divinitatis” or an innate sense of God.

Central to epistemology is the correspondence theory of truth: “(T)ruth obtains when a truth-bearer stands in an appropriate correspondence relation to a truth-maker.” (MC, 135) The truth-bearer is the content of declarative sentences/statements and thoughts/beliefs that is true or false (where content is often called a proposition). The truth-maker is the actual state of affairs or facts.

Correspondence theory of truth

Aristotle states, “Truth occurs when thought and reality coincide.”²⁰ He also asserts, “We must believe something before we can know anything.” Recall that the truth-bearer (TB) is a declarative proposition. For example, consider the TB, “All swans are white.” For a long period of time, empiricist believed this TB to be true based on innumerable observations from the western world as illustrated in Figure 2.3.

Figure 2.3. Illustration of truth-bearer, “All swans are white.”



Recall the truth-maker (TM) is found in the space-time universe. For example, the TM observation of a black swan. Truth is said to obtain when TM corresponds to TB. Figure 2.4 illustrates the correspondence between the TB = “All swans are not white” and the TM = “Black swan observation.”

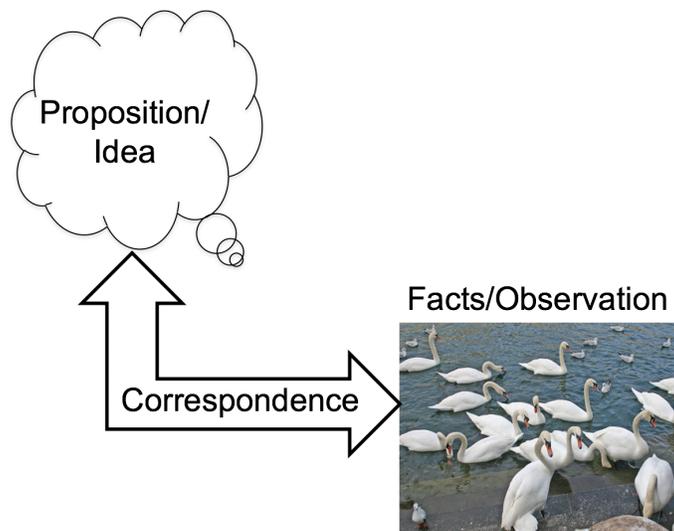
²⁰Aristotle (384-322 B.C.) Quoted in *Oxford Users' Guide to Mathematics*, 1996, p. 895.

Figure 2.4. Illustration of truth-maker, “All swans are not white.”



Thus, the correspondence theory of truth asserts that “truth obtains when reality is the way a proposition represents it to be.” (MC, 130) Alternatively, “truth obtains when a truth-bearer stands in an appropriate correspondence relation to a truth-maker.” (MC, 135) Thus, we see that propositions have intentionality, that is, they are often directed towards an object. Correspondence is a two-placed relation between a proposition (TB) and the state of affairs (TM) that is its intentional object. (MC, 139) Note that while evidence is truth-conducive, it is actually the case that evidence is not the same thing as truth itself; (MC, 141) therefore, “(t)ruth has always been a hard thing to countenance within the confines of an empiricist epistemology or a naturalist worldview.” (MC, 142) Figure 2.5 illustrate the correspondence theory of truth.

Figure 2.5. Illustration of correspondence theory of truth



Epistemology and budgeting

Finance is inherently linked to the task of valuation. Arthur Stone Dewing (1941) notes, “Underlying all practical problems in connection with the financial aspects of the corporation, there is the problem of value.”²¹ In finance, an instrument denotes anything that can be assigned a monetary value or used to assign monetary value to something else. Instrument examples include financial instruments, such as

²¹Source lost.

stocks, bonds, and mortgage contracts. Other instruments form the basis for financial instruments, such as temperature measurements, snow fall, and even number of votes. There are numerous ways to estimate a particular instrument's current value.

Epistemology lies at the very foundation of all financial valuation exercises. Valuation by definition involves the current monetary worth of perceived future benefits. For example, some people buy mutual funds, stocks, or even land because they believe in the future it will provide dividends, higher future sales prices or other benefits. Perceptions of the future involve epistemic uncertainty. That is, we simply do not know the future. If anything, we are taught over our lifetime that the future brings events that simply are not anticipated.

History is littered with financial failures where beliefs related to valuations lie at the core. Numerous families have suffered bankruptcy because of the belief that certain asset values, such as a home, would always rise.

For example, consider a family of four living in a \$700,000 home with a mortgage of \$200,000 and they ran a small motorcycle shop that made around \$250,000 per year. They essentially had no other debts but also no other assets. What could go wrong, right? When the 2008 financial crisis was wreaking havoc on communities, the shop failed and was closed. Unfortunately, many people in their neighborhood were also in financial distress and selling their homes. The \$700,000 home was auctioned for \$180,000 and the family filed for bankruptcy.

Establishing budget-related practices involve planning and preparing for rare events. According to Forbes, 37% of U. S. homes are owned without a mortgage.²² What is driving this decision, given the tax benefits of having a mortgage combined with “historically” low interest rates? You cannot go bankrupt unless you have liabilities that go unpaid. Clearly, the degree of leverage is a family choice. Upon what foundation do we make this choice? Do we base this choice on the latest financial advice sold by folks with multiple PhDs, in-depth data analysis, or even artificial intelligence? Or do we dust off the ancient documents and seek to understand the biblical basis for financial management? Understanding the level of epistemic uncertainty involved in finance is essential for improving financial decision-making.

Table 2.2 presents a sample balance sheet for the couple mentioned above. Most financial statements of this nature do not include implicit assets and implicit liabilities. An implicit asset is one that lacks tangibility such as one's human capital based on acquired skill. An implicit liability is similar such as parents' commitment to fund their children's college education. From Table 2.2 and the discussion above, there is significant epistemic uncertainty with many of these value estimates. For example, what is a reasonable estimate for one's human capital or future college costs? Further, what is the future range of possible outcomes for these valuation estimates? Clearly, financial valuation presently as well as estimating some potential future valuations poses epistemological challenges. History is filled with personal bankruptcies due to shocks in valuations coupled with unexpected loss of income or increase in expenses.

²²See <https://www.forbes.com/sites/brendarichardson/2019/07/26/nearly-40-of-homes-in-the-us-are-free-and-clear-of-a-mortgage/?sh=3e1ae82447c2>.

Table 2.2. Sample balance sheet for couple with two children

Assets	Value	TA Percentage
Cash (Checking, Savings)	\$5,000	1%
Vehicles	\$10,000	1%
Household Items	\$15,000	2%
Taxable Investments	\$5,000	1%
Retirement Accounts	\$25,000	3%
Primary Residence	\$250,000	28%
Other Assets (Land, Business)	\$75,000	8%
Other Assets (Human Capital)	\$500,000	56%
Total Assets	\$885,000	100%
Liabilities		
Payables (Rent, Utilities)	\$5,000	0.6%
Credit Cards	\$15,000	1.7%
Automobile Loans	\$50,000	5.6%
Student Loans	\$120,000	13.6%
Mortgage	\$225,000	25.4%
Other Debts (Relatives)	\$50,000	5.6%
Other Debts (Business)	\$60,000	6.8%
Other Debts (Past Due Bills)	\$5,000	0.6%
Implicit Debts (Children College)	\$300,000	33.9%
Total Liabilities	\$830,000	94%
Surplus	\$55,000	6%

Facing our daunting personal financial challenges requires that we be able to think logically and understand the actual level of epistemic uncertainty encountered. There is a critical need for us to have correspondence between personal finance ideas and the factual realities of our financial situation.

Summary

In this Chapter, we explored various definitions of philosophy and philosophical worldview. We then took a quick tour through the first two pillars within the field of philosophy, logic, and epistemology. We concluded this Chapter with an emphasis on the correspondence theory of truth and its relationship with personal financial budgets.

References

- (GF) Geisler, Norman L. and Paul D Feinberg, *Introduction to Philosophy A Christian Perspective* (Grand Rapids, MI: Baker Academic, 1980).
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Chapter 3. Philosophy: Metaphysics and Ethics

Learning objectives

- Introduce briefly metaphysics and how it is used in apologetics
- Explore ethics and demonstrate its importance in apologetics

Opening quotes

*“We are dealing, no less, with the basic conflict between two entirely different concepts of man and his universe, concepts that affect every aspect of our social and economic lives, one determinedly physical and finite and the other profoundly metaphysical and infinite; the one (collective socialism) rooted in fearful concern about visible resources, the other (market capitalism) springing from faith in spiritual reality.” (Warren T. Brookes, *The Economy in Mind* (NY: Universe Books, 1982), p. 23-24.)*

“Since philosophy is foundational to every discipline of the university, philosophy is the most strategic discipline to be influenced for Christ.” (Moreland and Craig, 2)

Overview

In this Chapter, we continue our quick tour through the field of philosophy. In the last Chapter, we introduced the first two pillars of logic and epistemology. In this Chapter, we will conclude our brief tour with the remaining two pillars of metaphysics and ethics following a brief review of logic and epistemology.

Logic and epistemology review

Recall Plantinga defines philosophy as simply just thinking hard about something. Philosophy plays out in one’s worldview. One’s worldview is like a pair of glasses used to see the world. One key to quality thinking is the law of noncontradiction; an “idea” cannot be both true and false in the same sense at the same time.

Logic is simply the study of the rules of reasoning. The goal of logic is to reach a conclusion, specifically to improve one’s ability to form good offense as well as critically evaluate and defend against others’ unsubstantiated beliefs.

According to Moreland and Craig, epistemology is a “branch of philosophy that tries to make sense out of knowledge, rationality and justified or unjustified beliefs.” Central to epistemology is the correspondence theory of truth. A truth-bearer is the content of declarative sentences/statements and thoughts/beliefs that are true or false (content is called a proposition). The truth-maker is the state of affairs (facts), any actual existing whole that is ordered by the relation of predication or exemplification (e.g., apple’s being red).

Metaphysics

Metaphysics is the study of “what we know about reality” (GF, 20) or the “... philosophical study of the nature of being or reality and the ultimate categories or kinds of things that are real.” (MC, p. 173) Metaphysics involves the investigating such things that exist.

Let us consider “knowledge” with the following statements:

- Knowledge – “facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject; expertise and skills acquired by a person through experience or education; theoretical or practical understanding of a subject.” (New Oxford American Dictionary)

- Knowledge – “A clear and certain perception of that which exists, or of truth and fact; the perception of the connection and agreement, or disagreement and repugnancy of our ideas.” (1829 Webster’s Dictionary)
- Knowledge – justified true belief (Plato); “confident understanding of a subject with the ability to use it for a specific purpose” Wikipedia

There are various forms of knowledge:

- Know that: (Polanyi) physics of balancing a moving bicycle
- Know how: (Polanyi) riding a bike
- Know how: Wisdom (actual choice, Tacit)
- Know what: Facts (autonomous, unrelated)
- Know why: Understanding (science)
- Know when: Tactical (not routine, but common)
- Know where: Strategic (not routine, rare, and major)
- Know who: Networks

Propositional knowledge (feasible set)

Truth (subset of propositional knowledge)

Belief (subset of propositional knowledge)

Knowledge (subset of intersection of Truth and Belief where there is warrant or justification)

Selected definitions useful in metaphysics

We now review several terms often used in metaphysical analysis.

Existence “is either the belonging of some property or the being belonged to by a property or, more simply, the entering into the nexus of exemplification.” (MC, 191) For example, let *z* denote any number of entities, including substances (e.g., atoms, mountains, planes, stock certificate, mortgage document, plastic credit card), properties (e.g., color, goodness), relations (e.g., greater than, father of, sets (e.g., {1, 2, 3, 4, 5}), numbers (e.g., 1, 2, 3), and propositions (e.g., grass is green)).

Exemplification means that the claim that *z* exist is the claim that the essence of being a *z* (the *what* of being a *z*) is actually exemplified by or belongs to something (the *that* or *fact* of an individual *z* existing). (E.g., tiger in MC, p. 191.)

Being is defined as the existence of “that which is” or a “something.” (GF, 168) “Beings are similar (analogous), but not identical to one another. Yet there is a unity of being, since God is the one being; everything else *has* being because He gives it being (**John 1:2, Revelation 4:11**). ‘In him we live, and move, and have our being.’ (**Acts 17:28**). God is an infinite being; and all creatures are finite beings.” (GF, 176) “All beings exist. The term *existence* is always defined in the same way, namely, ‘that which is,’ or ‘that which is actual.’”

John 1:2 ²*He was in the beginning with God.*

Revelation 4:11 ¹¹*“Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created.”*

Acts 17:28 ²⁸*for “‘In him we live and move and have our being’; as even some of your own poets have said, “‘For we are indeed his offspring.’*

Note: Paul is likely quoting Epimenides of Crete and Aratus’s poem “Phainomena” (ESV notes).

*Alternate views of existence*²³

From an atheist perspective, the universe can be defined as entities that are contained within the “total spatiotemporal system of matter and (impersonal) energy, that is, as the sum total of material objects, in some way accessible to the senses and to scientific investigation.”

From a theist perspective, the universe can be defined as entities that are contained within the universe as well as “nonspatiotemporal abstract entities.” Abstract entities are “immaterial (i.e., nonphysical) entities that do not exist inside space and time; instead they are timeless and spaceless.”

*Branches of metaphysics*²⁴

There are several branches of metaphysics:

1. Existence – “to be,” what is it to exist or not exist, e.g., the pastor is real
2. Identity – “same thing,” e.g., the pastor is a leader
3. Essential predication – “essence,” e.g., the pastor is human (predication – something affirmed or denied)
4. Accidental predication – “present in,” has a property, e.g., the pastor is thin
5. Constitution – “part-whole,” e.g., the pastor is body, soul and spirit

Clearly, much of the debate between different perspectives hinge on how these different metaphysical branches are addressed.

*Main divisions of metaphysics*²⁵

1. General ontology – the nature of existence itself (e.g., does Charlie Brown, the cartoon character in Peanuts created by Charles Schultz, have being? Does Charlie Brown exist?), general principles of being (known as transcendentals, e.g., unity, truth, goodness), and categorical analysis (e.g., genus-species relationships).
2. Special metaphysics – the study of specific topics of special interest (e.g., are humans free or determined?) and second-order metaphysical clarifications and investigations in other fields (e.g., are there electrons? If so, what are they? Do interest rates exist? Does the money held at a bank in your name, exist?)

*Methodological approaches to metaphysics*²⁶

There are at least four approaches to addressing metaphysical challenges.

1. Begin with things we already know or have reason to believe are true. For example, the critical use of common sense. Christian theism implies that we can trust our various faculties to give us true, rational beliefs, and these beliefs are part of the core of common sense.
2. State the metaphysical problem you are trying to solve and identify what gives rise to the problem. For example, how can something be in more than one thing at once?
3. Use thought experiments as a source for counterexamples to metaphysical arguments. For example, the number 2 must be even, contrast actual, impossible, and possible worlds.
4. Do not be constrained to operate within the bounds of sense experience. Note that this capacity explore intellectually is a real aid to Christian growth as it helps the intellect form habits that free it from grasping only issues and truths within the boundary of sensation.

²³See J.P. Moreland and William Lane Craig, *Philosophical Foundations for a Christian Worldview*, IVP Academic, Downers Grove, IL, 2003, p. 183-184.

²⁴Moreland and Craig, p. 174-175.

²⁵Moreland and Craig, p. 175-176.

²⁶Moreland and Craig, p. 178-183.

At the core of metaphysics, and hence Christian apologetics, is the debate as to whether abstract entities exist. We analyze this debate symbolically.

Abstract entities debate

The core issue with apologetics rests with the existence of abstract entities. Consider two propositions:

P : “Abstract entities exist”

$\neg P$: “Abstract entities do not exist”

We formally define the universe in two ways as well as abstract objects:

($U-S$) Universe – “total spatiotemporal system of matter and (impersonal) energy, that is, as the sum total of material objects, in some way accessible to the senses and to scientific investigation.” (MC, 183)

($U-A$) Universe – “sum total of everything whatever that exists including nonspatiotemporal abstract entities as well as the spatiotemporal universe of physical entities.” (MC, 184)

(A) Abstract objects – “immaterial (i.e., nonphysical) entities that do not exist inside space and time; instead they are timeless and spaceless.” (MC, 183)

If $x \in U-S$ (read x is an element of $U-S$), then we can ask where and when it is.

If $x \notin U-S \Rightarrow x \in A$ (read x is not an element of $U-S$ implies x is an element of A), then asking where and when it is incoherent.

- $x = \{\text{atoms, mountains, planes, stock certificate, mortgage document, plastic credit card}\}$,
 $x \in U-S$
- $y = \{\text{properties (e.g., color, goodness), relations (e.g., greater than, father of), sets (e.g., } \{1, 2, 3, 4, 5\} \text{), numbers (e.g., } 1, 2, 3 \text{), and propositions (e.g., grass is green)}\}$, $y \in A$
- $P \vee \neg P \Leftrightarrow U-S \vee U-A \Leftrightarrow (U-S) \vee (U-S \ \& \ A)$: (Read: P or not P if and only if $U-S$ or $U-S \ \& \ A$.) Either abstract entities exist or they do not. Within this framework, clearly how one views the universe hinges on the existence of abstract entities.
- Ontologists: $P \vee U-S \vee (U-S \ \& \ A)$: Ontologists seek to address these challenges.
- Naturalism: $\neg P \vee U-A$: Naturalism typically denies the existence of abstract entities.

Naturalism is “physicalist in flavor ... reality is exhausted by the spatiotemporal world of physical objects accessible in some way to the senses and embraced by our best scientific theories.” (MC, 184) For naturalism to have any merit, the naturalism apologist must show that mental entities are not real. That is, the mind does not exist. Further, they must deny that properties and relations are in fact abstract entities. Finally, they must show that abstract entities are not real.

Metaphysics and budgeting

Recall budgeting usually starts with the logical documentation of historical events, typically events related to receiving and spending money. Along with this historical documentation of our income statement, we also seek to estimate the balance sheet. What are our assets, such as cars and house, worth? Less often, we seek to estimate the current value of more difficult to quantify assets such as our future earnings power or even our liabilities, such as our children’s future college costs.

At its core, any estimate of future assets or liabilities is inherently metaphysical and uncertain. Like the number 2, you cannot find the value of a home or the present value of future college costs in space and time. It is a value and always a subjective estimate. Even if our estimate is unbiased, it is subject to wild changes in response to economic events.

For example, selling a home often takes months. Could you sell your home tomorrow? Well, yes, but you would not like the price received. If everyone in your neighborhood decided to sell their houses at the same time and events are such that no one wants to move in, home value estimates would likely tend toward zero.

Successful budgeting requires quality estimates of assets and liabilities that are inherently difficult to estimate. Further, if we do not change our actual financial decision-making behavior, then no amount of budgeting logic and budgeting epistemological study will accomplish anything. We have to deal with our willingness to actually effect change within the reality of our existence.

We may believe sincerely that our financial status will improve, but that belief will accomplish nothing if ultimately our future actions do not comport with our present financial plan derived from the budgeting exercise. Note that if we simply are “dancing to our DNA” as secularist would have us believe, then we cannot willingly change. Our brains are simply hard wired to certain behaviors and that’s that. Clearly, such a mindset is deeply incoherent with actual life. We can will our minds to comply with our written financial plan. We can choose to rise early and work diligently towards successfully executing the plan to pay off our credit card debts and never carry a positive balance again.

We conclude this section with selected quotes that link finance with metaphysics.

Selected quotes connecting metaphysics with finance

We start with selected quotes from Warren T. Brookes.²⁷

“The most important search of human existence is always teleological and ontological—finding primary causes, instead of thrashing around with superficial effects.” (p. 11)

“While the real economy has been growing daily more metaphysical, our economists and our accounting systems, it seems, have grown steadily more materialistic in their perspective.” (p. 14)

“Since economic thought first became formalized over two centuries ago, there have been essentially two different views about wealth. One view, first defined by Adam Smith and Jean-Baptiste Say, is that wealth is primarily metaphysical, the result of ideas, imagination, innovation, and individual creativity, and is therefore, relatively speaking, unlimited, susceptible to great growth and development. The other, espoused by Thomas Malthus and Karl Marx, contends that wealth is essentially and primarily physical, and therefore ultimately finite. The modern presentation of this view argues that since usable energy is steadily diminishing into entropy, all wealth is really cost to be shared more equitably.” (p. 12 (italics in original))

“The central message of nearly all religious prophets throughout history has been to look beyond these limited presentations of the physical senses into the ultimate potential of the mind and spirit. The common denominator of faith was and is the willingness to recognize that our real wealth comes not from finite natural resources or uncertain material conditions, but from the triumph of the metaphysical over the physical, of attitudes over appearances. Or in St. Paul’s words, ‘Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear.’” (p. 25)

“Wherever the barriers to the free exercise of human ingenuity were removed, man became rapidly able to satisfy ever-widening ranges of desires.” F. A. Hayek quoted in Warren Brookes, 1982, p. 28.

“Wealth is the progressive mastery of matter by mind.” Buckminster Fuller quoted in Warren Brookes, 1982, p. 34.

“You cannot bring about prosperity by discouraging thrift. You cannot strengthen the weak by weakening the strong. You cannot help the wage earner by pulling down the wage payer. You cannot help the poor by destroying the rich.” Abraham Lincoln quoted in Warren Brookes, 1982, p. 50.

²⁷Warren T. Brookes, *The Economy in Mind* (NY: Universe Books, 1982).

Finally, we note two other quotes that highlight the debate related to the metaphysical nature of finance.

Macaulay asserts,

*“The concept of ‘pure’ or ‘riskless’ interest is metaphysical. The practical contrast is not between ‘pure’ and ‘impure’ but between ‘promised’ or ‘expected’ and ‘actual’ or ‘realized’.”*²⁸

Lipshaw claims

*“economics is a science in the logical positivist tradition. It ought not try to speculate why things are happening in a metaphysical sense, but simply to explain or predict regularities.”*²⁹

There has been a concerted push in economics and finance to discard the metaphysical “why” and simply explore the physical “what.” Specifically, the focus is on positive economics (what is) as opposed to normative economics (what ought to be).

We now address the last pillar of philosophy, ethics.

Ethics

Recall “epistemology is concerned with the *true*, and metaphysics is concerned with the *real*, but ethics with the *good*.” (GF, 353) Ethics is the study of what is right and what is wrong. Moreland and Craig state, “Ethics can be understood as the philosophical study of morality, which is concerned with our beliefs and judgments regarding right and wrong motives, attitudes, character and conduct.” (MC, 393)

Ethics can be categorized as social, personal, and normative. Understanding these categories is best understood with an illustration. When a fleet of ships is on the high seas, three questions should be asked by each ship: 1) How can we keep the ship from bumping into other ships? (Social ethics) 2) How can we keep the ship from sinking? (Personal ethics) 3) Why is the ship out there in the first place? (Normative ethics)³⁰

The Christian ethic has a superior source—God—and a superior manifestation—Jesus Christ (our complete moral example). Note from a Christian perspective “morality is not a mere legalistic assent to a written code; it is a dynamic relation to a living Person. Further, the Christian perspective has a superior ethical declaration—the Bible—as well as a superior motivation—the love of Christ. Finally, the Christian ethic has a superior justification for ethics—our holy and sovereign God says so. (GF, 369)

Romans 8:3-4 ³For God has done what the law, weakened by the flesh, could not do. By sending his own Son in the likeness of sinful flesh and for sin, he condemned sin in the flesh, ⁴in order that the righteous requirement of the law might be fulfilled in us, who walk not according to the flesh but according to the Spirit.

²⁸Frederick R. Macaulay, *Some theoretical problems suggested by the movements of interest rates, bond yields and stock prices in the United States since 1856*, NBER, p. 38.

²⁹Jeffery M. Lipshaw, “The Epistemology of the Financial Crisis: Complexity, Causation, Law, and Judgment,” *Southern California Interdisciplinary Law Journal*, Vol. 19, 2009, p. 31.

³⁰Source lost. Based on C. S. Lewis, *Mere Christianity*, Book 3 “Christian Behavior,” Chapter 1, “The Three Parts of Morality.”

2 Corinthians 5:14-15 ¹⁴For the love of Christ controls us, because we have concluded this: that one has died for all, therefore all have died; ¹⁵and he died for all, that those who live might no longer live for themselves but for him who for their sake died and was raised.

Note that mere knowledge of right and wrong is not enough. “A mirror will show a man the dirt on his face, but it will not wash the dirt away.” (GF, 370)

Alternative views of right

We briefly note various views of how what is right is determined.

- Might is right – “justice is the interest of the stronger party” (Thrasymachus, GF, 353)
- Morals are mores – “Ethics is identified with the ethnic ... ‘is-ought’ fallacy” (GF, 354)
- “Man is the measure of all things” (Protagoras, GF, 354)
- Race is right – “mankind rather than man is the measure of all things” (GF, 355)
- Right is moderation – ‘golden mean’
- There is no right – ‘antinomian’ (against-law)
- Right is what brings pleasure – “hedonism claims that what brings pleasure is right and what brings pain is wrong” (GF, 356)
- Right is the greatest good for the race – utilitarianism ‘the greatest good to the greatest number of persons (in the long run)’ Bentham (GF, 357)
- Good is what is desired for its own sake
- Good is indefinable – known only intuitively, “ultimacy of ‘good’ makes it resistant to definition in terms of something else” (GF, 358)
- Good is what God wills – voluntaristic (God wills it), essentialist (God can only will in accordance with His unchangingly good nature)

A Christian view of right

The Christian view of right is deeply internally coherent, it corresponds well with empirical observation, and it is experientially relevant.

- Origins of the right – “unchanging nature of a God of perfect love and justice,” “God’s will is subject to His own unchanging nature,” (**Malachi 3:6, 1 Samuel 15:29, Hebrews 6:18**) God is omnibenevolent—God is love (**1 John 4:16, John 3:16**), morality is based in the unchanging nature of a loving Father who is just (**Deuteronomy 32:4**), impartial (**Romans 2:11**), and longsuffering (**2 Peter 3:9**)
- God’s revelation of right in the universe – general revelation (**Romans 2:14-15**, innate, Tao in *Abolition of Man*), found in the expectations of the human heart, moral law discovered more by one’s reaction than actions
- God’s revelation of right in the Bible – the divinely inscripturated truth of God (**2 Timothy 3:16-17**, noon day Sun), provides more information than general revelation (flash of lightning)
- Absolute nature of the right – “infinitely perfect God who wills men to be good in accordance with the unchanging perfection of His own nature” (**Matthew 5:48**)
- Christian ethic discovered, not created by men

How do we know what is right?

There are several approaches to justifying what is right. We sketch a few here:

- Results – the good is the expedient (W. James)
- Self-destructive nature of the contrary (I. Kant)

- Intuition – “since the good is not definable in terms of anything other than itself, it follows that one must know it intuitively” (GF, 375)
- Self-evidence – law of benevolence in ethics is a first principle like that of the law of non-contradiction
- Appeal to human authority
- Appeal to divine authority

In general, there are two categories of approaches to ethics:

- Deontological – duty-centered, keeping rules will determine the right results, right is of first importance, normative
- Teleological – end-centered, right results will determine the rules, right is pragmatic, utilitarian (GF, Ch 25)

“For the most part, morality is supremely authoritative, prescriptive, universalizable and makes reference to human dignity, welfare and flourishing.” (MC, 396)

Christian justification of right

- Faith (Fideism) – “no evidence or argumentation can bear upon a religious belief in God or in His Word” (GF, 378) “seem to be correct *ontologically*” (**Romans 9:20**)
- Note “‘belief *that*’ demands evidence, and it is prior to ‘belief *in*’ someone”. (GF, 379) For example, belief that Jesus rose bodily from the dead precedes belief in Jesus’ words.
- Reason – an epistemological argument for the Bible being the final authority of right (GF, 380ff)
 - (A) “Theistic God exists”
 - (B) “Miracles are possible”³¹ Miracles are defined here as “an act of God in the natural world that confirms the message of God through His prophet or apostles (**Hebrews 2:3-4**). ... Miracles are not contrary to nature; rather, they go beyond natural events.” (GF, 380)
 - (C) “Jesus is God in human form”
 - (D) “Whatever God says is true”
 - (E) “Jesus taught that the Bible is the Word of God”
 - (F) Using this logical structure, the Bible is the Word of God because
 - $A \rightarrow B$ (A implies B)
 - $B \rightarrow C$ (B implies C)
 - $\{C \wedge D \wedge E\} \rightarrow F$ (C and D and E implies F)
- Nature of general revelation
 - “Natural law” (**Romans 2:12-16**)
 - Humans are image-bearers of God (**Genesis 1:27, 9:6; James 3:9**)
 - “(I)f ‘ought’ is a basic category that cannot be reduced to ‘is’ or anything else, then one must understand it intuitively” (GF, 383) implying it is self-evident
 - “(R)ight is discovered by what persons expect should be done to them” (GF, 384) **Matthew 7:12**
 - “Surely, all men, for example, do expect to be treated as an end and not as a means, as a person and not a thing. Surely, all persons feel they have intrinsic value and not merely extrinsic value.” (GF, 384-5)

³¹Miracles are covered in detail in Chapters 11 and 12.

*An illustration of an ethical statement in finance: CFA Institute's Code of Ethics*³²

Philosophy always works its way out into practice, often through ethics. The CFA Institute's code of ethics is briefly reviewed here as it is a premier global finance organization and highly respected.

“CFA Institute is a global, not-for-profit organization comprising the world's largest association of investment professionals. With over 100,000 members, and regional societies around the world, we are dedicated to developing and promoting the highest educational, ethical, and professional standards in the investment industry.”³³

THE CODE OF ETHICS

Members of CFA Institute (including CFA charterholders) and candidates for the CFA designation (“Members and Candidates”) must:

- Act with integrity, competence, diligence, respect, and in an ethical manner with the public, clients, prospective clients, employers, employees, colleagues in the investment profession, and other participants in the global capital markets.
- Place the integrity of the investment profession and the interests of clients above their own personal interests.
- Use reasonable care and exercise independent professional judgment when conducting investment analysis, making investment recommendations, taking investment actions, and engaging in other professional activities.
- Practice and encourage others to practice in a professional and ethical manner that will reflect credit on themselves and the profession.
- Promote the integrity of and uphold the rules governing capital markets.
- Maintain and improve their professional competence and strive to maintain and improve the competence of other investment professionals.

