ENDORSEMENTS

Lamenting modern education's cheapening of words as neutral tools, Phillip J. Donnelly highlights their purpose, life, and particularity—words are seeds. The Lost Seeds of Learning takes Christology to the verbal arts (grammar, logic, and rhetoric) and teaches us to give ourselves in the words that we speak. Educationally formative, culturally subversive, and theologically profound, *The Lost Seeds of Learning* offers a dramatic and much-needed redirection of Christian education.

—Hans Boersma, PhD, Saint Benedict Servants of Christ Chair in Ascetical Theology

Only rarely are we privileged to discover a book that has transformative power that enriches reflection across all academic disciplines. Philip Donnelly's *The Lost Seeds of Learning* is just such a landmark work. By showing his readers the pervasive rootedness of words in the Word—from the beginning and incarnate in Christ—and doing so with such teachable examples and pertinent detail, Donnelly has gifted every serious Christian educator with a deeper and richer theological—as well as classical, philosophical, and literary—foundation. This is a learned and carefully written work; if studied with the seriousness it surely merits, it will reseed not only the vocabulary, but the pedagogical framework and intellectual capital of classical Christian learning. This book is a must-read for committed teachers, and I highly recommend it for thoughtful parents as well.

—**David Lyle Jeffrey**, Distinguished Senior Fellow, Baylor Institute for Studies in Religion and author of Scripture and the English Poetic Imagination The Lost Seeds of Learning provides a systematic, accessible, and delightful contribution to the recovery of grammar, logic, and rhetoric in contemporary liberal arts education. Under careful cultivation, the author finds that these delightful kernels of reasoning bear fruit in spiritual wisdom and right conduct. Since Donnelly appears to have drunk deeply from the Pierian Spring himself, we may yet wonder, "Will Lost Seeds slake at last the growing thirst for the Trivium?" Alas, no. In fact, it is guaranteed only to whet a ferocious and lifelong craving for more.

—**Fr. Francisco Nahoe**, OFMConv, Casa Kolbe at Our Lady of Grace

In *The Lost Seeds of Learning*, author Phil Donnelly brings his knowledge and wisdom to bear, offering a corrective to a formulaic approach to classical, trivium-based education. Donnelly teases out the theological implications of seeing the language arts as organic, life-generating seeds rather than mere tools. Voices like Donnelly's need to be heard if the recovery of classical education is to continue to deepen.

—Alyssan Barnes, PhD, Senior Faculty at the Institute for Catholic Liberal Education

The Lost Seeds of Learning explicates the liberal arts tradition as a way of intimately experiencing the self-giving love of Christ through grammar, logic, and rhetoric. It reveals how the fullness of a liberal arts education is in lockstep with Christian faith, soul formation, and divine encounters. Careful readers of this book will gladly lay down the lost neutral tools of learning as they understand that grammar, logic, and rhetoric are seeds of learning that can communicate divinely given life and are purposive tools that faithfully render reality.

-Alison Moffatt, Head of Live Oak Classical School, Waco, TX

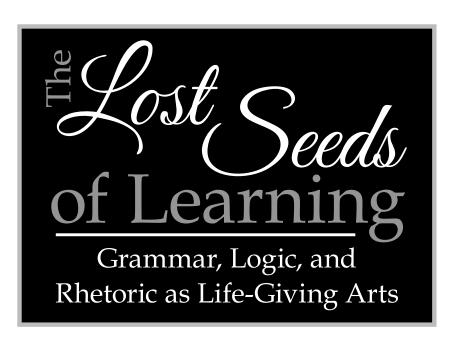
Phillip Donnelly's *The Lost Seeds of Learning* is a profound and beautifully written call to action. This carefully reasoned book demonstrates

how the verbal arts have an intrinsic power and God-given purpose to communicate the renewal of life that is so central to the Gospel. Many educators find the classical approach transformative for both themselves and their students, and yet still struggle to explain how and why this is so. In this timely book, Donnelly explains how educators can cultivate "attention, patience, and responsible action, rather than distraction, impatience, and paralysis." Writing with a finely tuned ear and from a deep well of wisdom, he points to the danger of assuming that the verbal arts are simply neutral "tools" that can be wielded haphazardly by the human will. Donnelly proposes that the verbal arts are better compared to generative seeds, which, when planted and nourished, carry in themselves an orchard of human flourishing. Rightly understood in light of Christian faith, the verbal arts have the potential to recreate all those involved—students, teachers, families, and whole societies—precisely because when the *Logos* speaks, the new kingdom of God promised in the Gospel of Jesus Christ springs to life.

> —**Brooke Ramsey**, Head of the Grammar School, Valor Preparatory Academy, Waco, TX

In the parable of the sower in Luke 8, Jesus relates seeds and words. In his theology of creation, Augustine referred to God's ideas implanted in creation as the *rationes seminales*, again invoking a link between seeds and words. Phil Donnelly, in *The Lost Seeds of Learning*, connects the verbal arts to this lost ancient Christian view as well as to contemporary scholarship. Within this book, the reader will discover "that knowledge is alive," grammar teaches us to render reality faithfully, and that the highest purpose of human discourse is "the communication of self-giving love so that a new life results." As keepers of language in the West erect a virtual Tower of Babel and Christians shake their heads in confusion, *The Lost Seeds of Learning* offers a way out of the madness. This book is a must-read for teachers of literature, logic, and rhetoric and for anyone seeking to behold how Christ, the Word, informs and transforms our verbal arts.

—**Ravi Scott Jain**, coauthor of *The Liberal Arts Tradition* and *A New Natural Philosophy*



Phillip J. Donnelly, PhD





The Lost Seeds of Learning: Grammar, Logic, and Rhetoric as Life-Giving Arts

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ISBN: 978-1-60051-425-8

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Classical Academic Press 515 S. 32nd Street Camp Hill, PA 17011 www.ClassicalAcademicPress.com

Cover & layout by David Gustafson

For Nicole Marie Donnelly Gardener, Librarian, Lover, and Friend

Yet words are deeds and deeds are words, Semeia, seeds, signs in the old theology, grace notes for the listening heart which wakes to the arché of the universe, so takes the Word made flesh to be God's own; better than messengers: Seed to perfection sown.

— "Semiotic," D. L. Jeffrey¹



^{1.} David Lyle Jeffrey, "Semiotic," in *Translations: A Collection of Poems* (Eugene: Resource, 2021), 111-112.

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INTRODUCTION Lost Seeds

The Hebrew Bible begins by telling us that God speaks Creation into being (see Genesis 1:3-30). Why is the fact that God speaks important? What does this particular form of divine action show us? The answer, though not stated, is implied when we are later introduced to the only creature that also uses words: human beings (Genesis 2:19). Humans cannot, of course, simply speak tangible things into existence. Nevertheless, the biblical account suggests that one of the ways that humans are indeed *like* God (bearing God's image) is in the ability to speak—the ability to give names. If the gift of Creation comes into being through divine speech, then the human version of speech provides a distinctive way to participate in that good gift.

Christians rely on this biblical vision of language when we assume that human words can cooperate with God's redemptive purposes in the world—despite the effects of sin and creaturely limits. This is indeed mysterious, and Christians do well to remember how audacious, not to mention strange, this vision of human language can seem to others. How exactly human words may participate in the good gift of Creation (and in its redemption) can be interpreted in a variety of ways, and the ensuing chapters consider some aspects of what such a vision of language involves. In any case, biblical revelation presumes that such participation is possible. The problem is this: Christians in contemporary culture are at risk of losing the ability to inhabit this vision of language at all. How is this so? As we shall find, the difficulties arise from the analogies that we assume in understanding our own language use—in particular, whether we imagine words only as neutral tools or whether we imagine that words can also be like seeds.

The phrase *lost seeds* is my response to the title of Dorothy Sayers's widely influential essay, "The Lost Tools of Learning." My concern here is not to criticize Sayers's reliance on the ancient scholastic metaphor that construes the verbal arts as tools. Rather, the problem is with the vision of tools that our information culture often presumes: this vision includes the belief that tools are neutral, serving only human purposes, and that the tool analogy provides a complete and comprehensive account of human language. Although language can indeed be like a tool in some ways, to inhabit that analogy as our dominant image of language brings two particular risks: a tendency to assume that all language use serves only human purposes, and a tendency to forget the biblical imagery that suggests our words can also be like seeds. The purpose of a seed is to communicate life, and that purpose is not a result of human fabrication: it is a gift. If we understand language to be like a seed, we can imagine how it gestures toward a reality beyond itself.

If we understand language to be like a seed, we can imagine how it gestures toward a reality beyond itself.

Our industrial and post-industrial patterns of living often train us to presume either that our language is the whole of reality or that our language is cut off from any reality beyond itself. In either case, the presumption is that human language cannot access anything greater than ourselves. Another kind of disconnection between speech and reality can often be reinforced by the earliest experiences of formal education. The industrial model of education often leads students to imagine that any self-reflection on words, spoken or written, has no relation to lived reality outside the classroom, whether in the playground or in the street beyond the school yard, not to mention the stars. Such educational experience is, I suggest, a symptom of presuming that our language is nothing more than a neutral tool.

^{1.} Dorothy Sayers, The Lost Tools of Learning (London: Methuen, 1948). In the subsequent chapter, I consider Sayers's account in more detail, but the first point to appreciate is that, although her influence has led many American classical educators to speak about "tools of learning," the characteristically modern misunderstanding of tools in general arises from much older and deeper sources (also explained in the next chapter). Because Sayers is well acquainted with the scholastic Aristotelian tradition, she presumes that tools are purposive and does not assume that they are ever neutral in the sense typically presumed by contemporary information culture.

This book presents a Christian account of the three traditional verbal arts—grammar, logic, and rhetoric. The power of a seed to communicate life provides an image for what these arts can become in light of the Incarnation. Rather than construing these arts as tools that serve only human purposes, the seed image reminds us that words can be a form of self-giving among persons, both human and divine. The goal of this study is to effect an imaginative shift—from thinking of the verbal arts only as tools to thinking of them also as seeds. Such an imaginative shift is crucial, I suggest, for educators (K–16) in any discipline who seek to get beyond the assumptions of the information consumer culture that we inhabit. My argument addresses Christians who are interested in learning how to improve their use of words, whether as students, as teachers, or as professors. It also speaks to those who may not be Christians but who—for reasons of historical or cultural study—seek to understand how a Christian account of the verbal arts could offer an alternative to contemporary practices.

Chapter 1 shows how the manner in which we imagine the verbal arts can shape Christian faith and practice. Chapter 2 draws on C. S. Lewis's *Abolition of Man* to explain how contrasting visions of learning can shape our assumptions regarding the agents, the objects, the forms, and the purposes of human inquiry. Chapter 3 considers why grammar is never simply information, or never like a neutral tool. Rather, grammar consists of knowledge regarding how to use words in order to make faithful and appropriate renderings of reality. Even if grammar is understood as a tool, it needs to be understood as a tool that has purposes embedded in it. Chapter 4 explains how such an understanding of grammar is further transformed in light of the Christian understanding of the Incarnation—that is, the teaching that the infinite difference between God and creation is crossed by God's Word, his Logos, becoming human. Such a vision of grammar implies that words can be not only like tools but also like seeds. Chapter 5 focuses on the verbal art of logic, while chapter 6 focuses on rhetoric. These chapters consider what happens when we construe these arts variously as neutral tools, as purposive tools, and as seeds. Logical propositions find their fulfillment in the drama of inquiry that is intrinsic to human communion with one another and with God. Similarly, the traditional tasks of the orator become transformed. Central to Christian faith is the claim that God's Word—the divine speech

through whom creation came into being—has become human. As a result, Christians believe that it is possible for verbal persuasion to communicate life for the good of others, rather than necessarily being a form of manipulation. Ultimately, both logic and rhetoric find their highest end in the action of worship, understood as human participation in the self-giving divine life.

In light of this account of the three verbal arts, the seventh chapter returns to the question of formation. As it happens, how well students are ultimately able to practice the arts of grammar, logic, and rhetoric depends on a distinctive kind of formation that comes most readily through the activity of translation, an activity which is often part of the study of ancient languages, among which Latin is distinctive. If Latin is considered only for its formational benefits, which are similar to other ancient languages, it may be imagined like a purposive tool, and thus interchangeable with other languages. However, Latin also provides the genealogical source for modern academic disciplines. If we are concerned with understanding how the testimonies of the past make present knowledge possible in the modern world, we can recognize how Latin is also like a seed with a particular genealogy. In this sense, Latin is important specifically because we live in the age of global information technology: it provides unique formative benefits for the verbal arts, and it gives access to the historical testimonies that go beyond our culture's presumption of the past's irrelevance. The study of Latin can do this because it is not only like a purposive tool but also like a seed.

Throughout this book's account of the transformed verbal arts, the footnotes invite readers to consider, if they choose, some of the specialized scholarly work on Christian faith and teaching practice.² These notes also

^{2.} Contemporary discussions of practice are often in dialogue with some version of Alasdair MacIntyre's Aristotelian definition, offered in *After Virtue*, 2nd ed. (Notre Dame, IN: University of Notre Dame Press, 1984): "any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved are systematically extended" (187). As David I. Smith and James K. A. Smith note, in "Practices, Faith, and Pedagogy," their introduction to *Teaching and Christian Practices*, eds. David I. Smith and James K. A. Smith (Grand Rapids: Eerdmans, 2011), for contemporary discussions of pedagogy, the difficulty with this definition is that it leads to the conclusion that "teaching is not a practice on the grounds that it lacks its own internal good to serve as its *telos*, but instead serves a variety of goods derived from the particular ideas and practices being taught" (11). Smith and Smith attempt to set aside MacIntyre's objection, but the underlying issue is that MacIntyre refuses to grant the self-legitimating narrative of the social sciences—of which modern pedagogical discourse is a species. MacIntyre's denial that teaching is properly a practice, relies on his judgment that the social-scientific attempt to give an

provide glimpses of some historical literary, philosophical, and theological roots of such scholarship. The main account presented here is a response to these voices from the past. This study is not, however, a work on the history of education, nor is it any kind of strictly historical inquiry. Rather, this book is an intervention in the present that draws from the testimony of the past.

