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Integral Humanism and the Poverty of Scientism

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Zachary M. Mabee

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Declaration: I confirm that this is my own work and that the use of all material from other sources has been properly and fully acknowledged.

Zachary M. Mabee

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Zachary M. Mabee, University of Reading, z.m.mabee@pgr.reading.ac.uk

Abstract

The thesis proffers a critique of certain prominent varieties of scientism and proposes an integral humanism in response to them. Chapter one surveys various prominent forms of philosophical naturalism and scientism and, in particular, the ways in which these depend upon *histories* of the sciences and their successes. Chapter two turns specifically to a criticism of Alex Rosenberg's *strong* scientism and the ways in which, I contend, it denigrates, in a self-contradictory manner, the sort of histories on which it is in some such crucial sense reliant. I also note the way in which Wilfrid Sellars's *scientia mensura* principle is in important respects a kind of precursor to Rosenberg's views and how it faces some of the same besetting problems.

Chapter three broadens the scope of my argument and turns to what several recent authors have termed *weak* scientism, which they take to avoid some of the flagrant pitfalls of the more extreme views of Rosenberg and others. I contend there that, while something of an improvement, weak scientism nonetheless is still problematic, particularly for the way in which it presumptively takes the sciences to be the best or most paradigmatic modes of inquiry, to the detriment of what others take to be more humane or non-objectifying forms of inquiry. Chapter four furthers this critique by tending specifically to the ways in both weak and strong scientistic approaches either fundamentally mishandle or prejudicially address various matters *religious*. I draw here lively connections between such scientistic approaches and the reasoning of certain prominent philosophers and public intellectuals who defend and promote secular humanism. Finally, chapter five offers an articulation of what I call integral or expansive humanism, a

contrastive approach I take to deal much more ably and unproblematically with the characteristic concerns that beset the foregoing varieties of scientism.

Introduction

This thesis is fundamentally about scientism as, in my view, a philosophical problem. In the course of the thesis, I articulate various reasons for thinking of it as such. I also, in the course of articulating these reasons, progressively develop what I count as an integral or expansive form of *humanism* to be a much more preferable alternative to a host of forms of scientism—even those that count themselves as more restrained or, as the case may be, "humane."

To commence my extended criticism of such varieties of scientism, I offer a few prefatory remarks that help to contextualize it and highlight its relevance. One concern that some might have about a thesis like this is that scientism, considered as a philosophical stance or outlook, is too *extreme* a position to serve as my antagonist. That is to say, the reaction of some might be that few, if any, philosophers take up the scientistic badge, such that criticizing them might almost amount to pursuing a straw man. I find this concern unconvincing, for several reasons. First, as I adduce generously throughout the thesis, there are numerous philosophers and scientists who do, at times rather explicitly, march under the banner of scientism. If nothing else, then, my argumentation in this thesis is an engagement with them, as they have articulated such views in print. What is more, this engagement yields some fascinating developments—for instance, a deep detour through the philosophy of history, which can be an oft-neglected domain.

Second, scientistic thinking, as many have noted, can easily creep into more popular or public discussions that at least sometimes take themselves to be, or aspire to be, philosophically informed. These discussions pertain at times to things like, for example, how we think about the educational enterprise or the (alleged) dichotomy between science and religion. Among other concerns, I consider these issues at length in chapters three and four, respectively. In doing so, though, I am not just engaging

scientistic thinking philosophically, but crucially, in a way that dovetails with issues of more *public* concern. That is, in my view, engagement with scientism affords an exemplary opportunity for a kind of foray into public philosophy; and this, I think, is not to be overlooked.

I think another consideration can be brought to bear, at any rate, in regard to the potentially *extreme* character of a scientistic outlook (as compared, say, to more subdued forms of naturalism) and the manner in which this affects one's engagement with it. So far as I can tell, there are any number of very important and central recent philosophical projects that stem or flow largely from engagement with what is taken to be some more extreme reality or opposing set of views. One such project might well be, as I survey in the first chapter, varieties of philosophical naturalism. As I note in my discussions of them, they are variously oriented toward restating and capturing summarily the unparalleled success of the modern sciences; but they are also typically, to be sure, ordered toward emphasizing that the sciences and their concomitant view of the world, have no place *particularly* for any immaterial or supernatural causes, entities, or agents. That is to say, forms of naturalism, so far as I can tell, critically take shape by foreswearing something they take to be fundamentally or diametrically opposed to them, viz. the immaterial or supernatural.

In a way, I see this project in a similar light, though perhaps not in terms so stark. That is, I find issue in various respects with forms of scientism—not just or mainly, to be sure, as contrived, but as actually articulated by philosophers (along with scientists and public intellectuals)—and, in articulating these points of contention, take the opportunity to propose what I broadly think of as a more sane, integrated *humanistic* alternative to these forms of scientism. Put differently, my leveling criticism against these forms of scientism affords me, I believe, a unique opportunity to sketch this sort of integral, expansive

humanism as a more sensible alternative, and one conceived in rather strong opposition. What is more, I target my argumentation at various stages, but especially to conclude the thesis, at more restrained forms of naturalism that I think—often in subtle respects—still manifest a kind of conceptual and analytical poverty vis-à-vis the sort of humanism I defend. My scope, in other words, is broader than it might, at first blush, seem.

Chapter One: Naturalisms' (and Scientisms') Histories

Introduction

In this first chapter, I draw attention to an oft-occluded way in which many varieties of philosophical naturalism—specifically varieties of scientific naturalism or scientism—rely, as a sort of critical first premise, upon a *history*, either implicit or explicit, of the sciences and their (purported) successes. I note, too, how such histories are not in any noteworthy way the products or fruits of the sciences themselves—and that, instead, they are part and parcel of a kind of ancillary "cultural history" or genealogy that often accompanies the sciences. The proffering of such histories, in other words—as I develop more extensively in chapter five—is a kind of *humanistic* enterprise that is no doubt bound up with the sciences but that is, in my view, less than strictly continuous with them. I note that this is unsurprising and that one ought to expect such histories or genealogies in conjunction with *most* forms of inquiry, scientific or other.

I also highlight how the failure to *acknowledge* the central role that such historical premises typically play in naturalistic and scientistic accounts can easily lead thinkers into tension, if not contradiction, on these fronts. (I allege such tension more directly in chapter two, as I critically engage Wilfrid Sellars's *scientia mensura* principle and, more recently, Alex Rosenberg's strong scientism. I take both of these authors' views to lead them, on this front, into a sort of contradiction.) I then draw attention, to close the chapter, to some potential risks stemming from the offering of such histories, chief among them a mythologizing tendency regarding the unity of the sciences.

1.1 (Scientific) Naturalism and Scientism

In a noteworthy contribution on the nature and appeal of naturalism, Barry Stroud compares the view, doctrine, or stance of naturalism (depending on how one frames it) to world peace:

> Almost everyone swears allegiance to it, and is willing to march under its banner. But disputes can still break out about what is appropriate or acceptable to do in the name of that slogan. And like world peace, once you start specifying concretely exactly what it involves and how to achieve it, it becomes increasingly difficult to reach and to sustain and consistent and exclusive "naturalism."[1]

Indeed, Stroud himself wonders seriously whether it *is* worth trying to maintain a more substantive notion of philosophical naturalism, or whether instead, after sufficient paring and specification, most healthy or reasonable forms of it end up looking rather just like a more simple and mundane virtue or cast of mind like, say, open-mindedness.[2]

Such contentions aside, it does seem fair to say that, among philosophical -isms, varieties of naturalism have become especially pervasive—or, better, *have been* for some time—perhaps especially evinced, over the past several decades, by the number of philosophical projects that have attempted the work of *naturalizing* this or that phenomenon.[3] Two key concerns seem to be fundamentally at the heart of most philosophers' embrace of forms of naturalism: a negative dimension of *anti-supernaturalism* and a positive dimension of trust in and deference to a scientific methodology and ontology, which is typically predicated on the *success* of the sciences. Timothy Williamson draws these two key points together thus: "Many contemporary philosophers describe

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[1] Barry Stroud, "The Charm of Naturalism," in *Naturalism in Question*, eds. Mario De Caro and David Macarthur (Cambridge, MA: Harvard University Press, 2004), 22, previously published in *Proceedings of the American Philosophical Association* 70 (1996): 43–55.

[2] Ibid., 35.

[3] See, e.g., Mario De Caro and David Macarthur, "Introduction: The Nature of Naturalism," in *Naturalism in Question*, 2; also, see Fiona Ellis, *God, Value, and Nature* (Oxford: Oxford University Press, 2014), 8.

themselves as naturalists. They mean that they believe something like this: there is only the natural world, and the best way to find out about it is by the scientific method."[4] Or consider Alex Rosenberg, a *scientistic* naturalist who finds himself variously at odds with Williamson: "Naturalism is the philosophical theory that treats science as our most reliable source of knowledge and scientific method as the most effective route to knowledge."[5] Mario De Caro and David Macarthur take these two fundamental naturalistic planks, in the case of more stern forms of *scientific* naturalism, to be ontological on the one hand—involving commitment to an *exclusively scientific* conception of nature[6]—and methodological on the other—conceiving of philosophy, specifically following Quine, as needing to be *continuous* with science, rather than in some way or other *prior* to it.[7]

One ought to note straightaway that, following Stroud's cautionary points, a whole *range* of views come typically to be counted as naturalistic, and many that do would shy away from being termed *scientistic* or even scientifically naturalistic. For scientistic approaches, broadly speaking, are those that would promote the sciences as "the *only* proper form[s] of inquiry," as Graham Oppy puts it.[8] They tend in various ways to suggest that *only* the sciences are in the business of generating knowledge or reliable true belief

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[4] Timothy Williamson, "What is Naturalism?," in *Philosophical Methodology: The Armchair or the Laboratory?*, ed. Matthew C. Haug (London: Routledge, 2014), 29.

[5] Alex Rosenberg, "Why I am a Naturalist," in *Philosophical Methodology*, 32.

[6] Their construal of the ontological plank of a typical scientific naturalism as involving an *exclusively* scientific conception of nature might well seem overstated, particularly to certain defenders of scientific naturalism; but the contentiousness of their emphasis here is not of particular relevance to the survey at hand.

[7] De Caro and Macarthur, "Introduction," 3ff.

[8] Graham Oppy, himself a naturalistic thinker, demarcates the naturalist's position, broadly speaking, from the scientistic one, in a way that many, I gather, would find congenial. See Graham Oppy, *Naturalism and Religion: A Contemporary Philosophical Investigation* (London: Routledge, 2018), 13, italics added.

about a host of phenomena, and that other purported sources of such epistemic achievement are in comparison likely, or even surely, dubious.

Nonetheless, it does seem that effectively *all* varieties of contemporary philosophical naturalism would endorse at least some version of the negative, anti-supernaturalist plank and also show some kind of particular methodological deference, even if of a reserved or qualified sort, to modern science and its approach(es) the world, broadly speaking.[9] I want to consider each of these points at greater length. Then, having done so, I want to argue that each of them is typically reached or advocated by way of a kind of philosophical-historical synthesis, rather than by some more specifically scientific means.

1.1.1 Anti-Supernaturalism

As to anti-supernaturalism, Fiona Ellis notes that most varieties of naturalism, "reject any form of supernaturalism," which "involves the postulation of a 'supernatural realm of being' and the claim that knowledge of this realm is of fundamental importance to human living."[10] Similarly, Stroud assuredly notes that "[n]aturalism on any reading is opposed to supernaturalism."[11] He continues:

> By "supernaturalism" I mean the invocation of an agent or force that somehow stands outside the familiar natural world and whose doings cannot be understood as part of it. Most metaphysical systems of the past included some such agent. A naturalistic conception of the world would be opposed to all of them. Supernaturalism as a doctrine about what is so can have consequences for the study of human beings—in particular, how they believe and come to know things. In epistemology there have been many supernaturalists. Descartes thought that human knowledge cannot be accounted for without a benevolent, omniscient, and omnipotent God who guarantees the truth of what human beings clearly and distinctly perceive to be true. For Berkeley, God's agency is the only active force

[9] I am not considering herein, e.g., prominent varieties of *ethical* naturalism, though it seems that many of them would similarly aspire to such desiderata.

[10] Ellis, *God*, 10.

[11] Stroud, "Charm," 23.

> there is in the world of things we perceive and know about. Without him there would be nothing for us to know. Even Locke relied on a benevolent agent as the ultimate source of those cognitive faculties that are all that human beings need to get along in the world they find themselves in. These are not fully naturalistic accounts of human knowledge. They appeal to something beyond the natural world. In going against this supernatural consensus, Hume is almost alone among the greats. His credentials as a fully naturalized—or at least as a nonsupernaturalized—metaphysician and epistemologist are impeccable. The same is probably true of John Stuart Mill, if he counts as one of the greats. But there have not been many.[12]

Consider a similar gloss on anti-supernaturalism from John Dupré:

> By antisupernaturalism I mean something like the denial that there are entities that lie outside of the normal course of nature. It is easier to point to some of the things that are agreed to lie outside the normal course of nature than it is to characterize the normal course of nature. Central cases of such outliers are immaterial minds or souls, vital fluids, angels, and deities.[13]

Finally, consider this passage from De Caro and Alberto Voltolini about prominent contemporary varieties of philosophical naturalism:

> The most common forms of contemporary naturalism . . . involve more than the bare claim that nothing exists beyond nature. According to these views, no entity or explanation should be accepted whose existence or truth could contradict the laws of nature, insofar as we know them. This thesis can be called the "constitutive claim of contemporary naturalism." . . . It is true that everybody would agree that this claim implies the denial of intelligent designers, prime movers unmoved, and entelechies.[14]

It is worth noting, if only briefly, that a sort of anti-supernaturalism roughly along these lines is effectively characteristic of even the most expansive forms of contemporary philosophical naturalism, too. The "liberal" naturalisms of John McDowell and Hilary Putnam, for instance, while different from each other in certain key respects and each more expansive than most varieties of scientific naturalism or scientism, both have as a

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[12] Ibid. Stroud also highlights that naturalism in this broad sense has been pervasive in Anglo-American philosophy for a good while, at least a century or so.

[13] John Dupré, "The Miracle of Monism," in *Naturalism in Question*, 36–7. For a helpful compilation and discussion of related texts and passages, see Ellis, *God*, 12ff.

[14] Mario De Caro and Alberto Voltolini, "Is Liberal Naturalism Possible?," in *Naturalism and Normativity*, eds. Mario De Caro and David Macarthur (New York: Columbia University Press, 2010), 71–2.

kind of theoretical backstop the basic tenet of anti-supernaturalism.[15] Fiona Ellis, similarly, who defends a kind of "expansive" theistic naturalism, still objects to more traditional varieties of *super*naturalism and so, taking a cue from Levinas, considers our experience of God as roughly akin to our natural experience of value, rather than of someone or something outside or beyond the domain of our ordinarily *natural* human experience.[16]

1.1.1.1 A History of the Immaterial

One can take anti-supernaturalism, then, of roughly the sort just sketched, to be crucial to contemporary naturalism of effectively *any* variety. I want to pause and note, though, that more ought to be said about the origins or *background* of such anti-supernaturalist views. For it seems to me that *explicitly* in all these excerpted passages, and implicitly in other respects or in similar views, is a kind of intellectual *history* or historical sketch—that is, some or other kind of historical reckoning with views that *count* as supernaturalist. Stroud, for instance, offers us Descartes, Berkeley, and Locke as examples of prominent philosophers whose epistemologies were marked in some way or other by a supernaturalist orientation. Dupré, in his version, cites deities, angels, souls or minds, and vital fluids as noteworthy supernaturalist notions; and De Caro and Voltolini, perhaps more controversially, adduce intelligent designers, (unmoved) prime movers, and entelechies—the latter two of which are of specifically Aristotelian provenance. (This is perhaps ironic inasmuch as Aristotle has been taken traditionally to be a foundational thinker of a robust sort of *naturalism*, not supernaturalism.) In all three of these cases, that

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[15] See, e.g., John McDowell, "Naturalism in the Philosophy of Mind," in *Naturalism in Question*, 94ff., previously published (in German) in *Neue Rundschau* 110 (1999): 48–69; and Mario De Caro, "Introduction: Putnam's Philosophy and Metaphilosophy," in *Naturalism, Realism, and Normativity* (Cambridge, MA: Harvard University Press, 2016), 12.

[16] See Ellis, *God*, chs. 6ff. I revisit some such forms of liberal or expansive naturalism in chapters four and five and attempt to show there that the humanistic approach that I develop is, while generally irenic with regard to them, in certain key respects preferable.

is, we do not just have, as it were, an articulation *in principle* of what anti-supernaturalist naturalism is or ought to be; we also have a kind of historical *sketch* of how it ought to look, particularly in contrast with various views that are taken to be positively supernaturalist. In other words, there is at play a kind of contention that a naturalist ought *not* to think about the soul as Descartes did; or to invoke a prime mover or inherent potentiality as Aristotle did; or *élan vital* in the way that, say, Bergson did.

I might note that distinguishing forms of philosophical naturalism from alleged supernaturalist precursors is not a new move. Terence Irwin reminds us, for instance, how what we think of as ancient (Aristotelian) philosophical naturalism was systematized between roughly the time of Homer (circa mid-eighth century B.C.E.) and Socrates (circa mid-fifth) and that this systematization happened largely in the wake of, or in response to, Hesiod and the mythologists, whose religious musings on various topics the naturalists took to be of a decadently supernaturalist flair.[17] In a similar vein, though his contention was not that Aristotle was of a *supernaturalist* bent, Bacon took Aristotle to have systematically corrupted natural philosophy (or science) by admitting notions of the foregoing sort—entelechies, specifically—into his analysis of the natural world:

> The most conspicuous example of [rational philosophers] was Aristotle, who corrupted natural philosophy by his logic: *fashioning the world out of categories*; assigning to the human soul, the noblest of substances . . . doing the business of density and rarity . . . *by the frigid distinction of act and power*; asserting that single bodies have each a *single and proper motion*, and that if they participate in any other, then this results from an external cause; and *imposing countless other arbitrary restrictions* on the nature of things . . . in the physics of Aristotle you hear hardly anything but the words of logic, which in his metaphysics also, under a more imposing name . . . he has handled over again.[18]

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[17] Terence Irwin, *Classical Thought*, A History of Western Philosophy, vol. 1 (Oxford: Oxford University Press, 1989), 20.

[18] Francis Bacon, [*Novum Organum Scientiarum, sive Indicia Vera de Interpretatione Naturae*] *The New Organon and Related Writings*, ed. Fulton H. Anderson (New York: The Liberal Arts Press, [1620] 1960), LXIII. For the emphases above, along with a citation of the same passage, see John Haldane, Foreword, in *Neo-Aristotelian Perspectives on Contemporary Science*, eds. William M.R. Simpson, Robert C. Koons, and Nicholas J. The (London: Routledge, 2018), x.

The contemporary naturalistic thinkers that I have cited do not seem keen on jettisoning Aristotle or any particular thinker so directly, but they are in a similar vein decisively parting ways with certain notions that they take to be of a supernaturalist character or origin—notions, of course, that have their own peculiar intellectual histories. And the theoretical proscriptions these naturalistic thinkers offer, it seems, either implicitly or explicitly invoke such particular notions *and* their particular histories. Doing this in certain key ways sets apart or *demarcates* their preferred way of doing things or approaching such questions specifically vis-à-vis the *ancien régime* that they take to have been superseded.[19] In a certain broad sense, I want to claim, they are offering a sort of "cultural history,"[20] to invoke Hilary Putnam's phrase, with regard to the sciences and various other modes of inquiry and thereby delineating what broadly counts (or has counted) as legitimate within them and so what also, on the other hand, does not. They are also giving us a kind of sketched history of how things *used* to be done in some cases and how, in the course of and development of things, they have come to be done differently. What is more, this sort of sketched history is offered by appealing to what are generally taken to be certain key or characteristically important junctures in the history of science.

Though I wait until the fifth chapter to treat these notions at greater length, I might nonetheless take just a moment to introduce a similar notion, highlighted recently by Bernard Williams, which can help to illuminate further the sorts of dynamics toward which I am gesturing. What I am provisionally describing as "cultural history"—employed, as I have noted, by various naturalistic and scientistic philosophers—is not dissimilar to

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[19] Cf. Bernard Williams, "Philosophy as a Humanistic Discipline," in *Philosophy as a Humanistic Discipline*, ed. A.W. Moore (Princeton, NJ: Princeton University Press, 2006), 190, previously published in *Philosophy* 75, no. 4 (October 2000): 477–96.