Note the numerous ethical terms and concepts: (definitions from Mac dictionary)

- Integrity – the quality of being honest and having strong moral principles; moral uprightness
- Competence – the ability to do something successfully or efficiently
- Diligence – careful and persistent work or effort
- Respect – a feeling of deep admiration for someone or something elicited by their abilities, qualities, or achievements
- Ethical manner - a way in which a thing is done or happens
- Others (profession) first
- Reasonable care
- Exercise independent professional judgment
- Uphold the rules
- Professional competence (self and others)

There are also a host of different constituents:

- Public
- Clients
- Prospective clients
- Employers
- Employees
- Colleagues
- Other participants
- Profession
- Capital markets

³²The code can be found at <http://www.cfapubs.org/doi/pdf/10.2469/ccb.v2010.n14.1>.

³³See <http://www.cfainstitute.org/about/strategy/Pages/index.aspx>.

Ethics and budgeting

Recall we noted that the mechanics of budgeting is deeply logical. We seek to adjust our numbers so our expenses cease to exceed our revenues. Further, we are concerned with the epistemic certainty with which we have estimated our assets and liabilities (explicit and implicit). Also, we seek to adopt a financial strategy that is inherently metaphysical so we modify our financial behavior in such a way as to successfully implement this strategy. Yet the budget is busted and we failed.

Why? One reason is the lack of personal accountability. Many financial counselors understand this pivotal component. Just like a gym coach, many people benefit greatly from having a financial coach. The key role for the coach is to hold us accountable to fulfill our commitments in light of a well-designed budget strategy.

Note that every worldview will have deep influence on the budgeting process. As we move through the remainder of our time together, pay attention to the philosophical foundational issues and how they work themselves out in personal finance. How does our budget-based strategy affect other people (social ethics)? For example, just because we have a bit of financial distress, do we cease all charitable giving? How does our budget-based strategy impact our personal health and well-being? For example, can we still maintain good health? Finally, what is our ultimate objective with our budget-based strategy? Is it to just die rich or is there some other more worthwhile objective?

Ethics plays a dominant role in finance. Once while serving on a corporate board, the decision was made to waive significant client fees for a period because the high quality standards were not met due to understandable technical reasons. Most clients never even knew the company took a significant financial loss. The standard for the firm was to place the interests of clients above personal interests.

Our ethical perspective deeply impacts our view of personal finance. Consider the following conclusion reached by Professor Sheldon Solomon in response to understanding death, “I am an infinitesimal speck of carbon-based dust born in a time and place not of my choosing here for an incredible brief amount of time before my atoms are scattered back into the cosmos. That need not be a terrifying thought.”³⁴ If life lacks meaning and purpose and hence there is no moral law—no need to worry, right? There is a more rational alternative: I am an eternal soul of divinely-infused dust created in a time and space of God’s choosing here for an incredible brief amount of time before my bodily death and subsequent resurrection where, for all eternity, I will glorify God throughout the cosmos. That is indeed a wonderful thought.

The chosen philosophical foundation drives all aspects of life, including personal finance. We need to carefully decide the foundation upon which to build our lives.

Summary

In this Chapter, we completed our quick tour through the field of philosophy. In the last Chapter, we introduced the first two pillars of logic and epistemology. In this Chapter, we finished our brief tour with the final two pillars of metaphysics and ethics.

References

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- (MC) Moreland, J. P. and William Lane Craig, *Philosophical Foundations for a Christian Worldview* (Downers Grove, IL: InterVarsity Press, 2003).
- (JPM) Moreland, J. P., *Love Your God With All Your Mind The Role of Reason in the Life of the Soul* (Colorado Springs, CO: NavPress, 1997).

³⁴Emma Pattee, “Covid-19 makes us think about our mortality. Our brains aren’t designed for that.” *The Washington Post*, October 7, 2020, accessed online.

Chapter 4. Nature of Information

Learning objectives

- Understand the nature and limits of data
- Explore the limits of data analytics
- Introduce two forms of explanation, mechanism and agency
- Contrast the syntactic measure of information from the semantic meaning of the information
- Review selected biblical passages related to information

Opening quote

“The most incomprehensible thing about the universe is that it is comprehensible.” Albert Einstein

Overview

We explore the nature of information seeking to understand whether matter generates information or information generates matter. First, four pictures are provided in an effort to understand the different types of information. Next, we take a brief tour through the now popular field of data analysis. We note two forms of explanation, mechanism and agency. We introduce the notion of measuring information syntactically and how that is different from the semantic meaning of the information. We conclude by examining several biblical illustrations of information primarily from speech.

Examples of Information

Information is metaphysical in its essence. To motivate our study, we briefly introduce four pictures, nature, cultivated nature, human language, and human emotive communication.

Nature

Figure 4.1 illustrates a typical jungle scene. It is not apparent that there has been any human involvement in its design. What inferences can be made from this picture? Naturalistic evolution or intelligent causation? Clearly, we would need more data to assess the logical arguments involved when comparing these two mutually exclusive propositions.

Figure 4.1. Apparent uncultivated jungle scene



Cultivated Nature

Figure 4.2 depicts something clearly different. There must be a gardener. The evidence of cultivation is overwhelmingly clear to anyone, except perhaps an over-trained philosopher. Is it possible that this garden just happened to come into being through naturalistic chance without any human involvement? No. Clearly, an intelligent being was involved in the design and maintenance of the garden depicted in this scene.

Figure 4.2. Cultivated garden scene



Clear Communication

Figure 4.3 depicts something entirely different. Human language is a wholly different form of information. What can you infer from this picture assuming, of course, that you can read and understand the English language? Did these letters and numbers just randomly appear in the sand or is someone pleading for help on July 28th? As an aside, when seeking help, a precisely arranged arrow with rocks is adequate to attract attention.

Figure 4.3. Human language



The BBC reported,

“A British man who got lost in a remote part of Australia says a life-saving SOS message he wrote in the sand was ‘one of those moments of inspiration’. Geoff Keys sparked a huge search after going missing on his way to a waterfall in Jardine National Park, Queensland. The 63-year-old was rescued after two days, with police saying the written cry for help probably saved his life.”³⁵

If Geoff Keys was in China, he may have made different marks in the sand as illustrated in Figure 4.4.

Figure 4.4. Alternate human language (Mandarin)

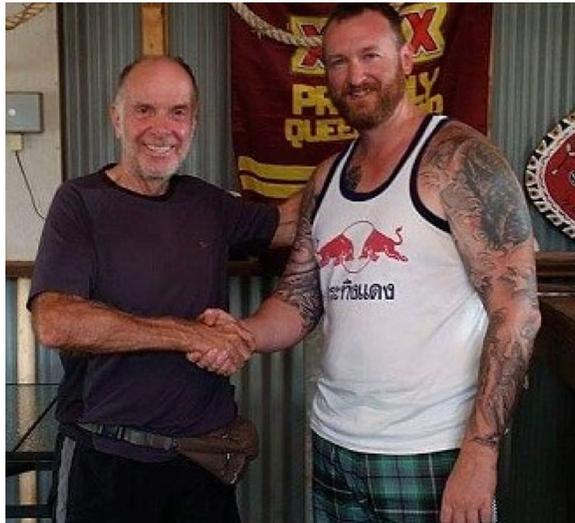
帮帮我

Bāng bāng wǒ

Human emotive communication

We illustrate one last form of information, human emotive communication. Figure 4.5 is communication well-understood—gratitude. Even if Geoff Keys (on the left) did not speak the same language as Brad Foat, the helicopter pilot who found him, Geoff is clearly communicating information to Brad.

Figure 4.5. Human emotive communication



Financial information

By law, financial institutions and corporations communicate vast amounts of information to their stakeholders. For example, publicly traded companies must file a 10-K with the Securities and

³⁵BBC News reported 8/24/2015, see <https://www.bbc.com/news/world-australia-34037852>.

Exchange Commission each fiscal year. Analysts and investors scrutinize this and other documents for clues regarding the company's prospects. Remember valuation is inherently based on beliefs about the future. It is not based on past performance.

John Maynard Keynes once noted that economists

*"... must study the present in the light of the past for the purposes of the future."*³⁶

The accounting industry is focused primarily on documenting historical transactions whereas the financial industry is focused primarily on making decisions while facing the future. This is a profound difference often missed if you are not careful.

Further, communication goes far beyond sterile data. Many legally required documents contain enormous amount of text. Further, many company executives hold quarterly conference calls to explain past performance as well as further clarify their strategies going forward.

Once, listening on a particular quarterly conference call an analyst asks the chief executive officer if the company was a takeover target. As I recall, I was listening in but working on something else. I really was not paying close attention. When the CEO answered, "No." The tone of the answer was just a bit more forceful and louder than the previous 30 minutes. There clearly was more going on in that answer than simply words. The company was subsequently taken over.

With today's analysis tools, not only are historical numbers carefully examined but there is also textual analysis performed. Thus, communication and even human emotive communication play important roles in understanding finance.

We now dive deeper into understanding the nature of information that is deeply relevant to establishing which perspective is true and which perspectives are false. We first briefly explore data analysis.

Data Analysis

According to Wikipedia, data analysis "... is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making."³⁷

Information "describes something we now know which we did not know before."³⁸ Typically, information is used to answer a question of some form. Information helps resolve uncertainty. "The uncertainty of an event is measured by its probability of occurrence and is inversely proportional to that. The more uncertain an event, the more information is required to resolve uncertainty of that event. The bit is a typical unit of information For example, the information encoded in one 'fair' coin flip is $\log_2(2/1) = 1$ bit, and in two fair coin flips is $\log_2(4/1) = 2$ bits."³⁹

Data analysis seeks to discover previously hidden information for the purpose of explaining something and facilitate making better decisions. Thus, information is used to provide explanations. Unfortunately, many people fail to recognize two primary categories of explanations—mechanism and agency.

*Categories of explanations*⁴⁰

There are at least two categories of explanations, mechanism and agency.

³⁶John Maynard Keynes, *Essays in Biography*, (NY, Horizon Press, 1951), pp. 140-141. Referenced at <https://www.indstate.edu/cas/econ/introduction-economics/jm-keynes-requirements-economist>.

³⁷See https://en.wikipedia.org/wiki/Data_analysis (accessed on July 26, 2020).

³⁸John C. Lennox, *God's Undertaker Has Science Buried God?* Lion Hudson plc, Oxford, England, 2009, p. 148.

³⁹See <https://en.wikipedia.org/wiki/Information> (accessed on July 26, 2020).

⁴⁰Based on Lennox, Chapter 2 The scope and limits of science.

Mechanism

Mechanism focuses on what it is and/or how it is, but not why it is. Figure 4.6 illustrates a Toyota Prius. A Toyota Prius automobile can be explained in terms of fundamental parts, how those parts are assembled, but one is not sure why the engineers at Toyota designed it the way they did unless they choose to reveal it typically in the user's manual and/or other documents.

Figure 4.6. Toyota Prius: Illustration of mechanism

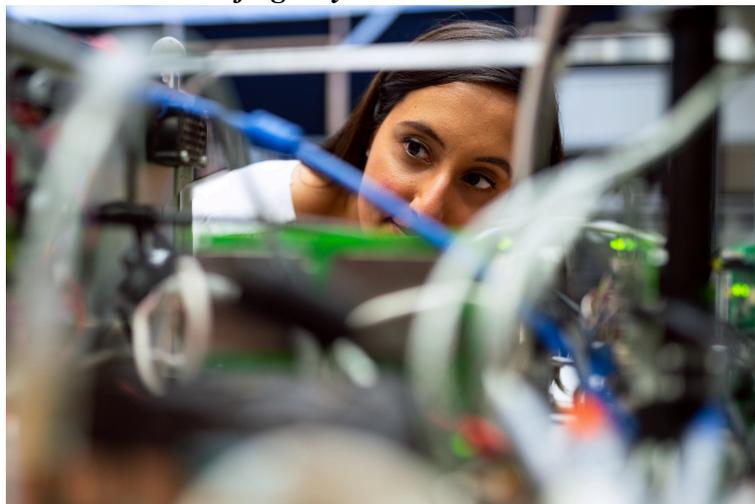


A more clarifying example used by Lennox is Aunt Matilda's cake. If you observed a cake, you can explain that cake mechanically. What are its chemical components, infer initial ingredients, and perhaps document its physical dimension? But you will never know for sure why Aunt Matilda baked the cake unless Aunt Matilda chose to tell you. Hence, we always have a second category of explanation.

Agency

Agency focuses on why it is or its purpose. In the examples above, only the design engineers or Aunt Matilda, if they chose to do so, can provide this type of explanation. Figure 4.7 illustrates an engineer.

Figure 4.7. An Engineer: Illustration of agency



Frequently, one makes a category mistake that is driven by a prior philosophical perspective. One cannot infer agency forms of explanations from mechanistic information. Interestingly, atheistic perspectives suggests that mechanism explains agency, whereas the Christian perspective suggests that agency explains mechanism. Data analysis is extremely useful in providing mechanistic explanations but struggles mightily with agency forms of explanations.

For many financial decisions, agency forms of explanations are vital. What is the management team at a particular company (agents) attempting to accomplish? Why are they moving the company in a particular direction? Clearly, agency-based explanations will give you advanced knowledge of where the company is attempting to go rather than rely on mechanistic data that show up later, perhaps in published financial reports.

We now turn our study toward the nature of information by contrasting syntactic information with semantic information.

Syntactic information

Syntactic information has nothing to do with meaning. It is simply a measure of information. Syntactic information seeks the number of bits needed to store a certain data structure.

- Information is measured in bits (e.g., a coin flip contains one bit of information)
- Information resolves uncertainty
- The more uncertain an event, the more information required to resolve its uncertainty

Semantic information

Semantic information is derived from the Greek word for a sign. It refers to the meaning of the data. No successful way has been developed to measure semantic information. Semantic information needs context. Figure 4.8 illustrates different street signs. Clearly, there is information communicated by these signs. Imagine, however, a world without cars or any other form of mechanistic transportation. How would the signs in Figure 4.8 be interpreted? Most likely, they would be interpreted incorrectly. When traveling in a foreign country, if you do not read the native language, then it is likely that many signs do not provide you any helpful information.

Figure 4.8. Semantic information illustrated with street signs



Data analysis is incredibly useful and valuable in human flourishing. In this regard, pursuing a better understanding of our universe’s mechanisms can prove beneficial regardless of our particular

fundamental perspective. Developing a love for the truth will aid in removing false claims from our set of beliefs.

Data analysis and financial prices

Finance is often feared due to the heavy use of mathematics and statistics. Fortunately, many fundamental issues can easily be understood without taking Calculus III or Ordinary Differential Equations, although both of these classes will aid in developing your ability to be disciplined in your thinking.

Figure 4.9 illustrates the challenge of data analysis applied to finance. This stock price chart represents over 20 percent return for almost 20 years. Clearly, this is an attractive stock based solely on this historical data. It is easy to forget that the past is not an accurate predictor of the future.

Figure 4.9. Data analysis of Bear Stearns stock price

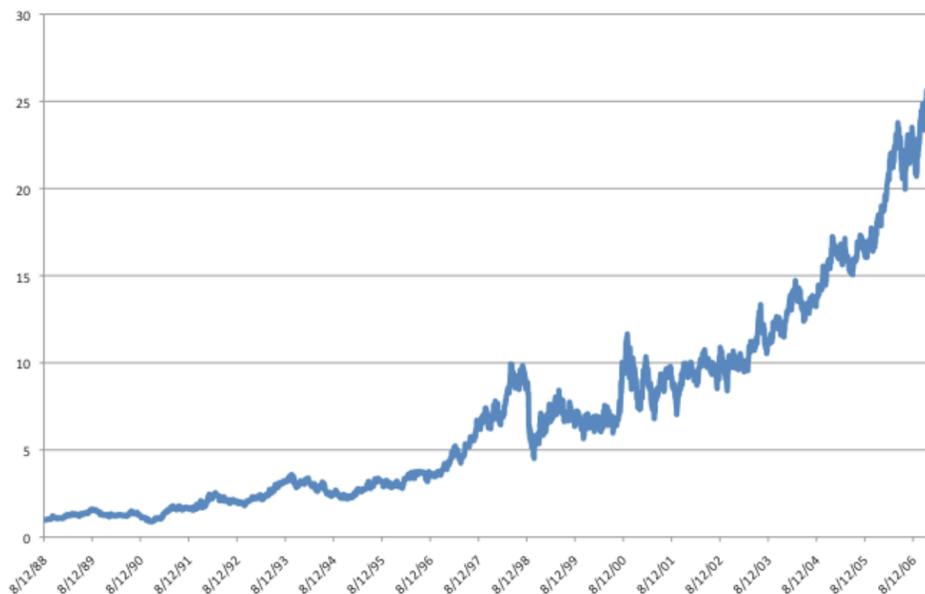
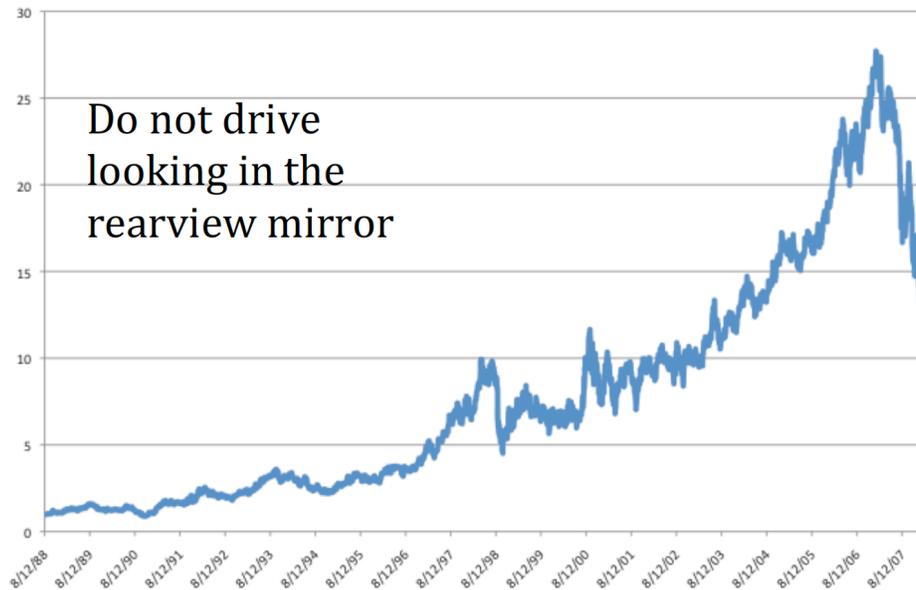


Figure 4.10 provides the rest of the story. Bear Stearns failed spectacularly in March 2008 for a host of reasons. Without going into the technical details of the failure, it is clear from these two graphs that data analysis would not have spared you from this financial carnage. It would be nice to believe one would simply bail out when the price faltered, but that is not what people do who have experienced such dramatic gains over such a long period of time. Investing based on data analysis of historical data is analogous to driving solely by looking in the rearview mirror. Crashes are inevitable. Is there a better way? Yes, investing based on your foundational perspective or worldview. We now explore a biblical perspective on the nature of information.

Figure 4.10. Bear Stearns stock price—the rest of the story



Biblical perspective on the nature of information

From a Christian perspective, information precedes matter or essence precedes existence. In this section, we first seek a clear understanding of the biblical claims related to origins. Next, we examine how information is used in making a rational defense of the Christian worldview. Finally, we examine several quotes and provocative thought related to information.

Role of information in questions of origins

We first examine a few passages related to the question of origins. Clearly, agency related questions are addressed repeatedly. Mechanism questions, however, are not explicitly answered but left to be discovered.

Genesis 1:3, 6, 7, 9, 11, 14, 15, 20, 21, 24, 26 ³And God said, “Let there be light,” and there was light. ... ⁶And God said, “Let there be an expanse in the midst of the waters, and let it separate the waters from the waters.” ⁷ ... And it was so. ... ⁹And God said, “Let the waters under the heavens be gathered together into one place, and let the dry land appear.” And it was so. ... ¹¹And God said, “Let the earth sprout vegetation, plants yielding seed, and fruit trees bearing fruit in which is their seed, each according to its kind, on the earth.” And it was so. ... ¹⁴And God said, “Let there be lights in the expanse of the heavens to separate the day from the night. ... ¹⁵And it was so. ... ²⁰And God said, “Let the waters swarm with swarms of living creatures, and let birds fly above the earth across the expanse of the heavens.” ²¹So God created the great sea creatures and every living creature that moves, with which the waters swarm, according to their kinds, and every winged bird according to its kind. And God saw that it was good. ... ²⁴And God said, “Let the earth bring forth living creatures according to their kinds—livestock and creeping things and beasts of the earth according to their kinds.” And it was so. ... ²⁶Then God said, “Let us make man in our image, after our likeness. ...

We now know that organic life is driven by information that is represented primarily in DNA. DNA in a human genome contains about 7 billion bits of syntactic information. Smallest proteins possessing biological function involve 100 amino acids, resulting in 10^{130} sequence alternatives. Paul Davies, a

renowned physicist summarizes, “We conclude that biologically relevant macromolecules simultaneously possess two vital properties: randomness and extreme specificity. A chaotic process could possibly achieve the former property but would have a negligible probability of achieving the latter.”⁴¹

The spoken word is widely referenced throughout the Bible. We provide a few selected examples below.

Numbers 20:8 ⁸“Take the staff, and assemble the congregation, you and Aaron your brother, and tell the rock before their eyes to yield its water. So you shall bring water out of the rock for them and give drink to the congregation and their cattle.”

Psalms 19:1-3 ¹The heavens declare the glory of God, and the sky above proclaims his handiwork. ²Day to day pours out speech, and night to night reveals knowledge. ³There is no speech, nor are there words, whose voice is not heard.

Matthew 9:6-7 ⁶But that you may know that the Son of Man has authority on earth to forgive sins—he then said to the paralytic—“Rise, pick up your bed and go home.” ⁷And he rose and went home.

John 18:4-6 ⁴Then Jesus, knowing all that would happen to him, came forward and said to them, “Whom do you seek?” ⁵They answered him, “Jesus of Nazareth.” Jesus said to them, “I am he.” Judas, who betrayed him, was standing with them. ⁶When Jesus said to them, “I am he,” they drew back and fell to the ground.

Colossians 1:16-17 ¹⁶For by him all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and for him. ¹⁷And he is before all things, and in him all things hold together.

John 1:1-3, 10 ¹In the beginning was the Word, and the Word was with God, and the Word was God. ²He was in the beginning with God. ³All things were made through him, and without him was not any thing made that was made. ... ¹⁰He was in the world, and the world was made through him, yet the world did not know him.

Psalms 33:6 By the word of the Lord the heavens were made, and by the breath of his mouth all their host.

1 Corinthians 8:6 yet for us there is one God, the Father, from whom are all things and for whom we exist, and one Lord, Jesus Christ, through whom are all things and through whom we exist.

From these passages, we see that essence clearly precedes existence in contradiction to non-theist worldviews. We find an explicit link between expression and spacio-temporal events. For example, Moses was to speak to the rock and water would subsequently flow.

Role of information in defending a proposition

In the following passages, we find clear reliance on rationality when making a defense of the Christian worldview.

1 Peter 3:13-17 ¹³Now who is there to harm you if you are zealous for what is good? ¹⁴But even if you should suffer for righteousness' sake, you will be blessed. Have no fear of them, nor be troubled, ¹⁵but in your hearts honor Christ the Lord as holy, always being prepared to make a defense to anyone who asks you for a reason for the hope that is in you; yet do it with gentleness and respect, ¹⁶having a good conscience, so that, when you are slandered, those who revile your

⁴¹John C. Lennox, *God's Undertaker*, p. 157. Lennox was quoting Paul Davies.

good behavior in Christ may be put to shame. ¹⁷For it is better to suffer for doing good, if that should be God's will, than for doing evil.

Acts 22:1-2a ¹“Brothers and fathers, hear the defense that I now make before you.” ²And when they heard that he was addressing them in the Hebrew language, they became even more quiet.

Acts 25:16 ¹⁶I answered them that it was not the custom of the Romans to give up anyone before the accused met the accusers face to face and had opportunity to make his defense concerning the charge laid against him.

Philippians 1:15-18 ¹⁵Some indeed preach Christ from envy and rivalry, but others from good will. ¹⁶The latter do it out of love, knowing that I am put here for the defense of the gospel. ¹⁷The former proclaim Christ out of selfish ambition, not sincerely but thinking to afflict me in my imprisonment. ¹⁸What then? Only that in every way, whether in pretense or in truth, Christ is proclaimed, and in that I rejoice. Yes, and I will rejoice, (ESV)

(See also *1 Corinthians 9:3*, *2 Corinthians 7:11*, *Philippians 1:7*, and *2 Timothy 4:16*.)

Biblical ideas on the nature of financial information

From a biblical perspective, we know that there is objective truth. We also know that humans have a deeply ingrained capacity to misrepresent the truth. Hence, when analyzing investment opportunities or even assessing home refinancing, we need to be ever vigilant to disentangle truth claims out of the mass of financial information.

Many financial industries rely on people not carefully assessing their choices. “Easy payments” just sounds so appealing especially if I can get something now rather than wait and have delayed gratification. Understanding the foundational nature of semantic information as well as what one’s worldview states regarding human nature is one key to successfully navigating the many financial decisions faced every day.

Key to quality financial decision-making is understanding the fundamental difference between historical data and the semantic representations of future expectations. Life’s experiences as well as biblical patterns suggest that those things that have never happened in history do. We tend to think we can predict the future better than we actually can.

James 4:13-14a ¹³Come now, you who say, “Today or tomorrow we will go into such and such a town and spend a year there and trade and make a profit”—¹⁴yet you do not know what tomorrow will bring.

With the humble admission that we do not have the capacity to accurately forecast the future, several finance planning strategies change. One simple example is retirement planning. Rather than focus solely on how much to save and where to invest, this inability to forecast leads naturally to focusing on the relationship between invested assets and the fair estimate of the present value of retirement needs.

As interest rates have fallen from the mid-1980s to 2020, the present value of retirement needs has significantly risen. By taking into consideration the way retirement needs rise when interest rates fall naturally suggest investing in a way that accounts for this pattern. We may not have known that rates would fall, but the relationship between rates and retirement needs is well known. Some estimate the losses within the pension industry exceed several trillion dollars just on this one issue.

In response to the massive losses due to the rate decline, many argue that this sharp decline in interest rates was an extremely rare event, often referred to as black swans. As Nassim Taleb notes, “history teaches us that things that never happened before do happen.”⁴²

Selected quotes and thoughts regarding information

We conclude this section with several quotes.⁴³ Note that one foundational premise of the scientific method is the rational intelligibility of the universe.

“The very concept of the intelligibility of the universe presupposes the existence of a rationality capable of recognizing that intelligibility.” (p. 59)

“Science does not explain the mathematical intelligibility of the physical world for it is part of science’s founding faith that this is so.” John Polkinghorne (p. 61)

Are there scientific methods for recognizing design? (A separate question from identification of the designer.)

God’s revelation of right in the Bible—the divinely inscripturated truth of God (2 Tim 3:16-17) is like the noon day Sun. It provides vastly more information than general revelation that is like a single flash of lightning.

“No molecular device is capable of generating any information that does not either belong to its input or its own informational structure.”

“Natural processes involving only chance and necessity cannot generate complex specified information.”

“The meaning of the message just cannot be determined without prior knowledge of the context.” (p. 151)

Summary

We explored the nature of information in this Chapter. The goal is to begin considering whether matter generates information or information generates matter. Four pictures were discussed identifying different types of information. After a brief tour through data analysis, we introduced two forms of explanation, mechanism and agency. Further, we introduced two concepts, syntactic measures of information and semantic meaning of the information. We concluded by reviewing several biblical illustrations of information primarily from speech.

⁴²Nassim Taleb, *Foiled By Randomness*, p. 108.

⁴³See John C. Lennox, *God’s Undertaker*.

Chapter 5. Existence of God

Learning objectives

- Understanding the nature of persuasion related to God's existence
- Demonstrate no contradiction between belief in God's existence and rationality

Opening quote

"It is absurd for the Evolutionist to complain that it is unthinkable for an admittedly unthinkable God to make everything out of nothing, and then pretend that it is more thinkable that nothing should turn itself into everything." G.K. Chesterton

Overview

In this Chapter, we explore arguments related to the existence of God. First, we will examine the nature of this argument. Next, we will scrutinize the atheist's philosophical problems including no moral laws, human life lacks meaning, and one has no hope. A bleak picture, indeed. Although there are numerous arguments favoring the existence of God, we follow Dallas Willard's three stage approach with some insights drawn from finance. We conclude this Chapter with a brief exploration into Christianity's philosophical bounty.

Nature of the theism debate

God's perfection can be addressed in the following way, God is the only essence in existence, the reason for whose existence is in Himself. All other essences, entities or quantities exist by virtue of something else and in that sense God alone is perfect. God alone is uncaused in essence, infinite in scope, and an independent being in essence.

How do we address the claim, "God exists," with the counterclaim, "God does not exist"? Recall that an argument is a set of statements that serve as a set of premises leading to a conclusion. (MC, 29) The goal of a good argument is to arrive at a conclusion regarding which truth claim is most plausible. One key to making a good argument is to identify the truth claim that ought to bear the burden of proof.

Burden of proof

With any argument, one should not unknowingly accept the burden of proof. That is, is it our responsibility to prove the argument is true or can we simply sit back and critique the argument letting someone else bear the burden to demonstrate that the argument is true?

It is always easier to be the defendant rather than the prosecutor in a legal case. The prosecutor bares the responsibility to prove the case beyond a reasonable doubt, whereas the defendant simply has to rebut the prosecutor's claim to the point of reasonable doubt.

Rather than trying to prove that God exists (take on role as prosecutor), simply challenge the opponent to prove that God does not exist (take on role as defendant). When challenging an opposing truth claim, it is important to distinguish between rebutting and refuting.

Rebut and refute

A rebuttal is demonstrating that an argument does not have the merit to conclude that it is true. For example, the claim, "Black swans do not exist," can be rebutted by simply noting that every location throughout the world where there may be black swans has not yet been searched carefully.

Refute is demonstrating that the argument is wrong—a much higher standard when compared to rebut. Recall a rebuttal only requires casting doubt. For example, the claim that "Black swans do not exist" can be refuted by simply producing reasonable evidence that a single black swan exists.

Providing evidence for the existence of a black swan could be more challenging than just casting doubt on the original claim that black swans do not exist.

The proposition, “God does not exist,” is like the proposition, “Black swans do not exist.” Thus, to rebut the proposition, “God does not exist,” simply requires noting that one has not examined all the evidence. Therefore, the proposition fails to have merit to be held absolutely true.