Some of the personal benefits that this book offers through its very idiom may not become apparent until several chapters have unfolded—until, for example, chapter 5 explains how a text may be indirectly oriented toward participation. This requires, above all, patience and perseverance. The effort is worthwhile because this study does not simply *describe* the kind of educational growth by which, for example, easy pleasures are exchanged for more difficult pleasures; rather, it leads readers *through* such a process. Such growth in understanding cannot be effected through a breezy plot summary. Like the germination and growth of any seed, such learning requires time to unfold. In my experience, it usually takes longer than I expect.

Located at the back of the book are three features to help readers cultivate the habits of attention, patience, and responsible action: a detailed glossary of key concepts, interpretive reading questions for each chapter, and application-oriented discussion questions for each chapter. The glossary and reading questions will be most helpful for improving focus and tracking arguments across multiple chapters. The discussion questions, by contrast, are oriented toward imagining how each chapter results, directly or indirectly, in changed practices.

This book is also a promise, in that it aims to be the first in a potential series of four volumes.³ The present volume gives an initial theological account of all three verbal arts, while the ensuing volumes will focus respectively on grammar, logic, and rhetoric. In those subsequent three volumes,

account of the procedural forms and tangible circumstances of "teaching in general" merely obfuscates the practical content, agency, and purposes of learning in a given instance. As MacIntyre goes on to explain, practices, as he uses the term, include both the arts and the sciences, among other activities (188). This is why, I suggest, the verbal arts of grammar, logic, and rhetoric can be understood as "practices" in a manner that "teaching in general" might not be: if the verbal arts are construed not as mere abstractions, they will include, in addition to general verbal forms, particular content, histories of action, and purposes of discourse. MacIntyre seems to imply that teaching should be understood as an apprenticeship in one of the particular arts or sciences, rather than as a universal method that mistakenly claims to be without particular content, practitioners, or purposes.

^{3.} The concluding Coda provides a more detailed account of the three projected volumes.

I intend to unfold that vision across a variety of disciplines: the volume devoted to grammar will draw on Hugh of St. Victor's Didascalicon as well as Bonaventure's *Retracing the Arts to Theology*⁴; the volume focused on logic will take Anselm's Proslogion as a central text for engagement; the volume on rhetoric will offer an interpretation of Augustine's Confessions. This first volume introduces the kind of reading that the successive volumes seek to model: that is, slow, attentive, and charitable reading oriented toward discernment.⁵ A version of such reading has long been understood as the practical beginning of Christian wisdom—an introduction to reverence regarding the use of names, most notably divine names. Because of the conceptual character of this first volume in outlining the vision for those that follow, the pedagogical reflections that conclude chapters 3 through 6 should be understood as both a promise and an invitation. They are a promise to unfold the pedagogical consequences in more detail in the ensuing volumes, and they are an invitation for you, as reader, to join in that imaginative process.⁶ The concluding Coda provides further details regarding how you can join the conversations that will shape those subsequent volumes.

What is at stake in the contrast between these visions of language—as a neutral tool or as a seed—is whether we have the ability to imagine that our

^{4.} This is my own translation of the title given to Bonaventure's Latin work, *De Reductione Artium ad Theologiam*. Although published under the English title, *On the Reduction of the Arts to Theology*, trans. Zachary Hayes (Bonaventure, NY: Franciscan Institute, 1996), I find the rendering of *reductio* as "reduction" to be more misleading than helpful.

^{5.} Compare David I. Smith, "Reading Practices and Christian Pedagogy: Enacting Charity with Texts," in Teaching and Christian Practices, 43–60. Smith draws upon the writings of Eugene Peterson, Eat this Book: A Conversation on the Art of Spiritual Reading (Grand Rapids: Eerdmans, 2006), as well as Paul Griffiths, Religious Reading (Oxford, UK: Oxford University Press, 1999) and Alan Jacobs, A Theology of Reading: The Hermeneutics of Love (Boulder: Westview Press, 2001). Any contemporary account of reading and charity is ultimately indebted, whether by negation or appropriation, to the ancient account of these matters in Augustine's De Doctrina Christiana, translated by Edmund Hill as Teaching Christianity (New York: New City Press, 1996). See esp. 3.8.12–3.10.16. For my own account of how an Augustinian hermeneutics of charity provides a critique of contemporary reader-response theory, see Phillip J. Donnelly, Rhetorical Faith: The Literary Hermeneutics of Stanley Fish (Victoria, BC: English Literary Studies, 2000).

^{6.} The Lost Seeds of Learning may also be plausibly construed as a theological companion to two very fine recent books: David I. Smith's On Christian Teaching: Practicing Faith in the Classroom (Grand Rapids: Eerdmans, 2018) and Perry L. Glanzer & Nathan F. Alleman's The Outrageous Idea of Christian Teaching (New York: Oxford University Press, 2019). Smith focuses on how Christian faith may shape specific forms of practice in the classroom. By contrast, Glanzer and Alleman focus on the faith identities of the agents doing the teaching. In practice, however, both of these studies, once they get into the details of their respective accounts, are interested in what I describe in chapters 3 and 4 as the crucial "fifth" question: what are the dynamic connections that unite the agents, contents, forms, and purposes in any particular moment of teaching?

own words are more than a form of self-serving fabrication. If we lose the ability to imagine how words are like seeds, we risk presuming that language cannot serve any purpose greater than our own. If we cannot imagine how human words can communicate self-giving life, then we lose the ability to imagine how Christian faith is possible. Ultimately, as chapter 1 explains, by understanding the verbal arts as seeds rather than neutral tools, Christians can sustain a vision of human formation that cultivates attention, patience, and responsible action, rather than distraction, impatience, and paralysis.

CHAPTER ONE

Coming to Terms: Verbal Arts and Christian Imagination

Rather than offering a variety of anecdotes and analogies, this book invites you to participate in a drama of inquiry that unfolds a central comparison between the verbal arts and the power of a seed. Ultimately, I propose that, in contrast to the tendency to construe the verbal arts as neutral tools, we understand them better in a twofold manner: both as purposive tools and as seeds. The inquiry here focuses on the image of seeds, however, because that is the element most often missing from our cultural imagination. This drama begins with three questions that may seem simple, but the attempt to answer them will lead us to some of the most basic issues concerning human formation. These questions are: What are the three traditional verbal arts? How do these verbal arts relate to Christian faith? What is at stake in whether we imagine the verbal arts as tools or as seeds? In answering these questions, we need to be clear about the meanings of key terms, but the concern here is not merely with semantics or with the historical usage of these words. For example, in discussing the traditional meaning of the term *art*, or in stipulating a definition for grammar, my intent is not to argue for a change in how we use those words in contemporary English. The point of these definitions—which may seem counterintuitive—is not to argue about the details of linguistic usage but to reveal an aspect of reality that our usage might otherwise conceal.

What Are the Three Traditional Verbal Arts?

The category of art does not traditionally refer only to fine arts, such as painting or music, or even to artifacts, as our contemporary use of the term often assumes. The ancient terms that we often translate into English as *art* (whether Greek *techne* or Latin *ars*) indicate something more like "living

knowledge of how to make any given thing." In modern English we might use the word *craft* to name such knowledge, but our common distinction between lowly crafts and the more exalted arts may also mislead us. Both the so-called mechanical arts and liberal arts, as well as the fine arts, require living knowledge of how to make something. We lose sight of what all these actions have in common if we limit the category of art to the realm of fine arts. On the one hand, our current use of the term *art* tends to conceal the role of creativity and wisdom in the activities of practical making, such as plumbing or engineering. On the other hand, by limiting artistic making to fine arts, we also risk misleading ourselves about the practical actions required for making things of beauty or enjoyment. The various kinds of knowledge oriented toward making, or arts, are distinguished from each other by what they make: the mechanical arts make useful tangible artifacts, while the seven liberal arts make intellectual things that consist of signs—whether words, numbers, or points.²

Those specific liberal arts that consist of words (Latin, *verba*) are grammar, logic, and rhetoric, hence the name *verbal arts*. The verbal arts are all

^{1.} The fine arts are distinguished by the fact that their primary purpose is enjoyment through their very being, rather than serving only as an instrumental means to something else. In this sense, fine arts are distinguished not by a complete absence of purpose but by having a particular purpose (in this case enjoyment) that is not a means to something else (that is, a non-instrumental purpose). Confusion on this point often arises in our culture from the assumption that all purposes are, by definition, instrumental purposes. There is a sense in which both mechanical and liberal arts can *become* fine arts when their primary purpose becomes such enjoyment. This is what happens when, for example, the verbal art of rhetoric becomes poetry or when the practical art of weaving becomes tapestry making.

^{2.} The first three traditional liberal arts are grammar, logic, and rhetoric, which all concern words and are called verbal arts or the trivium. The other four of the liberal arts go by the name of the quadrivium or mathematical arts. The arts of arithmetic and music (actually, the theory of number ratio) both consist of numeric signs in the same way that the trivium relies on verbal signs. The other two mathematical arts of geometry and astronomy both consist of points, whether singular or extended into lines, whether stationary or in motion, in two, three, or four dimensions. Astronomy was understood by the Platonist tradition as, in effect, three-dimensional geometry in motion. See Plato, Republic, trans. G. M. A. Grube and C. D. C. Reeve (Indianapolis: Hackett, 1992), 525c-531c. In the account given by Socrates, the purpose of all the mathematical arts is to turn the soul from the sensible to the intelligible. Even when readers have realized that physical music, in Socrates's account, is only an imitation of the mathematical theory of number ratios, there remains the further need to recognize that numbers are themselves only signs (or images) that reveal truth. In Socrates's idiom, mathematics is not truth; it is a dream about truth. There are obviously many other kinds of signs, whether natural or artificial; but the point is that all seven arts involve using a tangible object to signify something that is more than tangible (never less than tangible). Many people readily grasp how words and numbers can function as signs. Less apparent, however, is the fact that, in ancient mathematics, the word for geometric point simply is the word for sign in Greek: semeion. See Euclid, The Thirteen Books of the Elements, vol. 1, trans. Thomas L. Heath (New York: Dover, 1956), 153-55. The oldest source that arranges the liberal arts specifically into a group of seven is the fifth-century writer, Martianus Cappella, in his Marriage of Philology and Mercury, vol. 2 in Martianus Cappella and the Seven Liberal Arts, trans. William Harris Stahl, Richard Johnson, and E. L. Burge (New York: Columbia University Press, 1977).

oriented toward making, but any art consists not in the things that get made, but in the living knowledge that gives rise to the action of making.³ Thus, when I use the word *art* throughout this study, it has this specific sense. Art is not primarily an artifact or even the skill needed to make beautiful things, but living knowledge of how to make something. In light of this understanding of art in general, here is a preliminary definition of each verbal art. Grammar is living knowledge of how to choose and arrange words to make effective gestures toward reality.⁴ The art of logic uses words to make rational arguments.⁵ Rhetoric uses words to make speech or writing that addresses the whole person.⁶

Art is not primarily an artifact or even the skill needed to make beautiful things, but living knowledge of how to make something.

These verbal arts—understood as productively oriented knowledge—consist of words in two different senses. At one level, the intellectual content of the verbal arts consists of knowledge regarding words, in the same way that carpentry requires knowledge regarding building materials. There is, however, a second sense in which the verbal arts consist of words, a sense which is

^{3.} I specify living knowledge not to distinguish it from knowledge that may be dead but in order to emphasize that all real knowledge of any kind subsists in living persons and is, in this sense, alive. This is in contrast to a code, or information, that may subsist in something that is not alive. Information may subsist in something that is either sub-personal or even dead; knowledge, however, subsists only in living persons (whether human or divine).

^{4.} As I explain in the ensuing chapters on grammar, *reality*, as I use the term here, includes entities, actions, and the relationships among entities and/or actions. The category of entities necessarily includes other words, as well as concepts and tangible particular things. The stipulation *effective*, implies judgments regarding what is appropriate for the occasion, the agent, the audience, the topic, and the purpose of the utterance. As I explain in chapter 3, a full appreciation of grammar as a verbal art that is oriented toward making will result in a complete definition of grammar as "knowledge of how to make faithful and appropriate verbal renderings of reality." By reading this note, you have self-identified as someone who appreciates that each term in such a definition may be subject to controversy. The chapter devoted to grammar considers each key term in that definition.

^{5.} In identifying logic as a verbal art that consists of words, I am implying a distinction between traditional language-based logic and modern symbolic logic. The notes to the chapter devoted to logic consider what is at stake in this distinction. To the extent that symbolic logic consists of signs, it is still a liberal art, if not strictly a verbal art. At the same time, to the degree that the symbols involved gesture toward any reality beyond themselves, such logic risks functioning implicitly as a kind of grammar. Advocates of modern formal logic may well deny such an implication.

^{6.} The productive character of the verbal arts includes the making of those verbal arrangements that we call "the interpretation of texts." My emphasis upon production does not exclude interpretation. Rather, my point is to emphasize the role of reception in our acts of making. In other words, there is a productive character in receiving what we are given when we read in cooperation with an author.

unique among the various arts. Our understanding of words comes to us only through words themselves. In this sense, our lived experience of language provides not only the content but also the very form of the knowing that makes the verbal arts possible. Why is this important to appreciate? As we shall find, this explains not only why words can be like seeds but also why the verbal arts (the productive knowledge of how to use words) can be like seeds. Words can be like seeds in their potential to communicate self-giving life; the verbal arts have the same potential to the degree that they consist of the same kind of knowledge that is alive. Without this clarification, we might be inclined to imagine that words are like seeds but that the arts are more like the tools that we use to care for those seeds.⁷ There is indeed a profound sense in which what I describe here renders the verbal arts as something like the care and feeding of words. But the living knowledge of how to care for and feed plants should not be confused with the tools that such caring actions may require. To imagine that a tool can give us an adequate analogy for understanding the arts is like mistaking your hammer for the living knowledge of how to use a hammer. If we imagine that an art is reducible to a tool, then we risk reducing something that is alive (the interpersonal act of knowing) to something that is dead. Because such living knowledge exists only in persons, to reduce any art to a tool, also risks reducing persons to tools.8

If the verbal arts are united by the fact that they all consist of words, what distinguishes them from each other is their scale of discourse, whether in speech or writing, and their sense of purpose. Although grammar and rhetoric have very similar concerns, grammar focuses on diction and syntax on the level of the words and their arrangement into statements. Rhetoric includes grammar, but its scale is larger: it focuses on arguments and their arrangements, as well as variations in style, in composing entire discourses. Between

^{7.} I am grateful to Jeff Bilbro for inviting this clarification.