[20] Cf. Hilary Putnam, "What Evolutionary Theory Doesn't Tell Us about Ethics," in *Naturalism, Realism, and Normativity*, 57. I develop this notion at greater length, specifically following Putnam's lead, in chapter five.

the notion of *genealogy*, which is particularly traceable to Nietzsche but which Williams himself has recently applied to discussions of truth and truthfulness.[21] Williams contends that a genealogy is fundamentally "a narrative that tries to explain a cultural phenomenon by describing a way in which it came about, or could have come about, or might be imagined to have come about. Some of the narrative will consist of real history, which to some extent must aim to be, as Foucault put it, 'gray, meticulous, and patiently documentary.'"[22] For Williams, however, genealogy also typically involves some admixture of fictional narration, "an imagined developmental story," and a good deal of philosophy too.[23] In this sense, then, I take the invocation of such notions (viz., cultural history and genealogy) to be herein quite apt, as I take the contention that such naturalistic and scientistic accounts are characteristically, as I am calling them, philosophical-historical.[24]

1.1.2 The Success of the Sciences?

At any rate, most prominent varieties of philosophical naturalism do hold to a foundational anti-supernaturalist commitment, as I have just highlighted extensively. Their other key commitment, which I have also noted, is a kind of deference—both ontologically and methodologically—to the sciences, *particularly* on account of their

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[21] Bernard Williams, *Truth and Truthfulness: An Essay in Genealogy* (Princeton, NJ: Princeton University Press, 2002), 22ff. Another very important work on the genealogical approach and tradition, to which Williams is indebted, is Alasdair MacIntyre, *Three Rival Versions of Moral Enquiry: Encyclopaedia, Genealogy, and Tradition* (South Bend, IN: University of Notre Dame Press, 1990).

[22] Williams, *Truth*, 20.

[23] Ibid., 19–21.

[24] I end up preferring, for my present purposes, the notion of "cultural history" to that of genealogy—in part due to the weight that I give later in my argument to the *cultural*, as a category, specifically; but also to prevent the incursion into it of some of the stronger Nietzschean (and so critically deconstructionist) connotations of the notion, which I would prefer for the most part to circumvent. Regardless, I take the invocation of both notions to be relatively illuminating for what I am seeking to accent.

purported *success*. De Caro and Macarthur sketch this commitment, specifically as regards the ontological commitment of varieties of (scientific) naturalism and scientism:

> Schematically, the first theme is a commitment to a scientism that says not only that modern (or post-seventeenth-century) natural science provides *a* true picture of nature but, more contentiously, that it is the *only* true picture. Wilfrid Sellars expresses its animating spirit in his remark that "science is the measure of all things, of what is that it is, and of what is not that it is not."
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> Perhaps the most common reason cited in favor of this view is some version of what might be called the "Great Success of Modern Science Argument." It argues from the great successes of the modern natural sciences in predicting, controlling, and explaining natural phenomena—outstanding examples of which are mathematical physics and Darwin's theory of evolution—to the claim that the conception of nature of the natural sciences is very likely to be true and, moreover, that this is our *only* bona fide or unproblematic conception of nature. It is the latter claim that earns scientific naturalism the label of "scientism."
>
> The acceptance of an exclusively scientific conception of nature is what leads to the demand for the various projects of naturalizing the mind and its contents . . . that dominate contemporary research in metaphysics.[25]

It should be noted that this is De Caro's and Macarthur's assessment, in particular, of forms of *scientific* naturalism (and so, too, of scientism). I note this because many defenders of certain (liberal, say) varieties of naturalism—even those of a more markedly *scientific* variety—might balk at the *exclusive* and exhaustive reach of the scientific "picture" of the world on this rendering. I should also note that such claims about the success of science are typically specifically about its *epistemic* successes—"that it has succeeded in uncovering and establishing important truths about the world and ourselves."[26] That is to say, such claims do not typically regard matters like, e.g., the institutional longevity of science, which could also be counted as a sort of success (related, no doubt, but not strictly epistemic) on its behalf. They do, however, often adduce practical grounds of purported success, too—

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[25] De Caro and Macarthur, "Introduction," 4.

[26] René Van Woudenberg, Rik Peels, and Jeroen De Ridder, "Introduction: Putting Scientism on the Philosophical Agenda," in *Scientism: Prospects and Problems*, eds. Jeroen De Ridder, Rik Peels, and René Van Woudenberg (Oxford: Oxford University Press, 2018), 14.

namely, the ways in which data or findings from the sciences are *applied* variously in and through technology.[27]

As to the prevalence of such historical accounts of scientific success, I do think De Caro and Macarthur are right: One sees such sketches deployed by a variety of authors who advocate for a range of forms of philosophical naturalism. For some divergent examples to this effect, consider first John McDowell, whose liberal naturalism is avowedly anti-scientistic; and then subsequently, James Ladyman and Alex Rosenberg, who bear the scientistic moniker more proudly (particularly in the latter case). In helping his readers to appreciate aspects of (Aristotelian) Greek naturalism, McDowell offers the following remarks about the history of the sciences:

> The most striking occurrence in the history of thought between Aristotle and ourselves is the rise of modern science. . . .
>
> It is a commonplace that modern science has given us a disenchanted conception of the natural world. A proper appreciation of science makes it impossible to retain, except perhaps in some symbolic guise, the common mediaeval conception of nature as filled with meaning, like a book containing messages and lessons for us. The tendency of the scientific outlook is to purge the world of meaning—the object of reason, in an old sense that is threatened by this development.[28]

Later in the same piece, McDowell continues:

> Our position in history makes available to us the idea of the world as science reveals it. . . .
>
> There is no need to deny that what science reveals is special, in a way that is brought out by the point about disenchantment. In discarding the mediaeval conception of nature as a book, science indeed unmasked projective illusions, and it is essential to how scientific investigation rightly conceives its topic that it should be on guard against such illusions. The investigative stance of science discounts for the effects of features of the investigator, even his humanity. That is why the world as science reveals it does not contain secondary qualities. More generally, what science aims to discover is the nature of reality in so far as it can be characterized in absolute terms: the content of the view from nowhere, in Thomas Nagel's evocative phrase. And the practice of science is not a mere quirk of our culture, on par with, say, chess. Thanks to science, we know far more about the world, and

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[27] Ibid., 14–5.

[28] John McDowell, "Two Sorts of Naturalism," in *Mind, Value, and Reality* (Cambridge, MA: Harvard University Press, 1998), 174.

> understand it far better, than the mediaevals did, and it does not undermine the fact that this in an objective improvement to say (true though it is) that we make these assessments from our present standpoint, which includes the hard-won idea of disenchanted nature as the province of scientific understanding.[29]

McDowell, as is well known, develops a view according to which the scientific understanding of the world, and the workings of human reason within it, ought *not* to be taken as the only or predominant one; that we also ought, as he puts it, to allow for a kind of *sui generis* status to matters that fall within the space of reasons, for instance human acts of knowing.[30] Nonetheless, he does accede, in sketching this account, a certain sort of narrative of *success* regarding modern science and its achievements.[31] In particular, McDowell broadly countenances an analysis according to which modern science has freed us from a certain more enchanted mediaeval (and older) way of thinking about ourselves, the world, and our place in it. But if one does in fact countenance an analysis like this, I think, one also needs to say something more in defense or on behalf of it. For as it stands, it is a kind of sweeping *narrative* account of a pivotal shift in intellectual history: That before a particular juncture, a certain way of thinking tended to predominate but then, roughly since that time, a different, in some ways more successful cast of mind has won the day. As it stands, it might come across as a sort of roughshod *story* that philosophers tell in order to frame with vindication the various points they wish to make.[32] Now, many

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[29] Ibid., 181–2.

[30] One might raise a cautionary point about McDowell's sketch of the scope and power of the modern scientific view of the world. In particular, one might wonder whether it is sensible, or indeed carelessly sweeping, to try to equate this view with something like Nagel's view from nowhere. The concern here is whether the sciences themselves would *ever* aspire to something like that sort of denuded objectivity. I am considering McDowell, though, primarily as offering an historical sketch of the sciences and their successes and so do not need presently to comment further on this particular concern.

[31] Arguably, a way in which McDowell's "liberal" naturalism is more balanced than many versions of scientific naturalism or scientism is that it also offers a kind of critical take on accounts of such matters that are, in a word, scientistic. For him, these become unsatisfactory variations of a kind of "bald naturalism." Cf. John McDowell, *Mind and World*, with a new introduction by the author (Cambridge, MA: Harvard University Press, 1996), xviiiff.

[32] Indeed, McDowell himself notes that he draws this sort of sketch regarding the trajectory of modern science from Charles Taylor's seminal work on Hegel. Regarding this point about stories

would no doubt agree that there seems to be something fundamentally historically *accurate* or convincing about a sketch like McDowell's, particularly as regards various fruits of the modern scientific approach that have been borne out in technology. But if this is taken to be the case—and particularly if such fruits are taken in a key way to *justify* a philosophical view or outlook like naturalism or scientism—more needs to be said with precision in the proffering and defense of it. For instance, if he or others take this sort of story to be, say, overwhelmingly convincing *historiographically*, then more robust evidence or argumentation to this effect ought to be adduced on its behalf.[33] One should not just be satisfied that it is a *typical* or familiar summary rendering of these matters and the relevant cultural and intellectual developments they concern. To be sure, philosophers *especially* ought to view with wariness such a retelling so sweepingly and briskly offered.

1.1.2.1 Scientistic Sketches

McDowell's "liberal" naturalism is avowedly anti-scientistic. In a sense, it stands at the opposite end of the spectrum from some of the scientistic approaches that I consider herein.[34] It is perhaps especially striking, therefore, that aspects of its setup crucially involve a sort of retelling of the sciences' history of success that is in fact quite comparable to what is brought to bear in various scientistic accounts. To see this, consider James

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philosophers tend to tell (sometimes carelessly), cf. John Martin Fischer, "Stories," in *Our Stories: Essays on Life, Death, and Free Will* (New York: Oxford University Press, 2009), 131, previously published in *Midwest Studies in Philosophy* 20 (1996): 1–14.

[33] McDowell relies upon this sort of sketch in a variety of places and typically offers no more rigorous a defense of its merits. Cf. McDowell, *Mind and World*, 70–1.

[34] McDowell variously concedes that the sort of naturalism he cautiously countenances is anti-scientistic—though in a quietist spirit, he is wary of articulating it positively or ascribing to it specifiable content outside the bounds of a certain sort of dialectical engagement. For more on this, see, e.g., John McDowell, Response to Hans Fink, in *John McDowell: Experience, Norm, and Nature* (Malden, MA: Blackwell, 2008), 216.

Ladyman and Alex Rosenberg, whose views are both avowedly scientistic, though to admittedly different degrees. First, from Ladyman:

> The best reason to adopt . . . core scientism . . . is the track record of science compared to other forms of inquiry. Without science we would have a tiny fraction of the knowledge that we have, and we would still be in the grip of various dogmas about life and the planet depending on our particular cultural background. Religions and traditional forms of knowledge agree on little with regard to the objective nature of reality, and disagree substantially about the nature of the human body, mind, and soul (if any). Many religions also have internal doctrinal disputes about fundamental metaphysical matters, such as doctrines of transubstantiation in Christianity and reincarnation in Buddhism. Science, by contrast, is a uniquely universal form of culture. . . . Science is uniquely successful as a form of epistemic inquiry, and the track record of attempts to curtail its scope is poor.[35]

Ladyman takes the singular success of science to be *the best* reason to adopt the sort of scientism he prefers. And again, as is common, he principally construes this success *epistemically*, in regard to the knowledge that the sciences have generated. But notice something further: He casts this success specifically *in contrast to* certain other purported sources of knowledge that he (and many others) take to have *preceded* science as we generally know and practice it, or that have come generally to be supplanted by modern science. In particular, Ladyman draws attention here to "religions and traditional forms of knowledge." But there seems implicit here, if not explicit, a kind of cultural history or genealogy of the sciences vis-à-vis other such forms or sources of knowledge—one on which the sciences have in various ways *won out* over them. Further, what Ladyman assumes seems consonant with the kind of sketched history offered by McDowell, though their broader approaches are quite divergent.

Consider again the way in which Aristotle was a kind of direct enemy in Bacon's *oeuvre* and the way in which, more subtly, he resurfaces as such in some of the contemporary versions of naturalism that have been summarized herein. Consider as well

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[35] James Ladyman, "Scientism with a Humane Face," in *Scientism: Prospects and Problems*, 115.

a similar sort of narrated historical sketch of the onset of modern science: People *used to* countenance unmoved movers to account for entities' finality or entelechies to account for their regular and characteristic actions; but nowadays they generally know better and no longer do. Many philosophers *would* likely get behind a rough history of this sort, which points to a kind of broadly Aristotelian *ancien régime* that came to be ousted by the post-Galilean "new" science.[36] Even so, one cannot responsibly just take such an account for granted, for a number of reasons. For example, it might simply not be the case, anymore, that so many philosophers *do* think of matters in such a way. An arguably growing number of philosophers have, for instance, recently taken up the neo-Aristotelian mantle because they think that key Aristotelian ideas do *better* justice to aspects of recent science than their competitors.[37]

What is more, if someone like Ladyman is content with *contrasting* the successes of the sciences with the relative lack thereof of "religions and traditional forms of knowledge," he owes us a fuller defense, at least secondhand, of *how* such forms of knowledge have in fact been distinctly at odds with the sciences, or how they are so divergent, as he claims, with respect to each other. As a counterpoint to this, one might claim, as many have, that traditionally religious domains (in Judaism, Christianity, Islam, Hinduism, and so on) have sometimes or often been the *ripest* for the cultivation of the sciences and important moments bound up with them like, e.g., the birth and development of the university.[38] What is more, Ladyman expressly contends that various religions and

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[36] This point bears repeating throughout these discussions: To claim that such a typical account or history is narrated is surely not to claim that it is *fictitious*, but instead just to claim that it is told or given in a decisively narrated, or story-like, fashion.

[37] See, e.g., the contributions in *Neo-Aristotelian Perspectives*.

[38] The conduciveness of such *contexts* for scientific inquiry is of course a different matter than the inquiries, knowledge, and understanding that have been yielded therein. Nonetheless, it would seem dissonant and implausible if one like Ladyman were to claim that such contexts tend to be hostile to the sciences, say, while also admitting that they have in fact yielded a great deal of noteworthy and prolific scientific fruit.

traditional cultures "agree on little with regard to the objective nature of reality;" but again, this claim is far from obvious. Indeed, one might well contend the opposite: At least as regards certain matters of a kind of *fundamental* importance for many peoples and cultures, they might in fact tend to be quite *convergent*—like regarding the foundational significance of familial or tribal bonds, or that human beings are at least partly constituted by some sort of irreducible spiritual principle.

1.1.2.1.1 Rosenberg's Narrative

I have been surveying thus far a variety of forms of philosophical naturalism and, as I have stressed, my main points of criticism are ultimately directed toward certain varieties of scientific naturalism or scientism—rather than to more liberal or expansive forms of naturalism—that fail to leave room in their respective accounts for the sorts of historical premises that, as I have been showing, they typically tend to invoke.[39] Nonetheless, I think it helpful and instructive to note the ways in which a *host* of forms of naturalism, even more liberal or expansive ones, rely in a crucial way on such historical sketches of the sciences and their successes (and a concomitant proscription of supernaturalist incursions). With this in mind, the version of *scientistic* naturalism to which I turn now, from Alex Rosenberg, is perhaps the most avowedly scientistic of the lot. For the moment, I want to highlight the key way in which it, too, adduces the historical success of the sciences as a sort of pivotal first premise. To this effect, consider the following representative passage from Rosenberg:

> The "industrial-scale" inductive argument for naturalism is the track record of science. Science began with everyday experience, recursively reconstructing and replacing common beliefs that turned out to be wrong by standards of everyday experience. The result, rendered unrecognizable to common belief after 400 years or so, is contemporary physics, chemistry and biology (plus the theorems of mathematics). Why date science only to the 1600s? After all, mathematics dates

[39] The self-contradictory character of this sort of approach is what I seek to highlight chiefly in chapter two.

> back to Euclid, and Archimedes made empirical discoveries in the third century BC. But 1638 was when Galileo first showed that a little thought is all we need to undermine the mistaken belief that neither Archimedes nor Aristotle had seen through, but which stood in the way of science.
>
> Galileo offered a thought experiment that showed, contrary to common beliefs, that objects can move without any forces pushing them along at all. It sounds trivial and yet this was the breakthrough that made physics and the rest of modern science possible. Galileo's reasoning was undeniable: roll a ball down an incline, and it speeds up; roll it up an incline, it slows down. So, if you roll it onto a frictionless horizontal surface, it will have to go forever. Stands to reason, by common sense. But that simple bit of reasoning destroyed the Aristotelian world picture and ushered in science. Four hundred years of everyday experience continually remodeling itself has produced a description of reality radically at variance with common sense; that reality includes quantum mechanics, general relativity and Darwinian natural selection.[40]

In this passage, Rosenberg offers a roughly comparable sketch to the various other naturalistic authors surveyed thus far, though his is a bit more severe in its diagnoses. In a word, at any rate, he offers us a kind of summary *history* of "science" and its successes. But there is more, I think, to note about this history: It is distinctly a kind of *narrative* history.[41] I return to this matter with greater nuance in the second chapter; but his historical sketch has a striking kind of *plot* to it, and plots typically involve accounts in some way or other of *how* or *why* something happened and so not just *that* it happened—as in E.M. Forster's classic example of the queen's having died of grief rather than having simply died. A plot

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[40] Alex Rosenberg, "Can Naturalism Save the Humanities?," in *Philosophical Methodology*, 39–40. The medievalist and philosophical historian Etienne Gilson notes that such a Galileo-centric rendering of the rise of modern science (and rationalism) is no doubt familiar, and not unconvincing, but also perilously far from comprehensive. See Etienne Gilson, *Reason and Revelation in the Middle Ages* (New York: Charles Scribner's Sons, 1938), 37.

[41] It is a noteworthy aside that varieties of historical narration have accompanied the exposition and defense of certain other key philosophical and scientific methodologies, like that which Descartes elaborates in his *Discours de la méthode*. He offers readers in that seminal text, amidst an elaboration of his four key methodological principles, a broader *narrative* that recounts the history of their development and that also speaks to how he himself *personally* came to them, specifically during the winter of 1619 or 1620. See John A. Schuster, "Cartesian Method as Mythic Speech: A Diachronic and Structural Analysis," in *The Politics and Rhetoric of Scientific Method*, Australasian Studies in History and Philosophy of Science 4, ed. John A. Schuster and Richard R. Yeo (Dordrecht: D. Reidel, 1986), 33ff.

Gillian Beer takes a similar sort of narrative dynamism to have been at play in the development of Darwin's theories, as "[h]e sought to appropriate and to recast inherited mythologies, discourses, and narrative orders. He was telling a new story, against the grain of the language available to tell it in." See Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction*, 3rd ed. (Cambridge: Cambridge University Press, [1983] 2009), 3.

tends to give us important answers to relevant *why*-questions that are at play in such situations; it tends to satiate these sorts of questions.[42] On Rosenberg's account, there are certain key historical *figures* who had particular views about objects in motion, their appearances vis-à-vis common-sense judgments, and so on. These figures' views then came to be upended—or "destroyed," for Rosenberg, in the case of Aristotle—particularly through the work of Galileo, who paved the way for various developments that have led us to where we are today, with crowning achievements like quantum mechanics, general relativity, and Darwinian evolutionary theory. This is the rough sketch of a sort of plotline that concerns the history (and successes) of modern science.

I ought to note that for Rosenberg and many other naturalistic thinkers, a historical sketch of this kind would not *explicitly* be taken to be foundational for their accounts. Presumably, they would tend to say that something like the *results themselves* of the sciences, and the ways in which they have been experimentally and theoretically vindicated, are much more the foundation stone for them than any sort of historical recapitulation of what these results are.[43]

To be sure, I do not doubt that many would more or less countenance this sort of historical sketch that Rosenberg offers us, though it is not without certain imprecisions.[44] But again, it is decidedly *that*—an historical *sketch* that calls upon Galileo as a key protagonist and, to a degree, Archimedes, Aristotle, and various classical thinkers ultimately as antagonists. And there is indeed a kind of narrative *arc* to it as offered,

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[42] Cf. J. David Velleman, "Narrative Explanation," *The Philosophical Review* 112, no. 1 (January 2003): 2, https://www.jstor.org/stable/3595560.

[43] I cast doubt subsequently in this chapter, and in chapter five, on whether such a contrast between the results of the sciences and a *history* of these results can in fact be easily drawn and maintained.

[44] It would be fairer and more judicious for him to claim, e.g., that *experimental* science as we now broadly know and practice it decidedly traces to the beginning of the seventeenth century.

according to which there was a kind of longstanding consensus, perhaps more consonant with common-sense reasoning, that was fruitfully ousted in favor of the various views, theories, and principles that now allow us, for Rosenberg, to see the world as we do, according to the viewpoint of contemporary science:

> Natural science deals only in momentum and force, elements and compounds, genes and fitness, neurotransmitters and synapses. These things are not enough to give us what introspection tells us we have: meaningful thoughts about ourselves and about the world that together bring about our actions. Non-naturalistic philosophers since Descartes have agreed with introspection, and they have provided fiendishly clever arguments for the same conclusion. These arguments ruled science out of the business of explaining our actions because, they argued, it cannot take thoughts seriously as causes of anything.[45]

There is, once again, a striking *narrative* flair to this account that Rosenberg offers; and I do not simply mean that generically or carelessly. He indeed offers us a kind of plot-like developmental story on which a bygone way of seeing the world, having issued mainly from common sense, has come to be supplanted by one that deals only in the fundamental elements or forces of the (harder) sciences. And still, for him, during this course of development, there have been further antagonists, like Descartes and various like-minded philosophers, who have attempted to save face for more traditional, less scientific points of view—relating, say, to the value or veracity of introspection, among other phenomena.