Alternatively, the proposition, “God does exist,” is like the proposition, “Black swans do exist.” In the case of black swans, it is straightforward to produce a single black swan. Because God is spirit and not constrained by space and time, producing space-time evidence in favor of this proposition is a bit more challenging. Although ample empirical evidence will be provided supporting the existence of the God referenced in the Bible, it cannot by setup reach epistemic certainty.

God’s existence is properly basic belief

Ronald Nash (1988) asserts,

“Belief in God is properly basic; so far as the rationality of the Christian’s personal faith is concerned, the discovery of proofs or arguments is not necessary. When it comes to challenging the rationality of Christian faith, the burden of proof rests with the atheologist.”⁴⁴

An atheologist is “one who is opposed to a theologian.”⁴⁵ Note Nash is specifically denying the burden of proof.

Alvin Plantinga notes,

“The Christian philosopher has a perfect right to the point of view and prephilosophical assumptions he brings to philosophic work; the fact that these are not widely shared outside the Christian or theistic community is interesting but fundamentally irrelevant.”⁴⁶

Properly basic beliefs are those that are reasonable even though they are not inferred from other truth claims.

Challenge the internal logic of the atheist

How would one prove that the atheist’s premise is rational? If it is immoral to believe anything without proof, then I must prove this proposition! There is no proof for the statement. The evidence, however, favors theism overwhelmingly. So either the ground rules are false or approaching theism in this fashion is irrational.

Many atheists are deeply skeptical. A skeptic is generally a person who denies that other people have rationally justified beliefs or knowledge. There are at least two kinds of skeptics. The global skeptic applies his skepticism to all truth claims. The local skeptic applies his skepticism only to certain knowledge categories, such as religious claims.

We follow a general approach in addressing God’s existence.⁴⁷

⁴⁴See Ronald Nash, *Faith and Reason*, 1988, p. 105.

⁴⁵See Noah Webster, *American Dictionary of the English Language*, 1828 or <http://webstersdictionary1828.com/Dictionary/atheologist>.

⁴⁶See Alvin Plantinga, *Where the Conflict Really Lies: Science, Religion, and Naturalism*. Oxford: Oxford University Press. 2011. Quote found at <https://www.goodreads.com/quotes/704625-the-christian-philosopher-has-a-perfect-right-to-the-point>.

⁴⁷See <https://www.youtube.com/watch?v=mRRuKDXT7Kg>. We expand on several points.

Atheism's philosophical problems

Atheism and its cousin agnosticism suffer from numerous severe philosophical problems. Three major characteristic statements: There are no moral laws. Life is meaningless. And there is no hope beyond our present existence.

There are no moral laws

The logical argument is straightforward.

Premise > Evil exist.

Premise > Therefore, good exists.

Premise > Therefore, there must be a law to decide (Criterion)

Conclusion > There must be a lawgiver

The rational atheist therefore assumes as a premise that God does not exist as follows.

Premise > God does not exist.

Premise > Therefore, there is no lawgiver.

Premise > Therefore, there is no law to decide (Criterion)

Conclusion > Therefore, good and evil categories do not exist.

Numerous leading atheistic philosophers come to this same conclusion. The moral outrage on any given day to the human experience of injustice evidences that the vast majority implicitly believe God exists due to their belief that evil exists. According to Richard Dawkins, without God, there is

“ ... no evil and no good. Nothing but blind, pitiless indifference.”

Kai Nielsen notes,

“Pure practical reason, even with a good knowledge of the facts, will not take you to morality.”⁴⁸

Logically, if God does not exist, then there are no immutable moral laws—a very impractical perspective for addressing life's challenging problems. Without anchoring one's life in immutable moral laws, the desire for more wealth has led many to destruction. Often financial violations of actual laws started with minor ethical violations of standard financial practice. As is common, a particular corporate executive began to slightly increase the quarterly earnings numbers with deceitful intensions to make the company look just a bit better. Let us say that this decision was all within what is legally allowed. Over time, however, this same executive found himself in federal prison due to criminal violations of financial laws.

We now turn to the meaningfulness of life.

Life lacks meaning

Frederich Nietzsche was an atheistic nihilist who concluded life has no meaning. He popularized the notion that God is dead and that the philosophers killed him. Niccolò Machiavelli is often credited with the assertion that might makes right. He asserts,

⁴⁸See Kai Nielson, “Why Should I Be Moral?” *American Philosophical Quarterly* 21(1984), p. 90. Quoted in William Lane Craig, *Reasonable Faith Christian Truth and Apologetics*, Third Edition, Crossway, Wheaton, IL, p. 75.

“People should either be caressed or crushed. If you do them minor damage they will get their revenge; but if you cripple them there is nothing they can do. If you need to injure someone, do it in such a way that you do not have to fear their vengeance.”⁴⁹

Without God, there is no meaning in the quest for meaning. Yet most normal humans find life deeply meaningful. It is only after much bad education does one conclude life is meaningless. Stephen Jay Gould concludes,

“We are here because one odd group of fishes had a peculiar fin anatomy that could transform into legs for terrestrial creatures; because the earth never froze entirely during an ice age; because a small and tenuous species, arising in Africa a quarter of a million years ago, has managed, so far, to survive by hook and by crook. We may yearn for a ‘higher answer’— but none exists.”

Without meaning, why should you be charitable especially to those from whom no possible benefit will ever come your way? Life will quickly reduce to mere transactional existence. Quid pro quo everywhere you go. We intuitively know that transactional existence is dysfunctional as we overvalue what we provide and undervalue what is provided to us. It leads quickly to hopelessness.

Humans have no hope

Humans exhibit great hope in life, yet the atheistic philosophers conclude that they are deluded as there is no hope. Life just is and when you die it is no more. A thousand years from now, there will be no meaning from your life; hence, life today lacks any hope. Atheists have nothing to offer a world that is longing for hope. This perspective just does not accord with life’s actual experience.

Investing is anchored solidly in hope. If you invest \$10,000 in an exchange-traded fund, such as a stock index fund, what is it you seek? Is your objective to assist in human flourishing by providing the necessary capital for companies to function so they can provide benefits to the many employees, customers, and suppliers? Perhaps, but it is my belief that most people do not think this way regarding investment decisions. Rather, one invests in the hope that your \$10,000 investment will one day be worth significantly more and perhaps provide resources for your family when you are in retirement. Hope is a key element within financial decisions. Without hope, all that is left is to eat, drink, and be merry for soon we die.

We now turn to consider the question of God’s existence based, in part, on Dallas Willard’s three stages.

Willard’s three stage approach to God’s existence⁵⁰

The approach taken here benefitted greatly from the article by Dallas Willard, “Language, Being, God, and the Three Stages of Theistic Evidence.” The errors, however, are mine as I am not as systematic in presenting these kinds of arguments as trained philosophers. Thank you for your patience.

Stage 1: No physical quantity completely explains its own existence

Physical realities and the nature of them, regardless of how partitioned, owe their existence to something that preexisted it but it does not explain it fully. A blueberry from my blueberry tree does

⁴⁹Quoted in *The Prince*, 1513. See <https://libquotes.com/niccolò-machiavelli/quote/lbg2w6u>.

⁵⁰See Dallas Willard, “Language, Being, God, and the Three Stages of Theistic Evidence.” Available at <http://www.dwillard.org/articles/individual/language-being-god-and-the-three-stages-of-theistic-evidence>. We use Willard’s framework and expand in several ways.

not explain its own existence. Further, there are no known physical realities that explain its self-existence.

Further, there are no known infinite series of causes. Theoretically, if we found an infinite series of integers showing on our computer every second (e.g., -10, -9, and so forth), then we would never arrive at any stated number. Logically, the computer would have failed a long time ago. A common example is noting that with a series of falling dominos, we would never arrive at any given current domino. Alternatively, Figure 5.1 illustrates a coal train. Clearly, the observation of a series of moving coal train cars logically suggests the existence of an engine car often being at the front of the train.

Figure 5.1. Illustration of no known infinite series of causes



Thus, there must be an initial uncaused cause. There can only be one self-existent cause which is not concurrently within existence.

Stage 2: Argument from and to design

As Lennox notes, one of the foundational premises of the scientific method is the rational intelligibility of the universe. He states,

“The very concept of the intelligibility of the universe presupposes the existence of a rationality capable of recognizing that intelligibility.” (p. 59)

He quotes John Polkinghorne,

“Science does not explain the mathematical intelligibility of the physical world for it is part of science’s founding faith that this is so.” (p. 61)

We explore the role of science in more detail in Chapter 7.⁵¹

For now, let us consider the design evidence approach from two perspectives, from design to a designer and to design because of a designer. Although similar, these two approaches provide unique insights.

*Argument from design*⁵²

J. P. Moreland when addressing the question of God, documents the famous atheist Anthony Flew upon his conversion to theism, noted

“ ... if the arguments and evidence for God had been known fifty years ago, he and other prominent atheists of the twentieth century would have become believers decades ago.” (p. 173)

Moreland notes,

“In fact, the evidence for God from design is most likely the most popular argument for God.”

Recall from Chapter 4, Lennox identifies two forms of explanation, mechanism and agency. Mechanism-based explanations involve impersonal causes, conditions, and the laws of nature. Agency-based explanations involve motives, intentions, and purposes. Citing evidence from the human eye (2 million working parts), human ear (discriminate between 400,000 different sounds), and the human heart (pumps more than 3 supertankers of blood over a lifetime), Moreland notes,

“Certain facts about the world cannot be adequately explained by impersonal causes, conditions, and the laws of nature. But they can be adequately explained by a personal explanation. There is no reason to treat these facts about the world as unexplainable brute facts. It is better to use a form of explanation—personal explanation—to explain them. Moreover, some of these facts have characteristics that clearly indicate that only come from intelligent agents. So the intelligent action of a Designing Person is the best explanation for these facts.”

The notion that you can discern the difference between chance and design is ancient. In Dembski's book *The Design Inference*, he opens with a quote from Cicero.

“Cicero (46 BC, p. 213) remarked, ‘If a countless number of copies of the one-and twenty letters of the alphabet, made of gold or what you will, were thrown together into some receptacle and then shaken out on to the ground, [would it] be possible that they should produce the Annals of Ennius? ... I doubt whether chance could possibly succeed in producing even a single verse.’ (p. 1)

Figure 5.2 illustrates Michelangelo's famous painting, *The Creation of Adam*, on the Sistine Chapel created somewhere around 1508-1512. One can easily infer that the Sistine Chapel ceiling itself was designed as well as the painting it portrays.

⁵¹John C. Lennox, *God's Undertaker Has Science Buried God?* Lion Hudson, plc, Oxford, England.

⁵²This section draws heavily from J. P. Moreland, *Love your God with all your mind*, NavPress, 2012.

Figure 5.2. Illustration of design, Michelangelo's, *The Creation of Adam*



Moreland notes that the

“ ... ubiquitous existence of stunning, gratuitous beauty” is evidence of design. He notes that beauty comes from artists, beauty is intrinsically good and valuable, and humans can recognize it. Moreland concludes, “The world is teeming with overwhelming beauty.” (p. 175).

Moreland follows Behe in identifying another type of design termed irreducible complexity.

“An irreducibly complex system is a system containing several well matched, interacting parts that contribute to its basic function, and where the loss of any single part causes the system to cease functioning.” (p. 177)

The human body is comprised of numerous irreducibly complex systems, such as the eye, ear, and heart mentioned above.

Moreland follows Dembski in identifying a third type of design termed specified complexity where some phenomenon is most likely caused by

“ ... a purposive, intelligent act by an agent.” (p. 179)

Something is intentional if

“(1) the event was contingent, that is, even though it took place, it did not have to happen, no law of nature requires that the event happened (unlike water, which, given the laws of nature, must freeze at a certain temperature) ; (2) the event had a small probability of happening; and (3) the event is capable of independent specified ability (capable of being identified as a special occurrence beside the simple fact that it did, in fact, happen).” (Italics in original, p. 179)

Scientists have documented over 30 independent basic constants of nature required to sustain life in this universe. These constants were set in the first picosecond (1 trillionth of a second or the approximate amount of time it takes for light to travel across a single strand of hair)⁵³ of the universe's creation.

Moreland concludes,

“The universe is a razor's edge of precisely balanced life-permitting conditions.” (p. 181)

⁵³See <https://en.wikipedia.org/wiki/Picosecond>.

Note that each of these constants could have been different and the likelihood of this precise balance is very unlikely. Finally, each constant must hold in combination with the other factors. Thus, our universe appears to exhibit specified complexity of the sort that suggests design.

It goes without saying that biological life is complex beyond normal human reasoning. The discovery of DNA screams of creative beauty, irreducible complexity, as well as specified complexity. There are about 3 billion bits of information contained in a single strand of human DNA. Figure 5.3 illustrates one depiction of one perspective of DNA. Francis Collins, who has been instrumental in DNA research, is reported to have used this figure in a talk he gave.⁵⁴ This picture is a view down the long axis of genetic material, the β DNA double helix (common in human cells).

Figure 5.3. Illustration of DNA

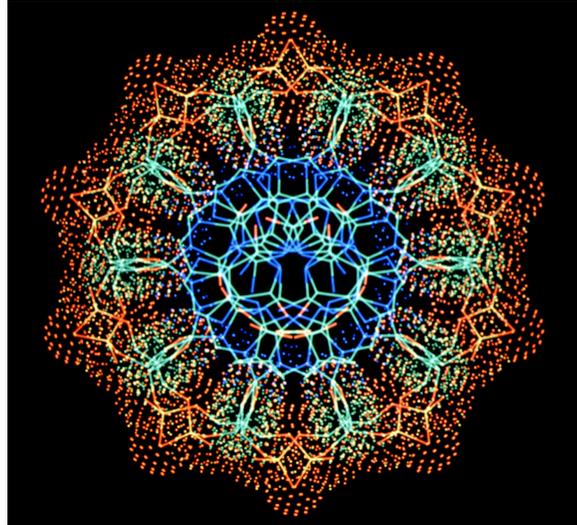
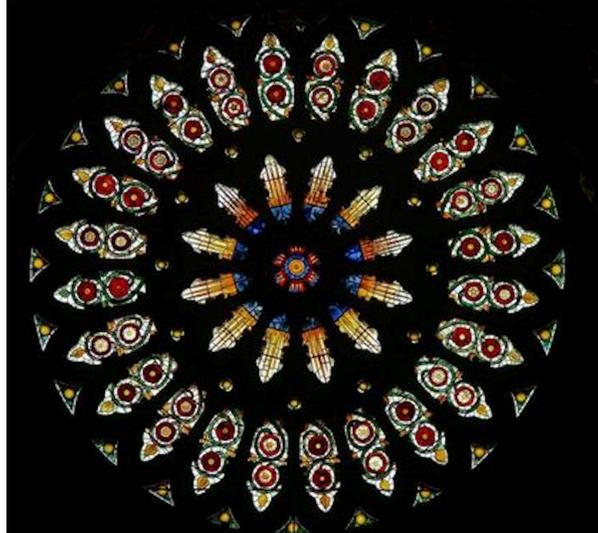


Figure 5.4 was side-by-side in Collins' talk. Figure 5.4 is a picture of the Rose Window at York Minster in England. Clearly, Figure 5.4 was painstakingly created, designed, and built. It is rational to conclude that the DNA represented in Figure 5.3 involve a being even more creative to design and construct it.

⁵⁴Francis Collins served as the 16th Director of the National Institutes of Health who provided numerous discoveries and provided leadership to the Human Genome Project. See, <https://www.nih.gov/about-nih/who-we-are/nih-director/biographical-sketch-francis-s-collins-md-phd>. Collins presents these two pictures in his talks related to faith and science, see for example, <https://religionnews.com/2018/06/19/christian-geneticist-francis-collins-ponders-promise-peril-of-biotechnology/>.

Figure 5.4. Picture of the Rose Window at York Minster, England



We now turn to a similar yet distinct approach to the argument from design—the argument to design.

Argument to design

The argument to design is explained as the

“configuration and coalescing of intelligent entities and quantities that pre-disposed the possibility of the resultant entity that came into being.”⁵⁵

It is important to note that the starting point for the atheist is very unnatural. As the opening quote by G. K. Chesterton points out, it is rationally absurd that “... nothing should turn itself into everything.”

From a Christian perspective, the universe and all that it contains was both created from design as well as being continuously created to design. From the passages given below, we see that all things were created by Jesus Christ and for His purposes.

Colossians 1:16-17 ¹⁶For by him [Jesus Christ] all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and for him. ¹⁷And he is before all things, and in him all things hold together.

John 1:1-3, 10 ¹In the beginning was the Word, and the Word was with God, and the Word was God. ²He was in the beginning with God. ³All things were made through him, and without him was not any thing made that was made. ... ¹⁰He was in the world, and the world was made through him, yet the world did not know him.

Psalms 33:6 ⁶By the word of the Lord the heavens were made, and by the breath of his mouth all their host.

⁵⁵See <https://www.youtube.com/watch?v=mRRuKDXT7Kg>.

1 Corinthians 8:6 *“yet for us there is one God, the Father, from whom are all things and for whom we exist, and one Lord, Jesus Christ, through whom are all things and through whom we exist.”*

We conclude this section on design with two parables. In 1955, Anthony Flew when he was still an atheist wrote the following parable.

*“Once upon a time two explorers came upon a clearing in the jungle. In the clearing were growing many flowers and many weeds. One explorer says, ‘Some gardener must tend this plot.’ The other disagrees, ‘There is no gardener.’ So they pitch their tents and set a watch. No gardener is ever seen. ‘But perhaps he is an invisible gardener.’ So they set up a barbed-wire fence. They electrify it. They patrol with bloodhounds. (For they remember how H. G. Wells’s *The Invisible Man* could be both smelt and touched though he could not be seen.) But no shrieks ever suggest that some intruder has received a shock. No movements of the wire ever betray an invisible climber. The bloodhounds never give cry. Yet still the Believer is not convinced. ‘But there is a gardener, invisible, intangible, insensible, to electric shocks, a gardener who has no scent and makes no sound, a gardener who comes secretly to look after the garden which he loves.’ At last the Skeptic despairs, ‘But what remains of your original assertion? Just how does what you call an invisible, intangible, eternally elusive gardener differ from an imaginary gardener or even from no gardener at all?’”*

In a masterful response, John Frame counters with this revised parable.⁵⁶

“Once upon a time two explorers came upon a clearing in the jungle. A man was there, pulling weeds, applying fertilizer, trimming branches. The man turned to the explorers and introduced himself as the royal gardener. One explorer shook his hand and exchanged pleasantries. The other ignored the gardener and turned away: ‘There can be no gardener in this part of the jungle,’ he said; ‘this must be some trick.’ They pitch camp. Every day the gardener arrives, tends the plot. Soon the plot is bursting with perfectly arranged blooms. ‘He’s only doing it because we’re here—to fool us into thinking this is a royal garden.’ The gardener takes them to a royal palace, introduces the explorers to a score of officials who verify the gardener’s status. Then the skeptic tries a last resort: ‘Our senses are deceiving us. There is no gardener, no blooms, no palace, no officials. It’s still a hoax!’ Finally, the believer despairs: ‘But what remains of your original assertion? Just how does this mirage, as you call it, differ from a real gardener?’”

Willard concludes his second stage,

“We have established that not all order is evolved and that relative to our data there is a probability of zero that order should emerge from chaos or from nothing into the physical world.”

We now explore the last stage with a focus on human events.

⁵⁶John M. Frame, “God and biblical language: Transcendence and immanence,” *God’s inerrant Word*, ed. J. W. Montgomery (Minneapolis: Bethany Fellowship, 1974), p. 171. Quoted at <https://www.thegospelcoalition.org/blogs/justin-taylor/the-invisible-vs-the-constant-gardener-parables-for-and-against-atheism/>.

Stage 3: Human events

In Willard's third stage, he considers

“ ... the course of human events—historical, social and individual—within the context of a demonstrated extra-naturalism (stage one) and of a quite plausible cosmic intellectualism (stage two). ... We know, most importantly, that human minds standardly create for a purpose, and that they retain an active interest in, feel intimately invested in, what they create—and all the more so the greater the originality or ‘creativity’ involved.”

The two stages can be exemplified in every new business venture as it is itself a deeply creative human activity. The entrepreneurs involved in its creation nurture it often with deep care. It requires continuous creativity, innovation, and adaptation over time. There does not have to be something flawed in the creation of the business for future creative acts to occur. At times, this deep investment of one's life in the new business blinds folks from seeing lethal defects. Many businesses ultimately fail. From a theist perspective, it is reasonable to infer that our universe is in a process of continual creation from a living and active God.

God's ongoing creation may well include redemption. Though known from eternity past, God intervenes on behalf of humans that have self-inflicted lethal defects commonly known as sin.

It is obvious from human history that something has gone terribly wrong. With numerous examples of brutal dictators, such as Hitler and Stalin, we intuitively know that their actions were wrong. There is a convergence of ethics, justice, love, and forgiveness uniquely found at the cross of Jesus Christ. From the brutal crucifixion of Jesus Christ followed by the affirmed resurrection, we have beauty.

Christianity's philosophical beauty

There are intense philosophical benefits—the immutable moral law, a deeply meaningful life, and satisfying hope—arising from the affirmation of God's existence within the Christian worldview.

Immutable moral law

Psalm 19 depicts the beauty of God's moral law when embraced with gratitude. Hence, this psalm of David attributes more economic value to this law than fine gold and more desirable than the sweetest honey. When first confronted with biblical commands, however, one typically bristles at its strictness. Over time, the deep wisdom and truthfulness of God's law is overwhelming.

Psalm 19:7-11 ⁷The law of the Lord is perfect, reviving the soul; the testimony of the Lord is sure, making wise the simple; ⁸the precepts of the Lord are right, rejoicing the heart; the commandment of the Lord is pure, enlightening the eyes; ⁹the fear of the Lord is clean, enduring forever; the rules of the Lord are true, and righteous altogether. ¹⁰More to be desired are they than gold, even much fine gold; sweeter also than honey and drippings of the honeycomb. ¹¹Moreover, by them is your servant warned; in keeping them there is great reward.

Deeply meaningful life

There are several passages in the Bible that are indicative of human life being deeply meaningful. We find references to our Christian identity being expressed as God's own possession with a commission to serve as an ambassador. The following verses are just a few.

1 Peter 2:9 ⁹But you are a chosen race, a royal priesthood, a holy nation, a people for his own possession, that you may proclaim the excellencies of him who called you out of darkness into his marvelous light.

Colossians 1:16 ¹⁶For by him all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and for him.

Romans 8:28 ²⁸And we know that for those who love God all things work together for good, for those who are called according to his purpose.

Psalms 139:13-14 ¹³For you formed my inward parts; you knitted me together in my mother's womb. ¹⁴I praise you, for I am fearfully and wonderfully made. Wonderful are your works; my soul knows it very well.

A satisfying hope

As countless Christians will testify, Jesus Christ provides a satisfying hope way beyond what mere transitory wealth promises. We know that God's plan for us is a future and hope that satisfies our deepest longings as illustrated in the following passages.

Jeremiah 29:11 ¹¹For I know the plans I have for you, declares the Lord, plans for welfare and not for evil, to give you a future and a hope.

1 Timothy 6:17 ¹⁷As for the rich in this present age, charge them not to be haughty, nor to set their hopes on the uncertainty of riches, but on God, who richly provides us with everything to enjoy.

The realization that life is deeply meaningful within the context of a loving God provides deep context and purpose of expressing your God-given creativity. Further, the physical, bodily resurrection of Jesus Christ give us an eternal hope even when life's experiences are deeply painful and discouraging.

God's existence and personal finance

The reality of God's existence has a profound influence on personal financial management. If the Christian worldview is true, then according to the Apostle Paul, there exist an unavoidable downward spiral facing those who choose an alternative worldview as illustrated in Figure 5.5.

Figure 5.5. Illustration of downward spiral described in the Book of Romans



Baucham suggests seven phases in this downward spiral.⁵⁷ First, someone rejects God’s general revelation. Second, this person refuses to honor the God they know. Third, he becomes futile in his thinking and his heart is darkened. Fourth, he exchanges the glory of God for various idols. Fifth, he gives into his lustful desires. Sixth, he shatters the image he bears. Finally, he loses his mind. Clearly, a darkened and lost mind will make poor financial choices.

Summary

In this Chapter, we first identified the unique nature of challenges to the existence of God. There is no reason why a theist must bear the burden of proof. Next, we identified atheism’s bleak philosophical implications. It lacks any rational basis for moral laws, concludes life is meaningless and without hope. We followed Dallas Willard’s three stage approach with some insights drawn from finance. Finally, we considered the opposing view, the Christian perspective resulting in philosophical beauty.

⁵⁷See Voddie Baucham, Jr., *Expository Apologetics Answering Objections with the Power of the Word*, Crossway, Wheaton, IL, 2015, 50-56.

Chapter 6. Competing Worldviews

Learning objectives

- Define and review philosophical worldviews
- Introduce three categories of worldviews, skepticism, methodism, and particularism
- Errors made when adopting a worldview
- Review of several worldviews
- Identify characteristics of beliefs

Opening quote

“We must believe something before we can know anything.” Augustine (354-430 A.D.)

Overview

After defining carefully what is meant by the phrase philosophical worldview, we identify three categories of worldviews, skepticism, methodism, and particularism. Although particularism is somewhat new, every worldview ultimately contains particularist elements. When evaluating various worldviews, we identify common errors. Finally, we briefly review several worldviews and identify unique characteristics of beliefs.

Philosophical worldview

A worldview is simply a conceptual arrangement by which we fit everything we believe and through which we interpret and judge reality. Recall from Chapter 2 that a worldview is a set of ordered propositions that one believes, especially propositions about life’s most important questions. (MC 13)

Myers and Noble define worldview in the following way.

Worldview is a pattern of ideas, beliefs, convictions, and habits that help us make sense of God, the world, and our relationship to God and the world.”⁵⁸

Habits are essential for life. We do many things in a habitual fashion. Some people habitually purchase goods on impulse whereas others analyze each purchase carefully. Although often an initial struggle, many people can change their habits.

Clearly, flourishing financially depends on one’s patterns or habits. In the same way, one’s core ideas flow in patterns and they are typically easy to recognize by yourself and others. It is often said, “Show me a person’s financial statement and I can tell you what they really believe.” How we spend money is a powerful resource for understanding our core ideas, beliefs, convictions, and habits.

Patterns are also studied by finance professionals. The better an analyst understands the habits of customers, suppliers, and competitors, the more likely the analyst will make the best decisions. Although it is impossible to perfectly forecast the future, often you can understand the times as illustrated in Chronicles.

1 Chronicles 12:32 ³²Of Issachar, men who had understanding of the times, to know what Israel ought to do, 200 chiefs, and all their kinsmen under their command.

The ability to understand and explore numerous different worldviews, requires one to identify core patterns as well as create broad categories. We can in fact discern between entire categories of

⁵⁸See Jeff Myers and David Noble, *Understanding the Times*, Summit Ministries, p. 11.

worldviews that are plausible and ones that are false. Thus, we can as Paul states in Corinthians arrive at the truth.

2 Corinthians 10:5 *5We destroy arguments and every lofty opinion raised against the knowledge of God, and take every thought captive to obey Christ,*

The propositions within worldviews tend to be presuppositions. They are implicit assumptions about the world for it to make sense. These presuppositions are often core to any argument to posit a philosophical worldview. One's worldview is like a pair of glasses.

Recall Chapter 1 we had three tests for truth and four questions to be answered when exploring worldviews.⁵⁹ The tests for whether a worldview is true are the following: Is the worldview logically consistent? Is the worldview empirically adequate? And is the worldview experientially relevant? The four questions a worldview must answer are the following: Where did we come from? Is life meaningful? Are there immutable moral laws? And where am I going?

Within this framework, there are several ways to test the legitimacy of a worldview. First, we can test the reasonableness of the worldview. Is it internally coherent? For example, how well does it answer these four questions? Further, we can explore how the worldview comports with our actual personal experience. How well does it explain yourself? For example, can it address why I do things I believe I should not do. Finally, we can consider how the worldview aligns with scientific experience. Does it explain empirical observations well? For example, why is the Bible the world's bestselling book, year after year? Finally, we can gauge how the worldview results in personal practice. Does it lead to a fulfilled life? For example, can it provide answers to the purpose of life.

There are numerous different worldviews that have been proposed. In an effort to categorize them all, here we explore three general categories of worldviews as a potential solution for the philosophical problem of the criterion.

Skepticism, Methodism, and Particularism

The objective here is to introduce alternative worldviews with the intention of framing the rational approach to the Christian worldview. First, we sketch the problem of the criterion.

Problem of the Criterion

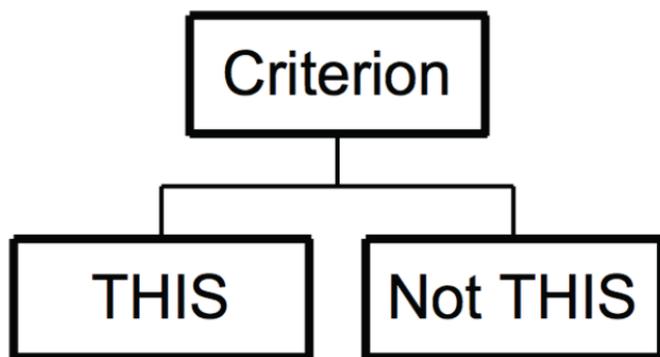
The following three figures develop the problem of the criterion. Step 1 illustrates two mutually exclusive declarative propositions—truth bearers. For example, let THIS denote “Jesus Christ is God’s Son Sacrificed” and let Not THIS denote “Jesus Christ is *not* God’s Son Sacrificed.”

Step 1: THIS Not THIS

Clearly, we need some sort of criterion to evaluate these two truth-bearers (Step 2). If the criterion is scientism, then, based on this criterion, the scientific evidence for this claim is evaluated.

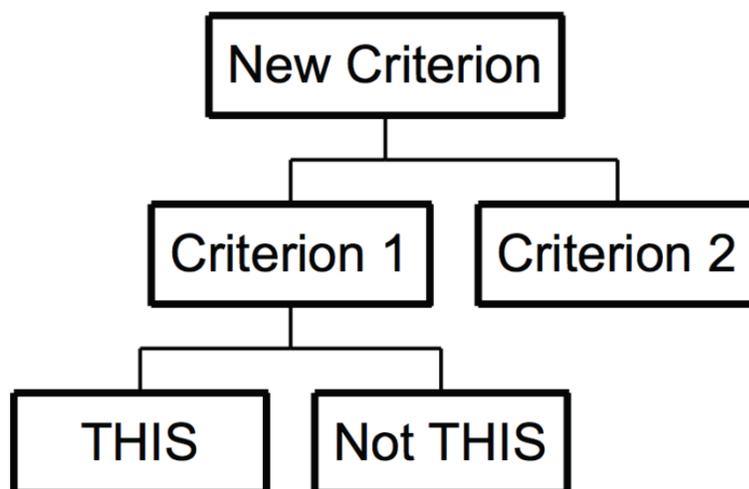
⁵⁹East and West, Part 1, Let My People Think, https://www.youtube.com/watch?v=5zIOKHtla_g.