^{8.} This is why, as we shall see in chapter 4, the biblical cosmic imaginary implies that words, knowledge, and persons are all potentially like seeds in some respects. I borrow the term cosmic imaginary from Charles Taylor, A Secular Age (Cambridge, MA: Harvard University Press, 2007), 322–51. It refers to "the way the universe is spontaneously imagined and therefore experienced" (325), as distinct from what Taylor calls a social imaginary which "consists of the generally shared background understandings of society which make it possible to function as it does" (323). As David I. Smith helpfully notes, a social imaginary is not to be confused with what is typically identified as a worldview, in that a social imaginary concerns not so much a series of explicit doctrines (as a worldview does) but an often implicit shared way of imagining things. See David I. Smith, On Christian Teaching 89–91. In the same way, I use the designation biblical cosmic imaginary to indicate an implicit sense of how Scripture invites readers to imagine reality (both cosmic and social reality).

these two arts, in terms of scale, stands logic. It relies on the selection of terms and the arrangement of those terms into propositions, thus arising from grammar. The primary focus of logic, however, is the formulation of arguments, whether valid or invalid, that arise from putting propositions together. In this sense, the arguments constructed by logic are larger in scope than the terms and statements addressed by grammar but smaller in scope than the holistic persuasive discourses composed by rhetoric. This situation among the verbal arts means that, although they can be distinguished conceptually, they are often, in practice, inseparable. This is especially the case for logic, to the extent that its terms find their origin in grammar and its logical inferences are often absorbed in persuasive means and ends that go beyond strictly rational appeal. However, it also applies to grammar, to the extent that the rhetorical appeal to *ethos* and *pathos*, for example, can often rely on the subtle connotations of particular words and their arrangement. The selection of the subtle connotations of particular words and their arrangement.

Readers who are familiar with the history of terms such as *liberal art* and *mechanical art* will notice that I distinguish between these arts on the basis of their subject matter—the liberal arts make things that consist of signs (words, numbers, or points), while the mechanical arts make tangible things. This way of making the distinction between arts, based on their subject matter, turns out to be controversial. As we shall find, what makes the liberal arts ultimately liberal, or free, is their role in the pursuit of knowledge for its own sake and not merely for economic purposes. There is an ancient tradition that interprets the liberal arts as the realm of the free (*liber*) citizen who participates in political deliberation, as distinct from the person in bondage who, if not a slave, is concerned only with survival or mere wealth.¹¹ This political definition makes it possible to reject the liberal arts on the grounds that they rely historically on unjust class distinctions and economic oppression. What

^{9.} Consistent with note 5 above, I use the word *proposition* as a synonym for *propositional statement* because I focus here on language-based logic.

^{10.} Ethos, pathos, and logos, are the traditionally identified means of persuasion—the means by which conviction (pisteis) is achieved by a speaker in the hearts and minds of listeners. Ethos appeals to the character of the speaker—specifically the belief that the speaker understands the situation and is well intentioned. Pathos involves an appeal to the emotions, often through the use of vivid description and narration. Logos involves the explicit appeal to reasoning, whether inductive or deductive. Compare Aristotle, On Rhetoric, trans. George A. Kennedy (Oxford: Oxford University Press, 1991), 1355b—1356a

See Bruce A. Kimball, Orators and Philosophers: A History of the Idea of Liberal Education (New York: College Board, 1995), 14–20.

such a view fails to account for, however, is that the dynamics of mass culture have now made knowledge of the liberal arts, both the verbal and mathematical arts, necessary for survival. In a world without the printing press (i.e., a manuscript culture), literacy and math skills could remain the possession of a privileged elite. In a culture of information technology, however, such skills are now crucial for economic survival, as well as social navigation. ¹² By contrast, many of the traditional kinds of knowledge that once made up the mechanical arts have become activities that, in the wake of industrial production, are now pursued as leisure activities (e.g., hunting, knitting, and handcraft woodworking). ¹³

Thus, the distinction between the liberal arts and the mechanical arts can no longer be made on the basis of their social functions, because their social functions have now become so fluid as to be, in some cases, reversed: the liberal arts, verbal and mathematical, are now required for survival in the age of information technology, while many mechanical arts that were once needed for survival, such as weaving or candle making by hand, are now pursued as leisure activities, done for pleasure rather than for survival. Thus, the mechanical and liberal arts can no longer be distinguished from each other on the basis of their necessity for survival. They can, however, be distinguished on the basis of what kinds of things the arts make—the mechanical arts make tangible things, and the liberal arts make intellectual things that consist of signs. Among the liberal arts, the four mathematical arts warrant their own extensive treatment. Our focus here, however, will be the verbal arts—those specific liberal arts whose matter consists of words (*verba*). In the age of information, such an ability to use words well is no longer a luxury, but a necessity.

Despite their intensely practical benefits, the ultimate importance of the verbal arts is that they allow humans to pursue something more than mere survival. The arts of grammar, logic, and rhetoric find their fulfillment in

Compare Marshall McLuhan, Understanding Media, ed. W. Terrence Gordon (Berkeley: Ginko Press, 2003), 142, and Tony Wagner, The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need and What We Can Do about It (New York: Basic Books, 2014), esp. 1–42.

^{13.} I plan to address the relationship between the mechanical arts and the liberal arts more fully in the subsequent volume devoted to grammar.

^{14.} For the mathematical counterpart to the present study, which aims to do for the mathematical arts what this book does for the verbal arts, see Ravi Jain's forthcoming book, *The Enchanted Cosmos* (working title).

asking what my friend Todd Buras calls "wisdom questions." 15 Such questions move beyond "How will I make a living?" to "What am I living for?" If such questions of purpose strike you as vague, abstract, or impossible to answer, that is, I suggest, a sign of the strangeness of the times in which we live. A sense of personal purpose that goes beyond the needs of survival is arguably one of the most urgent needs in our age of technical mastery. One sign of this urgency appears in the extraordinary number of deaths by suicide among physicians in the U.S. According to one recent study that compared a range of professions, including the military, the national suicide rate is highest among physicians. 16 This suggests that some of the most exalted forms of technical excellence and economic security that our society offers may not be sufficient to provide a purpose that will sustain people through the suffering that inevitably comes to each life. No matter how you make a living, at the end of the day, you must live with yourself. To be clear, the verbal arts by themselves do not constitute the whole of wisdom (Greek, sophia), but their practice is integral to the *pursuit of* wisdom (*philo-sophia*)—that is, integral to any reflection on what makes a particular life worth living. 17 Thus, although this book focuses specifically on the verbal arts, I do not presume that they are adequate by themselves for a complete education. The account given here assumes as a larger context the kind of integrated holistic education outlined by, for example, Kevin Clark and Ravi Jain in The Liberal Arts Tradition. 18

^{15.} Todd Buras explains "wisdom questions" in detail in his forthcoming textbook on moral philosophy. My point here is simply that to pursue such questions well requires the verbal abilities that are typically induced through grammar, logic, and rhetoric.

^{16.} Pauline Anderson, "Doctors' Suicide Rate Highest of Any Profession," *Medscape*, May 7, 2018. Anderson's report is based on a study by Deepika Tanwar that was presented at the 2018 annual meeting of the American Psychiatric Association. According to Tanwar, the suicide rate among physicians, at 28–40 per 100,000, is "higher than among those in the military" and is more than double the rate of the general population (12.3 per 100,000).

^{17.} As Thomas Aquinas points out, "The seven liberal arts do not adequately divide speculative philosophy." *The Divisions and Methods of the Sciences (Super Boethium De Trinitate, Questions 5-6)*, 4th ed., trans. by Armand Mauer (Toronto: Pontifical Institute of Medieval Studies, 1986), Q5.art.1.ad3. At one level, this is simply to acknowledge that wisdom does not exclude the liberal arts but involves more. Following Hugh of St. Victor, Aquinas' point is that the arts (verbal and mathematical) prepare a person for the pursuit of wisdom, a pursuit that includes the arts and also goes beyond them. Compare Hugh of St. Victor *Didascalicon*, trans. Jerome Taylor (New York: Columbia, 1991), 2.1 and. 3.1. Bruce Kimball, in *Orators and Philosophers*, 66–67, interprets the above statement to imply that Aquinas reduced the trivium to a logic that was "stripped of any connection to ethics" and was instead "oriented purely to intellectual formation." Kimball's exaggeration seems to rely on a misunderstanding of *intellect* and a resulting failure to appreciate that, for Aquinas, intellect is integral to the volitional ordering of the desires that constitute ethical formation.

^{18.} See The Liberal Arts Tradition, rev. ed. (Camp Hill, PA: Classical Academic Press, 2019), 1–11, where Clark and Jain identify seven elements that are crucial for a complete Christian liberal arts education:

VERBAL ARTS OR LANGUAGE ARTS?

If the verbal arts are united in their use of words, why not simply call them language arts? I use the term verbal arts specifically to distinguish them from what normally happens under the rubric of language arts in our contemporary educational culture. In my experience as a student, the term language arts, usually indicated two very different activities: either a soul-deadening drill on some aspect of English vocabulary, usage, or syntax, or else a lively discussion of a fictive, sentimental story that was understood to be, in some sense, self-indulgent—at least for some working-class students such as myself. The impression of self-indulgence seemed to arise from the combined effect of two assumptions: first, the belief that only useful knowledge could serve as a legitimate public good; second, the belief that made-up stories were fundamentally useless, in that they did not contribute directly to a tangible or economic educational benefit. By contrast, the earnestly "useful" drills on vocabulary, usage, and syntax typically left no lasting impression. This book presents the verbal arts as an alternative to both of these tendencies in modern language arts—tendencies which are really two sides of a single vision of language.

As it happens, the language arts, as they are practiced in our culture, are often a site of considerable acrimony. On the one hand are those who view words primarily as a form of individual self-expression. On the other hand are those who understand language as a mechanical system that must be mastered for social navigation. The arguments on both sides of such debates arise, I suggest, from the modern fact-value distinction. Although it was

⁽¹⁾ cultivating actions and attitudes of devoted reverence toward those who give us life (piety); (2) embodying participation in the fine arts in a manner that moderates appetites (music); (3) embodying athletics competition that instills courage (gymnastic); (4) establishing apprenticeship in the verbal arts, the mathematical arts, the common arts, and the fine arts (the arts); (5) instilling a desire for wisdom (knowledge of causes) regarding human and non-human nature (natural philosophy); (6) encouraging a desire to understand the human good as it relates to particular past and future actions (moral philosophy); (7) growing in the knowledge of God (in the affections as well as the understanding) (theology). The specific key terms that Clark and Jain use (indicated in parentheses) are, of course, each contestable. The burden of their book is precisely to make a case for what they mean by each term. They rightly note, for example, that piety (pietas) is not a specifically Christian or even specifically religious term but is no less crucial for that reason. Likewise, by the term theology, they mean not simply modern conceptual truth about God but a union of delight and understanding that would have been recognized as theology by Augustine, Bonaventure, Wesley, and A. W. Tozer no less than by Aquinas. My summary recapitulation of each term above does imply a refinement of Clark and Jain's account at some points.

most famously articulated by David Hume in the eighteenth century, 19 the fact-value distinction remains a belief that is deeply and widely shared, even if not recognized as such. It is not merely a doctrine about words but a vision of reality. In this view, reality consists of tangible, neutral matter (facts), while the source of worth (value) that attaches to those things is only a result of human sentiment, whether arising from individual purpose or social arrangement. In this vision of reality, there is no way to deduce a value judgment, or an imperative statement about what one ought to do, from any account of the way things are because reality is assumed to be neutral. For example, both David Hume and Aristotle could look at the same hammer and could give a series of statements describing it. Hume would describe the hammer as neutral, in that it could be used for good or bad purposes. By contrast, Aristotle would describe the hammer as a good hammer to the extent that it fulfills its highest potential as a hammer. It may also be a corrupted (broken) hammer, but it won't be neutral. For Aristotle (or any of the ancients), the highest potential is something that inheres in the object and is not simply a result of human decision. The difficulties that result from trying to use a hammer as a dinner fork, for example, reveal that it is better suited for some purposes rather than others. By contrast, Hume would insist that we could, if we chose, melt the hammer and make it into a fork. At that point, however, Hume would be simply assuming that reality is reducible to neutral material and that there is no good intrinsic to the being of either the hammer or the fork. Against Hume's assumption—which arguably pervades contemporary culture—premodern culture tended to believe that individual things do have some worth in themselves. In this sense, the fact-value distinction is generally presumed by modern culture: reality is assumed to consist of neutral facts, while values are presumed to be human impositions upon the world rather than arising from the intrinsic worth of things in the world.

This fact-value distinction permeates many of our cultural debates about language arts. There are, for example, long debates between those who maintain that grammar is purely a description of historical usage (fact) and those who maintain that there are important positive social goods embedded

David Hume, A Treatise of Human Nature (1739), ed. Ernest C. Mossner (New York: Penguin, 1969), 3.1.507–527.

in grammatical prescriptions (value).²⁰ This same disconnection between fact and value underlies debates regarding whether direct instruction in English grammar (as a description of language function) does or does not contribute in any discernible manner to improvement in writing.²¹ The ensuing chapters on grammar show how understanding grammar as a verbal art—as living knowledge oriented toward making—exposes the mistaken assumptions at work on both sides of such debates. At a deeper level, the very opposition between descriptive and prescriptive grammar relies on a misunderstanding of language: namely, the belief that words are like neutral tools. This explains why I refrain from using the designation *language arts*. There remains, however, the question: What are the benefits that come from using the traditional categories of the verbal arts?