I might stress here, too, that this sort of developmental story that Rosenberg offers, while perhaps quite commonly held, is not beyond reproach. As a brief and perhaps controversial aside, for instance, one might take issue with Rosenberg's characterization of Galileo's work on gravity as having upended a more common-sense and appearance-saving approach to scientific reasoning and demonstration. As Lorraine Daston notes, although Galileo, like Bacon, was decidedly anti-Aristotelian in certain key respects, he also, "like Aristotle, valued experience as the source of the axioms from which

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[45] Rosenberg, "Can Naturalism," 40.

demonstrations flow."[46] And it was these sorts of experience-saving axioms that "were the object of Bacon's most scathing attacks."[47] There might well be, one could argue, a way in which modern science broadly, as we know it, takes a generally more Baconian tenor in this respect, of seeking to upend views that are reliant upon or consonant with common sense. But this is to say, in other words, that Rosenberg's characterization of Galileo is perhaps not nearly as vindicating as he takes it to be. Rosenberg claims that Galileo was a scientific hero chiefly for having delivered scientific reasoning from this sort of preoccupation with common-sense-vindicating expectations; but the historical Galileo might in fact have been trying rather more to *preserve* these, which Bacon and others decisively sought to ouster. Again, as Daston notes, "Bacon's deviating instances isolated facts from the continuum of experience, by wrenching them out of the conventional generalizations that had been the stock-in-trade of scholastic natural philosophy."[48] This is not to claim that a story like Rosenberg's is broadly wrong or mistaken, but instead to note that parts of it might well be, and that significant dimensions of it might readily be recast.

Before proceeding, these preceding comments merit the brief consideration of an objection or point of contention. One who defends or is sympathetic to some or other sort of naturalism, like those I have just surveyed, might think that I am not really objecting to their views much at all—and that, instead, I am nitpicking at ways in which their stories of the sciences' successes *might* in some way or other be mistaken, deficient, or due to be retold slightly differently. The problem with such nitpicking, they might

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[46] Lorraine Daston, "Baconian Facts, Academic Civility, and the Prehistory of Objectivity," in *Rethinking Objectivity*, ed. Allan Megill (Durham, NC: Duke University Press, 1994), 43.

[47] Ibid.

[48] Ibid., 44.

continue, is that it can be leveled, at least to some degree, against just about *any* historical account, and so not just or especially against these.

The thought that such concerns might be directed toward nearly *any* historical account is well taken; but I think this objection misses the thrust of my contention. I worry specifically about the cursory way in which such success stories seem characteristically, across the spectrum of varieties of naturalism, to be offered, because almost inevitably in such accounts, these considerations are adduced with an eye to being *mobilized*, as I emphasize in the forthcoming sections and chapters, on behalf of the sciences and the view(s) of the world they are taken to secure and, as I have already noted, to some degree *against* certain more traditional, religious, or common-sense kinds of knowledge, e.g., or approaches to life and the world. In particular, as I argue broadly in chapters three through five, mobilizing such histories in a manner *contrary* to other such approaches carries with it a serious and culpable risk of *prejudice* against such approaches or forms of knowledge that are not taken to have sufficient scientific *bona fides*. What is more, the issue remains that many such accounts are offered in an unsatisfactorily sweeping fashion. I revisit this point, too, in chapter four; and a corresponding concern is borne out with regard to it: viz., that such cursory accounts of the sciences' successes are not uncommonly *coupled* with comparably cursory accounts, say, of religions' defects or misdeeds, as in many varieties of secular humanism. And it seems to me that both in their positive (or vindicatory) and in their negative uses, such cursory (and rhetorically employed) histories tend often to do the matters at hand a not insignificant degree of disservice.

1.1.2.1.2 Naturalisms and Monumental History

I have highlighted thus far, in these summary accounts of various naturalistic thinkers, a predilection, either implicit or explicit—decidedly more the latter in

Rosenberg—to offer a kind of *sketch* of a rough historical arc, which is part and parcel of their accounts of the sciences and their successes. I want to contend now that these sorts of historical sketches are, to elaborate my concerns with them, rather like what Nietzsche famously terms *monumental* histories, which focus upon and, in a way, relish certain aspects of human life and culture that seem most valiant, noble, or praiseworthy—particularly as they support or undergird various aspects of life or society. Consider first Nietzsche's tri-partite assessment of history as it pertains to human life and its concerns:

> History belongs to the living man in three respects: it belongs to him so far as he is active and striving, so far as he preserves and admires, and so far as he suffers and is in need of liberation. To this triplicity of relations correspond three kinds of history: so far as they can be distinguished, a *monumental*, an *antiquarian* and a *critical* kind of history.[49]

The fundamental idea at play here seems to be that our appeals to and uses of history often serve various needs that emerge in our personal and corporate lives.[50] The sense he is stressing, I take it, in particular with regard to *monumental* history, is that we tend to need and use history to help us to grow, strive, and improve in various ways—to sustain and excel within various dimensions of our lives. He continues thus:

> That the great moments in the struggle of individuals form a chain, that in them the high points of humanity are linked throughout millennia, that what is highest in such a moment of the distant past be for me still alive, bright and great—this is the fundamental thought of the faith in humanity that is expressed in the demand for a *monumental* history.[51]

I think that Nietzsche's notion of monumental history is quite apt for capturing the kind of history of the sciences at play in these various foregoing naturalistic accounts,

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[49] Friedrich Nietzsche, [*Von Nutzen und Nachteil der Historie für das Leben*] *On the Advantage and Disadvantage of History for Life*, trans. Peter Preuss (Indianapolis: Hackett, [1874] 1980), 14.

[50] To note these points of use or application, of course, is not to preclude the other important considerations that would typically accompany historical accounts, like whether, namely, they are true or accurate.

[51] Nietzsche, *On the Advantage*, 15.

particularly as regards their (1) anti-supernaturalist orientation and (2) stories of the sciences' successes. For in these accounts, there is a marked sort of emphasis especially upon the *achievements* of the sciences—in Rosenberg's and many others', particularly over the past four or five centuries—and the ways that these achievements have been good and fecund, particularly in eclipsing, in their view, more primitive or rudimentary approaches of human beings toward our lives and the world. This sort of emphasis does indeed seem generally becoming, especially when one considers the theoretical precision and advances of the past few centuries of science and also the application of such advances in the domain of technology. Nonetheless, the following dimension, I believe, is salient: Such accounts are reflective of something like a *monumental* historical tendency or impulse—i.e., they lay a particular emphasis on the theoretical and technological *successes* of the sciences, and often in such a way as to *commend* them in their own right, typically as models of inquiry more generally. What is more, they often do so without giving significant consideration either to arguable *setbacks* concomitant with these alleged successes, or to the fact that some of the other modes of knowledge or inquiry (like common sense or religious traditions) have available their own stories of success, or "vindicatory"[52] accounts, to use Bernard Williams's expression. To the former point, one might note the way in which various traditionalists, Marxists, and feminists, among a variety of others, have tended to see many *problems*—like "alienation, dehumanization, ecological deterioration, and nuclear escalation"[53]—as emergent from the movement that is broadly taken to be modern science. This is not of course to say that such problems outweigh or eclipse the various aforementioned successes; and it is also not to say that they are specifically *epistemic*

[52] Cf. Williams, "Philosophy as," 189ff.

[53] See Sal Restivo, "Modern Science as a Social Problem," *Social Problems* 35, no. 3 (June 1988): 206, https://www.jstor.org/stable/800619.

problems or deficiencies. It is to say, however, that one can quite reasonably note or adduce them, and that accounts that do not might reasonably, for such as omission, be called into question.

In a similar vein, consider Paul Feyerabend's assessment of Jacques Monod's objectivism, which is another take on a sort of scientific naturalism, and the way in which this objectivism highlights the successes of the sciences. In Monod's view, the "prodigious power of performance" of the sciences has effectively vitiated various pre-scientific (e.g., traditional, commonsensical, religious, etc.) outlooks on and approaches to life and the world.[54] As Feyerabend rightly notes, though, an approach like Monod's, predicated upon the success or "power" of the sciences, is not the only kind of approach on behalf of which one can offer such a noteworthy success story. Christianity, Feyerabend observes, can also claim its own peculiar kind of vindicatory history, inasmuch as it has, among other things, survived various famines, plagues, and hostile regimes, all the while bolstering people's spirits uniquely amidst these travails.[55] Of course its success story is, for Feyerabend, of a somewhat different sort than that which tends to accompany modern science; but that does not preclude its being a significant story of success in its own right (against which contrary stories could surely be counterbalanced.) Modern science, in a word, is not the only or main institution or set of practices, for Feyerabend, with a significant success story to be marshaled on its behalf.

1.1.2.1.3 *Belles-Lettres*, *Mythos*, and Apocalypse

I think several other historical points of comparison or reference can be adduced in passing to help understand, in my estimation, the sorts of historical glosses on display in

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[54] Paul Feyerabend, [*Ambiguitá e armonia: lezioni trentine*] *The Tyranny of Science*, ed. Eric Oberheim (Malden, MA: Polity, 2011), 6ff; 93ff.

[55] Ibid., 94.

these foregoing arguments for varieties of philosophical naturalism and scientism. To this effect, consider the following take on the *Belles-lettres* tradition in history, from Allan Megill:

> In the period preceding its nineteenth-century scientization, history was generally, and uncontroversially, seen as falling under the rubric not of science or philosophy, but of "rhetoric and belles lettres." The late eighteenth-century rhetorician Hugh Blair, whose *Lectures of Rhetoric and Belles Lettres* (1783) were for a century widely circulated in the English-speaking world, declared that "as it is the office of an orator to persuade, it is that of an historian to record truth for the instruction of mankind. . . . History was not expected to produce philosophical (scientific) knowledge, although adherents to the tradition of *historia magistra vitae* ("history, the preceptor of life") did see it as having the function of illustrating universal principles of prudence and ethics that had already been established by other than historical means.[56]

This sort of rhetorically infused approach to historical inquiry, according to which the discipline was in a key respect taken to be *didactic* for the sake of human life and edification—and which broadly preceded contemporary (scientific) historiography as we tend to know and practice it—is not just a product of modernity. Mary Lefkowitz draws attention to the way in which, though important classical authors drew a strong distinction between *mythos* and *historia*—the former being more religiously charged intergenerational narratives that were handed on as a kind of meaningful cultural patrimony, whereas the latter were more proper and evidence-oriented inquiries into what happened on various occasions and within various lives and societies—this distinction was often blurred in practice in the ancient world, principally in some of the most important authors of that epoch.[57] She notes, for instance, how Herodotus' *historiography* of the conflicts between the Greeks and barbarians had its roots or foundations not so much in archaeological or other

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[56] Allan Megill, "What is Distinctive about Modern Historiography?," in *The Many Faces of Clio: Cross-Cultural Approaches to Historiography, Essays in Honor of Georg G. Iggers*, eds. Q. Edward Wang and Franz L. Fuller (New York: Berghahn Books, 2007), 31.

[57] Mary Lefkowitz, "Historiography and Myth," in *A Companion to the Philosophy of History and Historiography*, ed. Aviezer Tucker (Malden, MA: Wiley-Blackwell, 2011), 353.

typically historiographical evidence-gathering efforts, but instead in the epic poetry that would have been the familiar inheritance and cultural backdrop of his audience. Likewise, his selective prowess in highlighting particular episodes in the narrative of the rise and fall of Croesus, King of Lydia, in the sixth century B.C., seems to have been geared sharply toward warning his Athenian audiences about the fleetingness of earthly happiness and also about various temptations toward the abuse of power.[58] Lefkowitz sees similar tendencies on display in Thucydides who, though he was perhaps more adamantly historiographical in his overall approach, nonetheless sought to structure his narratives in such a way as to emphasize or draw attention to the fragility of human power and mortal existence, in a way that would have been consonant with important religious wisdom of the day.[59]

Another noteworthy point of comparison, as regards somewhat more rhetorical approaches to history and historiography, is what R.G. Collingwood terms the "apocalyptic" approach, which he finds on display most characteristically in certain prominent medieval Christian authors. Their *modus operandi*, as Collingwood sees it, was typically one of approaching history in an *epochal* manner, such that there were taken to be both periods of darkness and light, sin and grace, decay and growth; but that, at any rate, history was taken to be in some key respects *universal* and implicated in the unfolding providential plan and redemptive work of God. Reflection upon the development of history, for the apocalyptic historian, therefore became a sustained meditation upon the *gesta Dei* and so was also bound up with an outlook permeated by revelation. Of interest too, though, is the way in which, for Collingwood, this sort of approach to historical

[58] Ibid., 354–5.

[59] Ibid., 356.

analysis was not peculiar to medieval Christianity but also employed, respectively, amidst the Renaissance, the scientific developments of the seventeenth century, the eighteenth-century Enlightenment, nineteenth-century liberalism, and with the development of Marxist thought and criticism.[60]

I offer these brief comments on aspects of such traditional approaches to or characterizations of historical inquiry to note that, to a degree, carrying out this work with a sort of rhetorical or didactic emphasis has arguably been quite commonplace traditionally, perhaps even predominant. I also take it that many varieties of philosophical naturalism and scientism, like those we have considered thus far, offer to us a kind of sketched history *with* a rhetorical or didactic flair as regards the sciences and their successes. As I have noted steadily, such accounts *commend* the (modern) sciences in regard to their theoretical precision and predictive accuracy (and indeed often their truth) *but also* on account of their technological payoffs, which have often been marshaled for increases in human well-being and comfort. But again, such benefits and advances are typically adduced *in contrast to* more traditional approaches to such matters, be they from various religions, past eras, or inherited wisdom and common sense. The rhetorical or didactic flair in such accounts, as I am calling it, often comes especially through the juxtaposition of the scientific and the technological, and their merits, with these other approaches, which are taken to be relatively rudimentary, deficient, or retrograde. Notice, too, the way in which several naturalistic authors I have surveyed (especially McDowell and Rosenberg, divergent though they otherwise are), do in fact gesture at the *epochal* shift that they take the development of modern science to have been. Inasmuch as they lay heavy (positive)

[60] See R.G. Collingwood, *The Idea of History*, rev. ed., ed. and with an introduction by Jan van der Dussen (Oxford: Oxford University Press, [1946] 1994), part II, §§ 1–3.

emphasis on such a pivotal juncture and its implications, they are offering something akin, in my view, to an apocalyptic approach to the matters at hand.

1.1.2.2 Sketchy Sketches?

Having contended that varieties of philosophical naturalism tend to rely quite importantly upon sketched histories of the sciences and their successes, I want to draw attention to two further matters that might become easily occluded in the development of such sketches, and which might often in various ways be interrelated: (1) the practical dimension of scientific inquiry and (2) the variability of the sciences or—more provocatively—their concrete disunity. Regarding the practical dimension of scientific inquiry, there might often, in the development of naturalistic philosophical ideas, be an easy temptation to make the work and findings of the sciences too cut-and-dry theoretical, as though they somehow do not involve the rigorous practical work that they in fact admittedly do. This is particularly how Feyerabend finds various classic mid-twentieth-century positivistic accounts of the sciences, and why he takes them to be peculiarly wanting:

> For the logical positivists . . . science was a system of statements and theories that tried to bring these statements into some kind of order – they were statements of a special kind. Can you imagine that? There are these philosophers, and they are intelligent people and all they see when looking at science is *statements*. They do not see laboratories; they do not see the fights scientists and politicians engage in to settle financial questions; they do not see the large telescopes, the observatories, the staff buildings, the staff conferences, the effects of an asshole in power on his underlings—they only see statements.[61]

Feyerabend's critique of the mid-twentieth-century positivists is not unlike Michael Polanyi's critique of "objectivism," which he, himself a highly decorated physical chemist, took to have been prevalent around that period; and which he took characteristically to

[61] Feyerabend, *Tyranny*, 64.

lead to a disjunction between "subjectivity and objectivity" that tended—very detrimentally, in his view—to ouster the "passionate, personal, human" dimensions of scientific practice and theory appraisal.[62]

One can see this sort of positivistic tendency at play in at least certain varieties of contemporary philosophical naturalism. Consider, to this effect, Brendan Larvor's recent assertion, in broadly defending naturalism, that "natural science is a great collection of arguments."[63] No doubt, he situates this claim within the practices and processes that are also part and parcel of the sciences. Still, the contention that science is mainly or essentially constituted of *arguments* might seem reflective of this latently positivistic cast of mind. Many forms of naturalism, as I have noted, tend to exhibit some or other sort of ontological plank, as well as a methodological one; but arguably the "constitutive claim" of most varieties of contemporary naturalism is the anti-supernaturalist plank. That is to say, arguably the most central dimension of such varieties of philosophical naturalism is their eschewal of anything, broadly speaking, supernatural. Leading with a notion like this, though, might leave one with a decidedly (and surprisingly) positivistic conception of the sciences. For on such an approach, arguably the most fundamental aspect of the sciences and the outlook they offer is taken to be a particular sort of *view*—namely, that there are no supernatural realms, entities, or causal agents. (I return in chapter four to this way of construing the sciences, and especially religions or religious approaches cast as their competitors, as *views* chiefly—and the distortions, I think, that such an approach precipitates.) Perhaps having such a notion as the "constitutive claim" of most

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[62] Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge, [1958] 1962), 15–6.

[63] Brendan Larvor, "Naturalism," in *The Wiley Blackwell Handbook of Humanism*, eds. Andrew Copson and A.C. Grayling (Oxford: Wiley Blackwell, 2015), 42–3.

contemporary forms of philosophical naturalism is to be expected, as they attempt, in Timothy Williamson's words, "to condense the scientific spirit into a philosophical theory."[64] And proffering some or other sort of *theory* is apt to be much more about *ideas* than it is about the practical elements associated with those ideas.

At any rate, it seems to me that some varieties of scientism or *scientistic* naturalism tend particularly in this sort of practice-obscuring positivistic direction. Ladyman, e.g., in defending what he terms a more "humane" version of scientism, stresses the way in which science as we know it is a peculiar sort of culture; and so he accounts more straightforwardly for some of these practical and, indeed, cultural dimensions of it.[65] But consider again the passage from Rosenberg that I already noted: "Natural science deals only in momentum and force, elements and compounds, genes and fitness, neurotransmitters and synapses." In a key sense, this sort of claim is quite comparable to the classical positivist outlook that Feyerabend rightly, in my view, critiques. It *is* true that the sciences deal in these fundamental notions and probably reduce many others to them (or something close to them). But to say that the sciences *just* or only deal in such notions is patently wrongheaded. In a spirit of fairness, I suspect Rosenberg would cede various practical elements of the sciences, in some way or other, into his account. Nonetheless, the kind of overly theoretical attempt of trying to capture the scientific spirit philosophically, which Feyerabend sees markedly afoot in the positivists, seems also explicitly on display in Rosenberg.

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[64] Williamson, "What is Naturalism?," 31.

[65] See Ladyman, "Scientism with," 115.

1.1.2.2.1 Methodological Unity?

Beyond the constitutive ontological claim(s) at play in most varieties of philosophical naturalism is also, again, a methodological one that, depending on the austerity of the account, almost certainly in some way or other shows a particular sort of deference to the scientific method, or some kind of generally scientific methodology. Accompanying such a deference is a typically a sense that scientific methodology is, as Ladyman puts it, "supremely reliable and self-correcting"[66] and that it relies upon "a constantly critical attitude to one's own beliefs."[67] Indeed, often concomitant with such an account is the further contention that the sciences are generally (more or less) *unified* as regards their methodology—that they broadly approach problems and questions in an effectively uniform manner.

There is ample reason to call into question, though, the notion that modern science, broadly speaking, is in fact unified—and particularly that such unity is manifest in its supposed distinctive *methodology*. As Tom Sorell notes, for instance, the rhetoric of a unified science was a key—perhaps *the* key—plank of the scientific empiricist platform, which was championed by the likes of Carnap, Reichenbach, Neurath, and the Vienna Circle. But this strand of empiricist thought was at least in part a *rhetorical* philosophical movement on behalf of a certain *conception* of science, which sought to vindicate the claim that, in principle, the sciences are in fact strongly unified (via logical connections and the like), rather than just more modestly noting that this unity seems to be the case in practice.[68] In this regard, it is not especially different from some of the stronger varieties of

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[66] Ladyman, "Scientism with," 113.

[67] Ibid., 115.

[68] Tom Sorell, *Scientism: Philosophy and the Infatuation with Science* (London: Routledge, 1991), 4–6.

(scientific or *scientistic*) naturalism that we have considered thus far: Its proponents were advocating for a certain view of the sciences and doing so often in marked contrast or relief to various other purportedly not-so-scientific approaches to inquiry (e.g., traditional metaphysics, theology, or ethics).