Step 2:



One may object to that criterion and offer an alternative criterion. For example, an alternative criterion is rationalism; that is, the reasonableness of this claim is evaluated. You may object and offer some criterion to evaluate competing criterion (Step 3 below) and off we go down an infinite regress.

Step 3:



Thus, we have the problem of the criterion. There are three categories of potential solutions:

- Skepticism – placing one’s faith in the fact that one can never know the appropriate criterion,
- Methodism – placing one’s faith in a particular method to make the choice, and
- Particularism – placing one’s faith in selected declarative propositions that you believe you have warrant to be held true.

We now investigate each potential solution with an emphasis on key perspectives within each potential solution.

Skepticism

The worldview category of skepticism is widely held among academics; however, most academics are not global skeptics, rather they are local skeptics—say skeptics of any religious claims. Some philosophers who are skeptics make the following argument:

Premise 1: I believe I know some claims are true.

Premise 2: I do not know every true claim.

Observation: Some claim presently unknown, may prove that what I believed as true in Premise 1 is, in fact, false.

Conclusion: Therefore, I cannot know any claim is true.

Thus, all knowledge claims start with some core beliefs. Given we do not know if the core beliefs are true, then we do not know if any claims are true.

Methodism

Methodism is much more popular and often ardently held without much thought. From my interactions, it appears that many people have adopted a culturally plausible worldview without careful examination. For example, some methodists seemingly have not grounded their conversion with any criterion. Further, over time they become deeply faithful to their adopted worldview.

Another example in this line of thought is that of scientism. It is popular in academic circles as it asserts that one should only believe truth claims that are supported by scientific evidence. As we will see later, there is no scientific evidence for scientism's core truth claim.

Particularism

The only remaining category of worldviews is the lesser known particularism. Particularism asserts that selected declarative propositions have warrant to be held true. For example, across most cultures, it is held that harming a defenseless child is wrong. The empirical evidence favoring this idea is sketchy at best, but it is wrong. Thus, the particularist would say that the widely held human virtues (for example, prudence, justice, temperance, and courage) are rationally held even if adequate scientific evidence is not available or is not supportive.

Note that both skepticism and methodism rely on particularism to justify their existence. For example, the skeptic who asserts he is certain that you cannot discern between mutually exclusive ideas has just asserted the truthfulness of an idea (skepticism) and hence his skepticism has a defeater.

Particularism provides the rational basis for the Christian worldview when compared to various other methodist worldviews, such as scientism, positivism, rationalism, logical positivism, and so forth. The natural question that arises is what are the foundational claims?

A particularist asserts that humans are equipped with belief forming mechanisms to account for ways we think in the presence of certain experiences. For example, holding a cup of coffee is fundamentally different from the idea of holding a cup of coffee. That is, the idea (abstract) is different from actual cup (concrete).

How do we know that the idea (abstract, truth bearer) in our minds correspond to actual reality (concrete, truth maker)? We naturally assume reality corresponds to our ideas of reality. The Christian particularist would therefore claim we are created in such a way that we cannot help but think that in this manner (a particular knowledge claim).

Biblical Particularism

The Christian worldview is easily categorized with particularism. The following passages illustrate core particular claims.

2 Timothy 3:16-17 ¹⁶All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness, ¹⁷that the man of God may be complete, equipped for every good work.

Genesis 1:1 ¹In the beginning, God created the heavens and the earth.

Psalms 1:1-6 ¹Blessed is the man who walks not in the counsel of the wicked, nor stands in the way of sinners, nor sits in the seat of scoffers; ²but his delight is in the law of the LORD, and on

his law he meditates day and night. ³He is like a tree planted by streams of water that yields its fruit in its season, and its leaf does not wither. In all that he does, he prospers. ⁴The wicked are not so, but are like chaff that the wind drives away. ⁵Therefore the wicked will not stand in the judgment, nor sinners in the congregation of the righteous; ⁶for the LORD knows the way of the righteous, but the way of the wicked will perish. See also **Deuteronomy 11:13-15** and **Joshua 1:8-9**.

Luke 9:23-24 ²³And he said to all, “If anyone would come after me, let him deny himself and take up his cross daily and follow me. ²⁴For whoever would save his life will lose it, but whoever loses his life for my sake will save it.

John 15:9-11 ⁹As the Father has loved me, so have I loved you. Abide in my love. ¹⁰If you keep my commandments, you will abide in my love, just as I have kept my Father's commandments and abide in his love. ¹¹These things I have spoken to you, that my joy may be in you, and that your joy may be full. See also **John 8:31-36**.

Luke 6:46-49 ⁴⁶“Why do you call me ‘Lord, Lord,’ and not do what I tell you? ⁴⁷Everyone who comes to me and hears my words and does them, I will show you what he is like: ⁴⁸he is like a man building a house, who dug deep and laid the foundation on the rock. And when a flood arose, the stream broke against that house and could not shake it, because it had been well built. ⁴⁹But the one who hears and does not do them is like a man who built a house on the ground without a foundation. When the stream broke against it, immediately it fell, and the ruin of that house was great.”

1 Corinthians 3:10-11 ¹⁰According to the grace of God given to me, like a skilled master builder I laid a foundation, and someone else is building upon it. Let each one take care how he builds upon it. ¹¹For no one can lay a foundation other than that which is laid, which is Jesus Christ.

2 Timothy 2:15 ¹⁵Do your best to present yourself to God as one approved, a worker who has no need to be ashamed, rightly handling the word of truth.

People can and do change their worldview. It is extremely disingenuous to assert that people are born with a worldview. Clearly, we are all born into families and cultures with predominant worldviews. Our families and local cultures do influence our perspectives.

As a professor for over 35 years, I have observed that college students often do drastically change their worldview. This is most dramatically seen with students from statist countries, such as Marxist-based, that impose their worldview by force. When considering changing our worldview, say from naturalism to Christianity, one must consider the potential for error.

Error analysis related to worldviews

Without a doubt, the stakes are very high when deciding to change our worldview. One can go to two different extremes when appraising a worldview—tight and loose.

Tight (intolerant, dogmatism)

At this extreme, one is intolerant to new ideas. For example, some investment professionals have adopted an investment philosophy based on what was established many years ago despite the significant, mounting evidence concerning its truthfulness. Professors teach what they were taught many years ago regardless of new evidence. To illustrate, there is mounting evidence that investment professionals lack the ability to forecast financial instrument prices. Unfortunately, being either delusional or deceptive, they continue to claim they have this skill.

Loose (overly tolerant, relativism)

At this extreme, one is over tolerant of new ideas. For example, with some investment professionals, their adopted investment philosophy is based on whatever is presently in fashion, independent of any contrary evidence. Some professors may teach any expressed idea as if it has equal merit regardless of evidence, an approach very popular position among investment professionals. As an illustration, trend following is very popular where the investment professional promotes whatever trading strategy seemed to be successful during the recent past.

Foundational ideas coalesce to form our worldview. We now briefly explore two categories of error when actually applying different worldviews.

Type I error (false positive):

The truth claim is correct, but a particular worldview rejects it.

Type II error (false negative):

The truth claim is incorrect, but a particular worldview fails to reject it.

Note that tight worldviews have a high type I error potential whereas loose worldviews have a high type II error potential. Both errors are of deep concern as the more truth claims are discarded and false claims are adopted, the more detrimental this can be to human flourishing.

Brief review of selected worldviews

We now review a few selected worldviews. We will cover in-depth the two most popular worldviews—naturalism and Christianity—in the next Chapter. Note that skepticism and methodism were previously covered. Most philosophical worldviews contain defeaters. That is, if the worldview itself is evaluated by its own claim, then it cannot be shown to be true.

Scientism

Scientism can be roughly stated as a worldview where no declarative proposition will be asserted true absent scientific evidence. Clearly, scientism itself contains a defeater because its own definition fails to allow for the scientism belief. Scientism is a statement of philosophy; hence there is no scientific evidence for it. The only way to rationally hold to scientism is through particularism. Importantly, it fails to give satisfactory answers to the four questions related to origins, meaning, morality, and destiny. Scientism leaves one with no explanation for how nothing became something. Further, in the end, scientism leads one to conclude that life is meaningless, there are no moral laws, and there is no ultimate destiny.

Positivism

Positivism (also known as logical positivism) is “a philosophical system that holds that every rationally justifiable assertion can be scientifically verified or is capable of logical or mathematical proof, and that therefore rejects metaphysics and theism.”⁶⁰ Again, positivism’s assertion is self-refuting. That is, the positivism worldview cannot scientifically verify or logically prove itself.

Verificationism

“Verificationism is the doctrine that a proposition is only cognitively meaningful if it can be definitively and conclusively determined to be either true or false (i.e., verifiable or falsifiable). ... Verificationism is often used to rule out as meaningless much of the traditional debate in areas of

⁶⁰Mac Dictionary, Apple, Inc., 2.3.0 (268), 2020.

Philosophy of Religion, Metaphysics, and Ethics, because many philosophical debates are made over the truth of unverifiable sentences. It is the concept underlying much of the doctrine of Logical Positivism, and is an important idea in Epistemology, Philosophy of Science and Philosophy of Language.”⁶¹ Again, the verificationism doctrine itself would be deemed false under its own criterion.

Post-modernism

Post-modernism (PM) allows for only ‘local’ truths. With this view, the justification standard is set low so that all true claims are validated. The PM philosophical worldview appears among many professionals to be the prevailing investment worldview today. For example, modern data mining exercises, such as “artificial” intelligence, lead to numerous truth claims related to investment strategies.

Critical realism

Critical realism (contemporary or modern empiricist) is a blend of critical pluralism (open to new theories but apply critical scrutiny) and scientific realism (the evidence supports the new theory better than the old).

Thus, there are many different worldviews each with different competing claims. Eventually, one must decide what to believe. Belief itself, however, is difficult to understand. Thus, let us take a careful look at the nature of belief.

*Nature of Beliefs*⁶²

Beliefs provide the framework for living and are heavily influenced by culture. We make three observations about beliefs.

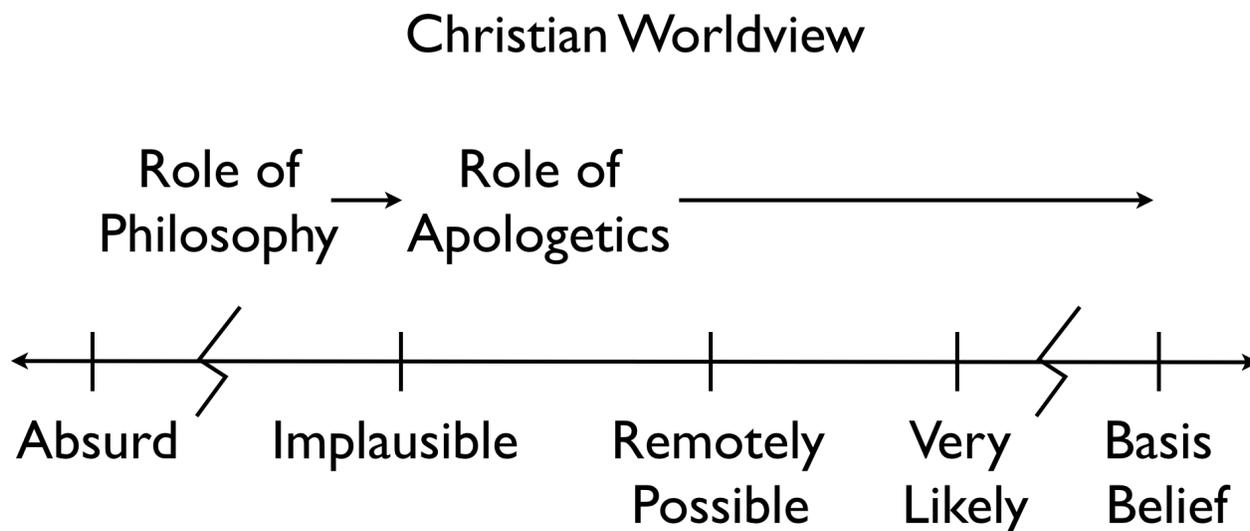
First, beliefs have at least three characteristics—content, strength, and centrality. When we appraise the content within a particular belief truth claim, it is vital to address the question, “Is it true?” What we believe matters. It shapes the very contours of our lives. We quickly realize that reality is indifferent to the sincerity of our beliefs, particularly if it is not true. For example, I may sincerely believe that my car flies, but that makes no difference in the behavior of my car. Clearly, we are responsible for the content of our beliefs.

The degree to which we are convinced a belief is true is relative to its strength. We must be more than fifty percent convinced compared with the converse. Strength degrees include plausibility, such as likely, fairly likely, quite likely, beyond reasonable doubt, and completely certain. As we gain evidence, our belief will strengthen. The more certain we are of the belief, the more we will rely on it, and it becomes a part of our very soul. Figure 6.1 illustrates a strengthening belief in the Christian worldview. Philosophy is often useful in migrating the Christian worldview from absurd to remotely possible. Christian apologetics aids in moving from implausible or remotely likely to a core basis belief.

⁶¹ See http://www.philosophybasics.com/branch_verificationism.html.

⁶²J.P. Moreland and William Lane Craig, *Philosophical Foundations for a Christian Worldview*, IVP Academic, Downers Grove, IL, 2003.

Figure 6.1 Illustration of the migration of belief in the Christian worldview



Belief centrality addresses the degree of importance the belief plays in our entire set of beliefs. How important is this particular belief’s role in our worldview. For example, my belief that blueberries are good for me is true, but it is not central whereas my belief in moral absolutes is central to me. Note that as you grow, a belief’s centrality may change.

Second, beliefs can be changed. Remember we are responsible for our beliefs. Life’s experiences teach us that we cannot change beliefs by direct effort. For example, even if offered a large sum of money, most people cannot believe there is presently a crimson elephant in the room. We can, however, change our beliefs indirectly. Through study, meditation, and reflection, we can identify false beliefs and thus change the content, strength, and centrality of various beliefs. Activities of the mind can change the characteristics of beliefs that transform our personality and beliefs.

Finally, beliefs are heavily influenced by the plausibility structure of a culture. Namely, the set of ideas a person is or is not willing to entertain as plausible. For example, you are most likely unwilling to attend a flat earth convention. Whether a proposition is plausible is a function of the beliefs one already has and the prior conditions of the human mind. For the proposition to become plausible, one must create favorable conditions for it. For example, the proposition that philosophy matters in personal finance may have been implausible prior to this class.

Worldview and personal finance

Beliefs are entrenched into personality in a variety of ways, including repetition, practice, and training. For a young couple to manage their money well, they should focus heavily on discovering the correct worldview. Anchoring on the true worldview will naturally result in a lifestyle that can maintain right beliefs. Right beliefs naturally flow to improved decision-making and hence better financial health.

C. S. Lewis notes,

“For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to subdue reality to the wishes of man: the solution is a technique; and both,

in the practice of this technique, are ready to do things hitherto regarded as disgusting and impious—such as digging up and mutilating the dead.”⁶³

Peter Kreeft, writing on this assertion by C. S. Lewis notes,

*“Science and religion both aim at conforming the mind to objective truth, objective reality (science conforms our mind to the nature of the universe, and religion conforms our mind to the mind of God and our will to the will of God). Magic and technology, on the other hand, try to conform objective reality to the human will. That is why they both arose at the same time—not the Middle Ages but the Renaissance, not the Age of God but the Age of Man. Both are Faustian, Promethean. The difference is, of course, that technology works while magic doesn’t (usually). But their end, their goal, the purpose behind them, the human values and desires and state of soul that set them in motion, are the same.”*⁶⁴

Remember that we all are in the process of conforming our minds to some chosen worldview. Clearly, if the chosen worldview is fundamentally wrong, then our entire philosophical framework is misaligned and subsequent decisions will be deeply impacted, particularly financial decisions. Figure 6.2 illustrates what happens when the foundation is flawed. The Piazza del Duomo is unique and a spectacle to see, the building just cannot function as the original designers intended.

⁶³C. S. Lewis, *The Abolition of Man*, p. 77.

⁶⁴Peter Kreeft, *C. S. Lewis for the Third Millennium: Six Essays on the Abolition of Man* (Ignatius, 2011). Quoted by Justin Taylor at <https://www.thegospelcoalition.org/blogs/justin-taylor/these-three-sentences-by-c-s-lewis-are-worth-at-least-an-hour-of-meditation/>.

Figure 6.2. Illustration of the consequences of faulty worldview



Piazza del Duomo, 56126 Pisa PI, Italy, Pisa. Source: www.unsplash.com.

One key area where worldview deeply impacts personal finance is how we view debt. There seems to be an incessant need to linearly extrapolate past financial patterns into future expectations. For example, the decision to buy a bigger house based on the assumption that our wage will continue to increase and we can grow our income so as to be able to make the mortgage payments. Empirically, future financial outcomes rarely follow historical averages. Like the Piazza del Duomo, a faulty worldview may be pretty to look at but results in disfunction and often significant human suffering.

Summary

In this Chapter, we provided several definitions for philosophical worldview. We reviewed three categories of worldviews, skepticism, methodism, and particularism. Every worldview ultimately contains particularist elements. When selecting a worldview, we were cautioned against two types of

errors—type I and II. Several worldviews were reviewed, and we concluded this Chapter by identifying unique characteristics of beliefs.

Chapter 7. Naturalism, Christianity, and Science

Learning objectives

- Define carefully naturalism and Christianity as well as their major implications
- Introduce science and its relationship with naturalism and Christianity

Opening quote

“(T)here is superficial conflict but deep concord between science and theistic religion, but superficial concord and deep conflict between science and naturalism.”⁶⁵

Overview

We address two dominant worldviews, naturalism and Christianity. We are particularly interested in which worldview is most compatible with science.

Naturalism

Naturalism is frequently defined as

“the philosophical belief that everything arises from natural properties and causes, and supernatural or spiritual explanations are excluded or discounted.”⁶⁶

Naturalism is

“physicalist in flavor ... reality is exhausted by the spatiotemporal world of physical objects accessible in some way to the senses and embraced by our best scientific theories.”

That is,

“Nothing exists outside the material, mechanical (that is, nonpurposeful), natural order.”⁶⁷

Clearly, naturalism implies atheism but atheism does not imply naturalism. Plantinga notes,

“Naturalism is stronger than atheism: you can be an atheist without rising to the full heights (sinking to the lowest depths?) of naturalism; but you can’t be a naturalist without being an atheist.”⁶⁸

In 1911, Dubray states,

“Naturalism is not so much a special system as a point of view or tendency common to a number of philosophical and religious systems; not so much a well-defined set of positive and negative doctrines as an attitude or spirit pervading and influencing many doctrines. As the name implies, this tendency consists essentially in looking upon nature as the one original and fundamental source of all that exists, and in attempting to explain everything in terms of nature. Either the limits of nature are also the limits of existing reality, or at least the first cause, if its existence is

⁶⁵ Alvin Plantinga, *Where the Conflict Really Lies: Science, Religion, & Naturalism*, 2011, ix.

⁶⁶ See, for example, <https://www.naturalnavigator.com/news/2012/07/meaning-of-the-word-naturalism/>.

⁶⁷ J.P. Moreland and William Lane Craig, *Philosophical Foundations for a Christian Worldview*, IVP Academic, Downers Grove, IL, 2003, p. 184.

⁶⁸ Alvin Plantinga, *Where the Conflict Really Lies: Science, Religion, & Naturalism*, 2011, ix.

found necessary, has nothing to do with the working of natural agencies. All events, therefore, find their adequate explanation within nature itself. But, as the terms nature and natural are themselves used in more than one sense, the term naturalism is also far from having one fixed meaning."⁶⁹

"According to Steven Schafersman, naturalism is a philosophy that maintains that;

- 1. 'Nature encompasses all that exists throughout space and time;*
- 2. Nature (the universe or cosmos) consists only of natural elements, that is, of spatio-temporal physical substance—mass—energy. Non-physical or quasi-physical substance, such as information, ideas, values, logic, mathematics, intellect, and other emergent phenomena, either supervene upon the physical or can be reduced to a physical account;*
- 3. Nature operates by the laws of physics and in principle, can be explained and understood by science and philosophy;*
- 4. The supernatural does not exist, i.e., only nature is real. Naturalism is therefore a metaphysical philosophy opposed primarily by supernaturalism.'*

Or, as Carl Sagan succinctly put it: 'The Cosmos is all that is or ever was or ever will be.'"

We now turn to explore the link between naturalism and personal finance.

Naturalism and personal finance

If naturalism is true, then we would not expect human choice to cause artificial intelligence or data analytics any significant problems. Humans should be as predictable as cattle on the farm. We should simply be able to study historical financial data and infer deep insights into future financial prices.

There has been enormous effort in this pursuit for the simple reason that the ability to forecast future prices leads to vast acquisition of wealth. An abundance of empirical evidence has accumulated to suggest that active trading results in lower average returns and higher risk, neither is attractive to investors. The future does appear to cast its shadow in financial markets, but it remains deeply elusive as human choice and future uncertainties clash.

As Figure 7.1 illustrates naturalism is like having your feet firmly planted in midair. Recall the 3 tests, 4 questions, and 5 subjects' assessment and naturalism's inability to provide a rational response.

⁶⁹See [https://en.wikipedia.org/wiki/Naturalism_\(philosophy\)](https://en.wikipedia.org/wiki/Naturalism_(philosophy)) quoting Dubray 1911.

Figure 7.1. Illustration of the consequences of naturalism—feet planted in mid-air



We now turn to carefully consider the Christian worldview.

Christianity

There are many ways to define Christianity. We adopt Plantinga’s definition here

“Human beings and the universe in which they reside are the creation of the God who has revealed himself in Scripture” or “rough intersection of the great Christian creeds ... the result would be something like the ‘Mere Christianity’ of which C. S. Lewis spoke.”⁷⁰

At the core of Christianity is the gospel of Jesus Christ. Paul provides a concise summary in Corinthians.

***1 Corinthians 15:1-5** ¹Now I would remind you, brothers, of the gospel I preached to you, which you received, in which you stand, ²and by which you are being saved, if you hold fast to the word I preached to you—unless you believed in vain. ³For I delivered to you as of first importance what I also received: that Christ died for our sins in accordance with the Scriptures, ⁴that he was buried, that he was raised on the third day in accordance with the Scriptures, ⁵and that he appeared to Cephas, then to the twelve.*

We make the following assertions within the Christian worldview:

⁷⁰Plantinga, p. 8.

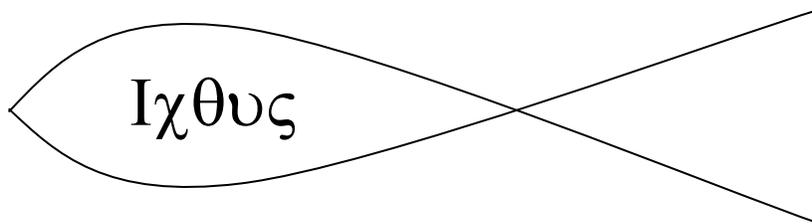
- Human beings and the universe in which they reside are the creation of the God who has revealed Himself in Scripture.
- Jesus Christ is God’s Son sacrificed.

The Christian symbol is often a fish. The Greek rendering of the statement, “Jesus Christ is God’s Son sacrificed” is the following (with the English rendering below it):

Ιησους Χριστου Θεος υιος σωτηρ
 Jesus Christ God’s son savior

The first letter of each Greek word, Ιχθους, spells fish in the Greek. Figure 7.2 illustrates this commonly observed symbol.

Figure 7.2 Christianity’s symbol



Based on the three tests and four questions, the Christian worldview is the most coherent.

Table 7.1. Three tests and four questions answered

Three tests for truth	Christian worldview	Naturalist
Logically consistent	Yes, deep coherence	Vacuous by definition
Empirically adequate	Yes, human nature explained well	Discord with observations
Experientially relevant	Yes, peace and joy even in suffering	Hopelessness reigns
Four questions	Christian worldview	Naturalist
Where did I come from?	Created by God	Don’t know
Is life meaningful?	Yes, we are to glorify God	Don’t know
Immutable moral laws?	Yes, clearly provided	Let me think about it
Where am I going?	Heaven	Don’t know

One interesting test of different worldviews is what you would say to someone on the verge of suicide.

What to say to a person about to commit suicide?

It is unclear to me what a naturalist would say other than go ahead if you feel like it. It really will not matter in a thousand years. The Christian plea, being in opposition to the naturalist, would be to seek and rescue this person found in such a hopeless state. The Christian answer is clearly to seek and rescue this person. The answer is never to end your temporal existence and start one’s eternal life sooner. There is always hope. We document a few biblical passages here. According to Biblical

Christianity, there does exist an entity seeking to destroy but there also exists a rescuer who is the Truth.

John 10:10 ¹⁰*The thief comes only to steal and kill and destroy. I came that they may have life and have it abundantly.*

John 14:6 ⁶*Jesus said to him, “I am the way, and the truth, and the life. No one comes to the Father except through me.*

Pilate asked the perfect question to the perfect person but did not wait around for the answer.

John 18:33-38 ³³*So Pilate entered his headquarters again and called Jesus and said to him, “Are you the King of the Jews?”* ³⁴*Jesus answered, “Do you say this of your own accord, or did others say it to you about me?”* ³⁵*Pilate answered, “Am I a Jew? Your own nation and the chief priests have delivered you over to me. What have you done?”* ³⁶*Jesus answered, “My kingdom is not of this world. If my kingdom were of this world, my servants would have been fighting, that I might not be delivered over to the Jews. But my kingdom is not from the world.”* ³⁷*Then Pilate said to him, “So you are a king?”* *Jesus answered, “You say that I am a king. For this purpose I was born and for this purpose I have come into the world—to bear witness to the truth. Everyone who is of the truth listens to my voice.”* ³⁸*Pilate said to him, “What is truth?”* *After he had said this, he went back outside to the Jews and told them, “I find no guilt in him.”*

We now examine selected personal finance issues through the lens of Christianity.

Christianity and personal finance

The key objective from a Christian worldview is to conform ourselves to the reality around us. The cosmos in which we reside is living and abundant—teeming with abundance created as well as sustained by God.

Further, we know that humans are deeply flawed. We were created within a moral universe with an ingrained sense of right and wrong. Unfortunately, we have a never ending pull towards what is wrong, known as sin. Absent God’s grace and mercy, we are destined to sin and destruction.

Deep within our being is the desire to align what we observe empirically with what we infer ought to be. We naturally seek the normative reason why. Once while working with a particular financial institution, we were requesting a significant allocation—say \$50 million—from an entity managing over \$100 billion. It was interesting to me that the analysts minimized the importance of our historical performance and sought to understand the normative reason why our portfolio management strategy had been historically successful. There was a deep desire to understand the normative foundation for the performance.

Figure 7.3 illustrates the ultimate pursue of following Jesus Christ—contentment. We should restructure our worldview to make personal financial decisions that lead to deep contentment regardless of extremely negative future financial events. History is filled with Christians who have suffered both physically as well as financially, but they have remained deeply contented due to their personal relationship with God.

Figure 7.3. Illustration of the consequences of Christian worldview—contentment



We now examine science through the lens of naturalism and Christianity.

Science

Science is an international enterprise, involving numerous people with a wide array of worldviews and presuppositions. Scientific activities usually focus on that which is repeatable, but the repeatability standard is not applicable in many areas, such as cosmology or biogenesis.

Interestingly, in most social science fields such as finance, it is often impossible to conduct repeatable events. Every day is unique and humans are constantly learning and changing. For example, the 2019-2020 pandemic has change numerous financial models. It has clearly changed the way people view the safety of their retirement accounts.

According to Michael Ruse, science “deals only with the natural, the repeatable, that which is governed by law.” Thus, it is too limiting as it rules out cosmology and many other disciplines including finance. According to John C. Lennox, science is a “method of inference to the best explanation.”

There are three formal reasoning methods that can be applied. According to Merriam-Webster, “Deductive reasoning, or deduction, is making an inference based on widely accepted facts or premises. If a beverage is defined as “drinkable through a straw,” one could use deduction to determine soup to be a beverage. Inductive reasoning, or induction, is making an inference based on an observation, often of a sample. You can induce that the soup is tasty if you observe all of your friends consuming it.

Recall abductive reasoning, or abduction, is making a probable conclusion from what you know. If you see an abandoned bowl of hot soup on the table, you can use abduction to conclude the owner of the soup is likely returning soon.”⁷¹ Scientific activity best falls within abductive reasoning; especially within the social science fields such as finance.

There are two broad categories of science, observation-and-prediction-based or problem-and-explanation-based. As an aside, naturalists are trying to determine apparent design whereas theists are trying to determine the Creator’s actual design. Interestingly, you end up with the same conclusion. According to Lennox, it is probably better to avoid this type of terminology. Lennox notes, “Vast tracts of science remain unaffected by ... philosophical commitments. But not quite all”

⁷¹See <https://www.merriam-webster.com/words-at-play/deduction-vs-induction-vs-abduction>.

Lennox has several deep insights related to science. We provide a few quotes here.⁷²

“(S)cience done on atheistic presuppositions will lead to the same results as science done on theistic presuppositions.” (p. 36-7)

“(E)ssence of true science—that is, a willingness to follow empirical evidence, wherever it leads.” (p. 38)

Two extremes: (1) Relationship between science and religion can only be viewed in terms of conflict. (2) All science is philosophically or theologically neutral. (p. 39)

The statement that only science can deliver knowledge is self-refuting. (p. 40)

“Science is powerless to answer questions such as ‘Why did the universe come into being?’ ‘What is the meaning of human existence?’ ‘What happens after we die?’” Francis Collins, Director of the Human Genome Project (p. 42)

“(W)e should not confuse the mechanism by which the universe works either with its cause or its upholder.” (p. 45)

“(T)here is no logical conflict between reason-giving explanations which concern mechanisms, and reason-giving explanations which concern the plans and purposes of the agent, human or divine.” Michael Poole (p. 45)

Science and personal finance

Personal financial management is an interesting combination of observation-and-prediction-based (OaP) or problem-and-explanation-based (PaE) analysis. Many people enjoy the hobby of predicting financial instrument prices based on historical financial data. Very few people have a documented record of success; in fact, less than what you would expect if completely random. For example, if 1,024 people entered a coin flipping contest to see who the best at landing on heads is each time without exception, then it is expected that only one would flip 10 heads in a row. Thus, this person would appear particularly skilled.⁷³

Although vast amounts of time and effort is place on OaP, the significant gains in personal finance will be found in PaE. Having a correct understanding of what it means to be human aids in creating flourishing cultures and effective strategies. For example, understanding the reality of peoples’ total depravity, including our own, aids in developing appropriate financial guardrails.