THE SEQUENCE OF THE TRIVIUM

When named together, these three verbal arts—grammar, logic, and rhetoric—are called the *trivium* (or three-fold path). This name derives from the important role that all three arts had in the medieval university curriculum, in which the verbal arts, together with the four mathematical arts (*quadrivium*), served as the paths (*viae*) that led to all other studies.²² Owing to the influence of Dorothy Sayers, the arts of grammar, logic, and rhetoric have been construed more recently as corresponding respectively to different stages of student psychological development. In Sayers's account, *grammar* corresponds to an early phase that focuses on memorization and observation, while *logic* corresponds to an early-adolescent phase that enjoys arguments, and *rhetoric* indicates a stage of advanced development which includes a

^{20.} For what is arguably the clearest account of how such debates unfold in the context of modern pedagogical disagreement, see Patrick Hartwell, "Grammar, Grammars, and the Teaching of Grammar," College English 47, no. 2 (1985): 105–127. Hartwell identifies five different definitions of grammar, the first two being descriptive and the last three being prescriptive. What Hartwell does not consider is the possibility of grammar as a verbal art which crosses the presumed division between description and prescription—that is, as a living inter-personal knowledge that is productive and purposive, an art in which students may be apprenticed and may therefore improve in a manner that accords with their language needs (subjectively and objectively).

^{21.} In "Grammar, Grammars, and the Teaching of Grammar," Hartwell takes precisely such debate as the focus for his analysis.

^{22.} For an account of the historical circumstances that led to that particular medieval formulation of the liberal arts, and the varied kinds of configurations in relationship between the trivium (verbal arts) and quadrivium (mathematical arts), see Kimball, *Orators and Philosophers*, 44–56.

power for expression and persuasive synthesis of all that has come before.²³ Sayers's particular interpretation of the trivium has resulted in many Christian schools using the names *grammar*, *logic*, and *rhetoric* to identify what had previously been known respectively as elementary, middle, and high school. This model has been widely adopted by those schools influenced by Douglas Wilson's account of the verbal arts in *Recovering the Lost Tools of Learning*.²⁴ This approach was also helpfully expanded and elaborated for a broader readership in the encyclopedic and practical work done by Susan Wise Bauer and Jessie Wise in *The Well-Trained Mind*.²⁵

In response to such accounts of the verbal arts, Robert Littlejohn and Charles Evans argue that such an interpretation of the trivium as a developmental chronology misrepresents the verbal arts and disregards the realities of actual curriculum sequence. They point out, for example, that students practice oral communication (an aspect of rhetoric) from the earliest days of grammar school. There is also the fact that students do mathematics from the earliest stages, rather than reserving the mathematical arts until after the study of the verbal arts is completed, as would seem to be implied if the seven liberal arts are taken to be sequential. Littlejohn and Evans are obviously correct to note that students may pursue some aspect of all three verbal arts at any stage of education. They are also correct to note that the trivium is not a model for students' psychological development. Their critique, however, does miss something important: namely, that there is a legitimate sequence to the verbal arts that is followed when we learn anything new. That sequence is not a result of the learner's stage in human development, but it is indeed a sequence.

For example, when someone begins to learn something new, even at the age of sixty-five—whether learning a new skill, such as making pottery, or studying a period of history, or learning about another culture—in each case, the first things to learn are: (1) the vocabulary, (2) the realities to which the

^{23.} Sayers, The Lost Tools of Learning, 14-15.

^{24.} Douglas Wilson, Recovering the Lost Tools of Learning (Wheaton: Crossway, 1991).

^{25.} Susan Wise Bauer and Jessie Wise, The Well-Trained Mind: A Guide to Classical Education at Home, rev. ed. (New York: Norton, 2004). Although explicitly oriented toward homeschoolers, the comprehensive, detailed, and practical character of the work has made it a key source for educators in a wide range of contexts.

^{26.} Robert Littlejohn and Charles T. Evans, Wisdom and Eloquence: A Christian Paradigm for Classical Learning (Wheaton: Crossway, 2006), 39–40.

vocabulary refers, and (3) the manner of using this new vocabulary in order to perform this new activity or understand a given reality. In effect, no matter our age, one of the first things we learn when we start learning something new is how to use the words relating to that new thing—that is, the grammar. Once we begin to master what plausible speech sounds like in this new context, we are then in a position to test how certain statements may (or may not) imply further statements and lead to new discoveries. In short, we begin to learn how logic is applied to this new area of learning. Finally, we learn to speak persuasively with others about our new study, whether woodworking or penguin migration. Such rhetorical skill requires learning to discern what is at issue in a particular debate at any given point. It also involves learning that, if we want to persuade people rather than simply win arguments, we need to consider the affections (ethos and pathos) as well as the role of understanding. In practice, of course, none of these activities is isolated from the others they are inseparable to the extent that they all involve words, but there is a recurring cycle of skill development in which improved mastery of how the words may relate to each other and to the reality being discussed (grammar) can then give rise to further improvement in rational analysis (logic) and expressive persuasion (rhetoric). Thus, while it is correct to insist that the verbal arts do not correspond to any particular stage in developmental psychology, there is a sense in which our practice of these arts in learning anything new does tend to follow a general sequence, regardless of the learner's age.²⁷

Regarding the verbal arts, as such, one final point needs to be made: attentive readers will note that, in referring to the verbal arts as part of the liberal arts, I do not often refer to classical education. Many people do indeed use the term *classical* to designate the liberal arts tradition that I describe here. Such usage can, however, be misleading. This is especially the case among those who associate the term with a narrow historical focus on Greco-Roman antiquity or a commitment to social or economic class divisions. ²⁸ I use the

^{27.} Although what I describe here is consistent with the verbal arts tradition, to speak of a grammar, logic, or rhetoric that is specific to any given discipline is to introduce an innovation in the tradition, strictly speaking. I am grateful to Brian Williams for reminding me of this.

^{28.} See, for example, Lee T. Pearcy, *The Grammar of Our Civility: Classical Education in America* (Waco: Baylor University Press, 2005), 8–10. Pearcy defines "classical education" as a tradition that is limited specifically to "ancient Greece and Rome" and the renewed appreciation of their "ethical and moral power" in the Renaissance. In such a view, the medieval traditions of liberal arts education appear, by contrast, too practical and not sufficiently elitist to be properly "classical." For an alternative

designations *liberal arts* and *verbal arts* in order to clarify three points that might otherwise be missed in using the term *classical*: (1) that such education involves not a narrow historical antiquarianism but living traditions that extend into the present; (2) that the liberal arts are deeply practical, whether considered in themselves or in relation to the mechanical arts; and (3) that such arts find fulfillment in the pursuit of wisdom that is not necessarily captive to the dynamics of social or economic oppression. The phrase *liberal arts* thus indicates a broad educational tradition in which the verbal arts participate—a tradition that aims to be both practical and widely accessible. The living knowledge of such verbal making, whether grammar, logic, or rhetoric, is crucial for everyone in the age of information.

HOW DO THE VERBAL ARTS RELATE TO CHRISTIAN FAITH?

The Transformational Character of Scripture

For Christians, a central purpose for studying the verbal arts is to improve our ability to receive and to share Scripture as a testimony of God's living word that continues to speak. There are also practical reasons for learning how to use words well, but the highest purpose for Christians undertaking such study is to improve the ability to hear the divine voice. People of other faiths and people of no religious faith obviously have their own reasons for studying the verbal arts, and some of those reasons overlap with the purposes identified here. For Christians, however, the study of words and how they signify has always been central to Christian formation and devotional practice. In this respect, the verbal arts are not optional but integral to the life of any Christian who is interested in maturing in the faith.

interpretation of at least the Augustinian legacy that informed medieval Latin educational institutions, see Charles Norris Cochrane, *Christianity and Classical Culture: A Study of Thought and Action from Augustus to Augustine* (London: Oxford University Press, 1944), esp. 359–455.

The highest purpose for Christians undertaking [the study of the verbal arts] is to improve the ability to hear the divine voice.

In order to appreciate how the verbal arts relate to Christian faith, we need to have some shared sense of what is meant by the latter term. By Christian faith I mean living trust in the person of Christ. Such faith is a response to divine revelation—the revelation of the person and redemptive work of Christ. This response involves a union of faithful word and trusting deed that together proclaim, with the Apostle Paul, "Jesus is Lord" (1 Corinthians 12:3; Romans 10:9). This trust is in the living God who is revealed in the Christian Scriptures. The essential content of belief about God comes from those authoritative Scriptures and is summarized in historic creeds. Protestants, Catholics, and Orthodox Christians each have different ways of understanding the relationship between Scripture and the Church; however, they all agree that the highest purpose of Scripture is not reducible to correct information. The greatest commandment is not to get more information about God but to love God (Deuteronomy 6:5; Matthew 22:37; Luke 10:27). The ultimate purpose of faith in the crucified and resurrected Jesus is the reconciliation of all Creation to God (Romans 8:22)—by the overcoming of the effects of sin. This reconciliation, which is currently partial, includes most notably human participation in divine self-giving, identified in Greek as agape and in Latin as caritas (1 Corinthians 13:1-13). Such participation in divine love, made possible only by the forgiveness of sin through Christ, is described by Thomas Aquinas (citing John 15:15) as "friendship with God."29 This characterization of Christian faith is sufficient to include Protestant. Catholic, and Eastern Orthodox believers. At the center of all such faith is the divine person, Christ, who is also the divine "Word" (Greek, logos). Words are important because they can (with variable success) mediate between persons, whether human or divine persons. The purpose of Scripture is to reveal Christ

^{29.} Thomas Aquinas, Summa Theologiae, II.2.Q23.art.1, in Questions on Love and Charity: Summa Theologiae Secunda Secundae, Questions 23–46, trans. by Robert Miner (New Haven: Yale University Press, 2016). For a thorough and insightful account of how Aquinas participates in an ongoing theological debate regarding charity and friendship, drawing upon Scripture, Aristotle, and the monastic tradition, see Jonathan Kanary, "Transforming Friendship: Aquinas on Charity as Friendship with God," Irish Theological Quarterly (2020): 1–19.

in a manner that transforms the whole human person. The problem, however, for many Christians today is that the very shape of our daily lives forms habits of reading that actually prevent Christians from receiving the benefits of Scripture that go beyond information.

Modern Challenges to Christian Formation

By appreciating how our reading practices are shaped by daily patterns of life, we can begin to discern why a recovery of the verbal arts is so important to Christian formation. Every generation has its own particular challenges. In making observations about our present situation, I am not implying that people today are less intelligent or less virtuous than previous generations. Rather, there are specific challenges that we face today because of the cultural practices that we inhabit. In what follows, I use the word *modern* to indicate a set of social, institutional, and mechanical processes that shape our lives in the present. This is *not*, at root, a historical claim—I may, in passing, refer to how this situation arose, but I do not offer (or require) direct argument regarding how or when modern institutions developed. The use of the term *modern* in this sense is simply an observation about our present condition. Regardless of how or when it came about, we now inhabit a culture whose dominant faith is in the power of calculation to control fortune, or nature. Consider, for example, the algorithms used by your smartphone to predict your own future actions.

What I call modernity is this: a combination of products and social practices that form in us the habit of trusting calculation to solve any human problem by controlling things in the world. 30 *Calculation* involves not just instrumental (means-ends) thinking, and not merely the use of numbers. Rather, it is the presumption that all such thinking can be reduced to a procedure—an algorithm, whether logical or mathematical. The phrase *the habit of trusting* is also crucial to the definition of modernity because there is an obvious sense in which technology of some kind has always been part of any human society—from the invention of the knife to the invention of

^{30.} My definition of "modern," although not a direct quotation, is indebted to George Parkin Grant's important essay, "Thinking about Technology," in *Technology and Justice* (Notre Dame, IN: University of Notre Dame Press, 1986),11-34. Compare Craig M. Gay, *The Way of the (Modern) World* (Grand Rapids: Eerdmans, 1998), 79–130, and Albert Borgman, *Technology and the Character of Contemporary Life* (Chicago: University of Chicago Press, 1984),196–209.

clothing. Such perennial technology, however, has not always formed the habit of trusting in calculation to solve any and all human problems.

The breaking news of the last century is that the gifts of modernity (the tendency to trust in calculation for better living) have turned out to be a mixed blessing. The tangible benefits in many cases have been accompanied by personal and social losses that are often not widely appreciated or acknowledged until the new technology is fully in place. Such technologies include everything from the printing press, to the automobile, to the light bulb, to the computer microprocessor, to less exalted things such as drink vending machines and clocks. For the record, I use all of these things gratefully. The problem is not with the things themselves but with the patterns of living, learning, reading, thinking, and desiring that they tend to induce. Of particular concern are the increased isolation and mental distraction, not to mention the rootless and disposable living, that result from the increasing speed of daily motion. At the same time, the practical logic of quantification that underlies electronic media also tends to strengthen the movement toward the commodification of everything. Even among those who have not read Nicholas Carr's The Shallows: What the Internet Is Doing to Our Brains, or Sherry Turkle's *Reclaiming Conversation*, there is a growing appreciation that electronic social media, for example, has intensified a sense of isolation and loneliness among its users. 31 In evaluating the products and practices that make up modern life, we must be able to get beyond the self-legitimating stories of the modern world. To entertain doubts about the way that our culture morally forms people does not imply a repudiation of penicillin or electricity. Our gratitude for the benefits of modern technology does not mean that we are forbidden to evaluate its personal and social consequences. When I use the word *modern*, I simply name a condition (sometimes called "postmodern") that all of us share to the extent that we participate in the logic of global information technology by virtue of our daily actions—this condition includes not only our electronics but everything from our modes

^{31.} See, for example, Nicholas Carr, *The Shallows: What the Internet Is Doing to Our Brains* (New York: Norton, 2012), 17–35, 116–43. According to the research on neuroplasticity that Carr cites, the regular use of digital media changes the brain in important detrimental ways. See also the revealing account of the profound social and psychological consequences of digital technology in Sherry Turkle, *Reclaiming Conversation: The Power of Talk in a Digital Age* (New York: Penguin, 2015).

of transportation to what we eat.³² The resulting daily actions, in turn, shape our imagination, from the way that we imagine the act of knowing to the way that we imagine a fulfilled life, or even a worthwhile evening. The most notable effect of these daily actions on our imaginations, however, is to train us in the habit of trusting calculation to solve our problems by imposing our desires on the neutral matter of nature.