John Dupré, who defends a pluralistic naturalism, has argued forcibly against the notion that the sciences are unified, and particularly that they are unified on account of a characteristic *method*. In a manner similar to Sorell, Dupré notes that a strong view of the sciences as unified has been quite central to a sort of rhetorical *mythology* that has been associated with the sciences over roughly the past few centuries; and that if we look to, say, "the daily practice of a theoretical physicist, a field taxonomist, a biochemist, or a neurophysiologist, it is hard to believe that there is anything fundamentally common to their activities that constitutes them all as practitioners of the Scientific Method."[69] Mary Midgley offers a very similar contention, noting that the view of the (modern) sciences as unified is precisely that—a *view* bound up with a *movement*; and that, fairly obviously, "ecology and anthropology are not at all like physics, nor indeed is biology, and this is not disastrous because they don't have to be like it."[70]

Dupré and Midgley both draw attention to the way in which certain scientific ideas (or *ideals*) become for us part of a cultural mythology. I take it that both would think of the notion of the unity of the sciences along these lines. They differ in their take as to whether myths ought to be taken as (literally) true or false. Dupré contends that they

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[69] Dupré, "Miracle," 42; see also John Dupré, *The Disorder of Things: Metaphysical Foundations of the Disunity of Science* (Cambridge, MA: Harvard University Press, 1993), 221ff. Cf. Feyerabend, *Tyranny*, ch. 2.

I do not take claims such as these to imply that there is nothing comparable or commensurate across these scientific domains, as regards their various practical components; but just instead that it is dubious that they are somehow, across such disciplinary lines, *just* or mainly instantiating a common methodology.

[70] Mary Midgley, *The Myths We Live By* (London: Routledge, [2004] 2011), 32.

technically are false; Midgley that they need not be. So she has the following take on evolution as a kind of present-day creation myth:

> Evolution, then, is the creation myth of our age. By telling us our origins it shapes our views of what we are. It influences not just our thought, but our feelings and actions too, in a way which goes far beyond its official function as a biological theory. To call it a myth does not of course mean that it is a false story. It means that it has great symbolic power, which is independent of its truth.[71]

The idea here is that evolution functions nowadays much more broadly than just as a biological theory: It also serves as a kind of cultural motif, an intellectual and social framework of great significance and appeal. It has, in a word, taken on a unique *symbolic* force and power, in addition to whatever it does in fact say about the world and the origins of species. The same could be said, I think, of the unity of the sciences thesis, which serves any number of not-strictly-scientific purposes, too. We might think here, e.g., of the didactic role of a notion such as this, which is quite handy for the education of children; or again, as Dupré highlights, the way in which it makes the *demarcation* of the sciences from other forms of inquiry easier and more cut-and-dry.[72]

Further, these sorts of doubts about the strong methodological unity of the sciences are corroborated by the analytical field work of Karin Knorr Cetina. Consider her summary account of the contrasts she notes in not just speculating about the manifest differences between high-energy physics and molecular biology but in *observing* them as they are typically practiced nowadays:

> The contrasts are many: one science (physics) transcends anthropocentric and culture-centric scales of time and space in its organization and work, the other (molecular biology) holds on to them and exploits them; one science is semiological in its preference for sign processing, the other shies away from signs and places the scientist on a par with nonverbal objects; one (again physics) is characterized by a relative loss of the empirical, the other is heavily experiential; one transforms machines into physiological beings, the other transforms

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[71] Mary Midgley, *Evolution as a Religion: Strange Hopes and Stranger Fears* (London: Routledge, [1985] 2002), 33.

[72] Dupré, "Miracle," 52.

> organisms into machines. . . . A comparative optics brings out not the essential features of each field but differences between the fields. These, I believe, are far more tractable than the essential features; in fact, one might argue that they are the only tractable elements available to us.[73]

Some of these noteworthy points of contrast between high-energy physics and molecular biology are abstruse, and we need not spend time here defending (or even trying to understand better) Cetina's analysis of them. It suffices for now to note that her thoroughgoing field study *accentuates* them for her—and, in doing so, drives home the notion that simply chalking both fields up as sciences is easily imprecise, particularly as far as their *ordinary practice* is concerned.[74]

Susan Haack is of the same mind on this front. Scientific reasoning, in her view, is decidedly contiguous with ordinary, everyday reasoning and so perhaps not all that peculiar in the first place.[75] The boundaries, for Haack, between the sciences and other forms of human inquiry are "fuzzy, indeterminate and, not least, frequently contested."[76] She notes that we ask questions and then "check them out" in serious, rigorous ways in the sciences, to be sure, but also in other areas—like in detective work or coaching, for instance. She is also of the mind that many of the more peculiarly rigorous tactics, methods, and theoretical strategies at play in scientific work are often quite *local*—that is, they are not employed, as it were, across the scientific board but within *particular* scientific fields and practices where they are at home.[77] The attempt, therefore, in her view, to claim

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[73] Karin Knorr Cetina, *Epistemic Cultures: How the Sciences Make Knowledge* (Cambridge, MA: Harvard University Press, 1999), 4.

[74] Of course most would demarcate them as *distinct* sciences; but those who would want to press the unity thesis would need to account for how such striking differences are so deeply manifest between them.

[75] Susan Haack, "Six Signs of Scientism," *Logos & Episteme* 3, no. 1 (2012): 86.

[76] Ibid., 85.

[77] Susan Haack, *Scientism and its Discontents* (Rounded Globe, 2017), 28ff.

a strongly unified method in the sciences often amounts to a kind of "methodism" or an attempt, again, to *mythologize* method rather than take it more honestly as it is normally encountered in practice.[78] This point is consonant with Dupré's and Cetina's: that the observer looking for *a* or *the* scientific method on display in *both* taxonomy and high-energy physics, e.g., will leave largely unsatisfied.

All this is *not* to suggest, of course, that it is trivial or useless to speak of science collectively or to appeal at times to the notion of a scientific method or approach to inquiry. It is just to stress that the boundary lines of what counts as scientific are better left somewhat fluid—"rough and ready," as Haack otherwise puts it.[79] It does seem apt, for instance, as Massimo Pigliucci notes, *not* to count plumbing as a science—though it does indeed exhibit some degree of the precision of inquiry and problem-solving that we see at play perhaps preeminently in the sciences.[80] And this sort of clarification seems rather conceptual: plumbing is not the *kind* of activity that counts as scientific—nor is praying, sport, or cooking. But this is of course not to denigrate these activities or practices, but just to clear the air about what they are (not). It also seems right to think, though, that not every such case, or even most of them, can be settled in this sort of more straightforwardly conceptual manner. I should stress, again, that I am not here claiming these points about the (dis)unity in the sciences as definitive. But they do give us pause and invite us to think more about how apt it is, say, to speak of *science* in the monolithic singular; or whether it is better, again, to speak of the science*s* in the plural. Dupré himself does this—wisely, I

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[78] Ibid., 45.

[79] Haack, "Six Signs," 13.

[80] Massimo Pigliucci, "Scientism and Pseudoscience: In Defense of Demarcation Projects," in *Science Unlimited? The Challenges of Scientism*, eds. Maarten Boudry and Massimo Pigliucci (Chicago: The University of Chicago Press, 2017), 197.

think—noting that the "empirical science*s*" are, for him and other naturalists, the best available means of "interrogating nature."[81]

1.2 A Perennial Blind Spot?

I have surveyed thus far a variety of naturalistic thinkers in regard to what are commonly taken to be the two fundamental planks of their broad platform: anti-supernaturalism and some sort of privileged respect for or deference to the modern natural sciences and their characteristic methodology. In a certain sense, the best way I can describe these sorts of reflections on the sciences, their achievements, and what they decidedly are not, is to count them as cultural histories or genealogies—that is, to consider them *philosophical-historical*, which I take in the following manner. Consider again the notion from Williamson, that philosophical naturalisms generally strive "to condense the scientific spirit into a philosophical theory."[82] I think this tendency is variously on display in the accounts I have considered thus far. For these versions of philosophical naturalism are not *themselves* scientific, i.e., products of the sciences or of more strictly scientific reasoning or theorizing. They are rather more, as Williamson says, *philosophical* theories (or something like that) that are purportedly *drawn* or *elicited* from the sciences and, as we have seen, their distinctive accomplishments. (It might even be that they are in some key sense *scientists'* preferred philosophies of science, as Jerry Fodor and Hilary Putnam suggest;[83] but if that is the case, they are still *philosophies* in some important sense and not just scientific data or theories.) So varieties of philosophical naturalism are just that, *philosophical*; but they are

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[81] John Dupré, "How to Be Naturalistic without Being Simplistic in the Study of Human Nature," in *Naturalism and Normativity*, 289, italics added.

[82] See ch. 1, n. 64.

[83] Jerry Fodor, "Is Science Biologically Possible?," in *Naturalism Defeated? Essays on Plantinga's Evolutionary Argument Against Naturalism*, ed. James Beilby (Ithaca: Cornell University Press, 2002), 30, previously published in Jerry Fodor, *In Critical Condition* (Cambridge, MA: The MIT Press, 1998), 189–202.

also quite decidedly, as we have seen, *historical* in certain key ways. And I have noted this as regards both the core negative (anti-supernaturalist) and positive (pro-scientific-methodology) commitments of typical forms of it. In neither case do these commitments just, as it were, spring from nowhere or emerge *a priori*. In both cases, across the naturalistic board, they have a kind of back-story to them, which we have seen various naturalistic philosophers sketch in a host of ways. In this sense, then, I take philosophical naturalisms (and scientisms) to be crucially philosophical-historical. Put differently, as I already noted, they serve as a sort of cultural history or genealogy of the sciences and so assure us of their relative value, particularly in regard to various forms of inquiry that they are taken to have supplanted, ousted, or improved upon.

At a basic level, we should be unsurprised that such philosophical-historical reflection, cultural history, or genealogy tends to accompany the sciences. It certainly tends to accompany various other domains, like ethics or moral philosophy, as Putnam notes. For Williams, similarly, genealogy is indispensably crucial to "the ethical life of modernity."[84] I take these claims to suggest in a key respect that, in ethical or moral philosophical reflection and theory, we tend to care about the topics that we do—like the *good* or what is *right*; or about virtues like justice—in large measure because these foci have been gifted to us by a tradition of reflection of which we take ourselves to be an ongoing part. I take it as quite reasonable to think that, had we been without the (western) tradition of ethical or moral philosophical reflection and analysis that is our cultural patrimony, we almost certainly would not care about such matters and key concepts to the extent that we broadly do.[85]

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[84] Williams, *Truth*, 20.

[85] Cf. Putnam, "What Evolutionary," 57ff. This is not of course to claim that such notions would not have arisen or did not arise in other cultural and civilizational contexts; but it is to stress that the (broadly) western tradition has them in a most central respect on account of a particular intellectual and

As regards the matter of cultural history and the sciences in particular, Bernard Williams notes, "the pursuit of science does not give any great part to its own history."[86] Similarly, he adds: "[S]cience does not really need to know about its own history. It is no doubt desirable that scientists should know something about their science's history, but it is not essential to their enquiries."[87] Interestingly, Rosenberg concurs:

> [W]hen it comes to physics, geology, and the other natural sciences, the specialists don't care about history much at all. Read the textbooks, scientific journals, attend the seminars and colloquia where they present their results to one another. The histories of their disciplines—how they got to where they are today, don't come into it. Facts, data, evidence, observations are all important, and though many are about past events, recent or distant, all they do is provide evidence for scientific results, findings, models, or theories. Scientists never confuse science with the narrative histories of science, still less with the biographies of scientists.[88]

To highlight these considerations: A systems biologist nowadays might profit from having a sense as to why *élan vital* is a bygone notion in his discipline; but he need not have this sense to do the work that his field currently demands of him. Scientists no doubt will come to have some broad sense of their disciplines' histories, as Williams notes; but they also typically do not need to have this sense to carry out their work ably. So it should not surprise us that *someone* is inclined to offer a cultural history or genealogy of the sciences and thereby to tell us, in a more rhetorical vein, about how they have succeeded and what is most admirable or noteworthy about them. Scientists themselves may not need to worry about such matters, but those who care about the sciences and their status vis-à-vis other forms of inquiry often do. As Nicholas Capaldi notes, various attempts to shore up or

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cultural lineage in which they factor uniquely centrally. I revisit this notion in chapter five with regard to the notion of personhood.

[86] Williams, "Philosophy as," 189.

[87] Ibid., 204.

[88] Alex Rosenberg, *How History Gets Things Wrong: The Neuroscience of Our Addiction to Stories* (Cambridge, MA: The MIT Press, 2018), 7.

articulate the legitimacy and pride of place of the sciences have been at the heart of western philosophy for generations. In his view, too, a kind of more recent scientism has obscured the need for such philosophical-historical cultural history or genealogy, as I am calling it:

> The problem with the role that analytic philosophy has assumed is that it only makes sense if science is the fundamental way of accessing the cosmic order and the place of humanity with it. Philosophy as such is the self-appointed supreme discipline only if scientism is true. By scientism I understand the doctrine that science is the truth about everything and the ground of its own legitimacy. The difficulty is that science cannot legitimate itself intellectually. The Great tradition of Western philosophy has known this and repeatedly asserted this for about two thousand years . . . .
>
> If science could legitimate itself intellectually, what need would it have of philosophy (as its social science)? . . . To establish its importance in its own eyes, analytic philosophy needs the premise that scientists, as opposed to science, are incapable of articulating self-legitimation. Philosophy is the (self-appointed) supreme discipline because it alone has the rhetorical and intellectual resources to legitimate a practically powerful science whose practitioners, it is alleged, nonetheless cannot provide for its foundation.[89]

Reflective of Capaldi's broader misgivings about analytic philosophy, the authors I have considered thus far manifest a kind of attempt at the cultural legitimation or defense of the sciences—by which I mean, again, a kind of summary retelling of their accomplishments with a particular eye to circumscribing what counts, by their standards, as worthwhile, legitimate, or not. These accounts also no doubt display a kind of vindicatory history of how certain ideas or concepts came to be privileged or accepted and others not. All this is to say that if we take these philosophers as working within the broadly western tradition, we ought not to be surprised by their doing so. They are in their own ways rehashing a very familiar exercise.

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[89] Nicholas Capaldi, "Philosophical Amnesia," in *Conceptions of Philosophy*, Royal Institute of Philosophy Supplement 65, ed. Anthony O'Hear (Cambridge: Cambridge University Press, 2009), 116.

Conclusion

I have taken this first chapter as a chance to survey varieties of philosophical naturalism (and scientism) and thereby get, in particular, a keener sense of certain subdivisions within them, especially as regards scientific naturalism or scientism as compared to certain more relaxed or liberal varieties. I have also drawn attention to the ways in which a kind of *history* characteristically plays a critical role in the development of such accounts, which I have generally likened to cultural histories or genealogies. I do not think that such a turn to history is perilous or even troublesome for at least some versions of philosophical naturalism; but I do think that it spells serious trouble for certain stronger varieties of scientific naturalism or scientism. I highlight this trouble in chapter two especially with regard to Alex Rosenberg's "strong scientism." I also argue there that a precedent for such an approach can be seen in Wilfrid Sellars's *scientia mensura* principle.

Chapter Two: Strong Scientism and Foundational Unawareness

Introduction

In the first chapter, I drew attention to the ways in which varieties of contemporary philosophical naturalism—and especially scientific naturalism or scientism—rely crucially, at times despite pretenses to the contrary, upon a kind of *history* of the sciences and their successes. This sort of history typically helps naturalistic and scientistic philosophers to establish both their basic *negative* commitment, which is a kind of anti-supernaturalism, and also their *positive* methodological one, which characteristically involves some sort of principled deference to scientific methodology, which they take to be exemplary (or even epistemically exclusive). It seems to me that, as I noted, some varieties of philosophical naturalism—typically those of a more liberal or relaxed ilk—likely do not face a particular problem in making room in their accounts for the sorts of cultural histories or genealogies of the sciences that one commonly sees on display within these accounts.

In this chapter, I want instead to consider two stronger versions of scientism, first and more recently from Alex Rosenberg; and then a kind of precursor to Rosenberg's approach, in the *scientia mensura* principle of Wilfrid Sellars.[1] I contend that neither of these varieties of (proto-)scientism makes adequate space for the kinds of cultural histories or genealogies that, as I noted in chapter one, are part and parcel of many naturalistic and scientistic accounts. In Rosenberg's case in particular, I argue that his attempt to

[1] I do not take Sellars's *oeuvre* to be broadly scientistic as Rosenberg's is; indeed, quite the contrary. I draw upon Sellars in some key respects in chapter five to develop the humanistic alternative that I propose to such varieties of scientism. That being said, his particular defense of this principle does strike me as scientistic, as I argue in this chapter, in a manner very similar to Rosenberg's broader project.

undermine our offering historical explanations in fact undermines, in a certain way, the grounds of his own scientism.

2.1 Strong Scientism and History

To begin, I want to consider some key aspects of Alex Rosenberg's argument against (narrative) history, which he takes to follow from his commitment to strong scientism. Consider a representative passage that summarizes Rosenberg's critical outlook:

> Scientism shares with . . . historians the insistence that to provide knowledge their discipline has to show improvement in predictive success. The alternative is to treat the discipline of history as a source, not of knowledge, but of entertainment. As a source of enjoyable stories or polemics written to move readers to action, to tears, or to nostalgia, history is unbeatable. But few historians are prepared to treat their discipline as merely literary art. Yet that is inevitable, unless history can be put to successful predictive use.
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> Unfortunately for historians, history—the actual events of the human past—shows no pattern, cycle, or regularity that can provide predictive knowledge about the human future. Scientism has strong proof that it can't. That is why, when it comes to providing the foresight required to certify something as knowledge, history is bunk. The past is not just bereft of meaning. The only patterns it may have had in the past cannot be exploited to provide foreknowledge.[2]

In this passage and many others like it, Rosenberg happily takes up the scientistic moniker and wears it as a badge of honor, particularly as he doubts the epistemic integrity of history.[3] To be fair, his criticism is not altogether dismissive. He notes, e.g., that historians can and regularly do present us with accurate renderings of when and how different events took place.[4] That is, as a scientistic naturalist, he is content with historical accounts that serve as *chronicles* of the past but that do not seek, further, to offer *interpretations* of what

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[2] Alex Rosenberg, *The Atheist's Guide to Reality: Enjoying Life without Illusions* (New York: W.W. Norton, 2011), 246–7ff. For his more recent, more extensive treatment of these matters, see Rosenberg, *How History*.

[3] See also Rosenberg, "Why I," 34–5; "Philosophical Challenges for Scientism (and How to Meet Them)," in *Scientism: Prospects and Problems*, 92; "Strong Scientism and Its Research Agenda," in *Science Unlimited?*, 209–10; and *How History*.

[4] Rosenberg, *How History*, 2.

they chronicle.[5] His gripe remains more with the way in which historians and especially (popular) writers of history tend to offer us *explanations* of events—and particularly ones that are achieved by narrative renderings of these events. What is more, he particularly finds fault with these sorts of explanations for the way in which they invoke folk psychology and theory of mind—even though, in his view, these explanatory apparatuses have been decisively shown to be errant and misguided, if endearing.[6]

His criticism at core seems to emphasize several main points. The first of these is that to "provide knowledge [a] discipline has to show improvement in predictive success." Elsewhere, he is quite emphatic that modern and contemporary physics has achieved this goal *par excellence* and so is the golden standard for other disciplines so aspiring.[7] For the moment, I leave this claim untouched—that modern and contemporary physics has been preeminently successful at making improvements in explanatory predictive success. I do want to note, however, that this criterion, as a key one for demarcating knowledge in general—and scientific knowledge in particular, as paradigmatic—is dubious, and it is not difficult to see this.

2.1.1 Just Predictive Success or Explanation?

It does not take much effort, in my view, to conjure up counterexamples to this preceding claim of Rosenberg's. Consider, as a handy one, a religious teaching like the Christian doctrine of original sin. This doctrine, among other things, specifies that there is a sort of inborn condition, common to *all* members of the human race, such that they are especially susceptible to certain tendencies—which on the Christian understanding of things are counted as vicious or sinful, particularly when manifested in action. Now, the

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[5] Rosenberg, "Why I," 34.

[6] Rosenberg, *How History*, 2–3.

[7] Rosenberg, *Atheist's Guide*, 22ff.

doctrine of original sin seems to provide an obviously troublesome example for Rosenberg's standard of knowledge. For, as one can quickly note—and as Chesterton famously quipped—the doctrine might well be *quite* predictively fecund. One might conceivably, for instance, widely survey people and look at various historical accounts and thereby become squarely convinced that people do and have *in fact* struggled rather consistently with *just* the sorts of tendencies or inclinations (greed, envy, lust, and so on) that this doctrine specifies. But it seems quite obvious that Rosenberg, as he wears his cards on his sleeve, would *not* want to countenance a doctrine like original sin as a source or instance of (scientific) knowledge. On the face of it, however, it seems like it might well have exactly what he principally reserves for the (physical) sciences and the knowledge that they paradigmatically yield—viz., a sort of robust predictive power. He might of course counter that a doctrine like original sin is somehow in principle not *falsifiable*; but that would be an additional condition that he would need to spell out and defend and in which, at least in various emblematic instances, he does not.[8]

But again, I want mainly to lay aside the concern as to whether successful predictive power is a good criterion for (scientific) knowledge. I want, instead, to draw attention to the fact that it seems wrongheaded to think about and *expect of* the discipline of history, broadly speaking, what Rosenberg does; and then, all the more, to dismiss it as entertainment (or literary art) if it in fact fails to meet these expectations. What I mean is that, inasmuch as history is an interpretive discipline, it seems to be crucially concerned with helping us to *understand* events of the past. Now, I think most would quickly insist that this understanding *does* involve basic points of factual knowledge—for instance, that the Normandy landings happened on June 6, 1944 or that it was Aaron Burr who shot

[8] It could be that Rosenberg takes the falsifiability criterion to be, say, *implicit* in the predictive power criterion. It is not obvious, though, that one should take this to be so. I think one who holds to such a view, then, ought to explicate this implication more directly.