OaP struggles with financial data because it involves human feedback. Performativity is the concept that beliefs about financial prices change financial prices. Note that beliefs about physical systems, such as gravity, does not change the behavior of gravity. There is ample evidence that beliefs about financial prices deeply impact observed financial prices. Most people fail to grasp the core reasons why their financial predictions fail. Many famous scientists have taken their analytical skills into various financial markets only to suffer massive financial losses.

From a Christian worldview, if one is encouraged early in their Christian life to engage in a deep dive into what the Bible says about personal finance, then one will likely have in a different perspective on debt as well as perhaps financial risk taking. Finding no encouraging passages on debt and many warning passages will enhance one’s aversion to borrowing. Delayed gratification will be much sweeter.

Interestingly, one may increase financial risk taking for several reasons. Given the vast number of Christians who have been martyred for their faith, taking a bit of financial risk seems rather benign. For example, a Christian that followed biblical financial principles may well be 80 percent equity at 80 years old—a very contrary position to modern financial orthodoxy. Why? The Christian is seeking to

⁷²John C. Lennox, *Has Science Buried God?*

⁷³The probability of flipping 10 heads in a row is 1 in 1,024 (= 2¹⁰).

leave an inheritance to her children’s children.⁷⁴ Generation skipping justifies a more long-term view, especially since her present financial needs have been adequately planned and supplied. The long-term view allows the “miracle” of compound interest. As the often attributed Albert Einstein quote, “Compound interest is the eighth wonder of the world. He who understands it, earns it ... he who doesn’t ... pays it.” The long run view allows for this most powerful force.⁷⁵

We now turn to examine the relationships between naturalism, Christianity, and science.

Naturalism, Christianity, and Science

Christianity and science are often portrayed as being in deep discord whereas naturalism and science as being in complete concord. For example, Peter Atkins, a chemist and prolific writer, asserts,

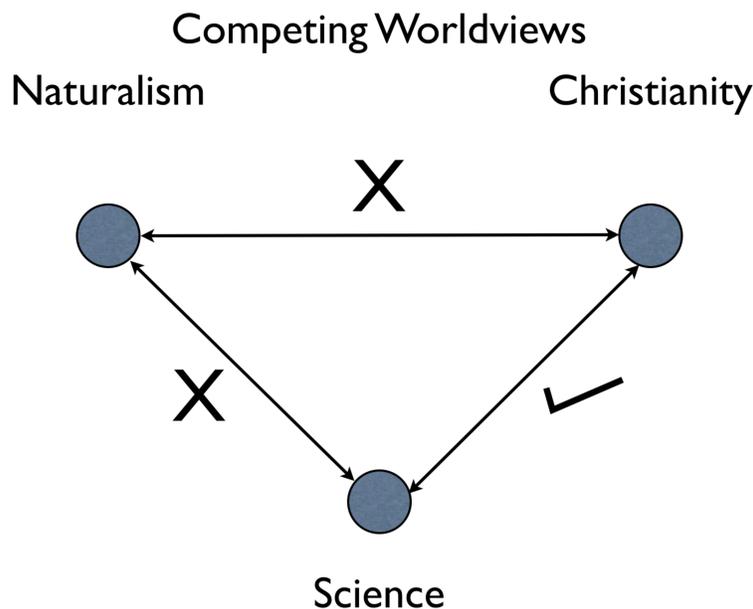
“Humanity should accept that science has eliminated the justification for believing in cosmic purpose, and that any survival of purpose is inspired only by sentiment. ... There is no reason to suppose that science cannot deal with every aspect of existence.”

Science has nothing to say regarding cosmic purpose? Cosmic purpose is simply is not within the science domain! Again, Atkins is conflating naturalism with science. Recall Alvin Plantinga asserts,

“There is superficial conflict but deep concord [agreement] between science and theistic religion, but superficial concord and deep conflict between science and naturalism.”⁷⁶

Figure 7.4 illustrates the key assertion in this section. Specifically, there is deep concord (✓) between Christianity and science whereas there is deep discord (X) between naturalism and science. Further, naturalism and Christianity cannot both be true.

Figure 7.4. Naturalism, Christianity, and Science



⁷⁴Proverbs 13:22 A good man leaves an inheritance to his children's children, but the sinner's wealth is laid up for the righteous.

⁷⁵Albert Einstein is often given credit for various quotes related to compound interest. The evidence is unclear. See, for example, <https://skeptics.stackexchange.com/questions/25330/did-einstein-ever-remark-on-compound-interest>.

⁷⁶Alvin Plantinga, *Where the Conflict Really Lies: Science, Religion, & Naturalism*, 2011, ix.

Selected observations by Plantinga are repeated here:

- Naturalist thinkers tell us that science has eliminated God whereas scientists who are theists tell us that science confirms their faith in God. (p.20)
- Science based on the conviction that the universe is orderly. This comes from the conviction that the universe is governed by a single God and not by the whims of many gods. (p. 20)
- The medieval thinkers insisted on the rationality of God. Many of the fathers of modern science were theists (for example, G. Galilei, Pasteur, Newton, Copernicus, Maxwell, Faraday, Heisenberg, Planc, A. Eddington, Leeuwenhoek, Kepler, and Mendel). They expected laws of nature because they believed in a lawgiver. Science freed from Aristotelian method of deducing from fixed principles of how the universe ought to be (that is, a priori philosophical principles), Galilei and Kepler went and looked to see what was there. (p. 23, note that additional scientist were added)
- There is a widespread myth that science has been constantly at war with religion (e. g., Galileo). Many secular philosophers were opposed to Galileo because of his criticism of Aristotle and many religious intellectuals supported him (at least initially). Also politics of Catholics versus Protestants The Catholic church was Aristotelian. (p. 25)
- The real conflict is not between science and religion but between two diametrically opposed world views: naturalism and theism.
- Naturalism says the cosmos is all there is or ever shall be. It is a closed system of cause and effect. Materialists are naturalists but some naturalists hold that mind and consciousness are to be distinguished from matter (that is, they are emergent properties). (p. 29-30)

Two potential foundations for personal finance

The Christian worldview related to personal finance is principle driven and not data driven. There are investments that would fail to bring glory to God and there are investments that seek to bring glory to God and leads to human flourishing. Figure 7.3 illustrates a house build on a rock—it simply endures the battering through time. Figure 7.4 illustrates a house build on sand—one disruption such as a global pandemic will send it crashing down.

Figure 7.5. Illustration of house built on a rock



Figure 7.6. Illustration of house built on sand



Summary

We addressed two dominant worldviews, naturalism, and Christianity. We identified that the Christian worldview is the most compatible with science.

Chapter 8. Problem of Evil

Learning objectives

- Contrast pain, suffering, and evil
- Compare atheistic-based solutions to the problem of evil with theistic-based solutions
- Explore biblical insights related to the problem of evil
- Review selected Christian's experiences with evil, including the apostles and Horacio Spafford

Opening quotes

"Ideas have consequences, but ideas also have antecedents." (Source lost.)

"That feeling of over-due bills, of bills coming due, of accounts overdrawn, of tradesmen unpaid, of general money cares, is very dreadful at first; but it is astonishing how soon men get used to it. A load which would crush a man at first becomes, by habit, not only endurable, but easy and comfortable to the bearer. The habitual debtor goes along jaunty and with elastic step, almost enjoying the excitement of his embarrassments. ... But then, at last, the time comes when the excitement is over, and when nothing but misery is left. ... If a man could only think of that, as he puts his name to the first little bill, as to which he is so good-naturedly assured that it can easily be renewed!"⁷⁷

Overview

On any given day, various news outlets will report evil acts of humans from murder to thefts to racism. It is assumed as facts that everyone agrees evil exists. Many worldviews, however, deny the existence of evil. Hence, we have a natural discord between many worldviews and the clear and indisputable fact that humans commit evil acts. In this Chapter, we primarily explore the Christian's response to evil.

Pain, suffering, and evil

Our focus is on evil. First, it is important to distinguish between pain, suffering and evil. Pain is the

"physical suffering or discomfort caused by illness or injury,"⁷⁸

To my knowledge, every worldview admits the existence of pain. Pain is very useful as it deters us from many activities, such as placing my hand on a hot stove. From the poorest to the richest among us, everyone experiences pain. For some who suffer, pain can be temporarily alleviated with having access to drugs. Unfortunately, often these very pain medicines cause future pain in terms of addictions and/or side effects. There may be pain in painkillers!

Suffering is

"the state of undergoing pain, distress, or hardship."⁷⁹

Our human existence to some degree, long term or instantaneous, entails inherent suffering. If you have not suffered greatly yourself, then you know someone who has. Suffering takes many forms, including both physical and mental. Enduring the pain of cancer is a common challenge for many. Even worse for some is the mental anguish of divorce or discord between people. Time often heals physical suffering, but for many, time does nothing for mental suffering. Again, to my knowledge, every worldview admits the existence of suffering.

⁷⁷Excerpt from Anthony Trollope, *Framley Parsonage*, (Vol. 1) New York, NY.: Dodd, Mead & Company, 1911, 182-183.

⁷⁸*New Oxford American Dictionary*, provided on Mac computer.

⁷⁹*New Oxford American Dictionary*, provided on Mac computer.

Evil is distinctly different from pain and suffering and is often denied by various worldviews. Evil is

“profound immorality, wickedness, and depravity, especially when regarded as a supernatural force.”⁸⁰

One immediately is confronted with the problem of the criterion. If a particular worldview asserts that a particular action is evil, then immediately we are confronted with some opposite action being good. Hence, there must be a criterion to decide, and we are off and running with the problem of the criterion.

Atheism and the problem of evil

Atheistic-based worldviews, such as naturalism, must deny the existence of evil even though it is all around us. The problem of evil causes significant discord for an atheistic-based worldview. By definition, the atheistic-based worldviews declare life’s imperative as vacuous, completely without meaning. Therefore, you cannot measure progress if you have no idea where you are going. You may very well be regressing as opposed to progressing.

The logic progresses in the following way:⁸¹

Premise 1) If evil exists, then good exists lest you not know the difference.

Premise 2) Evil exists.

Premise 3) Good exists.

Premise 4) Premises 2 and 3 imply measurability.

Premise 5) Measurability implies an objective basis for moral law.

Premise 6) Moral law implies a moral lawgiver.

Conclusion) Therefore, evil exists implies God exists.

Interestingly, many atheists have found their worldviews unlivable, particularly in their sunset years. The problem of evil is, however, also a challenge for theistic-based worldviews.

Theism and the problem of evil

A genuine concern for seekers and even Christ-followers is that if God is all-powerful and all-good, then why is there evil? Moreover, if God is all powerful, omnipotent, able to do anything, why does evil persist? If God is all powerful, then God can do anything, including removing evil. David Hume notes that Epicurus’ ancient questions remain unanswered.

“Is he [God] willing to prevent evil, but not able? then is he impotent. Is he able, but not willing? then is he malevolent. Is he both able and willing? whence then is evil?”⁸²

One solution to this dilemma is to introduce another attribute of God—God is all-knowing—and now we have a trilemma. If God is all-knowing and we are not, then surely God has a very good reason for not removing evil currently. From trilemma, we could move on to a quadrilemma—God is all-wise. If God is all-wise, then from His deep wisdom, evil serves a valuable purpose perhaps in displaying

⁸⁰*New Oxford American Dictionary*, provided on Mac computer.

⁸¹See Session 3 for an introduction.

⁸²See <https://www.gutenberg.org/files/4583/4583-h/4583-h.htm>. David Hume, *Dialogues Concerning Natural Religion*.

God's beauty. From quadrilemma to quintilemma—God is perfect in justice. The process could continue with all the known attributes of God.

From a Christian worldview, we learn that God is the very standard for His own actions and in no way owes us an explanation. As we do have the precious gift of the Bible, there are many insights to be gained regarding the problem of evil from examining what has been revealed.

Biblical insights on the problem of evil

Based on the first book in the Bible, we learn that God's creation was very good. Yet in God's sovereignty, He allowed a tempter to approach humans. Clearly humans were given the freedom to choose to obey God's simple law, not to eat of a particular tree or to disobey in rebellion.

***Genesis 1:31, 3:1, and 3:12** ³¹And God saw everything that he had made, and behold, it was very good. And there was evening and there was morning, the sixth day. ... **3** ¹Now the serpent was more crafty than any other beast of the field that the Lord God had made. He said to the woman, "Did God actually say, 'You shall not eat of any tree in the garden'?" ... ¹²The man said, "The woman whom you gave to be with me, she gave me fruit of the tree, and I ate."*

Throughout the Bible, we learn that God behaves in ways that offend the values held by some people. For example, in Exodus we find God schooling Moses and, in the Psalms, we find the psalmist acknowledging that God does as he pleases rather than what he himself in his humanness might devise.

***Exodus 33:18-19** ¹⁸Moses said, "Please show me your glory." ¹⁹And he said, "I will make all my goodness pass before you and will proclaim before you my name 'The Lord.' And I will be gracious to whom I will be gracious, and will show mercy on whom I will show mercy.*

***Psalms 115:1-3** ¹Not to us, O Lord, not to us, but to your name give glory, for the sake of your steadfast love and your faithfulness! ²Why should the nations say, "Where is their God?" ³Our God is in the heavens; he does all that he pleases.*

When we demand that God give an account of himself, it usually goes unanswered. Job, a very righteous man who suffered greatly made such a demand and God chose to respond in an unexpected way.

***Job 23:1-7** ¹Then Job answered and said: ²"Today also my complaint is bitter; my hand is heavy on account of my groaning. ³Oh, that I knew where I might find him, that I might come even to his seat! ⁴I would lay my case before him and fill my mouth with arguments. ⁵I would know what he would answer me and understand what he would say to me. ⁶Would he contend with me in the greatness of his power? No; he would pay attention to me. ⁷There an upright man could argue with him, and I would be acquitted forever by my judge. (See also **Job 31:35-40**.)*

***Job 38:1-5** ¹Then the Lord answered Job out of the whirlwind and said: ²"Who is this that darkens counsel by words without knowledge? ³Dress for action like a man; I will question you, and you make it known to me. ⁴"Where were you when I laid the foundation of the earth? Tell me, if you have understanding. ⁵Who determined its measurements—surely you know! Or who stretched the line upon it?*

Job eventually understands that God is holy and is accountable to no one. Further, God's holiness leads Job to repent.

Job 42:1-6 ¹Then Job answered the Lord and said: ²“I know that you can do all things, and that no purpose of yours can be thwarted. ³‘Who is this that hides counsel without knowledge?’ Therefore I have uttered what I did not understand, things too wonderful for me, which I did not know. ⁴‘Hear, and I will speak; I will question you, and you make it known to me.’ ⁵I had heard of you by the hearing of the ear, but now my eye sees you; ⁶therefore I despise myself, and repent in dust and ashes.”

From a Christian worldview, several conclusions can be drawn.

- We have no right to complain against God.
- God does not have to give us intellectually satisfying answers to the problems of evil.
- God's sovereignty is not to be questioned related to the problem of evil, rather to be underscored.
- God's Word and His truth is altogether reliable.
- God is holy, just, and good.

Christian experience

In a world of deep pain, suffering, and obvious evil, how does the Christian worldview stand up? John Stott summarizes the choice before us.

“I could never myself believe in God, if it were not for the cross. The only God I believe in is the One Nietzsche ridiculed as ‘God on the cross.’ In the real world of pain, how could one worship a God who was immune to it? I have entered many Buddhist temples in different Asian countries and stood respectfully before the statue of the Buddha, his legs crossed, arms folded, eyes closed, the ghost of a smile playing round his mouth, a remote look on his face, detached from the agonies of the world. But each time after a while I have had to turn away. And in imagination I have turned instead to that lonely, twisted, tortured figure on the cross, nails through hands and feet, back lacerated, limbs wrenched, brow bleeding from thorn-pricks, mouth dry and intolerably thirsty, plunged in Godforsaken darkness. That is the God for me! He laid aside his immunity to pain. He entered our world of flesh and blood, tears and death. He suffered for us. Our sufferings become more manageable in the light of his. There is still a question mark against human suffering, but over it we boldly stamp another mark, the cross that symbolizes divine suffering. ‘The cross of Christ ... is God’s only self-justification in such a world as ours’ ‘The other gods were strong; but thou wast weak; they rode, but thou didst stumble to a throne; But to our wounds only God’s wounds can speak, And not a god has wounds, but thou alone.’”⁸³

As the problem of evil is often a key stumbling block for seekers, we now briefly introduce you to several followers of Jesus who either suffered greatly and for many endured significant evils.

Fate of the apostles

In the early foundational years of Christianity, the original twelve apostles suffered significantly for proclaiming Jesus as the resurrected savior. Although the historical accounts are sketchy at times, the following is a brief account of fourteen people, the original twelve apostles, Matthias appointed after Judas’ betrayal and death, and Paul.

- Judas Iscariot – hung himself after betraying Jesus

⁸³See John R. W. Stott, <http://www.goodreads.com/quotes/416309-i-could-never-myself-believe-in-god-if-it-were>. Original in *The Cross of Christ*.

- Simon Peter – crucified upside down by Nero in Rome around 64 AD
- Andrew – crucified by Patras around 60 AD
- James – killed with sword by Herod in 44 AD (**Acts 12:1-2**)
- John – banished to the island of Patmos, died of old age
- Philip – not sure, perhaps beheaded, stoned, or crucified upside down around 80 AD
- Bartholomew – martyred, not sure how, and perhaps in India
- Thomas – killed by spear in Mylapore, India on July 3, 72 AD
- Matthew – killed by being burned, stoned, stabbed, or beheaded perhaps in Africa, 60 AD
- James son of Alphaeus – beaten with a fuller’s club and stoned in Ostrakine, Egypt
- Jude – killed with an ax in Syria
- Simon the Zealot – likely a martyr by crucifixion or by saw, location unclear
- Matthias – likely stoned or beheaded, location unclear
- Paul – not one of the original twelve, but considered an apostle, beheaded by Nero, 68 AD

Clearly, following Jesus had great cost. Would you endure this level of persecution if you knew Jesus was a liar or lunatic? I do not believe either of these to be a reasonable explanation for paying so great a cost. We now turn to a few others in Christian history to see how they endured pain, suffering, and evil.

Horatio G. Spafford

Horatio G. Spafford wrote the lyrics of the well-known Christian hymn, *It Is Well With My Soul*, in 1873. Before turning to the hymn, we provide a brief biography.⁸⁴ Spafford was born in Troy, New York in 1828 and died in Jerusalem, Israel in 1888. He was a successful lawyer in Chicago and had invested heavily in Chicago real estate. He also served as a Presbyterian church elder and from all appearances was a follower of Jesus Christ.

The great fire of Chicago in 1871 destroyed most of his real estate investments. Two years later, law duties kept him from joining his wife and four daughters on a ship to England. On November 22, 1873, the ship was struck by another ship and sank in 12 minutes killing 226 people, including his four daughters. Anna Spafford telegraphed her husband simply, “Saved alone.”

Horatio then traveled to meet his wife shortly after receiving news from Anna. He wrote most of the following lyrics as his ship passed near where his daughters had died.

It Is Well With My Soul
Horacio G. Spafford, 1873

When peace, like a river, attendeth my way,
When sorrows like sea billows roll;
Whatever my lot, Thou has taught me to know,
It is well, it is well, with my soul.

Refrain:

It is well, (it is well)
With my soul, (with my soul)
It is well, it is well, with my soul.

⁸⁴See https://en.wikipedia.org/wiki/Horatio_Spafford and references therein.

Though Satan should buffet, though trials should come,
Let this blest assurance control,
That Christ has regarded my helpless estate,
And hath shed His own blood for my soul.

My sin, oh, the bliss of this glorious thought!
My sin, not in part but the whole,
Is nailed to the cross, and I bear it no more,
Praise the Lord, praise the Lord, O my soul!

For me, be it Christ, be it Christ hence to live:
If Jordan above me shall roll,
No pang shall be mine, for in death as in life
Thou wilt whisper Thy peace to my soul.

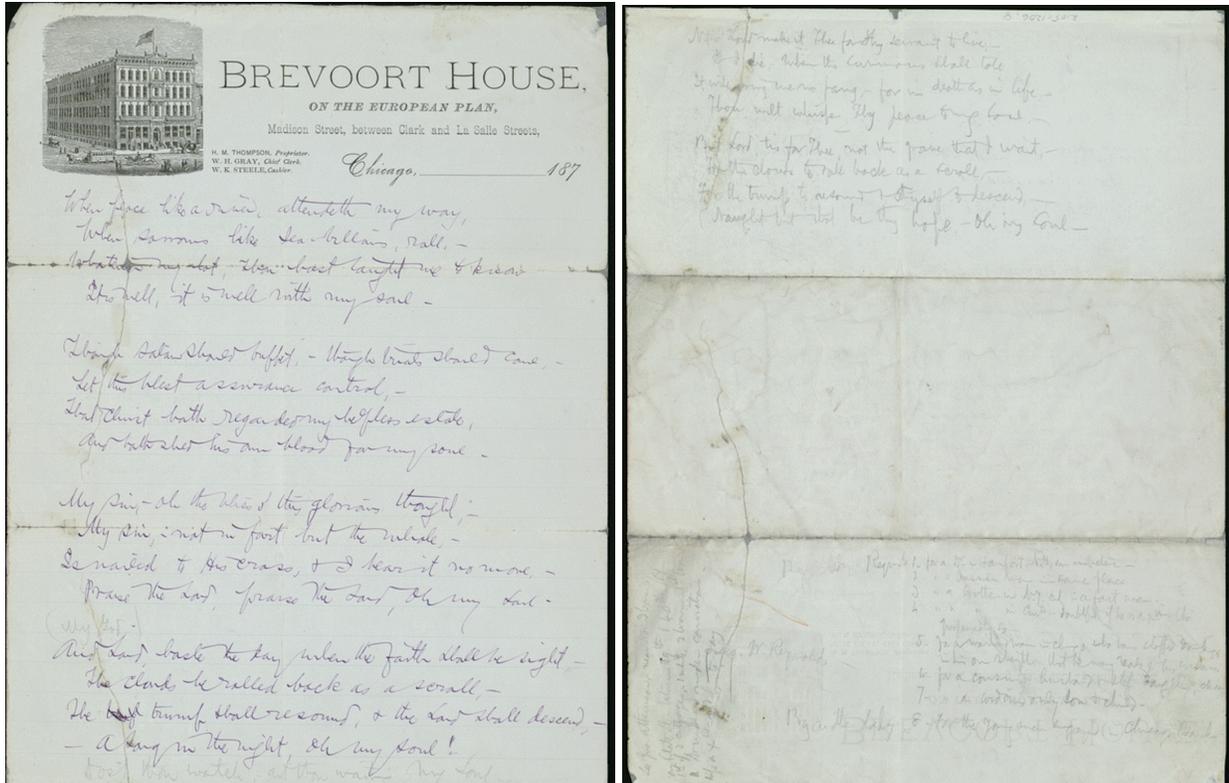
But, Lord, 'tis for Thee, for Thy coming we wait,
The sky, not the grave, is our goal;
Oh, trump of the angel! Oh, voice of the Lord!
Blessed hope, blessed rest of my soul!

And Lord, haste the day when my faith shall be sight,
The clouds be rolled back as a scroll;
The trump shall resound, and the Lord shall descend,
Even so, it is well with my soul.

Figure 8.1 is a copy of the original document. During a June 7, 2020 sermon, Pastor Alister Begg noted that in the third line in the original lyrics, Spafford uses the word “know” and not “say” (common today). The power of a personal relationship with Jesus Christ is more than just a coherent worldview that corresponds with reality. It is a growing, life-transforming, tactile experience where you “know” your Savior. The Apostle Paul expresses this same deep level of knowledge.

1 Timothy 1:12b ^{12b}But I am not ashamed, for I know whom I have believed, and I am convinced that he is able to guard until that day what has been entrusted to me.

Figure 8.1. Original handwritten draft of *It Is Well With My Soul*



After traveling to England, the Spafford's had three more children where his only son died of scarlet fever at age four. Finally, they moved to Jerusalem to serve the poor. Clearly, Horatio experienced significant business loss as well as significant emotional pain. He did not live an easy life and suffered greatly.

Enduring financial loss

Is it possible to invest in risky financial instruments or other financial opportunities and never suffer loss? Well, it depends. If your numeraire is currency units such as U. S. dollars, then the answer by definition is no. Like boxing, you will suffer punishing losses if you choose to step into the ring.

If your numeraire is enduring eternal wealth, then the answer by definition is yes indeed! For example, investing in a business startup will statistically most likely fail. If, however, the business startup is founded on biblical principles and centered on glorifying God and human flourishing, then during the season that the business existed, the business was generating enduring returns.

Many Christian businesses are deeply involved in making disciples of Jesus Christ. If the business was instrumental in the Christian maturation process, then clearly even after the business fails, the disciple is continuing the process of making other disciples.

Jesus promised that those who follow him will suffer.

Mark 8:34 ³⁴ And calling the crowd to him with his disciples, he said to them, "If anyone would come after me, let him deny himself and take up his cross and follow me.

Thus, if the business foundation is based on solid biblical principles, then financial failure is not to be feared. Further, the future of the venture is ultimately in God's sovereign hand, so we do not need to

be anxious. Rather we can focus solely on serving a faithful manager of God's resources and leave the results to Him.

Summary

After defining pain, suffering, and evil, we compared atheistic-based solutions to the problem of evil with theistic-based solutions. Next, we explored biblical insights related to the problem of evil. We review selected Christian's experiences with evil, including the apostles and Horacio Spafford. Finally, we explore financial loss.

Chapter 9. The Bible as Hearsay or Heresy

Learning objectives

- Refute the charge that the Bible is just hearsay
- Refute the charge that the Bible is just heresy
- Provide empirical evidence of the uniqueness of the Bible

Opening quote

2 Peter 1:16 *16For we did not follow cleverly devised myths when we made known to you the power and coming of our Lord Jesus Christ, but we were eyewitnesses of his majesty.*

Overview

In this Chapter, we consider carefully whether the Bible is just hearsay or actually heresy. These two charges are somewhat interrelated and evidence to refute one can be used to refute the other. In the next Chapter, we consider whether the Bible is reliable history. The hearsay argument is addressed by examining the Bible itself. Was the Bible, particularly the New Testament, just written in response to a cultural movement? Alternatively, was the Bible just a nasty heresy written in an attempt to manipulate a cultural movement? These two questions are examined carefully here.

Hearsay, heresy, or history

We start this analysis with three formal definitions:

- Hearsay – “information received from other people that one cannot adequately substantiate; rumor.”⁸⁵
- Heresy – “belief or opinion contrary to orthodox religious (especially Christian) doctrine.”⁸⁶
- History – “the study of past events, particularly in human affairs.”⁸⁷

From these three definitions, we formalize three hypotheses (H1, H2, and H3):

- **H1:** The Bible is just hearsay. The Bible was written in response to a cultural movement.
- **H2:** The Bible is heresy. The Bible was written by a group in the 300s AD in an attempt to manipulate a cultural movement.
- **H3:** The Bible is history. The Bible was written by the claimed authors and is authentic history. A cultural movement developed while the Bible was being written.

When evaluating documents, Aristotle notes that

*“... the benefit of the doubt is to be given to the document itself, not arrogated by the critic to himself.”*⁸⁸

The first two hypotheses are carefully examined here and the third is examined in the next Chapter.

Is the Bible just hearsay?

Recall that hearsay is based on unsubstantiated information. Luke, a physician, wrote very concretely providing an enormous amount of specific information. Interestingly, much of this information has

⁸⁵New Oxford American Dictionary, provided on Mac computer.

⁸⁶New Oxford American Dictionary, provided on Mac computer.

⁸⁷New Oxford American Dictionary, provided on Mac computer.

⁸⁸J. McDowell, S. McDowell, *Evidence That Demands a Verdict: Life-Changing Truth for a Skeptical World*, Thomas Nelson, 2017, p. 68.

been attacked as false only to be later substantiated as historically plausible. The level of vicious attack speaks to the specificity given in the Bible. Consider the following passages and note how Luke is not addressing philosophy, rather seeks to “write an orderly account.”

***Luke 1:1-4** ¹Inasmuch as many have undertaken to compile a narrative of the things that have been accomplished among us, ²just as those who from the beginning were eyewitnesses and ministers of the word have delivered them to us, ³it seemed good to me also, having followed all things closely for some time past, to write an orderly account for you, most excellent Theophilus, ⁴that you may have certainty concerning the things you have been taught.*

***Luke 3:1-2** ¹In the fifteenth year of the reign of Tiberius Caesar, Pontius Pilate being governor of Judea, and Herod being tetrarch of Galilee, and his brother Philip tetrarch of the region of Ituraea and Trachonitis, and Lysanias tetrarch of Abilene, ²during the high priesthood of Annas and Caiaphas, the word of God came to John the son of Zechariah in the wilderness.*

Now if the whole Bible is merely hearsay, why give such explicit detail. There have been countless cases where “higher critics” have argued that something is wrong in accounts like the one above. It is well-known that these objections have been fully resolved over the past 100 years or so. Thus, I conclude that a current unresolved problem may not be an error, just a lack of information. Luke continues in Acts to appeal to well-known events.

***Acts 2:22** ²²“Men of Israel, hear these words: Jesus of Nazareth, a man attested to you by God with mighty works and wonders and signs that God did through him in your midst, as you yourselves know—*

***Acts 26:24-26** ²⁴And as he was saying these things in his defense, Festus said with a loud voice, “Paul, you are out of your mind; your great learning is driving you out of your mind.” ²⁵But Paul said, “I am not out of my mind, most excellent Festus, but I am speaking true and rational words. ²⁶For the king knows about these things, and to him I speak boldly. For I am persuaded that none of these things has escaped his notice, for this has not been done in a corner.*

When writing hearsay, you would not accuse one of your key leaders (Paul) as being out of his mind. Generally, you would write about what a great person he is. In other passages, we find the authors appealing to eyewitness testimony, not hearsay.