Why is this particular use of the term *modern* important to appreciate? It has three implications for how we understand Christian faith. First, this definition allows us to distinguish cultural habits from identity. A pattern of broadly shared cultural habits and personal or shared identity are indeed often directly related, but they are not the same thing. Second, this definition distinguishes modernity from the species of Christian faith that goes by the name *Western*. Finally, understanding some of the social and personal effects of modern information culture reveals specific challenges that it poses for Christian formation. By considering each of these issues briefly, we can begin to discern how a Christian understanding of the verbal arts provides an alternative to the dominant trust in calculation to impose our desires on the world.

When I contrast Christian faith with modern assumptions, my point is to contrast visions of life and *not* to contrast groups of people. The distinction between habits of vision and persons is important because I am concerned to show Christians (as persons) that their practices and assumed principles can become unknowingly captive to a vision of reality that undermines Christian faith. Obviously, those from other religious traditions and those with no faith tradition will formulate their own responses to the modern condition, and I do not presume to advise them; nevertheless, the social forces that train us to trust in calculation to solve our problems act upon all of us who live amid global information and entertainment technology.

^{32.} My use of the term "modern" here, and throughout this book, does not imply that there is a single homogenous thing called "modernity"; rather, I use the term to designate merely one aspect of a constellation of social, linguistic, and technological changes that have become a global movement since the industrial revolution: namely, a trust in mechanistic calculation to overcome fortune. There are, of course, other aspects to this global movement that I do not identify or discuss here. Throughout this study, I usually refer to "modern" rather than "postmodern" discourse. My usage implies a general agreement with Anthony Giddens that what is often called "postmodern" is most accurately understood as "the consequences of modernity." See Anthony Giddens, *The Consequences of Modernity* (Stanford: Stanford University Press, 1990).

The second reason to appreciate this definition of modernity is that it permits an important distinction that is often missed. In contemporary English, the term *modern* is often used as a synonym for *Western*. There is, however, a crucial difference between these terms. Western refers to one historical expression of Christian faith: namely, the Latin tradition, as distinct from any number of other Christian traditions, whether Coptic, Greek, Syriac, or Russian, for example. While it is true that the modern attempt to master nature by means of calculation did arise out of the Western (Latin) Christian tradition, they are not the same thing, and it is possible to be a Western Christian without necessarily embracing the logic of global technological mastery.³³ Why is this distinction important? If Christian educators today do not make this distinction, the assumed patterns of living and learning will risk being merely modern rather than Christian. When such patterns are in place, the attempt to defend truth can end up defending merely the commodity called "information." As I explain in chapter 3, a Christian understanding of truth includes a sense of purpose, or good, whereas information presumes to set aside questions of purpose. The mistaking of information for truth is part of what results when our ways of learning are presumed to be only neutral tools. What would a Christian practice of the verbal arts look like if it were not captive to modern assumptions about language, reality, and the human person? This book ventures an answer to that question and, in doing so, offers an alternative to the logic of distracted consumption and commodification.

There is one final, and most important, reason to appreciate that modernity is "a combination of products and social practices that form in us the habit of trusting calculation to solve human problems." These products and practices shape the human capacity for attention, patience, and action. To be clear, the human temptations of distraction, impatience, and paralysis are perennial concerns much older than contemporary culture. The forms of our media, however, strengthen these temptations. This happens through repeated

^{33.} There are many open questions (which this book does not address) regarding the character and extent of the relationship between Christian faith and the rise of what becomes known as "modernity." My point here is simply to introduce a possible distinction between modernity and Christianity (including the Latin species of Christianity known as "Western") which may otherwise be overlooked. A series of books on the topic now arguably constitute a genre: see not only Charles Taylor, A Secular Age, but also John Milbank, Theology and Social Theory: Beyond Secular Reason (Oxford: Blackwell, 1990), Brad Gregory, The Unintended Reformation (Cambridge, MA: Harvard University Press, 2012), and Thomas Pfau, Minding the Modern (Notre Dame, IN: University of Notre Dame Press, 2013).

exposure that builds certain habits. As it happens, these issues also need to be addressed here because they could keep a reader from understanding how the idiom and the purposes of this book work together. These habits of modernity include: (1) assuming that anything worth learning must be understood easily without background knowledge, (2) thinking that the most important thing is what is happening right now, and (3) not acting in response to what we learn.³⁴ Our media culture gives rise to such habits, not simply because of its content (whether tragic or comic) but because of its daily, or periodic, character.³⁵ Regardless of anyone's intention, and despite a vast amount of worthwhile and entertaining information that gets communicated every day, the overall effect of electronic information culture ensures that public discourse will tend to be easily understood, obviously relevant, and overwhelming in volume. Any attempt to discuss the verbal arts must account for these social conditions because these three habits of thought are also habits of reading and listening.

Christian faith and formation are inseparable from the use of words, both spoken and written,³⁶ but the language habits of information culture can prevent that formation from happening. If only the obvious is worth reading, then there will be less patience for considering obscure parts of Scripture, obscurity that may be necessary to instill certain kinds of personal transfor-

^{34.} The first and third points are noted by C. John Sommerville, in *The News Revolution in England: Cultural Dynamics of Daily Information* (New York: Oxford University Press, 1996), 98–108; 28–29 (respectively) and still more directly in *How the News Makes Us Dumb: The Death of Wisdom in an Information Society* (Downers Grove, IL: InterVarsity, 1999), 12–24; 42–47. The second point is emphasized by Søren Kierkegaard who observes that the central effect of daily news is to exaggerate the importance of "the momentary"; in contrast, basic moral formation consists of learning that there are some things more important than momentary present experience. In this way, Kierkegaard connects mass media, as a form, directly to the moral infantilization of its consumers. See Søren Kierkegaard, *Journals and Papers*, trans. Howard V. Hong and Edna H. Hong (Bloomington: Indiana University Press, 1970), 2:483. Both Kierkegaard and Sommerville are part of a tradition of reflection on the social consequences of communicative form—an intellectual tradition that includes most notably Marshall McLuhan's *Understanding Media* and Nicholas Carr's *The Shallows*. See also Jeffrey Bilbro's important book, *Reading the Times: A Literary and Theological Inquiry into the News* (Downers Grove, IL: InterVarsity, 2021).

^{35.} This distinctive aspect of journalism, as a form, Sommerville calls its *periodicity*. As he notes, there is a sense in which news, understood as mere stories about important events, has always existed. What distinguishes modern journalism, an institution since the 1620s, however, is the mass packaging of arbitrarily selected events as a periodic entertainment commodity purporting to be something more than mere entertainment. See Sommerville, *News Revolution in England*, 17–45.

^{36.} Words may draw our attention to what are not merely words, such as actions that reveal persons, for example. Nevertheless, whether Christians emphasize the status of Scripture as the sign of a covenant or the proclamation of Jesus's work of redemption, the central place of words remains obvious for Christian faith and practice.

mation. If the present is all-important, then imagining delayed gratification as a good becomes increasingly difficult.³⁷ If sanity depends on learning to do nothing in response to daily accounts of fascinating catastrophes, then Christians will be accustomed to not acting in response to what they learn. Thus, the desire for "easy access" encourages a superficiality that is incapable of giving prolonged attention, the quest for "relevance" hinders the ability to imagine purposes beyond the present emotion, and the experience of "information overload" discourages acting in response to truth.

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This is not to suggest that the opposite of all three things does not happen regularly. Despite a frequent state of distraction, some people do indeed manage to read important and difficult books or to do what Cal Newport calls "Deep Work." Even in a culture of instant gratification, some people still manage to give one another the kind of attention required for charity and wisdom. Likewise, despite the dangers of information overload, there are times when media information does move people to action. The problem is not that there are no exceptions to these habits. The problem is the vision of reality (the habits and assumptions) that our information culture instills by means of its very forms of communication: it induces the expectation that things should be immediately understandable, perpetually urgent, and entertaining. A Christian understanding of the verbal arts aims to instill a contrasting set of habits: (1) the recognition that some things worth knowing may be difficult to understand at first; (2) the appreciation that the consequences and relevance of what we learn may take much time and patience to become

^{37.} Kierkegaard, Journals and Papers, 2:483.

^{38.} Cal Newport, *Deep Work: Rules for Focused Success in a Distracted World* (New York: Grand Central, 2016). The literary counterpart to Newport's book is *The Pleasures of Reading in an Age of Distraction* (Oxford: Oxford University Press, 2011) by Alan Jacobs.

clear; (3) the expectation that a revelation of reality may call for a profound change in life—whether in attitude or action. Such habits will seem strange to us, however, if we imagine that the verbal arts are only tools whose highest purposes are of human choosing. In order to discern how the verbal arts can improve a capacity for attention, patience, and action, we need to envision these arts as seeds.

WHAT IS AT STAKE IN HOW WE IMAGINE THE VERBAL ARTS?

The Modern Vision of Tools

In order to appreciate the difference between tools and seeds, we first need to recognize that we inhabit a culture that misleads us about the character of tools. We tend to assume that tools are neutral.³⁹ In this view, the purpose of human reason is only to calculate a means to any possible end or purpose. Reason is not, in this account, able to know ultimate purposes, but is limited to considering the relationship between means and local ends. Part of the dominant trust in calculation to solve any human problem is the tendency to assume that humans can know only local purposes, not ultimate ends, because it is presumed that there are no such ends.⁴⁰ If human reason is understood as only calculation, then it can help us, for example, estimate how much firewood we need in order to keep a house warm through the winter; however, such calculation cannot tell us why choosing to survive the winter is better than death. Such ultimate concerns are famously limited to matters of private judgment.⁴¹ The problem is not only that such a view reduces the world to neutral matter for human disposing, but also that it presumes that

^{39.} Although deeply indebted to George Parkin Grant's critique of instrumental rationality, my account of the difference between neutral and purposive tools goes beyond his claims. Compare Grant, "Thinking about Technology," as well as Grant, *English-Speaking Justice* (Toronto: Anansi, 1985).

^{40.} The belief that there are no ultimate ends (or any human good higher than survival) can sometimes be presented in our public discourse as though it were an empirical conclusion rather than a philosophical assumption. Because such a judgment is necessarily concerned with intangible "values," however, it can be logically deduced from empirical observations only if it is assumed. To be clear, such an assumption is circular only if one also believes that reality consists of neutral tangible matter (from which no value judgments can be logically deduced). If, however, one believes that the tangible world, considered as a whole, is a good gift, then there is no logical circularity in inferring value judgments from an account of what is real.

^{41.} For a classic formulation of this view, see John Rawls, *Political Liberalism* (New York: Columbia University Press, 1996), 11–15.

human knowledge of any ultimate good, or end, must be only private. As a result, the world consists entirely of neutral tools—or things that may only be a means to something else. To construe tools as neutral assumes that the relationship between any given means (tool) and any given purpose is ultimately arbitrary. If tools (or things) have no purpose internal to them, then ultimately any tool (or thing) can be made to serve any purpose.

On the face of it, this modern view of tools might seem crazy to anyone who has much experience with tangible tools. If you have ever been left with a screwdriver when you really need a hammer, or vice versa, you know that there are indeed very specific purposes embedded in any given tool. Those purposes, however, are local and immediate. What modern living trains us to suppose is that, given enough time, money, energy, and software, the metal and plastic of any hammer could be transformed into a screwdriver, or vice versa. We may not even realize that this assumption is indeed an act of imagination that relies on numerous value judgments. This vision is deeply shaped by the way that our information technology appears as neutral tools that serve only purposes of our own choosing. Such a perception, it turns out, is crucial for advertisers and software developers to maintain, in order to conceal their own purposes. As participants in the culture of global information technology, we are formed to presume a notion of neutral tools that does not actually apply to any of the tangible tools that we use. This is why, when people talk about the verbal arts as "the tools of learning," we need to be careful and clear. When we use such terms, we are predisposed to misunderstand the nature of the arts, because the purposes of tools—the ends that they serve—are assumed to be merely a matter of human choice. Thus, whether we consider grammar, logic, or rhetoric, we will misconstrue the verbal arts if we imagine them as neutral tools. This does not mean that all use of a tool metaphor needs to be rejected. Rather, we need to recover an understanding of each art as a purposive tool rather than a neutral tool.

This is the point at which the earlier definition of art becomes so important—we need to remember that it consists of living knowledge regarding how to make something. By recovering the role of purpose that is internal to each kind of practical knowledge for verbal making, we recover a sense of each art as a purposive tool. Such a view of the arts as purposive tools—as ways of knowing that are suited for specific ends—is typical of Aristotle and

the scholastic tradition. This is why the Aristotelian collection of texts on logic is called the Organon, meaning the "tool." The problem, however, is that when we moderns hear the word *tool*, we are trained to think of a neutral tool whose purposes are arbitrarily chosen—and to assume that the material of nature is fundamentally malleable. To be clear, the contrast between a neutral tool and a purposive tool is a contrast between different *conceptions* of tool. I am not suggesting that some tools are neutral while others are purposive. Rather, *neutral tool* is the name for a delusion that we may need to overcome. In reality, each tool has, to some extent, purposes that are embedded in it. Even if you have never witnessed, for example, an attempt to use a table leg as a toothpick or to use a scalpel as a chainsaw, you can imagine the difficulty. In this sense, the phrase *purposive tool* simply reminds us of the real character of any tool—that it has a highest potential. Such potential may not be realized in a given instance, as when a smartphone is used for a doorstop or a toothbrush, for example, but the highest potential remains internal to the tool. Thus, when we remember that the verbal arts can be like tools—properly understood as purposive—we keep in mind that ends can be intrinsic to a given reality, including verbal realities. Whether we consider wrenches, or movies, or speeches, or business communication—the purposes arise or fail to arise from the way that a maker combines any given material (content) with any form (arrangement). Chapter 3 presents a detailed account of this dynamic interaction between agent, matter, form, and purpose—elements that are traditionally identified together as the four Aristotelian causes.