Alexander Hamilton in a duel in Weehawken, New Jersey on July 11, 1804—and certain ways of honestly (though creatively) piecing these points together. But it does seem *more* apt and characteristic to think of historical inquiry as typically offering us *interpretations* of various events, often through distinctly narrative renderings that capture a certain sort of historical *intelligibility*—a certain sense that various events are taken to have inasmuch as they hang together narratively or within a story, as told or recounted. But notice that such intelligibility is not *just* narrative or constituted by presenting such events, as it were, story-wise; it is also quite centrally yoked to the historical record and the archeological, textual, and other foundations and points of empirical support that they afford us. Good history, of course, cannot just carry its stories in *any* which way. To the contrary: It ought to show an austere deference to the varieties of evidence that are most pertinent to the cases under consideration.

Another way of stating these concerns is to say that it is dangerously simplistic to think that history is *just* or mainly in the business of offering explanations, rather than, say, interpretative forms of understanding. To think in the former way, as Rosenberg seems to, might well be symptomatic of the sort of neo-positivist tendency that I flagged in the first chapter as regards the mythology-prone thesis of the unity of scientific methodology. Indeed, a key dimension of the logical positivist paradigm, which has arguably lingered (not so) subtly in historical practice, is the notion that there is or must be a sort of unified approach to or standard of *explanation*, which can be invoked and applied across various disciplines. In the practice of historical inquiry, this sort of predilection perhaps tends especially toward skepticism regarding narrative renderings of various topics, showing a kind of principled deference to histories that are *more* explanatory or scientific than they are synthesizing in a narrative fashion. Jared Diamond, himself an historian and a geographical determinist, has contended, in this sort of vein, that history writing ought to

aspire to a *scientific* standard, perhaps one particularly set by the more historical sciences (geology, climatology, and the like), lest it fatally become, as the aphorisms would have us worry, overwhelmingly just masses of facts and thereby, ultimately, bunk.[9]

Indeed, in the broader scheme of things, the notion that history *ought* to be a decisively more scientific discipline is a relatively recent development, and perhaps most directly traceable to nineteenth-century German university culture[10], which attempted to cast it as such in contrast to more classical models of the discipline, which were (arguably) more literary in form—like the belletristic approach, and its classical forebears, which I highlighted in chapter one. Again, one might wonder in various ways how salutary this sort of development has been. In the twentieth century, the *locus classicus* for a theoretical defense this sort of approach is Carl G. Hempel's "The Function of General Laws in History," in which he notes that historians' concern with particular events, rather than just general laws, is apt; but also that, allowing this sort of concern to guide their *scientific* methodology is "certainly unacceptable."[11]

A broad question remains amidst considerations such as these: Does historical inquiry generally *need* to aspire to offering scientific-type (nomological) explanations, or is this sort of aspiration ultimately unhelpful to the sort of inquiry that we typically take history to be? Wittgenstein's concern regarding our preoccupation with methodologically emulating the sciences is perhaps broadly apposite here:

> Our craving for generality has another main source: our preoccupation with the method of science. I mean the method of reducing the explanation of natural phenomena to the smallest possible number of primitive natural laws; and, in

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[9] Cf. Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W.W. Norton, 1999), 421; also, cf. Eugene Goodheart, "Is History a Science?," *Philosophy and Literature* 29, no. 2 (October 2005): 477, https://doi.org/10.1353/phl.2005.0024.

[10] Hank Wesseling, "History: Science or Art," *European Review* 6, no. 3 (1998): 265.

[11] Carl G. Hempel, "The Function of General Laws in History," *Journal of Philosophy* 39, no. 2 (January 1942): 35, https://www.jstor.org/stable/2017635.

> mathematics, of unifying the treatment of different topics by using a generalization. Philosophers constantly see the method of science before their eyes, and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics, and leads the philosopher into complete darkness. I want to say here that it can never be our job to reduce anything to anything, or to explain anything. Philosophy really *is* 'purely descriptive'. . . .
>
> Instead of "craving for generality" I could also have said "the contemptuous attitude toward the particular case."[12]

I have not tried to claim that history ought *not* to be concerned, even primarily, with explanation; but I do wonder whether a preoccupation with explanation might *occlude* certain other lively and important sorts of intelligibility and understanding that history can and does (at least sometimes) yield. This concern, in other words, is a concern about a sort of weaker *methodological* scientism as regards history: That is, whether attempts in history to *appropriate* the methodological (mainly explanatory) aspirations of the hard sciences end up in fact obscuring—or darkening, to use Wittgenstein's metaphor—historical inquiries and their various potentialities.

Rosenberg's concern regarding history, which issues from his strong scientism, is that history is deficient, and so akin to entertainment, *on account of* its failure to attain the standard of predictive success of the hard sciences. Any claims that it makes on behalf of a sort of *peculiar* methodology—say one that aspires to, among other things, varieties of narrative appreciation and understanding—are therefore not, for him, worthy of our time or serious attention. They do not hold water on account of their falling short of the (harder) sciences' golden standard. His strong scientism, in other words, effectively *precludes* the possibility of a distinctive historical sort of intelligibility or understanding—a way of rendering (series of) events that is distinct from what the harder sciences offer but nonetheless important, meaningful, accurate and, in some important sense, true.

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[12] Ludwig Wittgenstein, *The Blue and Brown Books: Preliminary Studies for the 'Philosophical Investigations'* (New York: Harper Torchbooks, 1965), 18.

There might be, though, an important obverse to these considerations. That is, one might also note that if historical inquiry often does seek to *understand* various pasts events or series of them, eras, and so on, by drawing them together or colligating them in such ways, it might not in fact—in *this* respect—be all that significantly different from the hard sciences—chief among them physics, which Rosenberg takes to be the preeminently exemplary science. That is to say, the presupposition, which I attempted to highlight through the consideration from Wittgenstein, that the harder sciences do seek just or mainly to *explain* various phenomena might itself be somewhat crude.

Various recent authors, Henk de Regt[13] notably among them, have argued that it is more apt to think of *understanding* as a or the chief epistemic aim of the (harder) sciences, instead of explanation. Now, de Regt takes understanding characteristically to come *via* theoretical explanations of various phenomena; but still, for him, the kind of heuristic achievement that constitutes understanding, on the part of scientists who possess certain requisite levels of field-specific skill and know-how, ends up being of preeminent importance in the (harder) sciences. And if understanding *is* of arguably more paramount importance in the sciences than is typically thought, then they might not be, in this sense, all that distinguishable from history or other more traditionally *interpretative* disciplines.

I should note here, too, that I am speaking of history somewhat narrowly. In particular, my focus here is on our study and systematic analysis of *human* history—that is, with our historical treatments of persons, places, eras, and regions that have mattered or played significant roles in the story of the human race, and especially in various human societies and civilizations. There are of course varieties of historical inquiry that do not in significant ways aspire to a sort of narrative-type colligation of persons, lives, events, or

[13] See Henk W. de Regt, *Understanding Scientific Understanding* (Oxford: Oxford University Press, 2017).

processes. One thinks here, for instance, of natural history; or perhaps also climatology, evolutionary biology, or geology, among other more historically inclined sciences.[14] For my present purposes, though, I think this sort of focus on human history is quite apt, particularly given the ways in which I treat the historical dimensions of various naturalistic and scientistic accounts, which tend to crucially to invoke *histories of the sciences*, which focus on their successes as particular human accomplishments.

To close this section, I want to introduce an initial example of an historical inquiry that broadly displays some of the tendencies I have been noting—James McPherson's *Battle Cry of Freedom: The Civil War Era*, which many take to be a (or even *the*) preeminent single-volume historical survey of the American Civil War.[15] *Battle Cry* is a complex and multi-faceted take on this pivotal era in American history, and McPherson states in the preface that he seeks "to integrate the political and military events of this era with important social and economic developments to form a seamless web synthesizing up-to-date scholarship with [his] own research and interpretations."[16] He also states explicitly that he seeks to achieve these variegated goals by way of a specifically *narrative* rendering of what he takes to be the relevant persons, places, and events of the Civil War era[17]—and a narrative rendering, he continues, that is distinctly thematized in light of the "multiple meanings of slavery and freedom, and how they dissolved and re-formed into new patterns in the crucible of war."[18] McPherson offers this encompassing narrative by way of

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[14] Cf. Jared Diamond, *Guns,* 421ff.

[15] James McPherson, *Battle Cry of Freedom: The Civil War Era* (Oxford: Oxford University Press, 1988).

[16] Ibid., ix. I take it that such considerations are reminders of his keen deference to the historical record and strong historical scholarship, lest it seem that I am trying in excess to draw attention to some of the more *thematic* dimensions that follow.

[17] Ibid.

[18] Ibid., viii.

a series of pivotal episodes leading up to, during, and following the Civil War. I want to highlight, for the moment, the way in which the author himself quite admittedly conceives his work as most aptly handled by way of a sort of colligated narrative that not only specifically thematizes a key background motif, but that does so in conjunction with a matter that we tend to care about deeply. The significance of this dynamic is of ongoing importance in this chapter.

I also should note the way in which Rosenberg himself treats *Battle Cry* within the larger milieu of Civil War history and the paradigm shifts the sub-discipline has undergone. He is not remiss, I think, to highlight the way in which Civil War history, for the century or so following the conflict, tended toward interpretations that emphasized the interests of the Southern cause—viz., that the war was mainly about *states' rights* and the Confederate defense of them. But this sort of emphasis has shifted, he thinks, especially over the past twenty-five years or so, such that the "moral motivation" of care and concern for the abolition of slavery, and the role enslaved soldiers played in the war itself, has come to eclipse foregoing concerns about states' rights.[19] Rosenberg takes this kind of interpretative paradigm shift in Civil War history to be emblematic, above all else, of the slipperiness of the enterprise of offering interpretative historical explanations of the past and the way in which such interpretative explanations—even those that are taken to be the best and most surefire—are often susceptible to the viewpoints or emphases of their respective eras. What he fails to see, I believe, is the way in which such an analysis harms the foundations of his own defense of scientism.[20]

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[19] Rosenberg, *How History*, 26–9.

[20] I might also note here the way in which Rosenberg seems to owe us a rejoinder to a broadly Kuhnian reaction to this critique. That is, he is dubious about historical explanation and interpretation because it seems susceptible to such alleged paradigm shifts. But do the harder sciences not also, the concern would go, at times succumb to such dynamics? And if they do, why should we take this point to be particularly disparaging of historical inquiry and understanding?

2.1.2 Scientisms, Naturalisms, and *Their* Narratives

I want at this juncture to claim that a strong scientism like Rosenberg's runs squarely into a tension, even a sort of contradiction, on this broad front. For he tells us that history, *inasmuch as* it fails to attain to the kind of predictive accuracy of the sciences—principally physics—ends up being bunk, or entertainment that is not genuinely of epistemic value. Consider yet another recent passage from him, which highlights the contrast he strives to draw. After defending much current academic history for being more akin to the sciences, Rosenberg says the following:

> The history that concerns us here [and with which Rosenberg takes issue] explains the past and the present by narrative: telling stories—true ones, of course; that's what makes them history, not fiction. Narrative history is not just an almanac or a chronology of what happened in the past. It is an explanation of what happened in terms of the motives and the perspectives of the human agents whose choices, decisions, and actions made those events happen.
>
> And that history, the kind that most readers of nonfiction consume, is almost always wrong. What narrative history gets wrong are its *explanations* of what happened. And the same goes for biography—the history of one person over a lifetime. Biographers can get all the facts from birth to death right. What they inevitably get wrong is why their subjects did what they accurately report them as having done. . . .
>
> It's crucial to disabuse ourselves of the myth that history confers real understanding that can shape or otherwise help us to cope with the future.[21]

The problem for Rosenberg, I take it, is that he offers us in his introductory and apologetic accounts of strong scientism *precisely* the sort of historical narration that he herein condemns. And as I highlighted in chapter one, it is not just incidental that he offers this sort of narrated history as a critical first premise in his case for scientism. Narrating the history of the sciences' successes thus is probably the most obvious way of *displaying* these successes as such. That is, a *chronicle* of various scientific findings and research projects, as I elaborate subsequently, does not amount to much of a *manifestation* of the sciences' successes; but a summary *narration* of what they have accomplished—and

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[21] Rosenberg, *How History*, 2–3.

in doing so, what they also have supplanted or displaced—does and can highlight, in particular, the cumulative *progress* they have achieved. Fundamentally, therefore, I am claiming that Rosenberg saws off the branch on which he needs to stand—that in trying to rebuke history for being insufficiently scientific, he in fact undermines what *he himself employs* as a foundational first step in his scientistic strategy. In this sense, one might take this objection of mine to be a peculiar version of the argument that scientism typically exhibits a critical kind of self-referential inconsistency.[22]

Consider the earlier passage from Rosenberg regarding the "'industrial-scale' inductive argument for [scientistic] naturalism," which for him amounts to "the track record of science."[23] In that passage and others like it, so far as I can tell, Rosenberg treats readers, as I already noted, to a kind of historical sketch—particularly *narrative* in form—of the sciences and their history, and how we arrived at the fruitful and ongoingly promising juncture where we currently find ourselves.[24] But Rosenberg's sketch *narrates* these matters for us. He tells us about how there was a prevailing consensus or paradigm (in the West) until about the seventeenth century, at around which point certain key Aristotelian-Archimedean principles were supplanted by Galileo's new approach. And now, Rosenberg assures us, scientists broadly and unanimously see things in terms of "momentum and force, elements and compounds, genes and fitness, neurotransmitters and synapses."

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[22] Cf. Edward Feser, *Scholastic Metaphysics: A Contemporary Introduction*, Editiones Scholasticae 39 (Heusenstamm: Editiones Scholasticae, 2014), 10ff; also, cf. J.P. Moreland, *Scientism and Secularism: Learning to Respond to a Dangerous Ideology* (Wheaton: Crossway, 2018), ch. 4.

[23] See ch. 1, n. 40.

[24] I ought to note that Rosenberg does not rest content with such a narrative recapitulation of the sciences and their successes. He attempts in great detail to show us, among other things, how their working perspective on a host of important issues has superseded various popular or bygone approaches to the same matters. Nonetheless, it is unmistakable that he, like many other naturalistic and scientistic philosophers, makes his case centrally and squarely by appeal not just to this or that particular point of scientific success but instead to the broad *history* of modern science, as he himself puts it, and its fecundity and vindication vis-à-vis various other (often more traditional) ways of thinking, analyzing, and approaching the world.

These are peculiarly, for him, the concepts and notions that scientists trade on in seminars, journal articles, labs, and colloquia. [25]

But this sort of retelling, to which Rosenberg treats us, is precisely a kind of vindicatory *narrative* of the sciences and their triumphant history. To this effect, one might specifically recall Rosenberg's own patent admission—which echoes Williams's, Williamson's, and my own views—that the sciences themselves are not typically particularly interested in their respective histories; and that these histories, indeed, are quite extraneous to the sciences and the purview of their ordinary practitioners.[26] A typical naturalistic or scientistic history of the sciences and their achievements, to recall the Nietzschean categories I invoked, is often something like a *monumental* history of the sciences, which highlights for us their successes and *commends* to us their characteristic virtues or cast of mind. What is more, it is characteristically the sort of history that to a certain degree also pegs *antagonists* within its narrative arc. As I noted in Rosenberg, along with Ladyman and others, there is a predilection in such accounts against elements that would count as supernatural, immaterial, or otherwise "spooky," but also against alleged sources of belief or knowledge that are typically taken to be at odds with scientific ones—be they of religious or otherwise traditional provenance, e.g. from the storehouse of common sense.

Notice here also the way in which one might level a comparable sort of criticism toward Rosenberg's (or other familiar naturalists') narrated history of the sciences' development and achievements to that which *he himself* levels against McPherson's *Battle Cry* vis-à-vis its various predecessors. For the narrated histories of the sciences' achievements that Rosenberg and others offer are of a decidedly vindicatory sort for the

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[25] See ch. 1, n. 88.

[26] See ch. 1, nn. 86 and 87.

modern experimental approach. According to a familiar version of it, the "dark" epoch preceding the sciences' triumphal ascent, to invoke Collingwood's apocalyptic analysis—during which a kind of scientifically unhelpful enchanted view of and approach to the world predominated—was marked by either more primitive ways of thinking and understanding various phenomena or by the allegedly simplistic analyses proffered by Aristotelian (and other classical) systems and their intellectual progeny. The ongoing work of modern science as we know it, for many such thinkers, has steadily come to disabuse us of such ways of approaching and conceiving the world and what unfolds within it.

My concern therefore continues: What if such a typical naturalist's read of these past few centuries of scientific development is *itself* marked by certain prejudices or "moral motivation[s]" that have tended to give it a particular rhetorical hue, of the sort highlighted in the first chapter? What if the Baconian insistence on the faultiness of the broadly Aristotelian approach to the sciences, which Rosenberg and other naturalistic or scientistic thinkers tend to recapitulate, is—as the neo-Aristotelian authors surveyed in the first chapter would likely hold—critically *overstated*? What if holding that modern science has displaced such an approach is akin to holding, on Rosenberg's read, that the Civil War was principally about states' rights? That is to say, what if the sort of stock approach of many naturalistic or scientistic thinkers, which they tend to assume without much historiographical argumentation, is itself morally motivated in various respects and so carelessly rhetorically tinged? I want to claim that this can be a very serious issue for such naturalistic and scientistic thinkers inasmuch as they tend, as I have stressed, to *presuppose* such an account or sketch as a kind of bedrock to their subsequent argumentation; and they tend to do so, all the more, typically *without* any sort of robust (historiographical) defense of it.

Indeed, a more deeply jarring point of contention, along these lines, for such naturalistic and scientistic philosophers and the histories they offer might be particularly the way in which they coopt rather uncritically the notion of *progress* within their accounts. I have variously noted this emphasis in the histories considered thus far; and Rosenberg seems quite sanguine, among many others, to assure us that the arc of modern science has been one of a kind of decisive progress. I do *not* want to claim that such a supposition or general point of emphasis is fundamentally wrong or mistaken. To the contrary: In many key respects it seems quite apt. But it does face, in my view, a serious concern from the sphere of cultural criticism: The notion that *progress* ought to be an important or central hermeneutical category for how ones approaches (scientific) *history* is, on deeper consideration, itself part and parcel of a kind of particularly modern cultural *mythology*—perhaps one that tends to imbue the scientific and the secularly political with a kind of religious significance and trajectory. At any rate, the notion of progress as applied to (scientific) history ought to be the sort of thing that a philosophical analysis looks to scrutinize and *criticize* and not just accept relatively uncritically. John Gray has recently stated this point forcefully, with particular regard to modernity: "For those who live inside a myth, it seems a self-evident fact. Human progress is a fact of this kind."[27] To be sure, one could offer here, in regard to progress, a sort of take comparable to Midgley's on evolution: viz., not that the notion is false or errant, but instead that it is so broadly culturally foundational and captivating that it is typically invoked, in a host of contexts, with a decidedly uncritical cast of mind. Gray himself thinks, in a way that echoes Collingwood, that seeing history as a domain of unfolding progress (and specifically redemption) is reflective of an outlook marked by religious (and particularly Christian)

[27] John Gray, *The Silence of Animals: On Progress and Other Modern Myths* (New York: Farrar, Straus and Giroux, 2013), 6.

roots. He also thinks that, more recently, "[i]n the story that the modern world repeats to itself, the belief in progress is at odds with religion."[28] I seek to address some of these matters further in chapter four specifically; but Gray's concerns dovetail with those of Stephen Gaukroger (among many others): that a most central development of the modern (western) world, broadly, has been a kind of paradigm shift on which the scientific has come, in many key cultural respects, to supplant the religious and claim its centrally authoritative role.[29] But seeing things broadly along these lines is not so much a precise engagement with historical data—at least not obviously—as it is the embrace of a kind of cultural mythology and *story* of the past few centuries' development.[30]

Whether one agrees with this sort of critical take on the notion of progress, specifically with regard to science and religion, is largely beside the point. The deeper concern that faces various naturalistic and scientistic philosophers, in my view, is that they seem in many cases not to raise such questions much *at all* about the application of the notion of progress within their accounts—a notion that, like the unity-of-science thesis, might well be yet another piece of a cultural mythology that is invoked with exactly the sort of moral motivation in mind that Rosenberg, for one, seeks to discount in many other narrative historical explanations.

These sorts of considerations prompt me to acknowledge at least two ways in which a naturalistic or scientistic thinker might retort. One might run as follows: To be sure, scientistic, or variously naturalistic, accounts of the sciences and their successes (and

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[28] Ibid., 8.