***John 19:35** ³⁵He who saw it has borne witness—his testimony is true, and he knows that he is telling the truth—that you also may believe.*

***1 John 1:3** ³that which we have seen and heard we proclaim also to you, so that you too may have fellowship with us; and indeed our fellowship is with the Father and with his Son Jesus Christ.*

As seen in this Chapter’s opening quote, Peter asserts firsthand knowledge as an eyewitness. Remember, Jesus prophesied that Peter would die by crucifixion. Further, he abandoned Jesus the night before his crucifixion. Years later we find Peter defending Jesus Christ as Lord. Something radical clearly happened to Peter.

Thus, Peter explicitly rejects the hearsay argument here. There are numerous other insights. For example, Luke and Acts were written sequentially. All extant evidence points to Paul being beheaded in Rome. Why wasn't that fact included at the end of Acts? Consider perhaps that Acts was written before Paul's death. This puts the record of Luke nearly at Jesus’ lifetime. Many scholars hold that Matthew was written before Luke!

In summary, the Bible clearly points to eyewitnesses thus rejecting the hearsay argument. Also, given that the New Testament contains numerous embarrassing accounts of Jesus' followers. For example, the Corinthian church was deep in sexual sin, Peter fights with Paul, and so forth. One must conclude that it is not a carefully devised fable. Given the explicit historical details given that have only recently been verified, one can reasonably conclude the New Testament is a historical document not just hearsay.

Bible as hearsay and personal finance

Even ardent atheist are reluctant to suggest the Bible is simply hearsay—a compilation of rumors. If the Bible is simply hearsay, then there is no compelling reason to consider its teaching related to personal finance. We may apply a few proverbs to our leadership approach, but that is about all.

Without a biblical foundation, we simply must take the position of ownership as opposed to stewardship. We would have to look elsewhere for guidance. Interestingly, it is typically little children that can recognize the awesome truthfulness of the Bible and it could not be hearsay as illustrated in Figure 9.1.

Figure 9.1 Little children often recognize truth better than intellectuals



We turn now to consider whether the Bible, particularly the New Testament, is just a cleverly devised heresy.

Is the Bible promoting a heresy?

Recall a heresy is a belief that is contrary to some religious doctrine. Is the Christian worldview simply a heresy designed to attract folks away from Judaism to Christianity? From the outset, early Christian writers documented that Jesus Christ was born within a Jewish family and sought to fulfill the law.

*Matthew 5:17*¹⁷ “Do not think that I have come to abolish the Law or the Prophets; I have not come to abolish them but to fulfill them.

Without the context of the Old Testament, much of the content of the New Testament is incoherent. Consider the following proclamation of John the Baptist.

*John 1:29*²⁹ The next day he saw Jesus coming toward him, and said, “Behold, the Lamb of God, who takes away the sin of the world!

Within Old Testament doctrine, the sacrifice of lambs was to cover sin, not take it away. Thus, John the Baptist's assertion is heretical and deeply incoherent, unless Jesus is the Son of God—a perfect sacrifice for our sins. Jesus himself often asserted claims that would be deemed heretical and were often interpreted as such by those around him.

John 10:30-31 ³⁰*I and the Father are one.* ³¹*The Jews picked up stones again to stone him.*

Jesus routinely asserts claims that seem mythical at best and heretical at worst. C. S. Lewis, an English literature scholar and a person with deep knowledge of mythology, makes the following observation regarding Christianity and myth.

“Now as myth transcends thought, Incarnation transcends myth. The heart of Christianity is a myth which is also a fact. The old myth of the Dying God, without ceasing to be myth, comes down from the heaven of legend and imagination to the earth of history. It happens—at a particular date, in a particular place, followed by definable historical consequences. We pass from a Balder or an Osiris, dying nobody knows when or where, to a historical person crucified (it is all in order) under Pontius Pilate. By becoming fact it does not cease to be myth: that is the miracle. I suspect that men have sometimes derived more spiritual sustenance from myths they did not believe than from the religion they professed. To be truly Christian we must both assent to the historical fact and also receive the myth (fact though it has become) with the same imaginative embrace which we accord to all myths. The one is hardly more necessary than the other.”⁸⁹

Also, if heretical, why do Luke and Acts contain medical terms typical of physicians? Luke was in fact a physician. Why would you need a physician if crafting a heresy?⁹⁰

Before leaving the charge of hearsay or heresy, we make a few observations regarding manuscript evidence related to the New Testament.

Direct manuscript evidence

The New Testament is one of the best attested historical documents in existence. We make just a few observations:

- John Rylands' (130 AD) - portions of John. This fragment destroyed a carefully developed theory by Baur that John was not written until about 160 AD.
- Bodmer Papyrus II (150-200 AD) - contains most of John. Keynon concludes based on this document and others, “No other ancient book has anything like such early and plentiful testimony to its text, and no unbiased scholar would deny that the text that has come down to us is substantially sound.”
- Codex Vaticanus (325-350 AD) - contains nearly all of the Bible.
- Interestingly, there are more than 15,000 existing copies of various ancient versions of the NT. Historically, ancient literature was rarely translated into different languages. The NT has shown up in Syriac, Greek, and Latin. (The desire to share this good news compelled Christians to translate.)

⁸⁹C. S. Lewis, *God in the Dock*, “Myth Became Fact,” William B. Eerdmans Publishing Company, Grand Rapids, MI, 1970, p. 66-67.

⁹⁰It is beyond our scope to dive deeply into the medical terminology used by Luke. There has been much written on this subject. See, for example, R. J. Knowling, “The Medical Language of St. Luke,” *The Biblical World* (October 1902), (Vol. 20, No. 4), 260-271, as well as numerous citations therein.

- Syriac Versions: Believed to have been produced around 150-200 AD. There are now more than 350 extant manuscripts today from the 400's in the ancient Syriac language.
- Latin Versions: "E. A. Lowe shows paleographical marks of it having been copied from a second century papyrus." (Codex Babbianensis which is in old Latin) Jerome produced the Latin Vulgate between 366-384 AD.

Indirect manuscript evidence from early church leaders

An interesting source of information is quotes from early church leaders. These writings “... are so extensive that the NT could virtually be reconstructed without the use of NT MS.” Greenlee Dalrymple claims to have found all but eleven verses referenced.

There were many early church leaders, including Clement of Rome (95 AD) (appointed by Peter), Tertullian (160-220 AD), and Irenaeus (130-202 AD). Irenaeus claims he “... had the preaching of the Apostles still echoing in his ears and their doctrine in front of his eyes.” Irenaeus quotes from Matthew, Mark, Luke, Acts, I Corinthians, I Peter, Hebrews, and Titus. Tertullian quotes the NT more than 7,000 times, where 3,800 of which are from the Gospels),

Ignatius (70-110 AD) quotes from Matthew, John, Acts, Romans and 11 other NT books. Others who quote from the NT include Polycarp (70-156 AD) (a disciple of John), Barnabas (70 AD), Hermas (95 AD), Tatian (170 AD), Clement of Alexandria (150-212 AD) (2,400 of his quotes are from all but three books of NT), Hippolytus (170-235) (1,300 references to NT), Justin Martyr (133 AD), Origen (185-254 AD) (compiled more than 6,000 works, quotes NT more than 18,000 times), and Cyprian (died 258 AD) (quotes approximately 740 OT and 1,030 NT).

According to Geisler and Nix, “... a brief inventory ... will reveal that there were some 32,000 citations of the NT prior to the time of the Council of Nicea (325 AD) (the time the "higher critics" claimed a heresy developed)”

F. E. Peters states that “... the works that made up the Christians’ NT were the most frequently copied and widely circulated books of antiquity.”

Manuscript evidence includes over 5,300 Greek, over 10,000 Latin Vulgates, over 9,300 other early versions in a variety of languages, and we have over 24,000 total manuscripts of at least portions of the NT which still exist today. The Iliad by Homer has only 643 manuscripts, the first complete text dating from the 13th century. Further, The Iliad is set near the end of the Trojan War but written around 400 years later. This pales in comparison to the New Testament writings.

Bible as heresy and personal finance

Heresy implies an explicit effort to conceal the truth. As the resurrection is the central event of all of Christianity, its falsehood would negate the Christology found throughout the entire Bible. The lack of eternality would render Bible-based personal finance pointless.

Fortunately, the abundance of historical documents give us warrant to reject the heresy argument.

Summary

In this Chapter, we considered whether the Bible is just hearsay or actually heresy. We found the hearsay argument is addressed in the Bible itself and rejected. Rather than the New Testament being written in response to a cultural movement, we found it to be documenting empirically verifiable historical events. Further, the Bible was not just a nasty heresy written in an attempt to manipulate a cultural movement.

References

Primary sources for this material include

Josh McDowell, “Evidence That Demands a Verdict,” Vol. 1

Josh McDowell, "A Ready Defense."
Gary Habermas, "The Verdict of History."
C. S. Lewis, "God in the Dock."

Chapter 10. The Bible as History

Learning objectives

- Five key aspects of the Bible are explored, best, inspired, believable, logical, and eternal
- Review several unique attributes of the Bible within a historical context

Opening quote

“The Bible stands like a rock undaunted, through the raging storms of time. Its pages burn with the truth eternal, and they glow with the light sublime.” Haldor Lillenas, 1917.

Overview

We briefly explore several unique attributes of the Bible within a historical context. Based on the evidence, we conclude that the Bible is not hearsay or heresy, rather it is clear and reliable history.

The Bible is simply the *Best Book*

We briefly review interesting facts related to the Bible.

1. The Bible was written over a 1,500 year span and by over 40 authors. These authors include Moses, a political leader, professionally trained in Egypt, Peter, a fisherman, Amos, a herdsman, Joshua, a military general, Nehemiah, a cupbearer, Daniel, a prime minister, Luke, a doctor, Solomon, a king, Matthew, a tax collector, Paul, a rabbi, and so on.
2. The Bible was written in different places: Moses in the wilderness, Jeremiah in a dungeon, Daniel on a hillside and in a palace, Paul inside prison, Luke while traveling, John on the isle of Patmos, and so on.
3. The Bible was written at different times: David in times of war, Solomon in times of peace. It was written in different moods: Some were at the height of joy; some were in the depths of despair.
4. The Bible was written on three different continents, Asia, Africa, and Europe.
5. The Bible was written in three different languages, Hebrew, Aramaic, and Greek.
6. The Bible covers literally hundreds of controversial subjects. These subjects are addressed in harmony and continuity from Genesis to Revelation.
7. The Bible has one singular theme: God's redemption of man.
8. The Bible is deeply coherent. According to F.F. Bruce, “Any part of the human body can only be properly explained in reference to the whole body. And any part of the Bible can only be properly explained in reference to the whole Bible.”
9. The Bible corresponds with empirical observations today. Karl Barth notes, “Take your Bible and take your newspaper, and read both. But interpret newspapers from your Bible.”⁹¹
10. The Bible is the number one best seller of all time. According to Guinness World Records, “Although it is impossible to obtain exact figures, there is little doubt that the Bible is the world's best-selling and most widely distributed book. A survey by the Bible Society concluded that around 2.5 billion copies were printed between 1815 and 1975, but more recent estimates put the number at more than 5 billion.”⁹² No other book comes anywhere close.

⁹¹See *Time Magazine*, May 1, 1966. Quoted by Pastor Geoff T. Sinibaldo at <https://sinibaldo.wordpress.com/2015/03/05/on-barth-the-bible-and-the-newspaper/>.

⁹²See <https://www.guinnessworldrecords.com/world-records/best-selling-book-of-non-fiction>.

CHALLENGE: Take ten authors, all from one walk of life, one generation, one mood, one continent, one language and just one controversial topic, would all these authors agree? What would you have if you did this? You would not get the deep coherence found within the Bible.

Personally, the deep wisdom and insights given in the Bible related to personal finance are astounding. The Biblical perspective of wealth management has been personally helpful and has benefited many that have taken Bible-based personal finance classes.⁹³

The Bible is Infallible, Inerrant, and Inspired

Many within the Christian community believe that the Bible was infallible and inerrant in its original draft. Further, many also believe the Bible to be inspired by God. Infallible indicates that it is absolutely trustworthy. Inerrancy indicates that it is absolutely without error. Consider the following logic:

Premise> God cannot err and is trustworthy.

Observation> Bible is God's Word.

Conclusion> Bible cannot err and is trustworthy.

The Bible itself asserts to be inspired or God-breathed.

2 Timothy 3:16 ¹⁶*All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness,*

The Apostle Paul states he spoke in words taught by the Spirit.

1 Corinthians 2:13 ¹³*And we impart this in words not taught by human wisdom but taught by the Spirit, interpreting spiritual truths to those who are spiritual.*

Frequently, Biblical authors quoted scripture with authority. For example, 80 different times the Bible uses the phrase, "It is written." A few selected verses are given below. For example, when wise men came to Jerusalem from the east, they asked King Herod where the King of the Jews would be born. The religious leaders knew immediately, and their answer is recorded in Matthew 2:5-6.

Matthew 2:5-6 ⁵*They told him, "In Bethlehem of Judea, for so it is written by the prophet: ⁶"And you, O Bethlehem, in the land of Judah, are by no means least among the rulers of Judah; for from you shall come a ruler who will shepherd my people Israel."*

The religious leaders in Jerusalem that quoted Micah 5:2 understood it to refer to the coming Messiah. Note that Micah was likely written during the last third of the eighth century B.C.

Micah 5:2 ²*But you, O Bethlehem Ephrathah, who are too little to be among the clans of Judah, from you shall come forth for me one who is to be ruler in Israel, whose coming forth is from of old, from ancient days.*

We will examine prophesy in more detail in the next Chapter. For now, just note that Jesus could not control where he would be born. Jesus quoted the Old Testament as authoritative and historically reliable.

⁹³For the detailed curriculum, see <http://www.robortebrooks.org/project/personal-finance/>.

Matthew 4:4 ⁴But he answered, "It is written, "Man shall not live by bread alone, but by every word that comes from the mouth of God."

Luke 24:46 ⁴⁶and said to them, "Thus it is written, that the Christ should suffer and on the third day rise from the dead,

Paul also quotes from the Old Testament numerous times as if it were authentic and reliable.

Romans 1:17 ¹⁷For in it the righteousness of God is revealed from faith for faith, as it is written, "The righteous shall live by faith."

Jesus said the Old Testament spoke of him.

Luke 24:27 ²⁷And beginning with Moses and all the Prophets, he interpreted to them in all the Scriptures the things concerning himself.

Luke 24:44 ⁴⁴Then he said to them, "These are my words that I spoke to you while I was still with you, that everything written about me in the Law of Moses and the Prophets and the Psalms must be fulfilled."

John 5:39 ³⁹You search the Scriptures because you think that in them you have eternal life; and it is they that bear witness about me,

Hebrews 10:7 ⁷Then I said, 'Behold, I have come to do your will, O God, as it is written of me in the scroll of the book.'

Jesus said that not even the smallest part of a Hebrew letter could be broken.

Matthew 5:18 ¹⁸For truly, I say to you, until heaven and earth pass away, not an iota, not a dot, will pass from the Law until all is accomplished.

The New Testament refers to the written record as the "oracles of God."

Romans 3:2 ²Much in every way. To begin with, the Jews were entrusted with the oracles of God.

Hebrews 5:12 ¹²For though by this time you ought to be teachers, you need someone to teach you again the basic principles of the oracles of God. You need milk, not solid food,

Writers are warned not to alter words.

Jeremiah 26:2 ²"Thus says the LORD: Stand in the court of the LORD's house, and speak to all the cities of Judah that come to worship in the house of the LORD all the words that I command you to speak to them; do not hold back a word.

Revelation 22:18-19 ¹⁸I warn everyone who hears the words of the prophecy of this book: if anyone adds to them, God will add to him the plagues described in this book, ¹⁹and if anyone takes away from the words of the book of this prophecy, God will take away his share in the tree of life and in the holy city, which are described in this book.

The Bible is *Believable*

The Bible stands as a unique document in several ways. The Bible is unique in its survival through time. The Bible, compared with other ancient writings, has more manuscript evidence than any ten pieces of classical literature combined.

The Bible has withstood vicious attacks of its enemies as no other book. Many have tried to burn it, ban it, discredit it, outlaw it, disprove it, yet the Bible stands. Voltaire, who died in 1778, said that in one hundred years from his time Christianity would be swept from existence and passed into history. What actually happened? Voltaire was swept into history, while the circulation of the Bible continues to grow. Interestingly, only 50 years after Voltaire's death, Voltaire's printing press and his house were used by the Geneva Bible Society to produce Bibles!

The Bible has withstood scholastic attacks like no other document. The “assured results of higher criticism” continue to fall by the wayside and the Bible stands. For example, the critics use to claim that Moses could not have written the Pentateuch (the first five books of the Bible) because, obviously and clearly, writing was not in existence at the time of Moses. The discovery of the “black stele,” which contained the detailed laws of Hammurabi, demonstrated conclusively that writing existed before Moses. Dating methods indicate that the “black stele” was written three centuries before Moses' time. The critics also claimed there were never any Hittites. The results of archaeology have produced hundreds of references overlapping 1,200 years of Hittite civilization.

The Bible is the very foundation of the Christian worldview. As C. S. Lewis notes, “If you see through everything, then everything is transparent. But a wholly transparent world is an invisible world. To ‘see through’ all things is the same as not to see.”⁹⁴ The clarity through which the Bible can explain current events and challenges is outstanding.

The Bible is very *Logical*

The following passages indicate that searching, reasoning, and considering the empirical evidence is encouraged.

Ecclesiastes 7:25 ²⁵*I turned my heart to know and to search out and to seek wisdom and the scheme of things, and to know the wickedness of folly and the foolishness that is madness.*

Isaiah 1:18 ¹⁸*“Come now, let us reason together, says the LORD: though your sins are like scarlet, they shall be as white as snow; though they are red like crimson, they shall become like wool.*

Acts 1:3 ³*He presented himself alive to them after his suffering by many proofs, appearing to them during forty days and speaking about the kingdom of God.*

The Greek word for “proofs” in Acts 1:3 is tekmerion meaning signs, indubitable tokens, or clear proofs. There is no other event in ancient history so well documented as the resurrection of Jesus Christ. We will explore the resurrection in detail in Chapter 12.

Within personal finance, the Bible is deeply logical. For example, numerous cautions are given related to debt and diversifying is encouraged.

Deuteronomy 28:43-45 ⁴³*The sojourner who is among you shall rise higher and higher above you, and you shall come down lower and lower.* ⁴⁴*He shall lend to you, and you shall not lend to him. He shall be the head, and you shall be the tail.* ⁴⁵*“All these curses shall come upon you and pursue you and overtake you till you are destroyed, because you did not obey the voice of the Lord your God, to keep his commandments and his statutes that he commanded you.*

⁹⁴C. S. Lewis, *The Abolition of Man*, p. 81.

Proverbs 22:7 ⁷The rich rules over the poor, and the borrower is the slave of the lender.
Ecclesiastes 11:1-5 ¹Cast your bread upon the waters, for you will find it after many days. ²Give a portion to seven, or even to eight, for you know not what disaster may happen on earth. ³If the clouds are full of rain, they empty themselves on the earth, and if a tree falls to the south or to the north, in the place where the tree falls, there it will lie. ⁴He who observes the wind will not sow, and he who regards the clouds will not reap. ⁵As you do not know the way the spirit comes to the bones in the womb of a woman with child, so you do not know the work of God who makes everything.

The Bible is Eternal

The Bible asserts itself to be an everlasting document.

2 Peter 3:10 ¹⁰But the day of the Lord will come like a thief, and then the heavens will pass away with a roar, and the heavenly bodies will be burned up and dissolved, and the earth and the works that are done on it will be exposed.

Psalms 119:89 ⁸⁹Forever, O LORD, your word is firmly fixed in the heavens.

Matthew 24:35, Mark 13:31, and Luke 21:33 ³³Heaven and earth will pass away, but my words will not pass away.

Bible as history and personal finance

The key financial insight here is that the true worldview actually implemented lead to human flourishing. We cannot live on hearsay or heresy, but a true and living history is a completely different matter. After 40 years of wandering and being attended to by God, the Israelites knew the importance of God's word.

Deuteronomy 8:3 ³And he humbled you and let you hunger and fed you with manna, which you did not know, nor did your fathers know, that he might make you know that man does not live by bread alone, but man lives by every word that comes from the mouth of the Lord.

Jesus picks up on this during His first temptation in the wilderness.

Matthew 4:1-4 ¹Then Jesus was led up by the Spirit into the wilderness to be tempted by the devil. ²And after fasting forty days and forty nights, he was hungry. ³And the tempter came and said to him, "If you are the Son of God, command these stones to become loaves of bread." ⁴But he answered, "It is written, "'Man shall not live by bread alone, but by every word that comes from the mouth of God.'" (See also **Luke 4:1-4**.)

After feeding the 5,000 and walking on water, Jesus declares clearly that God's living word is nourishment enough for life's challenges including financial struggles.

John 6:35 ³⁵Jesus said to them, "I am the bread of life; whoever comes to me shall not hunger, and whoever believes in me shall never thirst.

Real human flourishing comes from working within reality wherein we are placed. Figure 10.1 illustrates a fish in water. Clearly, if the fish sought to survive on land, it would die even though an abundance of food is all around. Rejecting the God-infused reality of life around us will eventually cause significant damage.

Figure 10.1 Illustration of fish working within its environment



As followers of Jesus, we were meant to do more than just survive in the living water and with the bread of life. We were meant to soar as illustrated in Figure 10.2. As eagles catch the thermal drafts to soar so we too should entrust our lives to the living God by believing in Jesus and feasting on His precious Word.

Figure 10.2 Illustration of soaring within its environment



The last five sections form an acrostic of BIBLE. In 1917, Haldor Lillenas wrote the lyrics to a simple, yet clear, song related to the Bible as history.

The Bible Stands
Haldor Lillenas, 1917
The Bible stands like a rock undaunted,

through the raging storms of time.
Its pages burn with the truth eternal,
and they glow with the light sublime.

The Bible stands every test we give it,
for it's author is divine.
By faith alone I accept to live it,
and to know it and make it mine.

The Bible stands though the rocks may tumble,
it will firmly stand though the earth may crumble.
I will plant my feet on its firm foundation,
for the Bible stands.

Summary

We briefly explored several unique attributes of the Bible within a historical context. Based on the evidence, we showed significant evidence that the Bible is not hearsay or heresy, rather it is clear and reliable history. What remains is whether you plant your feet on the Bible's firm foundation or not. The choice is yours.

References

Primary sources for this material include Josh McDowell "Evidence That Demands a Verdict" Vol. 1, Josh McDowell "A Ready Defense", and Gary Habermas "The Verdict of History."

Chapter 11. Miracles

Learning objectives

- Define and explain miracles
- Illustrate the deep coherence of recorded miracles
- Explore prophesy as supporting the Christian worldview

Opening quote

Luke 18 ²⁷But he said, “What is impossible with man is possible with God.”

Overview

Miracles are a source of much consternation by Biblical critics. The sheer force used to nitpick details is indicative of a worldview on the ropes. In this Chapter, we carefully define miracles focusing on the Biblical definition. We explore the motivation of the documented miracles in the gospel according to John to demonstrate how miracles primarily serve as a sign. We take a deep dive into one of Daniel’s prophesies and conclude by listing several prophesies related to Jesus Christ.

Miracles defined

Miracles are often defined as violations of natural law. Natural laws are typically scientific generalizations based on numerous empirical observations. The Bible makes no such definition.

Miracles in the Bible are defined simply as mighty acts. What distinguishes miracles from natural law is purely a man-made distinction. Consider the following logical approaches to miracles depending on one’s worldview.

Atheist claim (Atheist here is simply a non-theist, someone who does not have a belief in deities.)

Premise: Miracles occur only if it can be conclusively demonstrated that the event was not caused by any presently known or unknown natural law.

Observation: We do not know all presently unknown natural laws.

Conclusion: Miracles cannot be proven to occur.

Weak theist claim

Premise: Miracles occur only if it can be conclusively demonstrated that the event was not caused by any presently known natural law.

Observation: We observe an apparent violation of known natural laws.

Conclusion: Miracles are proven to occur.

Strong theist claim

Premise: Miracles are certainly possible.

Observation: The Bible presents reliable, eyewitness accounts, clear prophecies, extra-Biblical evidence supports the existence of miracles, and I have personally experienced miracles.

Conclusion: Therefore, miracles occur and my belief that they occur is perfectly rational.

Note that defining miracles as mighty acts of God allows for God’s intervention without necessarily violating current human conceptions of natural laws. In no way does this definition explain away all miracles. By any account, the very first verse in the Bible is miraculous.

Genesis 1:1 ¹In the beginning, God created the heavens and the earth.

Any rational human would realize that if the first verse turns out to be true, then every other recorded miracle would be rather trivial to the universe's creator. From Isaiah, we see that God actively created all things on the earth and continues that creative activity to this day.

Isaiah 42:5 ⁵Thus says God, the Lord, who created the heavens and stretched them out, who spread out the earth and what comes from it, who gives breath to the people on it and spirit to those who walk in it:

The heart of the Bible is the gospel of Jesus Christ. Paul records it this way.

1 Corinthians 15:1-6 ¹Now I would remind you, brothers, of the gospel I preached to you, which you received, in which you stand, ²and by which you are being saved, if you hold fast to the word I preached to you—unless you believed in vain. ³For I delivered to you as of first importance what I also received: that Christ died for our sins in accordance with the Scriptures, ⁴that he was buried, that he was raised on the third day in accordance with the Scriptures, ⁵and that he appeared to Cephas, then to the twelve. ⁶Then he appeared to more than five hundred brothers at one time, most of whom are still alive, though some have fallen asleep.

Note the appeal to empirical evidence when writing to the Corinthian church. This is not some contrived philosophy, rather tactile and evidentiary. We now examine seven miracles recorded in the Gospel According to John. It is important to note that there is only one gospel; however, there are four accounts of it given in the first four books of the New Testament (Matthew, Mark, Luke, and John). Ezekiel, when describing the glory of the Lord, writes about four living creatures each with four faces.

Ezekiel 1:10 ¹⁰As for the likeness of their faces, each had a human face. The four had the face of a lion on the right side, the four had the face of an ox on the left side, and the four had the face of an eagle.

One view of the four accounts of the gospel is related to Ezekiel's vision. Matthew depicts Jesus as the King of the Jews (lion), Mark depicts Jesus as a suffering servant (ox), Luke depicts Jesus as human, and John depicts Jesus as a heavenly King (eagle). Whether intentional or not, it is a useful aid in understanding the four accounts of the gospel. We now examine the seven miracles in the gospel according to John.

Miracles recorded in the Gospel According to John

Jesus did many things that were interpreted at the time as miraculous. John only records seven major miracles or signs. Why? Although we may never know for sure, here we present one explanation. John explains to us why these signs were recorded.

John 20:30-31 ³⁰Now Jesus did many other signs in the presence of the disciples, which are not written in this book; ³¹but these are written so that you may believe that Jesus is the Christ, the Son of God, and that by believing you may have life in his name.

It is important to note the role of a sign. Figure 11.1 provides a humorous example. Now upon seeing this road sign, it is understandable to pull over, take pictures, and have a chuckle or two. Clearly, that is not the purpose of this sign; however, this sign is pointing to something of significance. Apparently, at this location, cows do sometimes slip off the cliffs above and may fall on cars. In the

gospel according to John, these signs were recorded so that you may entrust your life to Jesus Christ and conjoin into a deeply fulfilling relationship with God.

Figure 11.1 Illustration of sign’s role



In the same way, it is important not to fixate on miracles only to completely miss the sign’s intention. Table 11.1 presents the seven signs aligned with the seven declarations Jesus made regarding himself. For example, in John 2:1-11 the first recorded sign is Jesus turning water into wine. We could fixate on the exact physical mechanism Jesus used to produce this miracle, contrive some sort of explanation of his trickery, or even explain why some writer made up this story. Alternatively, we could seek to understand what the sign was pointing toward. Later in John, Jesus declared that he was the true vine and that genuine life was found in him. (See John 15:1ff.) Pastor Adrian Rogers further aligns these seven signs with God’s potential purposes, such as providing joy for your disappointments.

Table 11.1 Seven signs in the Gospel According to John

Jesus Christ is God’s ...:⁹⁵	Physical Miracle	Jesus Christ’s “I am ...”
Joy for your disappointments	Water to wine, 2:1-11	True vine, 15:1
Assurance for your doubts	Nobleman’s son healed, 4:46-54	Way, truth, and life, 14:6
Strength for your disabilities	Invalid at the pool, 5:1-16	Good shepherd, 10:11
Satisfaction for your desire	Feeding of 5,000, 6:1-13	Bread of life, 6:35
Peace for your despair	Storm at sea, 6:15-21	The door, 10:7
Light for your darkness	Blind man sees, 9:1-7	Light of the world, 8:12
Life for your death	Dead man lives, 11:1-46	Resurrection and life, 11:25

⁹⁵Column one based on Adrian Rogers, *Believe in Miracles But Trust in Jesus*, 1997. All references in this table are to verses in the Gospel According to John, New Testament, Bible.

If you take the time to work through these seven signs, you will see a deep coherence within the Bible that is very difficult to simply explain away. We now turn to prophesy and consider whether it is simply coincidence or a mighty act of God.

Prophesy

Throughout history there have been various claims of prophetic utterances allegedly supporting some person or cause. Prophecy in this context is simply a prediction, whereas prophesy says that a specific thing will happen.

As seen above, there are numerous prophesies that actually were fulfilled by Jesus Christ. Jesus explains that these prophesies were related to him when speaking to the two disciples on the road to Emmaus.

***Luke 24:27** ²⁷And beginning with Moses and all the Prophets, he interpreted to them in all the Scriptures the things concerning himself.*

Peter in his sermon to the gentiles expresses the same idea.

***Acts 10:42-43** ⁴²And he commanded us to preach to the people and to testify that he is the one appointed by God to be judge of the living and the dead. ⁴³To him all the prophets bear witness that everyone who believes in him receives forgiveness of sins through his name."*

Often Jesus spoke in parables that lacked concreteness, frustrating some of his followers. Jesus indicates that it is intentional.

***Matthew 13:10-12** ¹⁰Then the disciples came and said to him, "Why do you speak to them in parables?" ¹¹And he answered them, "To you it has been given to know the secrets of the kingdom of heaven, but to them it has not been given. ¹²For to the one who has, more will be given, and he will have an abundance, but from the one who has not, even what he has will be taken away.*

If prophesies like parables are not clear, then perhaps prophesy fulfillment is simply random chance. Let us examine this claim carefully.