Imagining the Verbal Arts as Seeds

Even when the verbal arts are understood as tools with a purpose, however, the comparison between words and tools involves some important limitations. Most notably, tools are inert, dependent on human agency, and interchangeable. At the most basic level, a tool is dead; it consists of inert matter that can be moved, but only as a result of external forces acting upon it. At the same time, its particular union of matter, form, and purpose are of human choosing. Finally, any ¾-inch socket will be interchangeable with any other ¾-inch socket of the same dimensions, material, and quality of fabrication. A seed, like a tool, has an intrinsic purpose that arises from its distinctive union of matter and form. For a seed, however, the dynamic reality that unites the agent, matter, and form with its purpose is alive rather than dead.

Furthermore, the highest potential of the seed—to communicate life—is not of human origin. At the same time, each seed bears a unique genealogical relationship to its ancestors and its progeny.

What, then, is at stake in whether we imagine the verbal arts—our knowledge of verbal making—as tools or as seeds? First, tools serve purposes that humans choose, and they are moved only by mechanical force. By contrast, seeds have life inside them, a life that humans may shape but which is not of human origin. Second, although humans can do any number of things with a seed, its greatest potential is to communicate life so that a new plant results. Third, that resulting plant is not just a plant in general, even among its kind; rather, it bears an individual genetic relationship to the earlier plant that produced the seed. Thus, in contrast to a tool, a seed is a living gift with a particular genealogy. Similarly, an art consists of living knowledge, which means it exists only in persons (whether human or divine persons). If we imagine that the verbal arts are primarily like tools, we will tend to presume that words cannot serve any purposes higher than those of human choosing. We will also tend to presume that art—the knowledge of how to make—is inert. It may be capable of moving other things, but only by means of human agency and not as a result of a living principle internal to the knowledge. Finally, to imagine that a verbal art is primarily like a tool encourages us to presume that such living knowledge is interchangeable—in the sense that it concerns only general claims and not the knowledge of individual persons.

The analogy between a word and a seed also appears in what might be called the "cruciform" character of a seed: the manner in which a seed communicates life is through its own destruction. In some ways, this aspect of the seed is like a spoken word that moves between persons by means of a sound that is released and then dissipates. A seed, if it germinates, no longer exists (as a seed) once it has communicated life and a new plant has begun. This part of the comparison might seem to be limited to a spoken word, but it also applies, in a different way, to written words on a page: a book that is unread is like a voice that is not heard. At one level, a seed's ability to communicate life through its burial involves the risk that it may not germinate. To offer a word, whether spoken or written, involves a similar risk (however small) in the act of being offered. Christians can imitate the character of divine self-giving only because of the hope of resurrection, just as a seed's life is given

for the sake of a new life. In the same way, a word can be offered in the hope of communicating new life. This is not to suggest that every word or even all knowledge of verbal making is necessarily like a seed (some words may indeed operate like tools, while others may operate more like food, or poison). What is at issue here is the way that our images of learning shape what we presume words can or cannot do at all. If there is no hope of resurrection, then a tool may indeed be a sufficient comprehensive image for both life and learning. For Christians, however, a seed provides an image of resurrection hope and the self-giving—in word and deed—that such a hope makes possible.

[T]he seed is like a spoken word that moves between persons by means of a sound that is released and then dissipates. A seed, if it germinates, no longer exists (as a seed) once it has communicated life and a new plant has begun.

Thus, if our manner of speaking about the verbal arts is limited to the image of tools, then Christian education will risk captivity to the modern view of learning as a neutral tool. It will be assumed that reality consists of neutral matter for human disposing, that reason is mere calculation, and that there are no purposes higher than those of human choosing. Even in cases where the notion of a purposive tool is retained, however, if the image of the seed is lost, there will be a tendency to presume that language cannot communicate a life-giving reality that is both human and more than human. Understanding the verbal arts as seeds can help us to remember that the highest purpose of verbal knowledge is to communicate life. At a still more basic level, it reminds us that the life communicated is a gift which does not originate from us, a gift that is to be shared. The seed image also helps us remember the cruciform character of that life-giving communication; it reminds us that such communication involves the risk of self-giving. Finally, the priority of gift emphasizes the inherited character of language—that it does not originate with the individual speaking self—and what such genealogy makes possible. The inherited character of language reminds us that much of our verbal knowledge relies on the testimony of others, including, most notably, those philosophical assumptions that account for our empirical knowledge of the world. One term for this aspect of verbal knowing, as

something that is given and received between particular persons over time, is *traditionary*. ⁴² This is not to evoke a notion of tradition as the dead hand of the past, but to emphasize the sense of action in the giving and receiving of words over time (from the Latin *tradere*, "to hand over").

The image of verbal learning as a seed helps us to remember what the tool image would otherwise obscure:

- that words may serve an intrinsic purpose not of human choosing;
- that a particular purpose could be to communicate a new life, a resurrection;
- that such life communicated is a divine gift;
- that the form of such communication can be self-giving, or cruciform;
- that such verbal giving and receiving is traditionary in the sense that living knowledge relies on the testimony of particular persons over time.

This traditionary aspect of human learning is like the genealogical character of seeds. All of these qualities of verbal communication are suggested by the seed which signifies at multiple levels at the same time. In this case, the fact that seeds communicate life gives rise to the genealogical relationships among particular plants; in the same way, the possibility that words may communicate life among persons gives rise to the traditionary character of much human learning.

The seed image unites key aspects of the verbal arts—aspects that appear as possibilities specifically when those arts are understood in light of Christian faith. Again, this is not to say that all human use of words does all of these things; rather, the seed comparison ensures only that such verbal learning is imagined as possible, rather than precluded. Ensuring an imaginative possibility might seem like a low ambition, but if the tool is our only image for what language can do, then we shall tend to presume that what Christian

^{42.} My use of the term "traditionary" is indebted to Hans-Georg Gadamer, *Truth and Method*, trans. Joel C. Weinsheimer (New York: Continuum, 2003). In using that word, I name what Gadamer shares with Alasdair MacIntyre's account of tradition and language, rather than the issues on which they obviously disagree. For an account of those disagreements, see Christophe Rouard, "MacIntyre's Rationalities of Traditions and Gadamer's Hermeneutics," *Journal of Philosophical Research* 40 (2015): 117–136. The account of traditionary inquiry, presented here and in the treatment of Latin education in chapter 7, adapts and extends my account of tradition that appears in "Religious Toleration and Social Contract Theories of Justice" in *The Palgrave Handbook of Toleration*, ed. Mitja Sardoç (London: Palgrave Macmillan, 2021), 6–7.

faith does with words—communicate life—is simply not possible. The seed metaphor does not imply that all language ought to be explicitly theological. Nor does the seed metaphor always function in the same manner or at the same level of discourse. The analogy between seeds and the various ways that words can enable human learning is what Dante would call *polysemous*—that is, something capable of signifying in multiple ways at the same time. ⁴³ The crucial point is that what we presume words can or cannot do in our daily experience will depend on whether we imagine our verbal action to be more like a neutral tool, a purposive tool, or a seed.

^{43. &}quot;Dante, Letter to Cangrande della Scala," appendix A in *Paradise*, by Dante Alighieri, trans. and ed. Anthony Esolen (New York: Modern Library, 2004), 364.

CHAPTER TWO

Human Learning as Tool: Neutral or Purposive?

What does it mean to say that the human mind is like a computer? The most powerful images that shape our thinking can sometimes be so deeply embedded that we do not recognize we are speaking in terms of a comparison. Even when we are not making an explicit comparison, the terms and phrases that we use can reveal that we inhabit some vision or basic metaphor regarding the character of reality or the human person. In discussing "the constructive role of imagination in framing inquiry," specifically about the relationship between faith and learning, 2 David I. Smith points out that

metaphors can be theory-constitutive rather than merely decorative, and that a great deal of our theorizing is in fact rooted in and organized by imagery that both guides and obscures our reflections. To understand the world is in many cases to see it *as* fundamentally *this* kind of thing rather than *that* kind—to see, for instance, the mind as a computer, or knowledge as a house with foundations, or schools as marketplaces.³

^{1.} Because of the attention that I give to the importance of analogy and metaphor in this and subsequent chapters, some readers might wonder how the present account compares to that of George Lakoff and Mark Johnson in *Metaphors We Live By* (Chicago: University of Chicago Press, 1980). While I appreciate some aspects of their account, it often remains, despite their best efforts to the contrary, idiomatically captive to the philosophic presumptions of the Cartesian ego and a reliance on discrete propositional statements. My own view is closer to that presented by Janet Soskice, in *Metaphor and Religious Language* (New York: Oxford University Press, 1987), which includes (81–96) a critique of the "metaphor-as-myth" theory presented by Lakoff and Johnson. As Soskice notes, the most important feature in understanding metaphor (not to mention its capacity for revealing truth) is that it will seldom be intelligible at the level of a bare proposition and must be considered "at the level of a complete utterance, taking context into consideration" (86).

^{2.} David I. Smith, "Biblical Imagery and Educational Imagination: Comenius and the Garden of Delight," in *The Bible and the University*, eds. David Lyle Jeffrey and C. Stephen Evans (Grand Rapids: Zondervan, 2007), 189. Smith discusses how some accounts of the relationship between faith and learning miss the essential role of imagination. He explains that these common approaches seek to establish "the kinds of relationships" that may exist "between Christian theology and other disciplines." The relationships, understood in terms of content, may include "deduction, induction, permission, requirement, commendation, and the like" (189). Smith's point is that, while intellectual content is important, it is often governed by imaginative forms.

^{3.} Smith, "Biblical Imagery and Educational Imagination," 189. Compare David I. Smith and Susan M. Felch et al., *Teaching and Christian Imagination* (Grand Rapids: Eerdmans, 2016), which explores a

As Smith notes, one of the most common metaphors today is the tendency to speak of human learning by analogy with a computer. Someone who refers to the brain as being "hardwired" in a certain way might not even recognize that a metaphor is at work. This particular analogy usually relies on a twofold comparison that likens the human brain to the computer hardware and the intangible mind to the software. This image of human cognition is, of course, an updated version of the ancient image of learning as a tool. Such a comparison may be helpful in some contexts, but if we fail to recognize that it is a metaphor at all, we risk missing something important. We need to recognize the implicit operation of these images because visions of reality or the human person, like visions of learning, often operate below the surface of our speech.

This chapter considers an implicit vision of human learning in general as distinct from the treatment of particular verbal arts in the ensuing chapters. Specifically, this chapter answers one question: How does the vision of learning as a neutral tool both shape and rely upon assumptions about reality and the human person? The answer to this question unfolds through an interpretation of C. S. Lewis's Abolition of Man. As we have noted, modern culture tends to view tools as neutral and, as a result, assumes that the relationship between a tool and its purpose is ultimately arbitrary. Therefore, when we imagine human learning as a tool, our first challenge is to appreciate that tools are not neutral but have purposes embedded in them. What Lewis criticizes most directly in *The Abolition of Man* is the modern presumption that there is no highest human good. Such a view implies also that human learning has no ultimate purpose that is not merely subjective. Lewis suggests the inadequacy of such a view of human beings and human learning, showing why the vision of human learning as a neutral tool is so influential and why it has the consequences that it does. In this sense, the effect of his argument is to show why, when the human power for learning is viewed as a tool, it needs to be understood as purposive rather than neutral. Ultimately, Lewis's

series of key metaphors that provide alternatives to those that often govern contemporary reflection on teaching. Smith and Felch consider three of the most powerful metaphors that can shape teaching practices in ways that provide alternatives to modern visions of learning: namely, the journey, the garden, and the building. Their volume helpfully allows for the way such metaphors can have either positive or negative consequences for teaching. Much depends, for example, on whether we imagine the "journey of learning" as a pilgrimage or as a tourist day trip. Compare 22–41, 88–92, 140–48.

argument also raises the question of whether learning needs to be understood in terms of something more than a tool.

Modern Learning in The Abolition of Man

At the end of *The Abolition of Man*, Lewis refers to what he calls a "regenerate science." What would that look like in practice? Lewis only mentions a regenerate science in passing, in the last few pages of his short book, but the very possibility of such a thing has important implications. Although he uses the term science here to indicate the physical sciences, Lewis is also well acquainted with a broader understanding of science (scientia) as human knowing in general. In effect, by talking about a regenerate approach to knowing, Lewis asks whether there is an approach to investigating the world that offers an alternative to the one that he describes in his text: Is there a viable alternative to the characteristically modern approach to human knowing? Ultimately, I suggest that the phrase regenerate science names an opportunity in Lewis's text—an opportunity for reflection by anyone who is interested in reimagining what the act of human learning in any discipline might involve. As we shall see, by using the word regenerate and thus appealing metaphorically to something that may be reborn, Lewis introduces the difference between presuming that knowledge is inert and presuming that knowledge is alive.

In this chapter, I first argue that Lewis gestures toward three questions that would need to be addressed by a regenerate approach to human inquiry—questions regarding the matter, the purposes, and the agents of learning. Then, I draw upon those questions to show how Lewis's critique of the modern vision of learning also implies a fourth question, the question of investigative form. In this way, *The Abolition of Man* suggests what is needed for human learning to avoid the difficulties that are embedded in modern approaches to knowing. In effect, Lewis presents a challenge to the most basic assumptions about learning in modern culture.

^{4.} C. S. Lewis, *The Abolition of Man* (New York: HarperCollins, 1974), 79. Subsequent references to Lewis's text are from this edition and are cited parenthetically.