[29] See Stephen Gaukroger, *Objectivity: A Very Short Introduction* (Oxford: Oxford University Press, 2012), 1–2.

[30] To be sure, recalling Midgley's cautionary point: One could surely take up such an outlook *both* as an embrace of a kind of cultural mythology *and* as a serious reckoning with the historical record. But it seems to me that one would need to manifest this duality more clearly, which naturalistic and scientistic philosophers decidedly fail to do. Instead, they often seem unreflective that they might be doing the former and assured that they are doing the latter.

also what they proscribe) *do* often take a certain narrative shape; but this, they might say, is incidental and inconsequential in the grander scheme. What matters instead is that the sciences and their results or findings have generally or broadly been (eventually) *true* in remarkable ways—not just that they have somehow or other *won out*, as the telling of the story goes. I do think this point carries weight, and is of course worth noting. One issue that it raises, though—which I already broached—is this: varieties of naturalism—scientific, scientistic, or other—are not *just* in the business of reporting to us the strict or bare results or accomplishments of the sciences. To be sure, if they simply did *this*, they would likely be philosophically and popularly *uninteresting*. But they are typically intended to accomplish something quite different. As Williamson notes, they often rather seem ordered toward capturing the *spirit* of the sciences and somehow thereby enshrining that spirit philosophically. This is of course not in itself an objectionable goal or aspiration; but it ought not to be taken as *just* an attempt plainly to reiterate or recapitulate what the sciences have already said or deciphered—which, if accomplished, would be altogether less noteworthy or interesting.

Put slightly differently, simply *reiterating* the true things that the sciences have discovered or articulated would, I take it, be by and large philosophically and popularly uninteresting inasmuch as, among other things, much scientific work is too abstruse for non-specialists to appreciate or understand—at least without its being significantly simplified or pared down for broader consumption. This is perhaps why, for instance, *popular* science writing has such appeal, because it aims to *show* or highlight for people how scientific work in fact dovetails—sometimes surprisingly—with their more ordinary interests and concerns. Similarly, varieties of philosophical naturalism and scientism become more interesting as they attempt to synthesize and *harness* aspects of the sciences

in a philosophically or rhetorically interesting manner and thereby relate them to other broader issues or concerns, say domains like ethics or religion.[31]

Another issue to note here is that—as I have acceded—many *would* take a sort of broad narrative sketch like those considered thus far, from various naturalistic and scientistic thinkers, to be roughly accurate. There *does* seem to be something basically right, for instance, about Rosenberg's insistence that Galileo helped to upend a certain sort of Aristotelian-Archimedean synthesis in ways that have been greatly profitable theoretically and technologically. That being said, the antagonists in these histories, as I am calling them, deserve much greater historical attention than many such authors give them. After all, it might seem a rather *un*scientific move to count classes of thinkers or ideas (or sources thereof) as contrary to the spirit of the sciences—be they religious, traditional, or in the spirit of common sense. It might be the case, for instance, that some matters that have survived or persisted through such channels are rather more consonant with a scientific view of the world than others. And after all, as I noted in the first chapter, scientific reasoning is often rightly taken to be a kind of continuous development of *ordinary* reasoning. So one might actually, on account of a consideration such as this, have a basic reason *to* trust some such sources of belief or purported knowledge, even within a scientistic or scientifically naturalistic account. To discount or be hesitant toward them altogether or categorically might well, from a broadly scientific approach to reasoning, be too sweeping and reckless, and insufficiently rigorous.

[31] A perhaps gaudy and relatively recent example of this purported payoff is the cottage industry of writing about how quantum mechanics ought to affect our views about, e.g., moral deliberation or some or other dimension of ordinary life and experience.

2.1.3 *The* Measure?

To acknowledge the importance, to varieties of naturalism and scientism, of such narrative-historical accounts of the sciences and their achievements is *not* to denigrate these varieties of naturalism and scientism as such; instead, it is to criticize or caution against those that would employ them *but also* denigrate or disavow them in some sense or other, as Rosenberg does with narrative history more generally. (This sort of cautionary point might apply, too, to those who think that the sciences can float free from any sort of more broadly humanistic, philosophical-historical appreciation or defense. I touch on this matter more extensively chapter five.) Brendan Larvor, himself a committed (scientific) naturalist, takes a more responsible view of the sciences in this respect. Like Rosenberg, and those others surveyed in the first chapter, Larvor argues that the peculiar success of the sciences, especially over the past several centuries, is a uniquely strong reason for trusting them and the analyses they deliver, along with the paradigm(s) of rationality they commend.[32] But he also concedes, in a way more principled than at least Rosenberg, that contending for naturalism in this manner critically *depends upon* historical explanation, and in particular upon a kind of historical explanation according to which the natural sciences and their flowering are taken to be a noteworthy *story* of a singular kind of intellectual progress and development.[33]

At any rate, I think the kind of concern I am raising for Rosenberg might well also apply to similar views that attempt to claim too broad a *descriptive* capacity for the sciences. Here I have in mind a view like Sellars's *scientia mensura* principle, which he famously argues for in "Empiricism and the Philosophy of Mind." I take this contention of Sellars to be a

[32] Larvor, "Naturalism," 38.

[33] Ibid., 50.

sort of important forebear to an outlook like Rosenberg's. In "Empiricism," Sellars sketches an approach on "which the scientific picture of the world *replaces* the common-sense picture . . . [on] which the scientific account of 'what there is' *supersedes* the descriptive ontology of everyday life."[34] He notes that he does not think such an approach should be altogether destructive of the common-sense framework of thought, analysis, and description; but he notably continues:

> *[S]peaking as a philosopher*, I am quite prepared to say that the common-sense world of physical objects in Space and Time is unreal—that is, that there are no such things. Or, to put it less paradoxically, that in the dimension of describing and explaining the world, science is the measure of all things, of what is and that it is, and of what is not that it is not.[35]

This claim gets stronger as it proceeds; for Sellars first treats ordinary "physical objects" that people encounter in their (sense) experience. (One might think here of Austin's "medium-sized dry goods" or Eddington's famous table that he has the option to describe either ordinarily or scientifically.) But in the latter part, Sellars stresses that "*in the dimension of describing and explaining the world*, science is the measure of all things" (italics added)—this despite the fact that he elsewhere advocates a more congenial reckoning between the "manifest" and "scientific" images of the world and ourselves within them.[36]

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[34] Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, with an introduction by Richard Rorty and a study guide by Robert Brandom (Cambridge, MA: Harvard University Press, [1956] 1997), § 41, previously published in *Minnesota Studies in the Philosophy of Science*, vol. 1, eds. H. Feigl & M. Scriven (Minneapolis, MN: University of Minnesota Press, 1956), 253–329.

[35] Ibid.

[36] Indeed, Sellars elsewhere strives to suggest ways in which the "manifest" image of the world could come to be "joined" (though not "reconciled") to the "scientific image"; but it remains dubious as to whether a principle like the *scientia mensura* doctrine is susceptible, ultimately, to this sort of irenic effort. See, e.g., Wilfrid Sellars, "Philosophy and the Scientific Image of Man," in *In the Space of Reasons: Selected Essays of Wilfrid Sellars*, eds. Kevin Scharp and Robert B. Brandom (Cambridge, MA: Harvard University Press, [1962] 2007), § VII, previously published in *Frontiers of Science and Philosophy*, ed. Robert G. Colodny (Pittsburgh: University of Pittsburgh Press, 1962), 35–78.

Robert Brandom, for one, takes "the descriptive privileging of the natural science" on display in Sellars's *scientia mensura* to be "the unfortunate result of a misplaced, if intelligibly motivated, attempt to naturalize Kant's transcendental distinction between phenomena and noumena in terms of the relations between . . . the 'manifest image' and the 'scientific image' of knowers and agents in the world." See Robert Brandom, *From Empiricism to Expressivism: Brandom Reads Sellars* (Cambridge, MA: Harvard University Press, 2015), 15.

In conjunction with my broader discussion, it does seem that a view such as this—at least stated as strongly as Sellars does in this famous passage—runs into the same sort of self-reference problem that one sees in regard to Rosenberg's approach. The idea here is something like the following: The working description of what science is and what it has (successfully) come to be in recent centuries, the modern era, or whenever, is *itself* typically *not* a scientific description or account. Instead, it tends to be something more like a *cultural* account, which speaks of the sciences' merits as (something like) truth-seeking cultural *practices*[37] that are institutionally enshrined in various ways, like in universities and laboratories. Another way of putting this point might be to say that arguing for the relative merits, and showcasing the various successes, of the sciences is not really so much a *scientific* task as it is something like a display of a certain sort of *cultural* achievement, which in this particular case has been (and continues to be) attained by the sciences, their practitioners, and their respective institutions. And coupled with such cultural-institutional accounts, as I have noted amply thus far, is typically also a kind of rough-and-ready *narrative*-historical (though not rigorously historiographical) account of the sciences, their historical development, and these various achievements.

The key insight for an account like mine, at any rate, is something like the following: Such renderings of the sciences and their achievements are not *themselves* particularly scientific in any strong or robust sense. Again, they are something more like cultural-institutional accounts, offered typically in ways that would implicate their histories in certain broad strokes, and particularly vis-à-vis various other cultural practices like, say, religions. This approach does not require us, of course, to minimize or somehow culturally

[37] I develop this particular idea further in chapter five and invoke it as an important dimension in which a humanistic account like the one I proffer is more sensible than a scientistic one, or even than various forms of naturalism.

relativize the achievements of the sciences, as though they can thereby just be counted, as McDowell notes, like *just any other* cultural achievement or product—like, say, chess.[38] But it simply stresses the fact that *appreciating* the sciences and their achievements thus is a particular exercise in appreciating an historically important dimension, aspect, or manifestation of human cultural and intellectual achievement—much like appreciating various literary traditions.

This is also not to claim that an overarching scientific description of the world would somehow not hold or *fail to apply* in such matters; it is instead just to say that it somehow, in such contexts, would in key respects be *inapt* or insufficient. To put the self-referential concern perhaps more straightforwardly: A scientific description of the world in no obvious way generates or guarantees for us the *claim* that a scientific description of the world is sufficient or preferable to, say, a manifest or ordinary one. What tends to generate *this* sort of conclusion is instead something more like a philosophical-historical reflection upon the sciences and what they have yielded vis-à-vis these other domains or modes of inquiry. Putnam, I think, highlights the importance of this kind of insight:

> I do indeed deny that the world can be completely described in the language game of theoretical physics, not because there are regions in which physics is *false*, but because, to use Aristotelian language, the world has many levels of form, and there is no realistic possibility of reducing them all to the level of fundamental physics.[39]

Indeed, what we especially see in the varieties of philosophical naturalism and scientism under consideration thus far is not a kind of *scientific* reflection on the significance or importance of the sciences and the view of the world they offer but instead, as I am calling it, a kind of philosophical-historical *marshaling* of the sciences and their fruits, fit into a sort

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[38] See ch. 1, n. 29.

[39] Hilary Putnam, "From Quantum Mechanics to Ethics and Back Again," in *Philosophy in an Age of Science: Physics, Mathematics, and Skepticism*, eds. Mario De Caro and David Macarthur (Cambridge, MA: Harvard University Press, 2012), 65. This may well be more of an *ontological* claim by Putnam, but I take it that the point applies just as well to describing modes or forms of inquiry like, among others, the sciences.

of zeitgeist-capturing philosophical approach or theory, to invoke Williamson's analysis. To get at the problem for Sellars's principle in yet another way: If the scientific description of the world *is* in fact the measure of all things, it is hard to see how it is or could be the measure of that principle *itself*. A principle or doctrine like his *scientia mensura*, in a manner similar to the foregoing versions of naturalism and scientism, makes much more sense as a *philosophical* principle that is preeminently deferential to the sciences than as something that is *itself* purportedly yielded by or drawn from them.[40]

2.1.4 Approaches to Description

What I have been getting at steadily is the notion that the kinds of naturalistic philosophical accounts or theories surveyed herein seem to require something beyond *scientific* description, as they tend to rely quite crucially on varieties of philosophical-historical argumentation and rhetoric. To shed further light on other varieties of description, which I think in various ways are relevant to such accounts, consider a fairly typical fictional narrative and the varieties of description that would factor into it. A key dimension of such narratives is often *sketching* scenes and landscapes, *developing* characters, and *recounting*[41] at length, with a distinctive kind of literary flourish, various matters pertinent to the unfolding of a story. Now, such elements often subsequently play a kind of *explanatory* role in the story: Something that was unveiled in a prior description of the antagonist might, e.g., resurface at a key point in the development of the story's arc. But certainly this is not always, or even mostly, the case. Often such sketches and descriptions,

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[40] Perhaps Sellars, or others who would defend the *scientia mensura* doctrine, would tend to think of it as something like a philosophical-*scientific* principle, more than just a philosophical one. That is, he might object to the kind of dichotomy that I have herein proposed. Such a defense, however, would still need to address the considerations I have adduced, particularly regarding the dependence of such a principle on *historical* premises, accounts, or, following Larvor, explanations.

[41] Cf. Allan Megill, "'Description,' Explanation, and Narrative in Historiography," *The American Historical Review* 94, no. 3 (June 1989): 638, https://www.jstor.org/stable/1873749.

which are part and parcel of the literary enterprise, are quite delightful and appreciable, as it were, in their own right. No doubt they are typically somehow pertinent to the story at hand; but they also need not play some subsequent *functional* role in order to be a significant and memorable part of the narrative.[42] They are not offered just or mainly, that is, in an *explanatory* fashion. They instead help, among other things, to constitute the scenery of a narrative.

Consider also how some of these aspects of fictional narration emerge at times in the work of historical inquiry. To this end, I consider, with Allan Megill, Fernand Braudel's *The Mediterranean and the Mediterranean World in the Age of Philip II*—which appeared in 1949, and which is, for Megill, a of flagship example of historical writing that, in addition to the work of explanation, centrally engages in the task of description and, as Megill terms it, narrative recounting.[43] Megill notes a number of important aspects of Braudel's work, but crucially, for the present discussion, he takes it to be a history that offers various explanations but *not* in a straightforwardly analytical manner. Instead, in Megill's view, Braudel interweaves these explanations throughout his text rather than approaching them all that straightforwardly at any juncture. He no doubt *does*, for Megill, rigorously answer important explanatory questions—like why banditry flourished in the region in the late sixteenth century—but he does so amidst a broader narrative about the region.[44] What is

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[42] One might think here, for instance, of especially memorable *lines* from novels or film. Often they do factor in to the development and resolution of the plot; but quite often as well, they are memorably appreciable apart from the role they play in it. They are often noteworthy, in other words, in their own right.

[43] Megill, "'Description,'" 641ff. It should be stressed that there is something particularly remarkable to the arguable prevalence of a *narrative* dimension, if Megill is right, in such a key work by Braudel, who was a member of the Annales school, whose members broadly sought to *distance* their approach—which they took to do justice, sociologically, economically, and in other key respects, to the *longue dureé* of history—from the chroniclers and narrative historians like Ranke, who had more immediately preceded them. Cf. Fernand Braudel, [*Écrits sur l'histoire*] *On History*, trans. Sarah Matthews (Chicago: University of Chicago, [1969] 1980), 11ff.

[44] Megill, "'Description,'" 641ff.

more, Megill notes that narrative—for Braudel in *The Mediterranean*—amounts to something more than we might typically expect. That is, we might ordinarily be inclined to see narrative representation as having to do often with the fairly orderly, chronological sequencing of events. Megill notes, though, that the genre becomes something rather more for Braudel: that, e.g., places come to be personified and variously take on lives of their own, as though they were characters in a story. Consider, to this effect, the following assessment:

> Many of Braudel's commentators have pointed to his penchant for personifying. In an early review, Lucien Febvre remarked that Braudel promoted the Mediterranean to "the dignity of a historical personage." Hexter observed that Braudel populated the *longue durée* with "non-people persons—geographical entities, features of the terrain"; towns have intentions; the Mediterranean is a protagonist; even centuries are personalized. . . . Braudel himself was explicit about what he was doing. Consider the following passage, in the preface to the first edition: "Its character is complex, awkward, and unique. It cannot be contained within our measurements and classifications. No simple biography beginning with date of birth can be written of this sea; no simple narrative of how things happened would be appropriate to its history . . . So it will be no easy task to discover exactly what the historical character of the Mediterranean has been."
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> *The Mediterranean and the Mediterranean World* is best seen, then, as a vast character analysis, in which Braudel broke down "the Mediterranean," which begins as an undifferentiated entity, into its constituent parts, with growing attention over the course of the book to the human processes that are carried out within this geohistorical space.[45]

If we can take Megill's characterization to be roughly apt, Braudel's having chosen, for instance, to represent various places in such personified ways might seem, at first blush, a kind of distinctively literary flourish.[46] There might, however, be more to the matter in this regard than meets the eye. Imagine, say, a fisherman in an Italian port town who spent his working life in a boat upon those waters, hauling in his catch daily from them. It would be unsurprising—in fact, probably *likely*—if he himself were to think about the Mediterranean in broadly similar ways. That is, in a certain way, a *personified*

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[45] Ibid., 645–6.

Mediterranean, portrayed as a character more than just a body of water, might well *do justice* to the life and experience of the career fisherman—and it would likely do so *more* than any purportedly scientific (oceanographic or cartographic) account of the region or the sea would. In certain obvious respects, such a kind of *folk* account would very likely be more reflective of his experience of and relationship with the environs where he lived and worked.

As an aside, this is a broad front on which I take Hayden White and Louis Mink, among others, to be at least somewhat mistaken. That is to say, I think there is something especially *apt* about historically *capturing* or rendering certain sorts of historical personages, places, and events in a particularly narrative fashion—and that in certain characteristic ways, some such topics *conduce* to this sort of treatment. I take it that, further, this is not inconsequential or happenstance. Put differently, narration is not just something, as they suggest, that we *do to* or *impose upon* the content of history; it is more deeply reflective, I think—at least in *some* cases—of how we both experience and reflect back upon various matters of historical interest and significance. On this point, I think White and Mink overstate their point to the contrary, which particularly aims to compare historical narration to fictional narration. White famously notes that

> Stories are not lived; there is no such thing as a real story. Stories are told or written, not found. And as for the notion of a true *story*, this is virtually a contradiction in terms. All stories are fictions. Which means, of course, that they can be true in a metaphorical sense and in the sense in which any figure of speech can be true.[47]

Consider Mink to a similar effect, as he argues against Barbara Hardy's contention that narrative is a kind of cognitive transference from life to art:

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[47] Hayden White, *Figural Realism*, 33, cited in Robert Doran, "Humanism, Formalism, and the Discourse of History," in *The Fiction of Narrative: Essays on History, Literature, and Theory, 1957–2007*, ed. Robert Doran (Baltimore: Johns Hopkins, 2010), *xxv*.

> [T]o say that the qualities of narrative are transferred to art from life seems a *hysteron proteron*. Stories are not lived but told. Life has no beginnings, middles, or ends; there are meetings, but the start of an affair belongs to the story we tell ourselves later, and there are partings, but final partings only in the story. There are hopes, plans, battles and ideas, but only in retrospective stories are hopes unfulfilled, plans miscarried, battles decisive, and ideas seminal. Only in the story is it America which Columbus discovers, and only in the story is the kingdom lost for want of a nail. . . . So it seems truer to say that narrative qualities are transferred from art to life.[48]

I think that both of these contentions—as is manifest, I believe, in the narrative histories that accompany key varieties of naturalism and scientism—are critically overstated and rely upon too blunt a dichotomy between narrative and life, such that narrative must be *imposed* upon lived events. It is true in a way that stories are told; but there are also very crucial aspects of our lived experience that are reflective of a kind of narrative structure: As David Carr notes, we often find ourselves immersed in the realization of various plans and projects, for instance, that have a substantive past (or lead-up) to them; a present; and a future in regard to which we look forward to their completion or fulfillment. And often in such cases, these plans and projects have this sort of sense to them before, during, and after their execution or realization. What is more, Carr notes, it simply seems wrongheaded to claim that lives do not have beginnings, middles, or ends—for in a certain obvious way, they of course do.[49] Now, one might choose not to see these phases of them in a sort of narratively significant manner[50], but that does not diminish the fact that they begin, run their course, and eventually end.

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[48] Louis O. Mink, "History and Fiction as Modes of Comprehension," *New Literary History* 1, no. 3 (Spring 1970): 557–8, https://www.jstor.org/stable/468271.

[49] David Carr, "Narrative Explanation and Its Malcontents," *History and Theory* 47 (February 2008): 20ff. Noël Carroll has also extensively critically assessed White's views. See Noël Carroll, "Interpretation, History, and Narrative," in *Beyond Aesthetics: Philosophical Essays* (Cambridge: Cambridge University Press, 2003), 133–56.

[50] Cf. Galen Strawson, "Against Narrativity" *Ratio* 17, no. 4 (December 2004): 428–52, for an extended argument about how narrative fails to carry its theoretical weight in the ethical and psychological domains.