Prophesy fulfillment as random chance

Suppose prophesy follows a binomial distribution (fulfilled, not fulfilled) with a probability, p , of fulfillment. Most biblical scholars have identified at least 25 prophesies fulfilled regarding the betrayal, trial, death, and burial of Jesus Christ all of which were fulfilled in one 24-hour period. There are 109 fulfilled prophesies concerning the first coming of Jesus Christ. If we assume the probability of fulfillment is 50% ($p = 1/2$), is it possible that these fulfillments were just by chance?

If $p = 1/2$, then $(1/2)^{25} = 2.98 \times 10^{-8}$ or 1-in-33,554,432.

If $p = 1/2$, then $(1/2)^{109} = 1.54 \times 10^{-33}$ 1-in-649,037,107,316,853,453,566,312,041,152,512.

The odds of this set of events happening by chance is the same chance of picking a particular flea at random from one of 87 billion fleas on each of 87 billion dogs owned by each of 87 billion people (population of 20 earths). Rationally there must be a better explanation. One obvious explanation is that the Bible is simply a God-directed love letter that includes prophesies that empirically validate its authenticity. We now turn to a single prophesy.

What day would the Messiah be executed?

Although the prophesy we now explore has numerous interpretations, regardless one ends up very near the day of Jesus Christ's death.

Daniel 9:25-26 ²⁵*Know therefore and understand that from the going out of the word to restore and build Jerusalem to the coming of an anointed one, a prince, there shall be seven weeks. Then for sixty-two weeks it shall be built again with squares and moat, but in a troubled time. ²⁶And after the sixty-two weeks, an anointed one shall be cut off and shall have nothing. And the people of the prince who is to come shall destroy the city and the sanctuary. Its end shall come with a flood, and to the end there shall be war. Desolations are decreed.*

The Hebrew word for week is (Strong's # 7620) shabuwa` (shaw-boo'-ah) literal, sevened, i.e., a week (specifically, of years): KJV-- seven, week.⁹⁶ In context, we find this same word indicating years.

Genesis 29:27-28 ²⁷*Complete the week of this one, and we will give you the other also in return for serving me another seven years. ²⁸Jacob did so, and completed her week. Then Laban gave him his daughter Rachel to be his wife.*

The prediction in Daniel 9:1 was given in 539-538 BC. Daniel 9:25 states the initiating event was the order to restore and rebuild Jerusalem. This order is given in Nehemiah 2 dated as March 14, 445 BC. Let's do some math:

- 69 "weeks" = $69 \times 7 = 483$ years after initiating event.
- A prophetic year is 360 days. (See Daniel 7:25, 12:7, Revelation 12:14; 11:2, 13:5; 11:3, 12:6.)
- $483 \text{ years} \times 360 \text{ days/year} = 173,880 \text{ days}$.
- Gregorian calendar days (365 days/year + leap-years).
- March 14, 445 BC to March 13, AD 32 = $(445 \text{ years} + 32 \text{ years} - 1 \text{ year}) \times 365 = 173,740 \text{ days}$ (ignoring leap-years).
- March 14, AD 32 - April 6, AD 32 = 24 days.
- Leap-year rule: Year/4 = yes, year/100 = no, and year/400 = yes.
- 445 BC to AD 32 implies 119 possible leap years.
- Years 300 BC, 200 BC, and 100 BC are not leap-years but year 400 BC is.
- Total days between March 14, 445 to April 6, AD 32 = $173,740 + 24 + 119 - 3 = 173,880$.

There are several concerns with this calculation that have been given over the years. These concerns miss the main point. Regardless of how this prediction is interpreted, Jesus Christ is the only representative that came anywhere close to fulfilling this prediction. There is no other.

We present an alternative explanation. Can we confirm the start date for the prophecy which calculates the date on which Jesus presented himself as Messiah in Daniel 9:25? In the fifth century B.C. a Hebrew named Nehemiah, then cup bearer to the Medo-Persian king Artaxerxes, wrote of the command to restore and rebuild Jerusalem.

Nehemiah 2:1-2 ¹*In the month of Nisan, in the twentieth year of King Artaxerxes, when wine was before him, I took up the wine and gave it to the king. Now I had not been sad in his presence.*

⁹⁶There is a numbering system for every word in the Bible. Hence, Strong's number 7620 is helpful to find other uses of this exact same word.

²And the king said to me, "Why is your face sad, seeing you are not sick? This is nothing but sadness of the heart." Then I was very much afraid.

Nehemiah went on to explain that he was sad because he had heard reports that the city of his people, Jerusalem, was still desolate. Nehemiah requested that he be allowed to go back to Jerusalem and rebuild the city. King Artaxerxes granted his wish on the spot and gave him official documents for easy passage. This occurred, we are told in the month of Nisan, in the twentieth year of Artaxerxes Longimanus' reign.

Artaxerxes Longimanus ascended to the throne of the Medo-Persian empire in July 465 BC.⁹⁷ The twentieth year of his reign would have begun in July 446 BC. The decree occurred approximately nine months later in the month of Nisan (March/April on our calendar). By Hebrew tradition when the day of the month is not specifically stated (as in Artaxerxes decree), it is given to be the first day of that month. Consequently, the very day of Artaxerxes' decree was the first day of the Hebrew month Nisan in 445 BC. The first day of Nisan in 445 BC corresponds to the 14th day of March. These dates were confirmed through astronomical calculations at the British Royal Observatory and reported by Sir Robert Anderson.⁹⁸

The prophecy states that 69 weeks of years (173,880 days using the 360 day prophetic year) after the command goes forth to restore and rebuild the city of Jerusalem the Messiah will come. If we count forward 173,880 days from March 14th 445 BC, we arrive at April 6th 32 AD.

How could Daniel, writing in 537 B.C., have known this in advance? How could anyone contrive to have this prediction documented over five centuries in advance?

There is in fact, another way to check the accuracy of this date. In the Gospel of Luke, chapter three, it states that in the 15th year of the reign of Caesar Tiberius, Jesus was baptized by John the Baptist and began his ministry. It is well established that the reign of Caesar Tiberius began with his coronation on August 19th in the year AD 14.⁹⁹ Most scholars believe Jesus was baptized in the fall season. It therefore follows that the ministry of Jesus started with his baptism in the Fall of AD 28, the 15th year of reign of Caesar Tiberius. The day that a Roman ruler ascends the throne begins his first year. The ministry of Jesus spanned four Passovers or about three and one half years.

The first Passover of Jesus' ministry would have been in the Spring of AD 29. The fourth Passover of His ministry was the day of his crucifixion and would have fallen in the year AD 32. The Passover in that year fell on April 10th. The Passover holiday always occurs on the 14th day of Nisan in the Hebrew calendar. This corresponds to the first full moon after the Spring equinox. Remarkably, according to Robert Anderson and the British Royal Observatory, the Sunday before that Passover was April 6th, the very day that Jesus presents himself as King and exactly 173,880 days after the decree of Artaxerxes.

According to the principles of biblical higher criticism, this prophecy proves that the book of Daniel was written after the Gospel of Luke! This is, of course, absurd because Daniel was translated into Greek (the Septuagint) nearly three centuries before Jesus was even born.

This Prophecy is one of the most astonishing proofs that God transcends time and can see the end from the beginning with incredible precision. We now present numerous other prophecies regarding Jesus Christ given in the Bible. Like in a court of law, it is easy to nitpick with details of each

⁹⁷Encyclopedia Britannica, 1990 ed.

⁹⁸Robert Anderson, "The Coming Prince", Kregel. Reprinted in 1984.

⁹⁹The Encyclopedia Britannica, 1990. Micropedia.

prophecy. Given the sheer volume of prophecies, nitpicking really starts to look as if one does not want to be persuaded by evidence.¹⁰⁰

List of Prophecies

Prophecy Given	Prophecy Fulfilled	Comments
Daniel 9:25-26	Luke 23:54	Day of Messiah's Death
Genesis 3:15	Luke 23:33	Messiah's foot will be injured, seed of a woman
Isaiah 53	Luke 23	Numerous references to Messiah's abuse and death
Isaiah 50:6	Matthew 26:67	Messiah is beaten
Micah 5:1	Luke 22:63	Messiah is slapped in face
Psalms 22:16	Luke 23:33	Messiah's hands pierced
Zechariah 12:10	Luke 23:48-49	People mourn Messiah's death
Psalms 34:20	John 19:33	No bones are broken
Psalms 22:14	John 19:33-34	Poured out like water, bones out of joint
Genesis 12:1-3	Matthew 1:1, Galatians 3:8,16	Messiah lineage of Abraham
Genesis 17:19, 21:2	Luke 3:23,34,Romans 4:18ff	Messiah lineage of Isaac
Numbers 24:17	Matthew 1:2	Messiah lineage of Jacob
Genesis 49:10	Luke 3:33, Matthew 25:31-2	Messiah lineage of Judah
Ezekiel 21:27	Various	Israel will have no king until Jesus
Genesis 49:10	Luke 2:14, Romans 5:1	Shiloh = peace, Messiah shall bring peace
Isaiah 11:1, 10	Luke 3:23,32	Messiah lineage of Jesse
Jeremiah 23:5, 2 Samuel 7:12-16, Psalm 132:11	Luke 3:23, 31, Matthew 1:1, 9:27, Revelation 22:16	Messiah lineage of David
Micah 5:2	Luke 2:4	Messiah born in Bethlehem
Psalms 69:21	Matthew 27:34,48, John 19:28ff	Gall and vinegar
Isaiah 9:7	Luke 1:32,33	Heir to throne of David
Isaiah 7:14	Luke 1:26,27, 30, 31	Born of a virgin
Jeremiah 31:15	Matthew 2:16-18	Slaughter of children
Hosea 11:1	Matthew 2:14-15	Flight to Egypt
Isaiah 40:3-5	Luke 3:3-6	The way shall be prepared
Malachi 3:1	Luke 7:24, 27	Preceded by a forerunner
Malachi 4:5-6	Matthew 11:13-14	Preceded by Elijah
Psalms 2:7	Matthew 3:17	Declared the Son of God
Isaiah 9:1	Matthew 4:13-16	Galilean ministry
Psalms 78:2-4	Matthew 13:34, 35	Speak in parables
Deuteronomy 18:15	Acts 31:20,22	A prophet
Isaiah 61:1	Luke 4:18-19	Bind up the brokenhearted
Isaiah 53:3	John 1:11, Luke 23:18	Rejected by the Jews
Psalms 110:4	Hebrews 5:5, 6	Priest after the order of Melchizedek
Zechariah 9:9	Mark 11:7-11	Triumphal entry
Psalms 8:2	Matthew 21:15, 16	Adored by infants
Isaiah 53:1	John 12:37,38	Not believed
Psalms 41:9	Luke 22:47,48	Betrayed by a close friend
Zechariah 11:12	Matthew 26:14,15	Betrayed for 30 pieces of silver
Psalms 35:11	Mark 14:57,58	Accused by false witnesses
Psalms 35:19	John 15:24,25	Hated without reason
Isaiah 53:12	Mark 15:27,28	Crucified with malefactors
Psalms 22:7,8	Luke 23:35	Sneered and mocked
Psalms 69:9	Romans 15:3	Was reproached
Psalms 109:4	Luke 23:34	Prayer for His enemies
Psalms 22:17	Matthew 27:35,36	Soldiers gambled for His clothing
Psalms 22:1	Matthew 27:46	Forsaken by God
Isaiah 53:9	Matthew 27:57-60	Buried with the rich
Psalms 16:10, 49:15	Mark 16:6-7	To be resurrected
Psalms 68:18	Mark 16:19, 1 Corinthians 15:4	His ascension to God's right hand

¹⁰⁰Within the finance academic discipline, there is a pressing concern of selection bias. In this case, one may argue that the Bible as we know it today was selected in response to various books having fulfilled prophecies. The historical record simply does not permit selection bias as being a reasonable explanation.

Miracles and personal finance

Recall that miracles in the Bible are defined simply as mighty acts. Thus, we should not be surprised at all that God works mightily in the affairs of His ambassadors. As we seek first His kingdom and engage in God's disciple-making business, it is not shocking to observe direct, tangible, God-given provisions.

The challenge is simple: Go find a disciple-making follower of Jesus and simply ask them if they believe God has ever provided for them in a miraculous way. In my experience, they will immediately point to several unique God-given provisions.

Summary

In this Chapter, we carefully defined miracles as a mighty act of God. Clearly, if God created the universe, then everything else is rather elementary. We explored the motivation of the documented miracles in the Gospel According to John to demonstrate how miracles primarily serve as a sign. We then took a deep dive into one of Daniel's prophecies and conclude by listing several prophecies related to Jesus Christ.

References

Miracles of the Bible – Creation Studies Institute.pdf

List of Miracles Recorded in the Old Testament Bible – Access Jesus

Chart of All the Supernatural Events Recorded in the Bible – LifeCoach4God.pdf

Chapter 12. Resurrection of Jesus Christ

Learning objectives

- Explore Jesus's claims regarding his own resurrection
- Twelve compelling reasons favoring the resurrection of Jesus Christ
- Introduce Bayes Theorem and apply it to selected evidence related to the resurrection of Jesus Christ
- Review Pascal's Wager as a decision framework for appraising probabilities assigned to the resurrection of Jesus Christ

Opening quote

Matthew 28 ⁶*He is not here, for he has risen, as he said. Come, see the place where he lay.*

Overview

In this Chapter, we examine in detail the physical bodily resurrection of Jesus Christ. First, we examine exactly what Jesus Christ claimed he would do. Second, we identify twelve compelling reasons to believe that Jesus Christ did rise bodily from the grave. Third, we take a mathematical dive into Bayes Theorem and explore applying it to the resurrection of Jesus Christ. Finally, we introduce Pascal's Wager as a decision framework for appraising the resulting probabilities from applying Bayes Theorem.

Jesus's claim

Before taking into consideration the empirical evidence favoring the physical bodily resurrection of Jesus Christ, it is essential to understand clearly what Jesus Christ said about himself and his mission. We start with a very unusual assertion by John the Baptist.

John 1:29-34 ²⁹*The next day he [John the Baptist] saw Jesus coming toward him, and said, "Behold, the Lamb of God, who takes away the sin of the world! ³⁰This is he of whom I said, 'After me comes a man who ranks before me, because he was before me.' ³¹I myself did not know him, but for this purpose I came baptizing with water, that he might be revealed to Israel." ³²And John bore witness: "I saw the Spirit descend from heaven like a dove, and it remained on him. ³³I myself did not know him, but he who sent me to baptize with water said to me, 'He on whom you see the Spirit descend and remain, this is he who baptizes with the Holy Spirit.' ³⁴And I have seen and have borne witness that this is the Son of God."*

In John 1:29 above, we find a clear statement that John the Baptist believed Jesus to be the "Lamb of God." In Hebrew culture, it was understood that lambs are sacrificed to cover sins. John indicates that this lamb would be different. He "takes away the sin of the world!" We now turn to an assertion by Jesus Christ.

John 10:30 ³⁰*I and the Father are one."*

Here, Jesus clearly identifies himself as God. Amazingly, some people try to reinterpret this verse giving it a false understanding. The people who heard Jesus make this declaration clearly understood for they sought to kill him for blasphemy.

Jesus clearly predicted that he would suffer and be killed as illustrated below in Mark 8:31. He also clearly stated that he would be resurrected.

Mark 8:31 ³¹And he began to teach them that the Son of Man must suffer many things and be rejected by the elders and the chief priests and the scribes and be killed, and after three days rise again.

In Matthew 27:63 below, the leaders in Jerusalem understood what Jesus asserted concerning his own resurrection.

Matthew 27:62-66 ⁶²The next day, that is, after the day of Preparation, the chief priests and the Pharisees gathered before Pilate ⁶³and said, "Sir, we remember how that impostor said, while he was still alive, 'After three days I will rise.' ⁶⁴Therefore order the tomb to be made secure until the third day, lest his disciples go and steal him away and tell the people, 'He has risen from the dead,' and the last fraud will be worse than the first." ⁶⁵Pilate said to them, "You have a guard of soldiers. Go, make it as secure as you can." ⁶⁶So they went and made the tomb secure by sealing the stone and setting a guard.

After the physical bodily resurrection of Jesus Christ from the dead, Jesus went out of his way to demonstrate that he was physical; not just an empirically unverifiable spirit or a ghost as seen in Luke 24:39 below.

Luke 24:36-49 ³⁶As they were talking about these things, Jesus himself stood among them, and said to them, "Peace to you!" ³⁷But they were startled and frightened and thought they saw a spirit. ³⁸And he said to them, "Why are you troubled, and why do doubts arise in your hearts? ³⁹See my hands and my feet, that it is I myself. Touch me, and see. For a spirit does not have flesh and bones as you see that I have." ⁴⁰And when he had said this, he showed them his hands and his feet. ⁴¹And while they still disbelieved for joy and were marveling, he said to them, "Have you anything here to eat?" ⁴²They gave him a piece of broiled fish, ⁴³ and he took it and ate before them.

⁴⁴Then he said to them, "These are my words that I spoke to you while I was still with you, that everything written about me in the Law of Moses and the Prophets and the Psalms must be fulfilled." ⁴⁵Then he opened their minds to understand the Scriptures, ⁴⁶and said to them, "Thus it is written, that the Christ should suffer and on the third day rise from the dead, ⁴⁷and that repentance for the forgiveness of sins should be proclaimed in his name to all nations, beginning from Jerusalem. ⁴⁸You are witnesses of these things. ⁴⁹And behold, I am sending the promise of my Father upon you. But stay in the city until you are clothed with power from on high."

The early church leaders understood that the physical bodily resurrection of Jesus Christ from the dead was the centerpiece of Christianity as evidenced in the early creeds. See, for example, the Apostle's Creed below.

The Apostles' Creed (750 AD~)

I believe in God, the Father almighty, creator of heaven and earth. I believe in Jesus Christ, his only Son, our Lord. He was conceived by the power of the Holy Spirit and born of the Virgin Mary. He suffered under Pontius Pilate, was crucified, died, and was buried. He descended to the dead. On the third day he rose again. He ascended into heaven and is seated at the right hand of the Father. He will come again to judge the living and the dead. I believe in the Holy Spirit, the holy catholic Church, the communion of saints, the forgiveness of sins, the resurrection of the body, and the life everlasting. Amen.

We now examine twelve selected reasons for believing Jesus Christ rose bodily from the dead.

Reasons evidencing Jesus's bodily resurrection from the dead

We briefly identify twelve selected reasons favoring the conclusion that Jesus Christ rose bodily from the dead.

1. Eyewitness accounts and experiences

As previously mentioned, many disciples saw, felt, touched, and testified to Jesus's bodily resurrection. Remember that the vast majority of these same disciples suffered and died alone.

2. Early, preserved accounts of the gospel.

The centerpiece of Christianity is the gospel, not the prosperity gospel but the Biblical gospel. As Paul articulates the Biblical gospel in Corinthians.

1 Corinthians 15:1-4 ¹Now I would remind you, brothers, of the gospel I preached to you, which you received, in which you stand, ²and by which you are being saved, if you hold fast to the word I preached to you—unless you believed in vain. ³For I delivered to you as of first importance what I also received: that Christ died for our sins in accordance with the Scriptures, ⁴that he was buried, that he was raised on the third day in accordance with the Scriptures,

Remember that Paul follows up this good news with numerous eyewitness accounts. The New Testament is filled with early, preserved accounts of the gospel. The New Testament book of Acts contains numerous early sermons and testimonies related to Jesus' life, death, and resurrection.

3. Transformed from fear to martyrdom

The sheer number of people whose lives were transformed from cowering in fear to boldly proclaiming the gospel is an amazing historical fact. Given our inherent desire to avoid pain and suffering, people typically do not willingly die for what they know is a lie.

4. Empty tomb

In the days after the secured tomb was found empty all the leaders in Jerusalem had to do was produce Jesus's body. They never did.

5. Resurrection was declared in Jerusalem

Again, in the days right after killing Jesus, the fearful disciples of Jesus were found boldly declaring to each other as well as to anyone who would listen that Jesus had risen bodily from the grave. These declarations were occurring right where it happened.

6. No contrary evidence

In recorded history, there is no evidence of a body or any other contrary evidence. There was a false rumor that some of the disciples stole the body. Since the tomb was empty, this rumor is not convincing, given that the tomb was secured and protected by guards. Further, if the body was stolen by the disciples, then they would not have endured such brutal suffering and martyrdom.

7. Shortly thereafter some Jews changed the day of worship from Saturday to Sunday

The Sabbath was a sacred and holy day on the Jewish calendar. What would possess Jewish who believed Jesus was the prophesied Messiah, to change this day from Saturday to Sunday? Given the

physical, bodily resurrection of Jesus Christ occurred on Sunday, the celebration for what Jesus accomplished is the most reasonable explanation for this transition.

8. The conversion of Saul of Tarsus (renamed the Apostle Paul)

What would possess a Jewish religious leader to abandon his prestigious position in favor of following a dead Rabbi whose ministry was over due to the charge of blasphemy and execution? One rational explanation is that he encountered the resurrected Jesus. The fact that the Apostle Paul wrote a large portion of the New Testament suggests that he did not go insane. Clearly, insane people do not write such world changing materials.

9. Key initial evidence given to women

In the Jewish culture at the time of the resurrection, women were marginalized members of society. If you were going to create a myth surrounding a blatant lie, you would not have made women lead characters in the myth.

10. Physical resurrection—the cornerstone

The emerging religious cult, as some believe, could have easily made Jesus's resurrection a spiritual one. That is, just say that he rose spiritually from the grave. Given that it would be unverifiable, you could just proceed with your new religious cult. By asserting a physical, bodily resurrection, you introduce the messiness of physicality and all the associated required empirical evidence.

11. Fulfilled prophesy

From Genesis through Malachi, the Old Testament provides numerous clear and precise predictions of a coming Messiah who would suffer and die for transgressions. From the Messiah's birthplace to the date of his crucifixion, it was all clearly predicted.

12. Deep and abiding clarity of biblical teaching related to finance

If Christianity was merely a cruel myth fabricated by cunning people, then you would not expect to find deep and abiding wisdom related to personal and corporate wealth management. The Bible presents clear and coherent truth claims related to financial management starting in Genesis and ending in Revelation. Myths and frauds do not present coherent finance-related claims that deeply correspond to the empirical observations of our day. Given the empirical evidence of the resurrection of Jesus Christ, it is reasonable to consider deeply Jesus's teaching on finance.

We could continue with many more reasons supporting the physical bodily resurrection of Jesus Christ from the dead; I suspect by this point you get the general idea that the empirical and rational evidence is overwhelming. We now turn to a bit of mathematics for the purpose of appraising the rationality of believing that Jesus Christ rose bodily from the dead.

Bayes' Theorem and the resurrection¹⁰¹

Thomas Bayes (1701-1761) introduced a mathematical framework that bears his name for assessing the likelihood of undecided claims. Around the same period, David Hume (1711-1776) argued that miracles are extremely unlikely and therefore claims of Jesus' resurrection are likely false. Using Bayes' theorem, one can easily demonstrate that although one claim favoring the resurrection may not be compelling, multiple claims when rationally considered results in persuasive evidence.

¹⁰¹Based initially on materials produced by Professor Lionel Martellini.

Before introducing Bayes' theorem, we illustrate how probabilities are updated based on new data. Our illustration is based on known objective probabilities something rare in philosophy or finance. The illustration's objective is useful in understanding the basic mechanics of how evidence influences one's acceptance of the various historical claims. The key insight is not so much the influence of one piece of evidence related to a particular truth claim, rather, it is understanding the weight of numerous pieces of evidence related to a particular truth claim. The approach taken here is widely used to solve numerous mathematical problems and has proven deeply fruitful in many financial applications.

Suppose we have 10 marbles, four are blue and six are red. One of the blue marbles is striped and three are solid. Four of the red marbles are striped and two are solid.¹⁰² Figure 12.1 illustrates the assumed population of marbles.

Figure 12.1. Illustration of probability updating
(10 marbles, one striped blue, three solid blue, four striped red, two solid red)



The probability of randomly picking a blue marble is four out of ten or $\Pr(\text{Blue}) = 40\%$, whereas the probability of picking a striped marble is five out of ten or $\Pr(\text{Striped}) = 50\%$. Note, however, if all you know is that the randomly drawn marble is striped, then the probability that it is red is four out of five or $\Pr(\text{Red}|\text{Striped}) = 80\%$ (Read: The probability of observing a red marble given that we know the marble is striped.)

Technical details of Bayes Theorem

This section is solely for those interest in wrestling with the technical details. It can easily be skipped.

We now generalize the analysis. Let A denote red marbles and B denote striped marbles. Thus, symbolically we have the probability of A given B can be expressed as

$$\Pr(A|B) = \frac{\Pr(A \text{ and } B)}{\Pr(B)} = \frac{\Pr(A \cup B)}{\Pr(B)}, \quad (12.1)$$

where the symbol \cup denotes union or “and.” From the example above, we have

$$\Pr(\text{Red}|\text{Striped}) = \frac{\Pr(\text{Red and Striped})}{\Pr(\text{Striped})} = \frac{0.4}{0.5} = 0.8 \text{ or } 80\%.$$

Suppose we have two truth claims, A and B , where A is a particular proposition and B is a particular piece of evidence. We assume you can assign probabilities to these two truth claims, $\Pr(A)$ and $\Pr(B)$. We define the prior belief or prior probability of a particular proposition being true as $\Pr(A)$. The $\Pr(A|B)$ is the posterior belief or posterior probability of a particular proposition being true. That is, the new information provided by evidence B results in adjusting the probability of proposition A being true.

Note by symmetry, if we switch which truth claim is the proposition and which truth claim is the evidence, we also have

$$\Pr(B|A) = \frac{\Pr(B \text{ and } A)}{\Pr(A)} = \frac{\Pr(B \cup A)}{\Pr(A)}. \quad (12.2)$$

¹⁰²Ok, for the technically inclined reader, the white stripes would require naming the colors say reddish and bluish.

In our marble example, we have

$$\Pr(\textit{Striped} | \textit{Red}) = \frac{\Pr(\textit{Striped and Red})}{\Pr(\textit{Red})} = \frac{0.4}{0.6} = 0.67 \text{ or } 67\%.$$

Rearranging Equations (12.1) and (12.2), we note

$$\Pr(A \cup B) = \Pr(B)\Pr(A | B) \text{ and} \tag{12.3}$$

$$\Pr(B \cup A) = \Pr(A)\Pr(B | A). \tag{12.4}$$

Again, in our example, we have

$$\Pr(\textit{Red and Striped}) = \Pr(\textit{Striped})\Pr(\textit{Red} | \textit{Striped}) = 0.5(0.8) = 0.4 \text{ and}$$

$$\Pr(\textit{Striped and Red}) = \Pr(\textit{Red})\Pr(\textit{Striped} | \textit{Red}) = 0.6(0.67) = 0.4.$$

Note if we equate the right-hand side of Equations (12.3) and (12.4), we have

$$\Pr(B)\Pr(A | B) = \Pr(A)\Pr(B | A). \tag{12.5}$$

Rearranging Equation (12.5), we have Bayes theorem.

Bayes theorem

Assuming we have two events, truth claims, or propositions, denoted A and B , and the probability of B is positive, then

$$\Pr(A | B) = \Pr(A) \frac{\Pr(B | A)}{\Pr(B)}. \tag{12.6}$$

Considering again our marble example, we have

$$\Pr(\textit{Striped} | \textit{Red}) = \Pr(\textit{Striped}) \frac{\Pr(\textit{Red} | \textit{Striped})}{\Pr(\textit{Red})} = 0.5 \left(\frac{0.8}{0.6} \right) = 0.67 \text{ and}$$

$$\Pr(\textit{Red} | \textit{Striped}) = \Pr(\textit{Red}) \frac{\Pr(\textit{Striped} | \textit{Red})}{\Pr(\textit{Striped})} = 0.6 \left(\frac{0.67}{0.5} \right) = 0.8.$$

When evaluating historical claims, it is helpful to provide an alternative measure for the marginal probability of B . Let the symbol \neg denote “not.” Thus, $\neg A$ is read “not A ” and hence $\Pr(\neg A)$ is the probability not A is true, or A is false. Thus, in our marble case, not Red is equivalent to Blue. One helpful representation for $\Pr(B)$ is

$$\Pr(B) = \Pr(B | A)\Pr(A) + \Pr(B | \neg A)\Pr(\neg A). \tag{12.7}$$

In the marble example, we have

$$\begin{aligned} \Pr(\textit{Red}) &= \Pr(\textit{Red} | \textit{Striped})\Pr(\textit{Striped}) + \Pr(\textit{Red} | \neg \textit{Striped})\Pr(\neg \textit{Striped}) \\ &= 0.8(0.5) + 0.4(0.5) = 0.6 \end{aligned}$$

Thus, an alternative version of Bayes’ theorem can be expressed as

$$\Pr(A | B) = \Pr(A) \frac{\Pr(B | A)}{\Pr(B | A)\Pr(A) + \Pr(B | \neg A)\Pr(\neg A)}. \tag{12.8}$$

After this effort, we are ready to apply Bayes theorem to historical truth claims.

Bayes theorem and the resurrection of Jesus Christ

Suppose you are a skeptic considering the specific core claim of Christianity, that is, whether Jesus Christ rose bodily from the dead. Within the Bayes theorem framework, we define:

A – truth claim or proposition (e.g., A – “Jesus Christ rose bodily from the dead”) and
 $\neg A$ – truth claim or proposition (e.g., $\neg A$ – “Jesus Christ *did not* rise bodily from the dead”).

Further, being a skeptic and following Hume, you assign the likelihood of Jesus rising as very remote say one percent of one percent (known as a basis point in the investing world) or

$\Pr(A)$ – prior belief or prior probability [e.g., $\Pr(A) = 0.01\%$ or 0.0001].

Thus,

$\Pr(\neg A)$ – prior belief or prior probability [e.g., $\Pr(\neg A) = 99.99\%$ or 0.9999].

You now conduct a detailed study of the evidence related to the historical person known as the Apostle Peter. He is an interesting character and portrayed as very human. You consider a second truth claim:

B – second truth claim or proposition (evidence) (e.g., B – “Apostle Peter’s zeal in proclaiming that Jesus Christ rose bodily from the dead, especially after Peter’s own prior denial the night before Jesus was crucified”).

You know people do not typically suffer and die to promote what they know is a lie. You remain extremely skeptical but realize Peter was not the bravest of characters, hence you determine:

$\Pr(B|A)$ – likelihood [e.g., $\Pr(B|A) = 75\%$ or 0.75 , because Peter was unlikely to suffer and die to promote a cultural movement when he knew the resurrection was a lie]. Read: “Apostle Peter’s zeal in proclaiming Jesus Christ rose bodily from the dead, given his own denial assuming Jesus Christ actually rose bodily from the dead.”