Lewis's *Abolition of Man* is a curious book in several ways. The three chapters that make up the text were initially prepared as public lectures, delivered at King's College, Newcastle, in February of 1943.⁵ This date reminds us that Lewis was writing in the midst of the Second World War. This detail of the context appears only briefly, when Lewis emphasizes that his primary concern in the book is not with the Nazis, or what he elliptically calls "our public enemies at the moment" (73). Instead, he seeks to raise his audience beyond immediate concerns. In effect, he broaches the questions: What if we win the war? What are we actually fighting for? Is mere survival a sufficient end?⁶

As we turn from the circumstances to the content of the text, we should note that its main goal is explicit: to argue that there is objective moral worth in human and nonhuman nature. The goal is that simple—Lewis seeks to show that all entities, whether human or nonhuman, have worth in themselves and thereby warrant a certain ethical response from us. Even more scandalously, he contends that the affections are a necessary part of that human response. At one level, Lewis's primary concern is to bring into question the deeply held modern assumption that reality consists of neutral stuff for human disposing. At the same time, he also interrogates the related assumption that any value assigned to such neutral nature is only a result of human decision or social forces. His argument develops in three stages, each showing what follows from rejecting the idea that there is objective moral worth: in the first stage, he appeals to what might be called "immediate practical results" for education; in the second, he focuses on the logical incoherence of such a rejection of objective moral worth; in the third, he considers the ultimate consequences (rather than immediate ones) that follow from reducing all moral judgments to a function of mere subjectivity. Revealingly, education plays a key role in each of Lewis's three chapters.

Alister McGrath, C. S. Lewis—A Life: Eccentric Genius, Reluctant Prophet (Carol Stream, IL: Tyndale House, 2013), 231.

^{6.} As Alan Jacobs explains in *The Year of Our Lord 1943: Christian Humanism in an Age of Crisis* (New York: Oxford University Press, 2018), Lewis was one among several Christian intellectuals (Jacobs considers five) who turned to the topic of public moral deliberation amid questions about post-war society building—a topic that was newly urgent when the Allied victory became apparent in 1943. Jacobs's volume offers a compelling narrative account of the intellectual, biographical, and political contexts for *The Abolition of Man*.

THREE ARGUMENTS AGAINST MORAL SUBJECTIVISM

Education as Propaganda

In his first chapter, "Men without Chests," Lewis shows the immediate lived consequences that occur when educators assume that all moral judgments are merely subjective and are not warranted by any worth in realities outside the self. Such a view assumes that any moral claim, by definition, can never be an object of knowledge; moral judgments are presumed to be outside the category of things that can be known at all, neither true nor false. Lewis contrasts this view with what he calls "the Tao," or "the Way," or simply "traditional morality" in general. His point is not to deny that there are often points of disagreement among or even within various moral traditions but to notice what is "common to them all." This is "the doctrine of value, the belief that certain attitudes are really true, and others really false, to the kind of thing the universe is and the kind of things we are" (18). As he goes on to explain, "Because our approvals and disapprovals are thus recognitions of objective value or responses to an objective order, therefore emotional states can be in harmony with reason . . . or out of harmony with reason" (19). In a most revealing passage, Lewis suggests what is at stake for educators if they believe that all moral judgments are merely froth on the surface of reality. In effect, those who hold such a view cannot distinguish between education and propaganda. If there is no good that is intrinsic to things, including humans, then all the purposes of education must be extrinsic to those who are being educated, or rather manipulated—all purposes are assumed to be instrumental. In summing up the difference on this point, Lewis says, "Where the old [education] initiated, the new merely 'conditions.' The old dealt with its pupils as grown birds deal with young birds when they teach them to fly; the new deals with them more as a poultry keeper deals with young birds—making them thus or thus for purposes of which the birds know nothing" (23).

Lewis's concern in his first chapter is simply to show the practical results of such a view of education: it produces what he calls "men without chests." The image in this phrase uses the traditional understanding of the soul as consisting of three elements, generally identified as the reason, the affections,

and the appetites.⁷ The three aspects of the soul are then imagined as three aspects of the human body—the head as a figure for the rational part of the soul, the chest as an image for the affections, and the lower body a figure for the appetites. According to this account, the affections mediate between the understanding and the appetites. The role of the affections is crucial because the rational faculty can govern the appetites *only* by means of the affections. The point is simply this: by denying that the affections have any basis in reality, modern education fails to form this mediating part of the soul that was traditionally a primary focus of education. This results in "men without chests," in the sense that they are humans who consist only of rational calculation and appetites, lacking that middle part of the soul or the educated affections which enable moral judgment (25).

A lack of educated affections presents an immediate practical problem as soon as people try to live in any particular manner—for example, to be honest in their business dealings or to perform military service. The problem is that mere rational understanding is not a sufficient cause for most human actions; as Lewis puts it, "without the aid of trained emotions the intellect is powerless" (24). As he goes on to explain, "In battle it is not syllogisms that will keep the reluctant nerves and muscles to their post in the third hour of the bombardment. The crudest sentimentalism . . . about a flag, or a country, or a regiment will be of more use" in fortifying the practice of courage (24). Lewis identifies his current cultural moment as "tragi-comedy"—a condition where "in a sort of ghastly simplicity we remove the organ and demand the function" (26). This, Lewis contends, is the practical consequence that follows when we fail to realize that a great part of education consists of forming the affections to respond appropriately to the character of reality. Nevertheless, this is what indeed happens when we imagine that reality consists of neutral material for human disposing. Without any discernible worth in things themselves, the affections that motivate human action over time are left without a living connection to the world outside the self. In this way, the vision of

^{7.} The most famous ancient instance of this threefold division of the soul into three different kinds of desires (sometimes identified respectively as the desire to satisfy bodily appetites, the desire for honor, and the desire for knowledge) can be found in Plato's *Republic* 434d–444e. It should be noted, however, that some version of such a division can be found not only in other ancient writers and in biblical texts such as 1 John 2:16, but arguably runs throughout much of the Western intellectual tradition.

reality as neutral matter is directly related to the view of human learning as a neutral tool.

The Practical Difficulties of Moral Subjectivism

In his second chapter, "The Way," Lewis shifts attention from the immediate practical consequences that follow from rejecting the idea of objective value to the logical incoherence of such a view. His basic point is that people who take a completely subjective view of moral judgments and who reject the doctrine of objective value are never quite successful in their rejection. What actually happens is that, while arguing against one aspect of traditional morality, people inevitably insist upon another value claim that they must accept as not simply subjective. If a person rejects the notion of objective moral worth, then the attempt to persuade others to do anything in particular will become enmeshed in self-contradiction. The attempt to give a reason for any action will construe that action as either "good for its own sake" or as a means to achieve some further "state of affairs" that is ultimately sought for its own sake (28). The notion of "good for its own sake" brings the argument back to some tacit reliance on the concept of objective moral worth.

The crux of the argument is clear: if reality consists only of neutral matter, then no ethical imperatives about what people ought to do can ever be logically derived from any statement about the world. If, however, the things of the universe do have value in themselves, then ethical imperatives can be deduced from the worth in things. Given this logical situation, moderns often rely on tacit value judgments that they either conceal or fail to recognize as such. In arguing this point, Lewis uses the example of someone trying to explain why it could be morally justified for someone to die for others, or not to die. Writing today, he could just as easily have chosen as his example the attempt to explain why hospitals should be in the business of healing people rather than killing them when the latter becomes profitable. Whether one is arguing for or against such a conclusion, there is no way logically to derive an imperative statement from a descriptive statement about the world, unless one assumes that the world already has a moral character. Whether people appeal to instinct or to reason or survival, what they end up doing, Lewis says, is taking just one part of the moral law and mistaking it for the whole.

At this point, Lewis makes an important qualification. In describing what he calls "the Tao," or "the Way" that makes up traditional moral understanding, he acknowledges that there are many differences among various moral traditions, whether Eastern or Western. He does not deny this. The variety among—even contradiction between—different accounts of objective moral value merely implies, however, that moral progress or decline in a given tradition may be possible. As he says, "Some criticism, some removal of contradictions, even some real development, is required" (45). However, everything depends on how that development happens—on whether the changes being proposed are internal or external to the idea of objective moral worth. This difference between change from inside the tradition and change from outside the tradition is crucial; it is the difference between someone who seeks consistency among moral precepts that one already practices and the person who says, "I'm going to make up my own moral code." The latter person cannot appeal to anything more than momentary impulse—moral judgments, in this view, have no source in reality outside the self. As Lewis puts it, this is "the difference between the man who says to us: 'You like your vegetables moderately fresh; why not grow your own and have them perfectly fresh?' and the man who says [in contrast], 'Throw away that loaf and try eating bricks and centipedes instead'" (46). The moral subjectivist is like the person who imagines that one can simply start from scratch in thinking about moral judgments, as though there were somewhere to start other than the doctrine of objective moral value.

Human Beings as Resources

In the third chapter, entitled "The Abolition of Man," Lewis argues for the idea of objective moral worth by considering the long-term consequences that follow from assuming that nature consists entirely of neutral matter. He invites readers to imagine, What would happen if the human "conquest of nature" was completely successful? Lewis begins by considering some technological examples, recent to the 1940s: the airplane, the radio, and the contraceptive. In each case, what he shows is that the true character of all such "conquest" involves, in reality, the control of some people by other people. Whether we consider the planes as dropping bombs or carrying passengers, or the radio as delivering propaganda or life-saving messages, or the contraceptives as harming or helping the next generation, in each case, the human con-

trol over the world, or nature, also includes control over other people. To be clear, Lewis is not simply warning about the dangers of technology or repeating the cliché that such power must not fall into the wrong hands. Rather, his point is that when we imagine nature, which also includes human nature, as neutral stuff, we necessarily imagine some people treating other people as mere objects in the world—to be used as neutral tools. The purposes *must* be instrumental because, according to the modern view, there is no other kind of purpose: there is no good, no worth, intrinsic to anything—including the people that make up what we now call "human resources."

In other words, even when we imagine that we are treating people well, if we are still treating people as resources we are participating in what Lewis's friend J. R. R. Tolkien might call the logic of Sauron. Those familiar with Tolkien's *Lord of the Rings* will remember the story's repeated point that the One Ring cannot be used for good ends. The power, in its very inception, has banished any notion of a good that is not merely instrumental. In this sense, Tolkien's One Ring is arguably a figure for the modern view of knowledge that Lewis describes. In effect, to wear the One Ring is to adopt the view that the world consists of neutral resources whose only good is chosen by those with power to impose such ends. Such tyranny is invisible to itself. By contrast, the hope to avoid tyranny, in oneself and others, requires learning how to respond appropriately to the intrinsic worth of the things and persons around us.

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The most revealing point in all this is Lewis's observation that the turn toward moral subjectivism is not simply a result of some unfortunate social events that happened in the 1960s, as some might be inclined to think. Remember, Lewis is writing in 1943. Instead, he identifies the roots of the present condition in a shift that occurred in the seventeenth century (76–78). His point is that, regardless of people's initial intentions, the treatment of nonhuman nature as neutral matter results in treating human nature as merely neutral stuff—that is, as not having any good intrinsic to our being

as humans. Ultimately, he argues that the success of the modern approach to nature—through a combination of completely effective genetics and conditioning ("education")—will result in the elimination of human beings, or what he calls "the abolition of Man." At the very moment at which the control of some people over other people becomes complete, those who are doing the controlling will have no warrant for choosing one set of ends over another set of ends. In effect, "the Conditioners," as Lewis calls them, will also be "men without chests." He warns, "If man chooses to treat himself as raw material, raw material he will be: not [however] raw material to be manipulated, as he fondly imagined, by himself, but by mere appetite, that is, mere Nature, in the person of his de-humanized Conditioners" (72). In this way, to assume that human nature is reducible to the motion of matter is to reduce oneself to a discrete object for manipulation by others.

THREE QUESTIONS A REGENERATE SCIENCE SHOULD ASK

At the end of *The Abolition of Man*, almost as an afterthought, Lewis considers whether there might be an alternative to the modern approach to knowing the world. What would it look like to investigate the world in a different manner? At this point, Lewis proposes what he calls a "regenerate science." He says, "the regenerate science which I have in mind would not do even to minerals and vegetables" what the modern approach to knowing threatens to do to humans (79). He does not, however, elaborate much beyond that spare comment. Nevertheless, I contend that Lewis provides clues regarding what such a regenerate science would look like in practice. He rightly acknowledges, however, that this is not something that he could determine for others. The actions that he proposes could be undertaken only by those who are the practitioners of a given discipline. I suggest, however, that Lewis touches on three different issues that each imply a distinct characteristic of what he calls "regenerate science."

What Is the Intrinsic Worth of Our Study?

First, Lewis brings to our attention the fact that modern disciplines often make assumptions about reality that are reductive. In particular, modern disciplines tend to set aside questions regarding the moral worth of what they

study. Whether we consider chemical composites, ostriches, human psychology, human artifacts, or human institutions—whatever is studied, academic disciplines today typically constitute themselves as "modern" by banning from consideration the question of the intrinsic worth of the reality being studied. How would your investigation, how would your study, be different if you simply held in question the assumption that reality consists of neutral stuff? In other words, Lewis leads us to ask: What does this inquiry assume about what is real? How would this investigation be different if, instead of assuming that what I study is neutral stuff, I regard it as having worth in itself, a worth that warrants that I approach it with a certain level of respect, or even reverence? Such questions might be most obviously relevant to something such as zoology, where we can easily imagine that treating certain animals with respect in the wild, rather than cutting them up in the laboratory, could result in qualitatively different kinds of insights. However, there is much work to be done, I suggest, in considering the implications of this kind of question for any number of fields, whether chemistry on the one hand or social sciences on the other.