Also, I think that people we commonly deem historically important often tend to see themselves and their lives' work in a decisively narrative fashion. Take prominent activists like Gandhi or Martin Luther King, Jr. It seems to me that in both of their cases, they likely would have thought of *themselves* as having been protagonists of a sort in important *chapters*[51] in history—chapters that, no doubt, were open-ended or incomplete in some key way—in the broader fight for justice and equality. From our familiar scientific cases, consider thinkers like Bacon and his treatment of Aristotle, or the way in which Rosenberg presents Galileo and his achievements. Bacon seems to have thought of *himself* and various of his likeminded contemporaries in the sort of way that Rosenberg conceives of Galileo (and how Galileo might well have counted himself): viz., as a sort of *protagonist* of a reformed and liberated way of thinking that was no longer bound by the constraints or errors of a certain bygone model or era. I think it would be a critical overstatement to say that such figures just received or were given this sort of role *in retrospect*, as people recounted their lives. To the contrary: I think that having seen themselves in such a narratively couched light is probably one key way in which they were motivated to do the work that they did and to see it as the monumentally valuable task that they (and others) took it to be.

2.1.4.1 Personal Stories

In a not unrelated vein, consider the way in which biography might ably serve as an important means of historical inquiry but how, especially more recently, it has often been denigrated as such. The historian Lois Banner describes the prevailing attitude of her professional colleagues thus:

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[51] The invocation of the notion of a *chapter* in history is of course metaphorical; but its being so does not diminish the way in which such figures, I think, would often tend to appreciate their own lives and work in a decisively narrative fashion.

> Historians in general . . . often rank biography as an inferior type of history. They see it as inherently limited because it involves only one life, derives from a belles-lettres tradition rather than a scientific or sociological one, and is often written by non-academic historians who attract a lot of readers but lack the rigor of Ph.D.-trained scholars. Scholarly developments over the course of the twentieth century have also contributed to the defining of biography as second-rate.[52]

Once again, for my purposes here, I do not need to vindicate biography as *exemplary* history or prescind from certain characteristic shortcomings of the genre. Instead, I am more concerned with simply the way in which biographies are at least sometimes able to cast light upon a person's life, and various events connected to or within a life, in a way that is arguably uniquely suitable. Jonathan Steinberg, another accomplished historian, has recently argued to this effect in regard to his work on Bismarck. He notes how, having lectured on Bismarck's life for four decades, he remained puzzled by certain aspects of the statesman's life and achievements. It was ultimately, for Steinberg, a sort of biographical appreciation of the *drama* of Bismarck's life that helped him most to process certain key developments in his story:

> The relationship between Bismarck and the old King needs a biographer, not a social scientist, to explain. I see it as a drama between father and son and between the adopted son and a Queen who hated him as he hated her. In that triangle Bismarck unfolded his genius and in the struggle against his enemies, often female, he became physically and psychologically ill.[53]

I do not take it to be the case for Steinberg that explanation becomes somehow unimportant or sidelined in the work of biography; quite the contrary, as he explicitly notes. But he does seem to be claiming that biography can arguably offer an historically important manner of rendering or *capturing* significant aspects of an individual's life (no

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[52] Lois W. Banner, "Biography as History," *The American Historical Review* 114, no. 3 (June 2009): 580, https://www.jstor.org/stable/30223919. Cf. also Jo Burr Margadant, "The New Biography in Historical Practice," *French Historical Studies* 19, no. 4, Special Issue: Biography (Autumn 1996): 1045–58, https://www.jstor.org/stable/286663.

[53] Jonathan Steinberg, "Is Biography Proper History?," OUPblog, February 10, 2011, https://blog.oup.com/2011/02/biography/#:~:text=Biography%20can%20be%20proper%20history,evidence%20to%20support%20the%20answer.

doubt somehow or other incompletely), vis-à-vis its broader context and important events and developments in and around it, that a more characteristically analytical exposition might well miss or obscure. It affords the biographer a unique capacity to illuminate complex, interwoven aspects of a person's life, and various people, places, and events that were bound up with it, in especially nuanced, thickly descriptive ways.[54] And it highlights, once more, the importance of various techniques of description, recounting, and the like that ought to be taken as independently important and valuable and not *just* subservient to the work of (historical) explanation.

In a way, this digression allows me to return to Rosenberg's critique of history, with which this chapter began. Recall his dichotomy: That *either* history offers us explanations with predictive efficacy in the way the harder sciences do, or it is effectively epistemically insignificant or trivial, like entertainment (or creative literature at best). What I have highlighted is that historical inquiry often does have explanatory aims, but that these aims are not exhaustive, and that they should not be seen apart or separate from *other* aims that mark or define this practice (or set of practices) of inquiry. These perhaps include, as I have sketched, historical description and (narrative) recounting. What Rosenberg has done, in arguing from such a strong posture of *epistemological* (and methodological) scientism is effectively *by stipulation* ruled out or precluded these other varieties of historical intelligibility—of (narratively) making sense of various persons, events, and states of affairs—that are often quite important and central to the work of historical inquiry. What is more, I have noted how a more modest—and widespread—methodological scientism has tended, while not to *preclude* these varieties of historical intelligibility, to at any rate obscure, undervalue, or *occlude* them, in such a way as to be at times detrimental to the practice of historical inquiry and its broader aspirations.

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[54] Banner, "Biography as," 580–2.

In a way, then, I think that Rosenberg fundamentally mishandles these matters: He seems to think that history *fails* to meet a standard—of predictive power—that is set for us by the sciences, particularly physics. But my claim, in response, is that he is *amiss* in the first place to think about history as aspiring to the same sort of standard as physics; and even further amiss to deride historical inquiry on account of this incongruity.[55] One might be of a mind that history should help us to predict the future with a certain sort of robustness; but one might just as well not. One might instead, for instance, take a view more like Marc Bloch's and insist that history's greatest virtue is its allowing us to experience "the thrill of learning singular things."[56] If one advocates an approach such as this, one is of course claiming for historical inquiry a kind of epistemic robustness and intellectual seriousness over and above, say, what entertainment affords (or even, in these respects, fiction or creative literature); but one is also specifically sidestepping any comparison with the standards of the harder sciences and resting quite content in the relative *uniqueness* of historical inquiries.

One might also note here a certain sort of crudeness to the dichotomy that Rosenberg offers us, according to which history either typically attains to the disciplinary standards of the sciences *or* falls to the status of entertainment or a certain sort of "merely literary art." For, as Megill notes, if one takes heed of the broad trajectory of the development of contemporary historiography as a discipline, one sees precisely a certain sort of adamant insistence that the enterprise is in a certain strong sense scientific, but not *just so*. That is, especially in the nineteenth century, as the discipline came to be treated more squarely as a scientific-grade endeavor, there came with this sense a growing concern

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[55] Jared Diamond, whose more scientific approach to history Rosenberg admires, notes that attempts to judge history by the metric of physics are misguided. See Diamond, *Guns,* 424–5.

[56] See Goodheart, "Is History," 479. Whether this sort of approach was more broadly characteristic of Bloch's *oeuvre* is perhaps more contentious.

that, somehow or other, it ought also to be treated as a kind of art form, and so not *just* as a science.[57] But the way that Rosenberg pitches this dichotomy does not seem even to leave room for such a hybrid approach.

What is more, it often seems that the sorts of people, places, institutions, and events that are of the greatest interest historically are *precisely* the sorts of people, places, and institutions that, in very decisive ways, *escape* scientific description (if not explanation). Return to an example like Braudel's treatment of the Mediterranean "world." Part of the lure or mystique of a work like this is precisely, as I noted with Megill, the way in which it is able to give us a sort of rendering of a place that is very rich, textured, and multi-layered—in a way that, say, an oceanographic or cartographic account of that same "place" could not. Or think about the example from Steinberg and his treatment of Bismarck's life—and particularly the way in which he sees the unfolding dramatic family triangle as especially decisive for the description and assessment of Bismarck's life as a whole. The thought in both of these cases is that there is a kind of intelligibility to a "place" or a life that can be captured, or at least importantly gestured at, via narrative history, biography, and other such forms of (historical) inquiry that would escape a more plainly scientific rendering of these same things. The same sort of dynamic holds, I think, for wars, empires, pastimes, various cultural manifestations, and so on. This is *not* of course to say that scientific techniques cannot be adduced or brought to bear in treating such matters; but it is to say that there is a way that they are not mostly or entirely conducive to scientific *description*; and this might just mainly be because apt description of such matters ought to involve certain very crucial aspects of their *particularity*, cast in more *ordinary*

[57] Megill, "What is Distinctive," 30–1. Cf. Goodheart, "Is History," 487. This conception evokes scientific *dimensions* of typical historical inquiry and practice—*alongside* literary ones—but does not rest content with them unqualified.

terms. At the heart of an account like Braudel's, for Megill, is the notion that there is something remarkable, interesting, and noteworthy about the Mediterranean world in its (experienced) peculiarity. Now, indeed, aspects of its peculiarity might emerge as well in a sketch of the Adriatic, the North, or the South China seas; but there is arguably a way they come to life in that particular place and in the way in which its story, so to speak, has unfolded.

Prior to turning to another compelling example, consider again the roughshod historical accounts of the sciences' successes that I have considered at length. Indeed, these *themselves* are not particularly *scientific* in character; if anything, they are more like the favorable, belletristic renderings that are characteristic of biography. For my account, this sort of point bears repeating: In showing or manifesting to us how successful the sciences have been, philosophers often opt not so much for a *scientific* account or description of these successes, but instead—looking just at their *own* such accounts as examples—a kind of narrative-historical summation of these achievements and the ideas, concepts, and ways of thinking that they have vindicated, and also those that they have purportedly ousted or banished.

As a final key example, then, consider an historic battle like Gettysburg. Arguably, one could imagine (various) fundamental or tiered scientific descriptions of this historic sequence of events—perhaps sociological-historical ones somehow paired with more fundamental physical ones; or perhaps accounts of how the events, as they are familiar to us, supervene on various physical or microphysical events. If such descriptions *were* in fact achievable, it would be wrongheaded to claim that they in some way or other, following Putnam, were *wrong* or did not apply to the events of the battle. Nonetheless, there is an obvious way in which such descriptions, if given in the language of fundamental physics, chemistry, or neuroscience—perhaps even if paired in a tiered manner with relevant

sociological and historical analyses—would *largely* be beside the point.[58] For what we tend care about in such cases is *the battle of Gettysburg*; and that battle, as we tend to be familiar with it, is something that we can talk about and access best (or perhaps *only*) by way of the ordinary categories of experience, common-sense, and social life. Our take on a battle like Gettysburg might no doubt in various ways come to be importantly *refined* or sharpened through various kinds of scientific assessment or analysis; but the renderings of such events that we opt for and care about are precisely those that offer us enduring, usually narrated accounts of them and how they unfolded—and indeed, accounts that typically lead with (folk-psychological) emphases on key *figures* (or groups thereof) and what their plans, goals, and decisions were in the course of the events.[59] To be sure, such accounts are rightly held to rigorous standards of documentary, archeological, and other sorts of historical evidential norms.[60] But they also crucially—and this becomes well-nigh inescapable—need to advert to precisely the kinds of ordinary categories that critics like Rosenberg would balk at—e.g., *decisions* made by various generals and leaders; *reactions* by politicians to turns of events; and so on.

Ultimately, in my view, it becomes inescapably difficult in such cases even to *imagine* how, following Sellars, a *scientific* description of a significant battle would be ultimately preferable or superior to those to which we are ordinarily accustomed, or which are more normally accessible to us. I think Peter Hacker captures this same sort of insight:

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[58] See John McCarthy, "The Descent of Science," *The Review of Metaphysics* 52, no. 4 (June 1999): 846.

[59] I do not intend to sound overly anthropocentric in making a claim such as this. For of course, in analyzing a battle like Gettysburg historically, various other considerations—environmental, economic, sociological and so on—ought no doubt to factor in crucially to one's analysis. Nonetheless, priority is typically given to key (groups of) *people* involved, and their plans, decisions, and reactions—in a word, dimensions that would typically count as decidedly folk-psychological.

[60] My targeted rendering of Braudel's *Mediterranean*, via Megill, is *not* meant to suggest that it is somehow deficient in this respect. On the contrary: A cursory look at it evinces its robustness on this front. My concern in this case is more to emphasize the other dimensions (of description and recounting) that are notably concomitant with the explanatory dimensions.

"No amount of physics, chemistry, or biology can explain why Hannibal did not attack Rome itself after the battle of Cannae . . . let alone why Raphael painted the figure of Democritus in *The School of Athens* with boots on. But we do know the answers to these questions."[61] And the answers to these questions that we do (sometimes) know, I would add, are typically given by advertence to the ideas, plans, and intentions of the agents (or groups thereof) most crucially bound up with them.

2.2 Scientism, Histories, and Varieties of Significance

To return to the central dialectic of this chapter, consider once more the key way in which Rosenberg lays aside much historical inquiry and analysis: Since it does not yield knowledge—through its predictive power, in the way that the hard sciences do—it must at best be worthwhile for entertainment, or for rousing us sentimentally or to certain sorts of action. In another key respect, I think Rosenberg misses something crucial about the meaning of history: it *matters* to us and carries with it important varieties of *significance*. I have in mind here, in a certain sense, what Harry Frankfurt says, in a classic piece, about three sorts of philosophical focus. Traditionally, he claims, philosophers have devoted most of their time and effort, broadly speaking, to the (a) theoretical, on the one hand—what to *believe*—and the (b) practical, on the other—what to *do*. But there might well be, Frankfurt insists, a third important category that often gets overlooked; and that is (3) what to *care about*. And this third branch of philosophical attention, as he sees it, gives attention to what is *important* to us, and perhaps, at least in some cases, what is *worthy of* being important to us.[62]

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[61] P.M.S. Hacker, "Philosophy and Scientism," in *Scientism: The New Orthodoxy*, ed. Richard N. Williams and Daniel N. Robinson (London: Bloomsbury, 2015), 98.

[62] Harry G. Frankfurt, "The Importance of What We Care about," in *The Importance of What We Care about: Philosophy Essays* (New York: Cambridge University Press, 1998), 80ff, previously published in *Synthese* 53, no. 2 (1982): 257–72.

It seems to me that this Frankfurtian (and also Parfitian) distinction is quite apt here, particularly with regard to Rosenberg, because I think that highlighting it suggests an important respect in which Rosenberg is careless, or misses something worthwhile in his assessment of how we approach and carry out historical—and, indeed, scientific—inquiry. For in many important cases, histories are important because they are *our* histories—they matter to us because we are, in various ways, *implicated* in them and care about them specially. This is at least partly why, e.g., families' histories matter to them; or countries' national ones; or the Church's her own; or, indeed, the sciences theirs. They are not just stories, as it were, to be told; they are quite often, to varying degrees, *our* stories.[63] And it seems to me that Rosenberg's dichotomy—between scientific-grade knowledge and titillating entertainment—obscures or entirely misses this crucial dynamic. And it is not a dynamic that is irrelevant to the harder sciences. I think Michael Polanyi is onto something critical in this respect when he suggests that the neo-Darwinian research program has been so particularly captivating and enthralling because, among other things, it offers us a naturalistic account of *our own* history as a species.[64] It is a particular brand of origin story, among many other things; and because it pertains to *our* origins especially, along with those of other species, it carries with it a most peculiar sort of significance to and for *us*.

Consider briefly another example that highlights Rosenberg's oversight or critical omission. Recall again a history like McPherson's *Battle Cry*. I noted already that McPherson himself chose, as he tells us in the work's preface, to thematize the history of the war around the "multiple meanings of slavery and freedom, and how they dissolved

[63] Historical inquiries are no doubt undertaken for manifold reasons, but it seems to me that this sort of reason and impetus is a uniquely important kind—and one, indeed, that peculiarly gets eclipsed by a framework like Rosenberg's.

[64] See Polanyi, *Personal*, 136–7.

and re-formed into new patterns in the crucible of war."[65] Now, if one considers an authorial choice such as this, there are no doubt varieties of significance to it—none of which needs to be of clear priority. But I might return to the distinction from Nietzsche, regarding the varieties of history, to help see them as variegated.

Many, I have noted, take McPherson's *Battle Cry*, to be a preeminently good *critical* history (or historiographical take) of the Civil War era. Nonetheless, we see in the author's own stated intentions an inescapable *commemorative* emphasis: a way of treating the war and events surrounding it *particularly* with an eye to matters pertaining to the issue of slavery and the struggle to abolish it. This is not to say that McPherson just or mainly made this selective choice in order to honor those who were victims of slavery or *commend* the struggle that was evident in the efforts to abolish it. But it certainly does seem as though such a commemorative intent is—even *explicitly*—on display in the work. He is indeed offering a critical historical assessment of the war and various events surrounding it; but he is also commemorating a struggle against an institution that we collectively take to be abhorrent and are happy to have left, *as* institutionalized, in history's dustbin. There is something of the Nietzschean monumental type at play in a case like this—though I of course want to be loath just to chalk this work up as an instance of this type.

Indeed, one might think of McPherson's history, or indeed *many* histories of wars, as being at least to a degree commemorative with regard to those who fought in or were involved with the wars. If any soldiers of the Civil War had survived to see McPherson's volume written, they likely would have appreciated it (more or less, depending on their affiliation) for the way in which it recalls and *remembers* the trials that they and their brethren endured. A volume like it would have a sort of commemorative *significance* to

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[65] See ch. 2, n. 18.

them. The way in which histories often do this, I think, seems quite lost on Rosenberg's basic scientistic dichotomy. (It is, though, the sort of dynamic that earlier models of history, like the ancient ones I noted with Lefkowitz or those in the belletristic tradition, seem better suited to handle.) For there might well be various ways in which histories aspire to a sort of more strongly scientific rigor; but their failing to do so ought not to leave them at the level of entertainment or a certain sort of "merely literary art." One important task they at least sometimes accomplish is a sort of monumental or commemorative one of helping people to recall various past events and junctures, important in various ways to them and their relevant social groups or societies, and to reflect upon and (hopefully) learn from them morally; and this is not inconsequential. Also, as I have stressed, this kind of dynamic is quite often specifically at play in the histories of scientific achievement that factor most centrally into various accounts of philosophical naturalism and scientism that I have surveyed. That is, they *commemorate* the past few centuries of scientific work and achievement as a peculiar cultural and intellectual *success* and thereby commend to us key aspects of scientific practice and rationality as exemplary.

This observation—about the crucial *significance*[66] to such histories, which Rosenberg's dichotomy seems to miss—in a certain way circles me back the more central point, for my purposes, on display in his views. Avowedly scientistic, Rosenberg effectively *precludes* a lively sort of appreciation and significance that can typically be at play in and through historical inquiry. When we offer histories, we are *not* striving typically for the sort of theoretical precision that the (harder) sciences more generally offer us, nor the

[66] For an important recent treatment of a host of issues surrounding the notion of significance, and particularly its epistemological relevance, see Rick Anthony Furtak, *Knowing Emotions: Truthfulness and Recognition in Affective Experience* (New York: Oxford University Press, 2018), esp. ch. 6.

sort of predictive power of, say, physics.[67] What we are, at least sometimes, striving for is instead a kind of narrative rendering of events that are in key respects important *to us* and the groups, societies, and institutions that we care about—personally, within families, nations, churches, and so on.[68] And it is quite fine that histories tend to work this way and, indeed, probably unrealistic to argue to the contrary.

2.2.1 Foundational (Emotional) Resonance

I think there is yet another related matter of importance that surfaces with regard to Rosenberg's strong scientism that needs critical scrutiny. To see this, consider the following passage:

> The narratives of history, the humanities and literature provide us with the feeling that we understand what they seek to explain. At their best they also trigger emotions we prize as marks of great art. But that feeling of understanding, that psychological relief from the itch of curiosity, is not the same thing as knowledge. It is not even a mark of it, as children's bedtime stories reveal. If the humanities and history provide only feeling and fun . . . that will not be enough to defend their claims to knowledge. The humanities, history, and literature need naturalism to show how interpretation is grounded in science.[69]

This is yet another instance of his criticizing narrative history, in particular, along with varieties of the humanities and literature, for in a sense *fooling us* epistemically by way of titillating us emotionally. That is, he thinks that in such domains, we often come to *feel* a sense of confidence or assurance that we have knowledge of some thing or other, but this sort of (supposed) felt confirmation is in fact misleading and is akin, say, to the warmth that children feel when they hear bedtime or other nostalgic stories.

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[67] Again, this is *not* to suggest that histories cannot or should not, in various respects, be scientific. It is just to say that, if they become so "scientific" that they lose their sort of basic humane character as histories (narrative or otherwise), then something will have gone afoul. This would be akin to some harder science's losing any serious contact, say, with the empirical domain.

[68] Note that this broad point about significance is *not* a suggestion that histories can just, as it were, by carried willy-nilly to meet the preferences or ideological or rhetorical needs of such groups, cohorts, or causes; but it is to acknowledge that our various such affiliations *do* tend importantly to shape and affect our *selective* aspirations in taking up such questions and inquiries, as I further adumbrate in the following section.

[69] Rosenberg, "Can Naturalism," 42.

