

Introduction

Who can gaze at a star-filled sky or breathe deeply of crisp mountain air without the feeling that we are part of a marvelous and mysterious universe? Our understanding of what we experience takes us from the spontaneity of feeling into the conceptual worlds of both religion and science. How do our current notions of the workings of the universe fit with our deepest convictions about its meaning and value? From religion, we grasp the world as created, given, gift. From science, we apprehend it as evolving, in process, changing. How do we bring these apprehensions together? Or can we? Is our impulse to find the two complementary: creation *and* evolution? Or is it to find them contradictory: creation *or* evolution?

The way we answer these questions has personal and intellectual consequences. It will constitute the first piece in a worldview within which we order our religious beliefs and scientific judgments.

PROBLEMATIC PRESUMPTIONS

When creation and evolution are thought to be incompatible, three problematic presumptions are often at work:

1. by *creation* is meant the biblical story of creation in Genesis 1, understood as a historical event,
2. Genesis 1 and evolutionary theory each describe the way the world began, and
3. we must choose between them.

If these presumptions are indeed at work, then we have engaged this controversy in terms shaped by fundamentalists, the most conservative of Christian traditions. If we take conflict and rivalry as givens, we have appropriated the fundamentalist understanding of creation. In fact, if we place creation and evolution against one another as alternatives, we have affirmed as real a conflict created by fundamentalists themselves.

Uncovering these presumptions and the misunderstanding of both creation and evolution that they impose is the chief purpose of this book. The debate between religion and science on the world's origins need not—indeed, should not—be dictated by the views of fundamentalists and creationists, the common designations for those who oppose evolutionary theory most vigorously. Fundamentalists are conservative Christians of various denominations. “Creationists” are fundamentalists whose public opposition to evolution includes attempts to persuade local and state school boards to eliminate evolutionary theory from science courses or to balance such theory with what they propose as the biblical view of the world's origins. We will define each more fully in the chapters ahead.

One misunderstanding is important to clarify right at the beginning. What fundamentalists mean by “creation” is Genesis 1 as revealed history, that is, an account of what God

did in creating the physical universe. That is not the meaning of creation in the theological tradition. We will explore that meaning in chapter 2. Here it will suffice to say that the concept of creation does *not* refer to Genesis 1, nor does it compete with evolutionary theory as an account of the origin of species. As a theological concept, creation does not explain physical things, as evolution does, but answers the metaphysical question why there are physical things at all, a question that evolutionary science does not take up. With that said, we have already stepped out of the framework shaped by fundamentalists and into one in which our religious and scientific worldviews can integrate creation and evolution without conflict.

OBJECTIVES

The chief objective of this book is to move the debate about creation and evolution from a framework shaped by unnoticed fundamentalist presuppositions and conclusions to a historically conscious and scholarly framework in which we have an intelligent grasp of each of the components involved—the Bible, Christian doctrine, evolutionary science, and creationism. The following chapters address each of these components.

To shift frameworks requires separating creation from creationism. We have not done so if we hear the question, “Do you believe in creation?” as “Do you believe the events narrated in Genesis 1 really happened?” Rightly understood, creation and evolution are different realities in the order of being and different explanations in the order of knowing.

They are not competing answers to the same question but complementary answers to different questions.

A second objective is to bring the human desire to understand the world into focus. This desire is open and unrestricted.¹ It is expressed in the everyday understanding of living, the insight of the poet, and the technical analysis of the economist. Scientific inquiry is this desire on the move. The insights generated by inquiry become the building blocks of an explanatory knowledge of physical reality. But science does not fulfill the whole of the human desire to know. There are many questions science does not answer—questions about the meaning of texts and the value of art, for example.

Some questions are about the physical universe, but they are different than asking what happens to a flower as it grows. Why is there anything at all? What accounts for the intelligibility of the world, that is, the fact that it can be understood? What would account for contingent being? These are questions about the world, but they are *meta*-physical rather than physical questions. They are genuine questions, and anyone may engage them; but to do so is to do something other than science.

A third objective of this book is to unfold a progressive series of clarifications. From the side of theology especially, two clarifications are important. The first is to distinguish the Bible as understood by fundamentalists and the Bible as critically appropriated and fully informed by biblical scholar-

1. I am indebted to the work of Bernard J. F. Lonergan, SJ, for an understanding of human knowing in its development, structure, differences as common sense and theoretical, interferences, and so on. Of primary importance in his work are two major books: *Insight: A Study of Human Understanding* and *Method in Theology*.

ship. The latter is less evident in the creationist conflict over evolution than could be the case. When scientists and others argue with creationists, they not only talk about the Bible as fundamentalists do, but think that that is the way the Bible *is*. Christians in mainline traditions, for example, do not understand the biblical story of creation in the literalist way of fundamentalists. The fundamentalist understanding ignores the original historical context of the narrative, its writer, the purpose the writer had for it, its genre, and date of composition. That is a lot to ignore. To keep these kinds of factors in mind gives rise to a richer text without the contradictions with science that fundamentalists cannot avoid.