This then is the first question that Lewis prompts: What does this inquiry assume about the intrinsic worth of what it studies? In some disciplines, you can make a major contribution by simply showing people that they are, in fact, making assumptions about reality.⁸ At a deeper level, having shown people that such issues are at stake, you could take the next step and ask a related question: How does this particular process of inquiry change if reality is not neutral stuff? Again, this is not a question that I or C. S. Lewis can answer for others. This is a question that only the practitioners of a given discipline can answer. What I bring to your attention, however, is that the very attempt to discern the intrinsic worth of any given thing implies a shift toward thinking of that reality—whether human or nonhuman—as purposive rather than neutral. It raises the possibility that human learning may have purposes that

^{8.} See, for example, Christian Smith, What is a Person? Rethinking Humanity, Social Life, and the Moral Good from the Person Up (Chicago: University of Chicago Press, 2010). Smith helpfully shows that, whatever approach one adopts in practice, social-scientific inquiry cannot avoid making substantive assumptions about the character of human nature, assumptions that are not based on mere observation. For a more general discussion of the necessary role of such assumptions, whether about human or non-human nature, in the physical sciences, see Hugh G. Gauch, Jr., Scientific Method in Practice (Cambridge: Cambridge University Press, 2003).

are not extrinsic or arbitrary. To see learning in this new way is to see it as, at least, a purposive tool.

What Is the Purpose of Our Inquiry?

The second question that Lewis leads us to consider is this: What is the assumed goal of the action or inquiry? What Lewis's second argument reveals is that to speak or act at all in the world is to imply that some state of affairs is ultimately preferred over some alternative. Even when people are not willing to speak about goals, or "the good," there will always be some kind of de facto goal embedded in both actions and inquiries. Once again, one of the characteristic features of some modern academic discourse is a tendency to obscure this very question. In many modern disciplines, there is either a vigorous disowning of value judgments or the privileging of a very select few. What that means, however, is that many of the important decisions have already been made or postponed. There are, of course, specific times when a particular judgment must be reserved; however, the pretense of avoiding making any and all value judgments is delusional. Here is the key point to appreciate: simply because we are not making an explicitly ethical argument does not mean that there are no value judgments or ethical purposes at work in the selection, description, or analysis of data. When we consider a particular academic inquiry, we can ask questions about the purposes of either the actions that we study, the local actions that we perform as part of a study, or the overall investigation. A question as simple as this—What are the assumed goals of this action or inquiry?—opens up the possibility that learning could have ends that are not merely extrinsic. In this way also, Lewis implicitly criticizes the notion that human learning is like a neutral tool.

How Does Our Study Depend on Previous Testimonies?

The third question that Lewis leads us to ask is this: What are the testimonies that make present knowledge possible? Lewis gestures toward this aspect of a regenerate science when he points out the difference between someone who asks ethical questions from inside the tradition of the Tao and someone who demands moral answers while rejecting the possibility of objective moral worth. My point here is that what Lewis illustrates is not simply the inherited and participatory character of moral discourse; he also illustrates the way in which any human inquiry depends to some extent on those who have made

discoveries before us. In effect, every body of knowledge and practice, and especially scientific inquiry, depends in some way on what I call "historical testimony." This should be obvious to us as soon as we consider the fact that, for any given science that you might study, there is simply not enough time to conduct all the experiments yourself in a single lifetime. Instead, if you do your homework, you read about the experiments and accept that testimony as a basis for future inquiry—the curious thing is that we often fail to recognize that this is, in practice, a dependence on historical testimony. The fact that this dependence is not obvious to us suggests the strangeness of the world in which we live.

We rely daily on testimony to understand any number of things, whether we want to know what happened, or the way things are, or what we ought to do in order to get certain results. Beyond such daily reliance on testimony for practical purposes, however, intellectual inquiry especially relies on historical testimony.9 Consider, for example, the strange manner in which calculus is often presented: most students seem to encounter the subject as though any of the typical eighteen-year-olds in the room could have figured it out alone. The fact is, however, that there was a time when human beings did not know calculus, and then we did, and the human relationship to the world changed. The problem is that when we study calculus today, we are not usually taught that, by coming to understand this thing that Isaac Newton called "the calculus," we are being inducted into an intellectual tradition—a tradition that extends from Pythagoras to Stephen Hawking. This habit of obscuring the relevance of the past is not, of course, peculiar to mathematics; much public discourse today assumes that the past is irrelevant—this condition is what I call "the age of amnesia."10

^{9.} This is especially the case when we think about our specialized knowledge; we tend to forget, for example, that *physics* is not simply a name for a body of knowledge but is also a series of particular actions that unfolded over time and could have been different. By confusing our knowledge (what we learn) with our process of inquiry (how we investigate), we tend to forget that the process of inquiry itself is contingent (not inevitable) and historical (involving individual particular agents of inquiry).

^{10.} For a more detailed account of what such presumed irrelevance of the past involves, see chapter 7, "Latin Learning: *Verbum* as Tool and Seed."

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By contrast, Lewis reminds us that the understanding shared by others from the past is, in fact, what makes our present understanding possible. Lewis refers specifically to the character of moral discourse that is transmitted over time; however, the need to rely on the discoveries of others is relevant to any area of human learning. To participate in any first-order inquiry as it unfolds requires understanding more than the last five minutes of the scholarly conversation. The essential role of testimony arguably applies to the mechanical arts as well as it does to academic inquiry. Understanding the testimonies that make the present knowledge possible will determine whether or not people in any discipline recognize when they are reinventing the wheel. Simply asking "What testimonies make the present knowledge possible?" can guard an academic discipline from certain kinds of futility. On the other hand, presuming that the past is irrelevant tends to obscure two things: that the process of learning happens because of human agents, and that present knowledge depends on a very specific genealogy of learning that has been given to those in the present. The likelihood that Gottfried Leibniz and Isaac Newton separately developed calculus, for example, demonstrates that learning depends on both human agency and a genealogy. The possibility that they independently formulated the problems and solutions involved shows how much they relied on traditions that they both shared to some extent.¹¹ What I bring to your attention here is that these two features of learning that it depends on particular people and can have a specific genealogy—are

^{11.} Curious readers might be interested to know that historians have vindicated Leibniz's claim that he discovered calculus independently and did not steal the idea from Newton. See, for example, A. Rupert Hall, *Philosophers at War: The Quarrel Between Newton and Leibniz* (Cambridge: Cambridge University Press, 1980).

hidden from us if we imagine learning as a tool but become apparent when we imagine learning as a seed.¹²

A FOURTH QUESTION FOR THE READER TO ANSWER

As we have seen, *The Abolition of Man* provides us with three kinds of questions that a regenerate science might ask: What does this inquiry assume about the worth of what is studied? What is the assumed goal of this action or inquiry? What testimonies make the present knowledge possible? To ask such questions in a serious and detailed way in the context of any modern academic discipline will certainly involve a degree of self-examination. Every modern academic discipline arguably obscures at least one of these issues, pretending that we can ignore the presumed character of reality, the purposes of inquiry, or the role of testimony in our learning. These are the issues that need to be addressed in order for the quest for understanding to get beyond a reductive vision of reality and the human person.

In raising these issues, even if only implicitly, Lewis relies on three of what are known as the four Aristotelian causes, which are the four elements that are required for any complete account of a given thing or action. In very basic terms, the causes include (1) the material cause, or the matter of which something consists; (2) the final cause, or the purpose of a thing; (3) the efficient cause(s), or the agent(s) that bring it into being; and (4) the formal cause, or the order given to the matter. The next chapter explains these in detail, but it is worth noting here how Lewis uses them. In considering the action of human inquiry, *The Abolition of Man* effectively appeals to the first three causes (matter, purpose, and agent) and then raises a question about the fourth cause (form). When Lewis asks about the intrinsic worth of what is studied, he is appealing to the content, or matter, of the action of human inquiry, the object of study. His appeal to the goals of human learning and inquiry depends on the notion of purpose, or final cause. His appeal to the past testimonies that make present knowledge possible arises from his attention to the agents, or efficient causes, of human learning. Given Lewis's

^{12.} I consider the connection between the life-giving and the genealogical aspects of verbal learning (both depicted by the seed) more fully in chapter 4.

attention to matter, purpose, and agency, we might reasonably ask, Where does this leave consideration of the fourth cause, the *forms* of inquiry?

As it happens, Lewis does not directly address the question of investigative form. He does not do so, I suggest, because he appreciates that readers must address that topic for themselves. To be clear, the form of learning concerns how exactly an inquiry is conducted. Modern thinking typically considers questions regarding forms of inquiry under the rubric of method. In scientific studies, this typically involves a quest for a single method of inquiry that relies on a version of inductive reasoning, but such a quest often fails to acknowledge that not all questions can be handled using the same approach. Historical and literary studies can be at times similarly required to identify a "methodology" in order to suggest the kind of authoritative knowledge associated with empirical science. However, even among empirically oriented studies, forms of inquiry are many and varied. Do we learn by cutting things into pieces and looking at them? How is that different from listening to things before we cut them up? Do we poke things or simply watch them? What exactly do we watch or poke? In what chronological sequence should we watch, poke, listen, or cut? Questions about the study of texts, rocks, forensic witnesses, human social groups, or rodents may (or may not) be different from these. All such questions relate to the *form* of inquiry.

But who decides the form? Lewis does not explicitly address the forms of intellectual inquiry because those forms must be decided by the present agents of inquiry. Questions regarding the manner (form) of investigation can be answered in each case only by the practitioners of each discipline (agents)—those who have some sense of how the topics of inquiry, the past agents, and the purposes of study are connected. For Lewis, because the present inquiry depends on past testimony, there are crucial consequences to whether practitioners of any discipline have been apprenticed well or poorly. The integration or disintegration of faith and learning is not something that happens instantly; it happens over the course of time as each generation of practitioners is apprenticed in a given field of inquiry. Lewis therefore never offers a universal form or "method" of inquiry in the modern sense. That is what he is trying to avoid.

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In a related way, the verbal arts of grammar, logic, and rhetoric need to be understood as practices in which students are apprenticed and should not be construed as an abstract pedagogical method. To mistake the *trivium* for a method is to remain captive to a vision of education that is committed to a curricular material and pedagogical form (method) that purports to get certain results. Such a focus on method not only tends to neglect the agents of learning, but also tends to assume that having predictable results (purposes) removes the need to evaluate whether those outcomes are for the best or even worthwhile at all. By contrast, if we understand the verbal and mathematical arts, as well as the moral and physical sciences, as disciplinary practices in which students are apprenticed, we foreground the continuous need to renew and refine our sense of purpose in light of new insights regarding what is studied, the manner of inquiry, and the agents of inquiry, past and present.¹³

Lewis not only avoids formulating a method of inquiry in *The Abolition of Man*, but he also carefully refrains from making any explicitly theological arguments. He openly states that he intends for his arguments regarding objective moral worth to stand without regard to whether or not a person believes in the existence of God (49). Nevertheless, Lewis does come close to Christian theological language when he speaks about possible alternative forms of inquiry. He suggests that a "reconsideration" of modern approaches

^{13.} We should note here that the term *learning* can be equivocal. It can refer to how accomplished practitioners in a given discipline make new discoveries, but it can also refer to how new practicioners are apprenticed in a given domain of inquiry. The present chapter focuses on learning in the first sense (as the activity of accomplished practicioners), while the ensuing chapters of this book focus on the latter sense of learning (as an apprenticeship for new practicioners). As David I. Smith points out, the contemporary discourse of faith and learning tends to emphasize the former sense of learning at the expense of the latter, often focusing on epistemology and omitting any real consideration of pedagogy (*On Christian Teaching*, 139–53). In addition to the reasons that Smith adduces for this neglect of pedagogy, I suggest that two further points bear stating: (1) although distinguishable, the two aspects of learning are often existentially connected in the lives of both accomplished and new practicioners; (2) in the wider culture there is a mirror-image version of the neglect of pedagogy which attempts to make pedagogy central, but it does so by construing it not as an apprenticeship but as an abstract universal method of social control that has no need to account for curricular content, not to mention the agents or purposes of learning.

to knowledge may, in fact, call for "something like repentance" (78). What would such repentance look like? Something of its character is implied by each of the three questions for a regenerative science posed above. The first question, regarding matter, implies a call to turn from treating the tangible world as neutral stuff for human disposing to receiving it as a good gift. The second question calls us to turn from ignoring the ultimate ends of our investigative actions (personally and corporately) to recognizing that our inquiries do serve purposes, if we take the time to consider them. The third question, regarding agency, calls us to turn from the presumed superiority of the present and to remember that our learning participates in a series of gifts upon which we rely and which we are called to receive (and give) with gratitude and humility. The implied fourth question concerns the form of learning or inquiry: Does our manner of investigation fit with our answers to the first three questions?

In other words, given that what we study may have worth that does not depend on us, that our understanding could serve ends greater than human purposes, that our present inquiry is part of a historical dialogue, we can consider the following questions: Do the forms of inquiry harmonize with those new understandings of the matter, the agents, and the purposes of study? If not, what needs to be changed in the form of inquiry? If so, is there some way to improve that harmony? Such questions would, of course, challenge the most basic assumptions of many academic disciplines. Again, this is why the only people who are in a position to answer all four of these questions are the practitioners of a given discipline. In the same way that development (or corruption) in any given moral tradition is, in Lewis's account, possible only among those who assume that moral order is not merely subjective, so also any academic discipline can be advanced in meaningful ways only by those who have been inducted into its particular combination of objects of inquiry, purposes, historical conversations, and forms of study.

Thus, although Lewis does not say explicitly what a regenerate approach to human learning would involve, his critique of modern assumptions about reality and the human person do imply the features of such a change. By insisting on the intrinsic worth of what is known and by raising the question of investigative purpose, he shows why the vision of learning as a neutral tool needs to be corrected by the vision of learning as a purposive tool. His

observations about the inherited character of human inquiry over time suggest something further: that the image of learning as a tool, even when a tool is properly understood as purposive, needs to be supplemented by something more. In this respect, what Lewis's critique implicitly calls for is something that depicts the genealogical aspects of human inquiry, such as the image of learning as a seed. The next chapter focuses specifically on the verbal art of grammar, showing how the four Aristotelian causes help to recover an understanding of grammar's qualities as a tool that is properly understood as purposive. The ensuing chapter then shows what grammar becomes when it is also understood as a seed.