Further, you concoct nefarious reasons motivating Peter to promote a lie and determine:

$\Pr(B|\neg A)$ – likelihood [e.g., $\Pr(B|\neg A) = 10\%$ or 0.1]. Read: “Apostle Peter’s zeal in proclaiming Jesus Christ rose bodily from the dead, given his own denial assuming Jesus Christ *did not* actually rise bodily from the dead.”

Based on Bayes’ theorem, we have

$$\begin{aligned} \Pr(A|B) &= \Pr(A) \frac{\Pr(B|A)}{\Pr(B|A)\Pr(A) + \Pr(B|\neg A)\Pr(\neg A)} \\ &= 0.0001 \frac{0.75}{0.75(0.0001) + 0.1(0.9999)} \quad . \quad (12.9) \\ &= 0.0001 \frac{0.75}{0.100065} \\ &= 0.0007495 \text{ or approximately } 0.075\% \end{aligned}$$

Based on this analysis, the skeptic’s view of the likelihood that Jesus Christ rose bodily from the dead has increased by a factor of about 7.5 (initial probability of 0.01% and posterior probability of 0.075%). Although this increase in probability does not seem like much, remember that the life transformation of Peter is simply one of hundreds of factual evidences favoring the resurrection.

For example, assuming the same probability structure for each of the additional twelve apostles, we can produce the following set of outcomes for the thirteen apostles who all suffered after the resurrection of Jesus Christ. Table 12.1 shows the resulting mathematical calculations. Based on repeated use of Bayes’ theorem, the likelihood of Jesus rising bodily from the dead is virtually 100%.

Table 12.1. Bayesian updating of the likelihood of the bodily resurrection from the dead

Bayes Theorem and the Resurrection						
	Pr(A B)	Pr(A)	Pr(B A)	Pr(¬A)	Pr(B ¬A)	
Event (1)	Pr(Res Peter)	Pr(Res)	Pr(Peter Res)	Pr(¬Res)	Pr(Peter ¬Res)	
Event (i)	Pr(Res i)	Pr(Res i-1)	Pr(i-1 Res)	Pr(¬Res i-1)	Pr(i-1 ¬Res)	Apostle
0						
1	0.07495%	0.01%	75%	99.99%	10%	Peter
2	0.55941%	0.07%	75%	99.93%	10%	Andrew
3	4.04836%	0.56%	75%	99.44%	10%	James
4	24.03743%	4.05%	75%	95.95%	10%	John
5	70.35530%	24.04%	75%	75.96%	10%	Philip
6	94.68075%	70.36%	75%	29.64%	10%	Bartholomew
7	99.25649%	94.68%	75%	5.32%	10%	Thomas
8	99.90022%	99.26%	75%	0.74%	10%	Matthew
9	99.98668%	99.90%	75%	0.10%	10%	James, son of Alphaeus
10	99.99822%	99.99%	75%	0.01%	10%	Jude
11	99.99976%	100.00%	75%	0.00%	10%	Simon the Zealot
12	99.99997%	100.00%	75%	0.00%	10%	Matthias
13	100.00000%	100.00%	75%	0.00%	10%	Paul

We now turn to what has become known as Pascal’s wager. The goal is to explore a rational framework for establishing the threshold of probability that would transition a person from believing a particular truth claim as false to one who now believes a particular truth claim as true.

Pascal’s Wager

According to Wikipedia,

“Blaise Pascal (19 June 1623 – 19 August 1662) was a French mathematician, physicist, inventor, writer and Catholic theologian. He was a child prodigy who was educated by his father, a tax collector in Rouen. Pascal’s earliest work was in the natural and applied sciences, where he made important contributions to the study of fluids, and clarified the concepts of pressure and vacuum by generalising the work of Evangelista Torricelli. Pascal also wrote in defence of the scientific method.”

Regarding Pascal’s Wager, Alan Hájek concludes,

*“Pascal’s Wager is a watershed in the philosophy of religion. As we have seen, it is also a great deal more besides.”*¹⁰³

Before specifying the wager, we need to define the concept of utility. Again, quoting Hájek,

“In any decision problem, the way the world is, and what an agent does, together determine an outcome for the agent. We may assign utilities to such outcomes, numbers that represent the degree to which the agent values them. It is typical to present these numbers in a decision matrix, with the columns corresponding to the various relevant states of the world, and the rows corresponding to the various possible actions that the agent can perform.”

Alan Hájek summarizes Pascal’s Wager in the following way:

¹⁰³See Alan Hájek, “Pascal’s Wager”, *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2018/entries/pascal-wager/>. Hájek is a widely cited professor of philosophy at Australian National University.

1. *“Either God exists or God does not exist, and you can either wager for God or wager against God. The utilities of the relevant possible outcomes are as follows, where f_1 , f_2 , and f_3 are numbers whose values are not specified beyond the requirement that they be finite:*

	<i>God exists</i>	<i>God does not exist</i>
<i>Wager for God</i>	∞	f_1
<i>Wager against God</i>	f_2	f_3

2. *Rationality requires the probability that you assign to God existing to be positive, and not infinitesimal.*
3. *Rationality requires you to perform the act of maximum expected utility (when there is one).*
4. *Conclusion 1. Rationality requires you to wager for God.*
5. *Conclusion 2. You should wager for God.”*

The main insight is that a “Wager for God” results in a positive infinite expected utility regardless of the finitely assigned probability that “God does not exist.” Assuming any positive probability assigned to “God exists” will result in a positive infinite expected utility.

There are many criticisms of Pascal’s Wager, but it remains a powerful way to frame evaluation of various decisions. Alan Hájek concludes,

“Pascal’s Wager vies with Anselm’s Ontological Argument for being the most famous argument in the philosophy of religion. Indeed, the Wager arguably has greater influence nowadays than any other such argument—not just in the service of Christian apologetics, but also in its impact on various lines of thought associated with infinity, decision theory, probability, epistemology, psychology, and even moral philosophy.”

In summary, based on Pascal’s Wager, once you have established a positive probability favoring the bodily resurrection of Jesus Christ, then entrusting your life to Jesus Christ is the only rational response.

Personal finance considering the resurrection of Jesus Christ

Because the physical bodily resurrection of Jesus Christ is not only historically plausible, but a biblical necessity, all of life changes materially. The world we find ourselves occupying is God-infused and teaming with living water and the bread of life.

The simple charge to go and make disciples is impossible from a human perspective. Fortunately, God is at work all around us and we simply must join Him in what He is already doing. If you are a follower of Jesus, then plead with Him to open your eyes to the lost but seeking all around you. Ask God for one person to assist along the way.

I remember riding in a car in a large city within a country deeply hostile to Jesus Christ. The government official who was driving describe the burden he felt for his entire nation as the vast majority of its citizens do not have a personal relationship with God through Jesus Christ. For you see, this person recently met Jesus and his life was radically transformed from meaningless secular pursuits to serving in a deeply meaningful divine commission of God’s ambassador.

It is easy for us to feel the pressure in our soul for the despair of entire nations. It is much more challenging to invite our colleague at work to coffee to serve as God’s ambassador and introduce them

to Jesus Christ. My friend understood his need to identify just a few people through prayer to whom he could proclaim the good news of salvation.

Figure 12.2 illustrates the daunting challenge of serving as God’s ambassador to the world, but it starts by one person loving another person enough to share the gospel of Jesus Christ. Ask God to give you one more person to disciple.

Figure 12.2. Illustration of the disciple-making challenge



Summary

In this Chapter, we examined in detail the physical bodily resurrection of Jesus Christ. First, we examined what Jesus Christ claimed he would do. Second, we identified twelve compelling reasons to believe that Jesus Christ did, by empirical fact, rise bodily from the grave. Third, we took a mathematical dive into Bayes Theorem and explored applying it to the resurrection of Jesus Christ. Finally, we introduced Pascal’s Wager as a decision framework for appraising the resulting probabilities from applying Bayes Theorem.

Chapter 13. Loving Your Neighbor and Apologetics

Learning objectives

- Understand the link between loving your neighbor and Christian apologetics
- Consider hospitality as the key to honing your worldview
- Explore the link between the Christian worldview and leadership as well as finance
- Review two poems and selected quotes summarizing this material

Opening quote

A life based on cost-benefit analysis "... believes in nothing, cares for nothing, enjoys nothing, loves nothing, hates nothing, finds purpose in nothing, lives for nothing and only remains alive because there is nothing for which to die." Dorothy Sayers

Overview

There is a link between loving your neighbor and Christian apologetics. Love is the overarching compelling argument favoring the truthfulness of the Christian worldview. Hospitality is the key to honing your worldview. Learning to serve others, particularly the sojourners amongst us, entails the essence of working out one's relationship with Jesus Christ. Next, we briefly explore how the Christian worldview impacts both leadership and finance. The Chapter concludes with a couple of poems and selected quotes.

Love as the compelling argument

With any philosophical worldview, we need to understand its entailments. It is important to think through the logical coherence and empirical correspondence of a worldview. The final piece is the implied lifestyle that results. Is life really "red in tooth and claw" and merely meaningless "survival of the fittest" or is life deeply meaningful, full of hope, and worthy of expending unconditional love? Jesus addresses this issue clearly. Consider the challenging question posed to Jesus by a lawyer.

Matthew 22:35-40 ³⁵And one of them, a lawyer, asked him a question to test him. ³⁶"Teacher, which is the great commandment in the Law?" ³⁷And he said to him, "You shall love the Lord your God with all your heart and with all your soul and with all your mind. ³⁸This is the great and first commandment. ³⁹And a second is like it: You shall love your neighbor as yourself. ⁴⁰On these two commandments depend all the Law and the Prophets."

Note that the lawyer was seeking to test Jesus with his question. Apparently, in that day there was a debate regarding which of the ten commandments was the greatest. Jesus basically answered all of them within his summary answer. The key insight is that a right relationship with God results in a loving relationship with other people.

As explained in John below, Jesus gives a new commandment to his disciples.

John 13:34-35 ³⁴A new commandment I give to you, that you love one another: just as I have loved you, you also are to love one another. ³⁵By this all people will know that you are my disciples, if you have love for one another."

Followers of Jesus Christ are to be marked with a genuine love for each other. The key hallmark of true followers of Jesus Christ is the love they have for each other as well as a passion to make disciples. Paul summarizes this keystone of the Christian worldview in 1 Corinthians 13.

I Corinthians 13 ¹If I speak in the tongues of men and of angels, but have not love, I am a noisy gong or a clanging cymbal. ²And if I have prophetic powers, and understand all mysteries and all knowledge, and if I have all faith, so as to remove mountains, but have not love, I am nothing. ³If I give away all I have, and if I deliver up my body to be burned, but have not love, I gain nothing. ⁴Love is patient and kind; love does not envy or boast; it is not arrogant ⁵or rude. It does not insist on its own way; it is not irritable or resentful; ⁶it does not rejoice at wrongdoing, but rejoices with the truth. ⁷Love bears all things, believes all things, hopes all things, endures all things. ⁸Love never ends. As for prophecies, they will pass away; as for tongues, they will cease; as for knowledge, it will pass away. ⁹For we know in part and we prophesy in part, ¹⁰but when the perfect comes, the partial will pass away. ¹¹When I was a child, I spoke like a child, I thought like a child, I reasoned like a child. When I became a man, I gave up childish ways. ¹²For now we see in a mirror dimly, but then face to face. Now I know in part; then I shall know fully, even as I have been fully known. ¹³So now faith, hope, and love abide, these three; but the greatest of these is love.

It is important to note that the word for love used in this passage is rather unique to Christianity. According to Wikipedia,

“Agape has been expounded on by many Christian writers in a specifically Christian context. C. S. Lewis uses agape in The Four Loves to describe what he believes is the highest level of love known to humanity: a selfless love that is passionately committed to the well-being of others.”

It is stunning to contrast followers of Jesus Christ who are committed to loving God and loving others with the reality on the ground in this modern era. Paul Vallely writes in 2014,

“The Centre for the Study of Global Christianity in the United States estimates that 100,000 Christians now die every year, targeted because of their faith – that is 11 every hour. The Pew Research Center says that hostility to religion reached a new high in 2012, when Christians faced some form of discrimination in 139 countries, almost three-quarters of the world's nations.

All this seems counter-intuitive here in the West where the history of Christianity has been one of cultural dominance and control ever since the Emperor Constantine converted and made the Roman Empire Christian in the 4th century AD.

Yet the plain fact is that Christians are languishing in jail for blasphemy in Pakistan, and churches are burned, and worshippers regularly slaughtered in Nigeria and Egypt, which has recently seen its worst anti-Christian violence in seven centuries.”¹⁰⁴

The primary response for Christians is not retaliation, though often justice is sought. The mandated response is to love our enemy—an admittedly impossible task outside of a life transformed by redemption found in Jesus Christ. Consider the teaching of Jesus Christ recorded in the Gospel According to Matthew.

Matthew 5:43-48 ⁴³“You have heard that it was said, ‘You shall love your neighbor and hate your enemy.’ ⁴⁴But I say to you, Love your enemies and pray for those who persecute you, ⁴⁵so that you may be sons of your Father who is in heaven. For he makes his sun rise on the evil and on the good, and sends rain on the just and on the unjust. ⁴⁶For if you love those who love you, what reward do you have? Do not even the tax collectors do the same? ⁴⁷And if you greet only

¹⁰⁴See <https://www.independent.co.uk/voices/comment/christians-the-worlds-most-persecuted-people-9630774.html>.

your brothers, what more are you doing than others? Do not even the Gentiles do the same?
⁴⁸*You therefore must be perfect, as your heavenly Father is perfect.*

So how do we love our neighbor, even if they hate us? Given the opportunity, let us consider hospitality.

Hospitality as the gateway to the world¹⁰⁵

Hospitality is the opposite of avoidance or at the extreme—cruelty. Opening your home and sharing a meal with your neighbor is the essence of serving and loving them. Your neighbor can be across the street or from across the globe. In our home, we have been blessed to have people literally from all over the world visit in our home. Since we live in a college town and the rest of the world sends their best and brightest to our colleges and universities, through various activities we often find people at our table from many different countries.

One customary activity for welcoming our guests is to play various games. This often helps to break the awkwardness when language is taxing. Further, when weather is conducive, we especially enjoy sharing time outdoors. We have a small green on our front yard and a tee box 65 yards away. Since many foreign scholars are more academic than athletic, a golf lesson is a fun distraction (and potentially dangerous for anyone standing around).

One Thanksgiving Day we had six guests, four from China, one from Saudi Arabia, and one from Israel. When picking up one of these guests as they often do not have cars, he asked whether the US holiday of Thanksgiving was a religious holiday. Due to the deep Christian roots to Thanksgiving, that sparked a great discussion.

During this same occasion we realized we had perhaps chosen the wrong gaming activity. That year our six children had taken an interest in airsoft target shooting. Airsoft involves plastic guns that take plastic pellets for ammunition. These guns look real apart from an orange tip. Rather than a turkey shoot, as for some a traditional Thanksgiving activity, we set up a balloon board for target shooting. Here we witnessed a Muslim passing an air rifle to a Jew. It was a bit cringeworthy for sure. It turned out, however, that these two scholars—mortal national enemies in their home countries—really enjoyed meeting each other and the discussions that ensued that evening were ones for the ages. Given we homeschooled our children, it was a classic lesson in global affairs. Clearly, it was easy for us to help our children better understand global issues while having sojourners at your table who often have lived out these same issues.

At the time of this writing, we find ourselves often interacting with Persians and we are learning much about the rich Persian history. It is important to note that listening is a fine art. As our house guests have many questions and our home is a safe place to ask these questions, it is crucial to listen. Behind every question is the questioner and behind every questioner is not only a worldview but experiences that include pain and suffering. Some of our guests have personally observed the very present evil of oppression and injustice common in their countries. It is heartbreaking to realize the deep pain and suffering inflicted on people intentionally by other people. Where do they turn for justice? How do they restore life's meaning and hope for the future?

A lawyer seeking to understand what it takes to inherit eternal life questioned Jesus. Jesus replied that the lawyer should love God and love his neighbor. Being a typical lawyer, he sought further clarification.

Luke 10:29-37 ²⁹*But he, desiring to justify himself, said to Jesus, "And who is my neighbor?"*
³⁰*Jesus replied, "A man was going down from Jerusalem to Jericho, and he fell among robbers,*

¹⁰⁵For an insightful book that addresses this topic, see Rosaria Butterfield, *The Gospel Comes with a House Key*, 2018.

who stripped him and beat him and departed, leaving him half dead. ³¹Now by chance a priest was going down that road, and when he saw him he passed by on the other side. ³²So likewise a Levite, when he came to the place and saw him, passed by on the other side. ³³But a Samaritan, as he journeyed, came to where he was, and when he saw him, he had compassion. ³⁴He went to him and bound up his wounds, pouring on oil and wine. Then he set him on his own animal and brought him to an inn and took care of him. ³⁵And the next day he took out two denarii and gave them to the innkeeper, saying, 'Take care of him, and whatever more you spend, I will repay you when I come back.' ³⁶Which of these three, do you think, proved to be a neighbor to the man who fell among the robbers?" ³⁷He said, "The one who showed him mercy." And Jesus said to him, "You go, and do likewise."

It is indisputable that the teaching of Jesus Christ has transformed life on this earth and His teaching that urges us towards hospitality. Jürgen Habermas notes that western culture has never been the same. He states:

*"Universalistic egalitarianism, from which sprang the ideals of freedom and a collective life in solidarity, the autonomous conduct of life and emancipation, the individual morality of conscience, human rights and democracy, is the direct legacy of the Judaic ethic of justice and the Christian ethic of love. This legacy, substantially unchanged, has been the object of continual critical appropriation and reinterpretation. To this day, there is no alternative to it. And in light of the current challenges of a postnational constellation, we continue to draw on the substance of this heritage. Everything else is just idle postmodern talk."*¹⁰⁶

We now explore the link between the Christian worldview and one's vocation. Given its pervasiveness throughout all vocations, we address leadership and finance.

The servant leader¹⁰⁷

Ken Blanchard, a prolific author focused on leadership, offers an interesting perspective.

"Business and beliefs. Jesus and your job. Personal and professional. Servant and leader. Even seeing those words paired together makes many people uneasy. Our sophisticated culture encourages us to draw lines and keep our spiritual lives separate from our secular lives. Faith is for Sundays or family gatherings only. Right?" (p. 8)

Blanchard's views on leadership changed after his eyes were opened "... to the power of the Word ..." referencing the Bible. He concludes,

"I realized that Christians have more in Jesus than just a great spiritual leader; we have a practical and effective leadership model for all organizations, for all people, for all situations." (italics in original, p. 9)

Blanchard has identified Jesus as a practical and effective leader. How can a simple carpenter from Nazareth have the key insights to so many different fields of study? Any conclusion other than Jesus is

¹⁰⁶Jürgen Habermas, *Time of Transitions*, Polity Press, 2006, pp. 150-151, a translation of an interview from 1999. According to the Stanford Encyclopedia of Philosophy website, Jürgen Habermas currently ranks as one of the most influential philosophers in the world. See <https://plato.stanford.edu/entries/habermas/>. It is important to note that Habermas is not a Christian.

¹⁰⁷See Ken Blanchard and Phil Hodges, *The Servant Leader Transforming Your Heart, Head, Hands & Habits*, 2003.

God's son, that He rose bodily from the grave, and the Bible contains his authentic teachings is logically difficult given the depths of biblical insights. Leadership and finance are just two of many.

We conclude with selected Bible-based financial management ideas.

Bible-based financial management¹⁰⁸

One of the interesting insights gained from an in-depth study of the Bible focusing on finance is the clear change of numeraire. The dictionary defines numeraire as "... an item or commodity acting as a measure of value or as a standard for currency exchange."¹⁰⁹ One interpretation is that there are at least two types of numeraires, currency (transitory) and metaphysical (enduring). We all know the transitory nature of money. There are numerous jokes along these lines. "Money talks! I heard it once. It said, 'goodbye.'" "Do you know why they call it cold cash? Because you do not get to hold it long enough for it to get warm!" As with much humor, there are truths embedded.

Enduring wealth is different as it never dissolves. Consider the following Bible verses.

***Proverbs 15:16-17** ¹⁶Better is a little with the fear of the Lord than great treasure and trouble with it. ¹⁷Better is a dinner of herbs where love is than a fattened ox and hatred with it.*

***Proverbs 8:10-11, 18** ¹⁰Take my instruction instead of silver, and knowledge rather than choice gold, ¹¹for wisdom is better than jewels, and all that you may desire cannot compare with her. ...*

¹⁸With me are riches and honor, enduring wealth and prosperity.

***Proverbs 13:11** ¹¹Wealth gained hastily will dwindle, but whoever gathers little by little will increase it.*

***Proverbs 22:1** ¹A good name is to be chosen rather than great riches, and favor is better than silver or gold.*

Clearly, many of the challenges facing modern business practice and finance in particular would solve themselves if the primary motivation was love for others. If we genuinely love our co-workers, bosses, suppliers, clients, and other stakeholders, then so many challenges would vanish. The economic cost of monitoring is staggering. Small businesses that have sought to adopt various portions of the Christian worldview typically see the cost of monitoring decline. If your staff seeks to honor God and love others, it fosters a much more enjoyable work environment and customers are attracted.

It is important to note that from a Christian worldview no one is perfect except Jesus Christ. Thus, every boss, supplier, client, or staff member will fail in some way. Interestingly, the mechanisms for forgiveness and restoration found in the Christian worldview is deeply helpful. Figure 13.1 illustrates the simple act of sharing a meal together. The challenge is loving your neighbor, who may be next door or across the globe, enough to invest in them. It is not enough to just spend time together; we must proclaim God's precious word to the lost and dying all around us.

¹⁰⁸For more insights on personal finance, see <http://www.robortebrooks.org/project/personal-finance/>.

¹⁰⁹New Oxford American Dictionary on my Mac computer.

Figure 13.1 The eternal blessing of sharing a meal together



Thank you for your investment in this material. I hope you have found it helpful and would welcome your feedback. We conclude this material with several favorite quotes that encapsulate our objectives for the material covered here.

Salient quotes

Worldviews can be easily categorized as those that assume existence precedes essence (e.g., naturalism) and those that assume essence precedes existence (e.g., the Christian worldview). The following two poems encapsulate these perspectives.

Existence precedes essence

Invictus (Latin: Unconquered)

William Ernest Henley, 1875

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.
In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.
Beyond this place of wrath and tears
Looms but the Horror of the shade,
And yet the menace of the years
Finds and shall find me unafraid.
It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate,
I am the captain of my soul.

Essence precedes existence

Conquered

Dorothy Day (1930s?)

Out of the light that dazzles me,
Bright as the sun from pole to pole,
I thank the God I know to be,
For Christ – the Conqueror of my soul.
Since His the sway of circumstance,
I would not wince nor cry aloud.
Under the rule which men call chance,
My head, with joy, is humbly bowed.
Beyond this place of sin and tears,
That Life with Him and His the Aid,
That, spite the menace of the years,
Keeps, and will keep me unafraid.
I have no fear though straight the gate:
He cleared from punishment the scroll.
Christ is the Master of my fate!
Christ is the Captain of my soul.

¹¹⁰See <http://www.desiringgod.org/articles/invictus-redeemed>.

Napoleon's question¹¹¹

“When conversing, as was his habit, about the great men of the ancient world, and comparing himself to them, he turned, it is said, to Count Montholon with the enquiry, ‘Can you tell me who Jesus Christ was?’ The question was declined, and Napoleon proceeded, Well then, I will tell you. Alexander, Caesar, Charlemagne and I myself have founded great empires; but upon what did these creations of our genius depend? Upon force. Jesus alone founded His empire upon love, and to this very day millions will die for Him. ... I think I understand something of human nature; and I tell you, all these were men, and I am a man: none else is like Him; Jesus Christ was more than a man. ... I have inspired multitudes with such an enthusiastic devotion that they have died for me, ... but to do this it was necessary that I should be visibly present with the electric influence of my looks, my words, my voice. When I saw men and spoke to them, I lighted up the flame of self devotion in their hearts. ... Christ alone has succeeded in so raising the mind of man to the unseen, that it becomes insensible to the barriers of time and space. Across a chasm of eighteen hundred years, Jesus Christ makes a demand which is beyond all others difficult to satisfy; he asks for that which a philosopher may often seek in vain at the hands of his friends, or a father of his children, or a bride of her spouse, or a man of his brother. He asks for the human heart; he will have it entirely to himself. He demands it unconditionally, and furthermore his demand is granted. Wonderful! In defiance of time and space, the soul of man, with all its powers and faculties, becomes an annexation to the empire of Christ. All who sincerely believe in him experience that remarkable supernatural love toward Him. This phenomenon is unaccountable; it is altogether beyond the scope of man’s creative powers. Time, the great destroyer, is powerless to extinguish this sacred flame; time can neither exhaust its strength nor put a limit to its range. This is it, which strikes me most; I have often thought of it. This it is which proves to me quite convincingly the divinity of Jesus Christ.”

Shorter quotes

“Christianity preaches the infinite worth of that which is seemingly worthless and the infinite worthlessness of that which is seemingly so valued.” Dietrich Bonhoeffer, quoted in Eric Metaxas, Bonhoeffer Pastor, Martyr, Prophet, Spy, p. 85.

“If only it were all so simple! If only there were evil people somewhere insidiously committing evil deeds, and it were necessary only to separate them from the rest of us and destroy them. But the line dividing good and evil cuts through the heart of every human being. And who is willing to destroy a piece of his own heart?” Aleksandr Solzhenitsyn, The Gulag Archipelago 1918-1956

“I seem to have been only like a boy playing on the seashore ... whilst the great ocean of truth lay all undiscovered before me.” Isaac Newton

“The battle for the mind cannot be waged by mobilizing in the streets or on Capitol Hill, nor by denouncing more furiously the secular humanists. If we are to help preserve even the possibility of Christian thinking for our children and grandchildren, we must begin to nurture first-order Christian scholarship.” Nathan Hatch

“Christian scholars view their work as larger than themselves, larger than itself. They look not only at what they’re studying but also along it, so as to see its Christ-centered implications. This tethering of the temporal to the eternal provides meaning and significance and beauty to what they do and generates the highest motivation for excellence. Their study becomes virtually an act of worship. They work not merely to understand the created order, as worthwhile as that goal is within itself; they also study the created order to deepen their understanding and appreciation

¹¹¹Henry Parry Liddon, Liddon's Bampton Lectures 1866 (London: Rivingtons, 1869).

of, and ultimately their relationship with, the One who fashioned it and who occupies its center, its Creative Orderer, the Lord Jesus Christ.” Duane Liptin

“Scholarship and science are not neutral, but are deeply involved in the struggle between Christian theism, perennial naturalism and creative anti-realism. And the unhappy fact is that at present (and in our part of the world) it is the latter two that are in the ascendancy. Christian theism has perhaps made some small steps back in recent years; but it is surely the minority opinion among our colleagues in Western universities.” Alvin Plantinga

“Men became scientific because they expected law in nature, and they expected law in nature because they believed in a lawgiver.” Alfred North Whitehead

“The great delusion of modernity is that the laws of nature explain the universe for us. The laws of nature describe the universe, they describe the regularities. But they explain nothing.” Ludwig Wittgenstein

“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 incredible credulity that it has.” Malcolm Muggeridge, The End of Christendom quoted in William A. Dembski, Intelligent Design The Bridge Between Science and Theology.

Back Cover

One key to human flourishing is improved financial decision-making. At its core, decision-making rests on philosophical presuppositions or one's worldview. A worldview is simply a conceptual arrangement by which we fit everything we believe and through which we interpret and judge reality. It is analogous to eyeglasses.

In this book, I seek to express reasons for the truthfulness of the Christian worldview. If the Christian worldview is true—and I believe it is—then those who embrace it will make significantly different financial decisions. Thus, we seek to establish the link between worldviews and finance. You will find here various arguments for the truthfulness of the Christian worldview.

The material presented here is taken from many sources and is just my compilation of the hard work of numerous other authors. Thus, one way to view this material is my effort to organize foundational concepts in a form that is personally useful to me—particularly in the context of personal finance. The hope is that you will also benefit from how this material is organized and gain your own insights.

Biographical Sketch



Robert E. Brooks, PhD, CFA, is Professor Emeritus of Finance at the University of Alabama and the President of Financial Risk Management, LLC, a financial risk management consulting firm focused on market risks. Brooks has retired from a 37-year career as a finance professor focused on investments, primarily issues related to financial risk management.

Brooks is the author of over 85 articles appearing in the *Journal of Financial and Quantitative Analysis*, *Journal of Derivatives*, *Journal of Banking and Finance*, *Financial Management*, and others. Further, he is the co-author of *Foundations of the Pricing of Financial Derivatives: Theory and Analysis* (PhD level) and *An Introduction to Derivatives and Risk Management* (Undergraduate level, Seventh through Tenth Editions) with Don Chance and has authored several books including *Building Financial Risk Management Applications with C++* (Masters level). Further, he maintains <https://www.youtube.com/@FRMHelpForYou>, a YouTube channel covering free online materials, *Building Quantitative Finance Applications with R* (Masters level).

Brooks is an award-winning instructor at both the collegiate level as well as the executive level. His teaching awards include: Algernon Sidney Sullivan Award, nationally recognized and a University of Alabama Premier Award, 2023; Outstanding Commitment to Teaching Award, National Alumni Association, University of Alabama, 2014; Thomas D. Moore Endowed Teaching Award, Culverhouse College of Commerce, 2018; and Jim Nabors Teaching Excellence Award, Culverhouse College of Commerce, 2015. Finally, Brooks received numerous department-level teaching awards. Brooks has been retained as an executive training facilitator for several major companies.

Brooks has been quoted in several print media, including *The Wall Street Journal*, *Bloomberg News*, *New York Times*, and *The Bond Buyer*. Brooks has also testified in a subcommittee hearing of the U. S. House of Representatives in Washington, D.C. as well as in a field hearing of the SEC in Birmingham, Alabama. Brooks has consulted with major public utilities, energy companies, auditing firms, corporations, investment bankers, elected municipal officials, and commercial bankers regarding managing financial risks, derivatives valuation and software development.

Brooks has served as both consulting and testifying expert witness in several court cases and conducts custom-designed financial seminars on various aspects of finance. These and other activities may be found at www.robortebrooks.org. Robert has been married to Ann for 37 years and has 6 adult children and an increasing number of grandchildren.