Moreover, the assertion that the Bible gives us complete historical and scientific truth—the idea of biblical inerrancy—is a reaction to and rejection of the emergence of historical-critical studies of the Bible. Mainline traditions take for granted the necessity of a scholarly appropriation of the Bible. Such factors as literary genre, historical context, and cultural milieu are important aspects of human meaning. As features of ancient texts they require the work of biblical specialists to unpack. A scholarly understanding of the story of creation in Genesis 1 puts an end to many pseudo-difficulties presented by fundamentalists. Chapter 1 takes up these topics.

We have suggested the nature of the second clarification already, one that we will deal with more fully in chapter 2. This is the clarification of the meaning of the theological concept of creation and the difference between this meaning and that given to creation by fundamentalists. The concept of creation, naturally, is the centerpiece of the doctrine of creation, a development that took place over the first several centuries of Christian history. In chapter 2, we will highlight

the questions that engaged Christian theologians in the early centuries of the church. Are God and the world one? Are they distinct? Is matter eternal? Is the divine a personal or nonpersonal reality? What is the relation of the Creator to evil?

FURTHER TASKS

With these objectives and clarifications of the first two chapters, in the third chapter we introduce the outlines of the modern evolutionary theory. Among the key issues that generate fundamentalist resistance, we will treat:

- what Charles Darwin meant by natural selection as a mechanism of evolution and why that was an achievement;
- the nature of theory as scientific understanding;
- scientific method, the import of “bracketing God” as an explanation in scientific inquiry, and why this is legitimate from a theological point of view.

Here and elsewhere we will have the occasion to reject the fundamentalist claim that evolution is incompatible with God. Unless one reads Genesis 1 as an alternative to evolutionary theory, evolutionary theory is not a threat to faith but an unparalleled insight into the sheer magnificence of the universe. Scientists explain the world; they do not make it. What exists cannot be a surprise to the unrestricted understanding that grounds the intelligibility we discover.

In the following chapters, 4 and 5, we explore contemporary religious resistance to evolutionary theory. In chapter 4, we look at nineteenth- and early twentieth-century Catholic

opposition. In chapter 5, we take up the current organized opposition of creationist groups, in particular young-Earth creationists and the Intelligent Design movement.

Chapter 6, the final chapter, addresses the question of why creationists engage in such resistance to evolution. Why is the historicity of Genesis 1 so important to them? What makes the historical truth of this story so crucial, so necessary, to fundamentalist faith? What is the consequence if Genesis 1 is not historical? Is the problem really creation?

Creationists face opposition from scientists worldwide. Why do they refuse evidence for evolution that scientists describe as overwhelming? What fear is so great that creationists would persist in their attempts to eliminate evolution not just from science courses but from our very minds? This refusal and fear are a real puzzle. Determining the reason that gives rise to this resistance and fear sheds light on the intellectual demands of authentic faith.

Eugenie Scott, Director of the National Center for Science Education, has written that education by both scientists and theologians is the solution to the problem of anti-evolutionism.² I hope this book contributes to the solution needed. But it is not only evolution that requires our attention. To deal with the controversy adequately we need to become informed about the Bible by biblical scholarship and about the doctrine of creation by historical and theological studies.

Opposition to evolution is not an abstract issue but a very concrete one of the human good. Science contributes not just abstract knowledge but also the means by which we meet the massive challenges of hunger, disease, and ecological dev-

2. Scott and Branch, "Antievolutionism: Changes and Continuities."

astation. We cannot hope for progress in the world without science. Scientists can go further than their methodological canons warrant and make pronouncements on transcendent reality and other matters. Such personal indiscretions are just boundary problems. Creationists do the same thing by trying to say they are doing science when they are pursuing a religious agenda.

But what creationists are doing when they threaten the integrity of science education carries serious consequences. Science is a condition for the possibility of the human good. Such a threat should be shown for what it is and resisted.

I am honored that this book will take its place in the Cascade Companions series. My thanks to Dr. K. C. Hanson, editor-in-chief of Cascade Books, for his friendship and invitation to take up this challenging topic. Corresponding to the series design and purpose, my treatment will be brief. Resources mentioned in the notes and bibliography provide suggestions for further reading.

I write as a Catholic theologian with a deep appreciation for the achievements of scientists and for the intellectual tradition of Christianity. My thinking about both is influenced by the work of Bernard Lonergan, SJ, whose insights into the structure of knowing are of particular value in understanding both the thinking of modern scientists and the oversights of religious fundamentalists.