I take it that there are at least a couple problems with an analysis like this. First, one might argue that an affective dimension to such experiences is not often as prevalent or pronounced as he claims. This element is perhaps quite often salient and pronounced, e.g., in the aesthetic domains he mentions; but then again, one might argue that such experiences are often not as emotionally charged as Rosenberg (and many others) would make them out to be. One might claim, for instance, that they are often more *disinterested* and so in a certain way more elevated *above* such emotions than he would have us think. In a word, it seems that taking such an affective dimension for granted or to be commonplace within such experiences or domains might well amount to a simplistic or crass take on their typical character.

Second, and more important, Rosenberg seems to think that flagging these sorts of dimensions with respect to history and various aesthetic pursuits thereby *differentiates* them strongly from the (harder) sciences, which he seems to think do not tend similarly to implicate these sorts of affective and experiential factors. But there are convincing reasons to doubt this point of contrast between history, literature, and various aesthetic pursuits, on the one hand, and, on the other hand, the (harder) sciences. This is precisely the sort of concern raised by Michael Polanyi—toward which I already gestured—in his critique of "objectivism" as

> the prevailing conception of science, based on the disjunction of subjectivity and objectivity, [that] seeks—and must seek at all costs—to eliminate from science such passionate, personal, human appraisals of theories, or at least to minimize their function to that of a negligible by-play.[70]

Contrariwise, Polanyi's insistence was that various "intellectual passions," as he terms them, are needfully at play *throughout* the scientific enterprise, particularly in the heuristic

[70] Polanyi, *Personal*, 15–6. Polanyi variously refers to this sort of conception as, among other things, objectivistic, positivistic, and mechanistic.

work of making informed guesses about theoretical matters; in the work of acknowledging aesthetic ideals (like, e.g., elegance, which are typically taken to be truth-conducive) in various theoretical claims and entities; and in the persuasive work of convincing one's peers that one has a grasp of something of nascent theoretical importance.[71] What is more, for Polanyi, at the very base or foundation of the scientific enterprise—or, indeed, of *any* matter of intellectual pursuit that aims at knowledge or understanding—there must be some guiding undercurrent of *interest* in the matter, which guides those inquiring with regard to what they *care about*, lest the inquiry itself, for him, "spread out into a desert of trivialities."[72]

Paul Thagard echoes this last point in regard to the sciences and, indeed, in a similar vein reiterates the centrality of the cognitive emotions—which for him range from surprise, hope, and happiness, to frustration, fear, and anger—in scientific work. And his broad sense, like Polanyi's, is that they fundamentally assist inquirers in (1) generating questions; (2) striving to answer these questions; (3) (eventually) generating answers; and then (4) evaluating these answers. What is more, Thagard argues this case convincingly from the memoirs of Watson and Crick, which are peppered with examples that highlight the ways in which various emotionally charged episodes helped to carry and guide their work not only through, to invoke the familiar dichotomy, the process of discovery but also through the more typically soberly-cast process of justification.[73]

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[71] Ibid., 134ff. Polanyi's observation might be taken as a more science-specific manifestation of the way in which our emotions and "affective experience," as Rick Furtak has recently argued, are often our principal means of *apprehending* or attuning to important or *significant* truths about ourselves and the world we inhabit. Cf. Furtak, *Knowing*, 1; 14.

[72] Polanyi, *Personal*, 135. Furtak notes, too, that Scheler, Kierkegaard, and Frankfurt all similarly drew attention to this sort of foundational dynamic, contending that it is *love* that ultimately orients our interest in inquiry and makes various matters (or people) significant or *salient*, such that we care about them in particular ways and so thereby seek to appreciate or understand them. See Furtak, *Knowing*, 124ff.

[73] Paul Thagard, "The Passionate Scientist: Emotion in Scientific Cognition," in *The Cognitive Basis of Science*, eds. Peter Carruthers, Stephen Stich, and Michael Siegal (Cambridge: Cambridge University Press, 2002), 235–50.

At any rate, the point that counts here, I think, with respect to Rosenberg's strong scientism, is something like the following: Claiming that history, literature, and various aesthetic pursuits stimulate or stir the emotions is plainly insufficient for *contrasting* them with the sciences. It might even be that some scientists find their work *more* stimulating in this sort of respect than people often find these other disciplines or practices—even likening the zeniths of it, as some have, to the heights of erotic experience.[74] Now, a scientistic thinker like Rosenberg might counter by saying that, *even though* various scientific pursuits can at times be shot through in these sorts of emotionally charged ways, there is still, nonetheless, a process of review and intersubjective engagement that, in the end, properly filters out such dimensions. If that is his reply, though, it becomes hard to see how the sciences are especially different from the practice of history—either academically or popularly—which no doubt has similar checks and balances in place.

To conclude, one final point bears reemphasizing: Rosenberg stresses that "[t]he humanities, history, and literature need naturalism to show how interpretation is grounded in science." If the argumentation of this and the first chapter have succeeded, he critically fails to note that naturalism (and scientism), especially as it is typically espoused and articulated by philosophers, in fact *needs history* for its articulation and defense. That is, in a key respect, this claim of his in fact cuts the other way. For the articulation and defense of naturalism (and scientism) typically proceeds by highlighting a sketched history of the sciences' successes and then commending both their view of the world and their characteristic methodology specifically on account of these historically summarized successes.

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[74] Ibid., 243.

Conclusion

I largely highlighted in the first chapter the ways in which varieties of philosophical naturalism (particularly of a scientific or *scientistic* sort) rely in key respects on histories of the sciences and their accomplishments. In this chapter, I have noted the ways in which, for a strong scientism like Rosenberg's or a scientistic doctrine like Sellars's *scientia mensura*, such a reliance upon the history of the sciences spells trouble, because such histories are not in any important or key ways *themselves* scientific. Instead, to the contrary, they are characteristically kinds of philosophical-historical amalgamations. Having offered this critique of these stronger forms of scientism or scientific naturalism, I turn now in the following chapter to recent defenses of weak or "humane" scientism and raise some cautionary points in regard to them.

Chapter Three: Weak Scientism, Intellectual Paradigms, and Varieties of Inquiry

Introduction

The argumentation of chapter two was specifically directed at Rosenberg's "strong" scientism, and Sellars's *scientia mensura* principle as something of a predecessor to it, and the manner in which its dismissal of varieties of historical understanding—as being insufficiently scientific in their standards, predictive accuracy, and explanatory strength—spells damning trouble for it. This is principally because, like so many different forms of naturalism and scientism, it is crucially predicated on a kind of historical recounting of the sciences' successes and, with that, a concomitant recounting of the kinds of matters and approaches to life and the world that these successes have purportedly warded off or rendered bygone.

There is an important concern, however, that ought to accompany a critique of Rosenberg's scientism: viz., that his brand of scientism is peculiarly strong and, indeed, if Johan Hietanen et al. are correct, *singularly* so.[1] That is, critiquing Rosenberg's scientism might well amount to critiquing of a sort of lone outlier in the dialectical space that comprises varieties of contemporary naturalism and scientism. While I take it as dubious[2] that Rosenberg's views *are* in fact so exceptional, I nonetheless think that heeding such a concern is worthwhile, for it affords an opportunity for engagement with what various recent authors have taken to be a more palatable form of scientism—viz., what has most commonly been referred to as "weak" scientism in the relevant literature. In critiquing

[1] See Johan Hietanen, Petri Turunen, Ilmari Hirvonen, Janne Karisto, Ilkka Pättiniemi, and Henrik Saarinen, "How *Not* to Criticize Scientism," *Metaphilosophy* 51, no. 4 (July 2020): 526.

[2] See Zachary Mabee, "Nascent Cybernetics, Humanism, and Some Scientistic Challenges," *Journal of Systemics, Cybernetics and Informatics* 19, no. 4 (2021): 42ff.

some recent defenses of weak scientism, I take the opportunity in this chapter specifically to defend the notion that we have good reason to think that there are other forms or modes of inquiry that are not specifically scientific in their orientation or disposition. I defend these examples broadly en route to my defense of religious approaches to life and inquiry, in chapter four, and then my fuller defense of a kind of humanistic paradigm, which builds upon these points, in chapter five.

3.1 Clarifying Weak (or Humane) Scientism

Hietanen et. al, working with the aforementioned concerns, argue that Rosenberg's brand of scientism, which he himself terms "strong," counts as a sort of "narrow-strong" variety—i.e., one on which the sciences *alone* (and specifically physics among them) count as reliable means of attaining knowledge about the world, or as paradigms for inquiry in general. Claiming that Rosenberg might in fact be the *lone* noteworthy defender of such an approach, they contend instead for the viability of what they call a *weak* form of scientism, which they take to be variously advocated by Peter Atkins and James Ladyman, among others.[3] Roughly, according to weak scientism, "the sciences are not the *only* reliable means or procedures for 'exposing fundamental truths about the world,' but just the *best*."[4] Moti Mizrahi, in similar fashion, takes weak scientism to be what advocates of scientism *should* defend, in contrast with the straw man, in his view, that strong scientism has become for opponents of scientism.[5]

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[3] Weak scientism is taken to be able to avoid a number of the problems that allegedly beset at least Rosenberg's strong scientism—perhaps chief among them the allegation of self-referential inconsistency. See Hietanen et al., "How *Not*," 536.

[4] Mabee, "Nascent Cybernetics," § 2. See also Peter Atkins, "Science as Truth," *History of the Human Sciences* 8, no. 2 (May 1995): 97; and Hietanen et al., "How *Not*," 524ff.

[5] Moti Mizrahi, "What's So Bad about Scientism?," *Social Epistemology* 31, no. 4 (April 2017): 353ff., https://doi.org/10.1080/02691728.2017.1297505.

James Ladyman, for one, has defended his preferred approach to scientism of late under the rubric of "humane" scientism.[6] He casts his approach to scientism—in part to his credit, I think—as a *stance*, following Bas van Fraassen, rather than as, say, a doctrine. Doing so is meant help scientism avoid a kind of obviously damning critique of self-referential inconsistency—as a principled version of it, as I have argued, is *not* itself the product of the sciences.[7] Proposing it thus is also meant to capture and take stock more gracefully of the "norms, values, commitments, and forms of life" that constitute the sciences and their practice. Conceiving of scientism as a stance, for Ladyman, allows it to be theoretically useful and fecund rather "idiotic and dogmatic."[8]

Ladyman's scientism[9] is thereby, at least on the face of things, somewhat more hedged than Rosenberg's. He takes his (humane) scientistic stance roughly to involve something like a "core negative commitment"—which is *not to privilege* the deliverances of common sense or religious (and other) traditions either with respect to each other or, in particular, with respect to the sciences and their findings. Such sources of belief, teaching, or insight are not, for him, in any way *immune* to scientific criticism or to being ousted,

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[6] Ladyman's brand of scientism can be difficult to pinpoint as regards its ambition. He takes up quite boldly the scientistic moniker, for instance in arguing against the enterprise of analytic metaphysics, but also contends that he wants his approach to count robustly as "humane." Further, he purportedly has noted in personal correspondence that he advocates for a weaker form of scientism than the weak form defended by the abovementioned authors (see Hietanen et al., "How *Not*," n. 10). My attempt here, at any rate, is to concern myself chiefly with what he and others have in fact advocated for in writing.

[7] Hietanen et al. contend that the charge of self-referential inconsistency is not as perilous for varieties of scientism as many of its opponents allege. See Hietanen et al., "How *Not*," 534ff.

[8] Ladyman, "Scientism with," 113. For his more thorough defense of this line of thought, see James Ladyman and Don Ross, with David Spurrett and John Collier, *Every Thing Must Go: Metaphysics Naturalized* (Oxford: Oxford University Press, 2007), 57ff.

[9] I refer to this scientism as Ladyman's—though significant portions of it, as recounted here, are proposed by him *along with* Ross et al.—because he is the sole proponent who is implicated *across* the sources on which I am commenting.

with scientific help, from an intelligent and well-formed view of the world.[10] The "core positive commitment" of his scientistic stance

> is that there are no domains of inquiry that are in principle off limits for science. Everything real can in principle be investigated by scientific methods and no limits should be placed on what science can study. It follows that we should not believe in what is claimed to exist but posited to be inaccessible to science in principle. What can be studied by science is what we take to be the natural world. In particular, we ourselves and our cultures and societies are part of nature.[11]

To commence a critique of this line of thought, one might wonder *which* "domains of inquiry" have been construed, traditionally or ever, as being "off limits" for the sciences. It is not obvious that this or that domain or subject matter has been, particularly within the sorts of (religious or other) outlooks or traditional systems of thought with which Ladyman seems to take issue. One might think of the immaterial—say God or the angels—as stereotypical candidates for this sort of treatment. But even to claim something like this would require further argumentation. Theology traditionally has been conceived of *as a science* in a variety of religious traditions; and so too has angelology. Now, of course, these disciplines would have been carried out in a somewhat methodologically distinct manner from, say, the natural sciences; but they would nonetheless have been considered sciences of a sort—and often, as such, *preeminent* among the sciences.[12] So Ladyman does need to say more about *which* domains would have been taken—traditionally, say—to be off-limits or impervious to the sciences. Otherwise he might himself be leaning on a kind of crude historical caricature of aspects of the intellectual and cultural past.

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[10] Ladyman, "Scientism with," 114.

[11] Ibid., 113.

[12] Indeed Gilson notes that Augustine and his followers championed the view that *faith* is a surer means to attaining truth than reason; so theology became for them *the* science of sciences, with the natural sciences aspiring to *its* paradigm. See Gilson, *Reason*, 16–7ff.

More importantly, note the way in which Ladyman manifests an austere commitment to something like the ontological *and* methodological planks of scientism: viz., that we should only take those things that are (in principle) countenanced by the sciences to exist; and that our method for investigating the natural world *just is* the sciences, as we have and practice them. Ladyman takes the latter point to proceed from, I gather, a fairly standard sort of methodological naturalism, according to which the sciences are our preferred means of investigating or probing reality—which would be broadly consonant with weak scientism as I have sketched it thus far: "Naturalism requires that, since scientific institutions are the instruments by which we investigate objective reality, their outputs should motivate all claims about this reality, including metaphysical ones."[13] He takes this claim further in regard to how the institutional reach of the sciences ought to shape and direct the sorts of questions with which we concern ourselves. More specifically, he thinks we ought to leave the science "undomesticated," which involves "recognizing that it itself may tell us that there are questions we absolutely cannot answer because any attempted answer is as probable as any other. This does not imply that we should look to an institution other than science to answer such questions; we should in these cases forget about the questions."[14] One might note, too, that these key dimensions of humane scientism are rather on par with the characterization of weak scientism proffered by Hietanen et al., according to which "there is no such form of knowledge for which science would not be the best form of inquiry."[15] In both cases, I take it, these authors are contending that if there were some area or domain of inquiry in regard to which the sciences were ultimately flummoxed or bemused as regards the questions at play

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[13] Ladyman and Ross, *Every Thing*, 30.

[14] Ibid.

[15] Hietanen et al., "How *Not*," 536.

or the matters at hand, we would do better to dispense altogether with those questions and matters than to think somehow we might look elsewhere and find a *better* approach to them.

At any rate, the sciences, for Ladyman, are *the* means that we have for inquiring into or investigating objective reality—such that questions or claims that are purportedly not amenable to their handling ought to be laid aside, rather than addressed in a different venue. But Ladyman, in clarifying this approach, makes a telling claim. Situating these various concerns within his own revised form of verificationism, he says the following: "When we call [a] statement 'pointless' we intend nothing technical. We mean only that asking it can make no contribution to objective inquiry. (It might, of course, make a contribution to comedy or art.)"[16]

This contention, which Ladyman accedes in passing, is precisely the kind of point that at least some opponents of scientism or scientific naturalism would want to contravene; and that he, like the aforementioned defenders of weak scientism, does not really *argue for* with care or at length. He tells us that "humane" scientism need not involve the denigration of the humanities, which some critics of scientism commonly allege.[17] But notice the kind of approach his scientism favors or, indeed, *assumes*: one according to which comedy and art, for instance, simply *do not count* as the kinds of practices that can afford us views into objective reality. They are simply not, for him, the kinds of pursuits that, like the sciences, could afford us such insights. The question that I want to raise, though, is: Should we accept this contention? Or should we see this type of thinking as beholden to a sort of prejudice that itself calls for scrutiny, as Wittgenstein observes:

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[16] Ladyman and Ross, *Every Thing*, 30.

[17] Ladyman, "Scientism with," 106–9.

"People nowadays think that scientists exist to instruct them, poets, musicians, etc. to give them pleasure. The idea *that these have something to teach them*—that does not occur to them."[18] Should we simply cede, in other words, Ladyman's scientistic claim that *only* the sciences afford us a reliable view into objective reality? Or, as the proponents of weak scientism might contend, that they and *just they* afford us the *best* view into such matters? I want to contend to the contrary on both of these fronts.

3.2 Humane Goods and Varieties of Inquiry

The concern I have raised for Ladyman in particular—but also for advocates of weak scientism—regards whether other, specifically non-scientific (or not-so-scientific) practices might, in a sense, count as useful or commendable forms of inquiry *at all*; and in particular whether they might count as important and serious ways, along with the sciences, of investigating or engaging, broadly speaking, objective reality.[19] The problem facing such scientistic accounts, I take it, is twofold: First of all, in a case like Ladyman's, though he gestures at the value of the humanities, he seems just to *assume*—or to take it on principle, insofar as he adopts a sort of methodological naturalism—that the sciences *just are* the means we have of inquiring into the world and, again, objective reality. As far as aforementioned accounts of weak scientism go, the following concerns similarly apply. Proponents of such an approach are keen to tell us that the sciences are the *best* means of inquiring into the world and investigating various questions about reality. But again, what if this sort of contention is itself just comparably presumptive? They take their formulation

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[18] Ludwig Wittgenstein, [*Vermischte Bemerkungen*] *Culture and Value*, eds. G.H. von Wright and Heikki Nyman, trans. Peter Winch (Chicago: University of Chicago Press, 1984), 36e: » Die Menschen heute glauben, die Wissenschaftler seien da, sie zu belehren, die Dichter und Musiker etc., sie zu erfreuen. *Daß diese sie etwas zu lehren haben*; kommt ihnen nicht in den Sinn. « Cf. Jonathan Beale, "Wittgenstein's Anti-Scientistic Worldview," in *Wittgenstein and Scientism*, eds. Jonathan Beale and Ian James Kidd (London: Routledge, 2017), 68.

[19] I realize that using "objective reality" as a turn of phrase here might seem a bit broad and nebulous. I do so, though, particularly with regard to Ladyman and his own use of it, which I noted already.

to be more inclusive than stronger forms of scientism, but their approach in a certain sense exhibits a kind of principled prejudice against any such approaches that are not squarely or paradigmatically scientific. To see these problems more clearly manifest, consider several prominent examples drawn from Lorraine Code, Iris Murdoch, and Rush Rhees, along with a set of distinctions from Bas van Fraassen that help to highlight, I believe, the significance of these examples. These examples deal with matters including the interpersonal, broadly speaking, and friendship, along with literature and art, all of which I am inclined—for the moment at least—to refer to collectively as *humane* goods.

3.2.1 Positivism, Code, and the Knowledge of Persons

Before wading into some of these more particular examples, I want to raise of set of concerns articulated perhaps most forcefully by Lorraine Code, relating to the scientific paradigm for knowledge and inquiry. The broadly scientistic contention, again, is that the sciences quite obviously are *the* paradigm for human knowledge and inquiry into objective reality. The purportedly more inclusive forms of scientism that I have broached in this chapter attempt to claim variously that they are compatible with other ways of knowing but that these other ways will, at the end of the day, in some way(s) or other fail to reach the standard of the sciences.

I raised the concern in the previous chapter, for Rosenberg, about whether it is apt to think of the scientific as paradigmatic for history, or whether this approach is in fact injurious to how we conceive of various aspects and upshots of historical inquiry. I adduced a number of reasons for thinking that we should disagree with Rosenberg on this key point. I noted that, among other things, we see a kind of (latent) positivism on display in his views, such that he unduly expects the scientific to be too *broadly* paradigmatic in regard to ways of knowing or approaches to inquiry more generally. In a similar vein, Lorraine Code contends that too often, the (broadly) standard "S knows that P"

epistemologies of contemporary Anglo-American epistemology, reflective as they are of the Enlightenment aspirations of "pure objectivity and value neutrality,"[20] are indeed emblematic of this sort of troublesome tendency: "From a positivistically derived conception of scientific knowledge," she contends, "comes the ideal objectivity that is alleged to be achievable by any knower who deserves the label. Physical science is represented as the site of controlled and objective knowing at its best, its practitioners as knowers *par excellence*."[21]

I mentioned in the first chapter the tendency, in my estimation, among certain forms of naturalism and scientism, to veer toward countenancing an outlook regarding the *unity* of the sciences that can seem more like a *principled* embrace of the positivistic thesis to that effect than a more grounded reckoning with the diversity of the sciences as we in fact find them. It seems to me that the same sort of risk is potentially afoot on this broad epistemological front, in the manner that Code intimates. For it might just be that the sciences, particularly the harder or more physical sciences, *are*, upon further reflection, *the* most paradigmatic vehicles for knowledge-seeking that we have; but it is insufficient indeed for a philosopher simply to *assume* this. And for scientistic thinkers, who are particularly keen on telling us that the sciences are the only or best means of attaining knowledge or inquiring into objective reality, to assume a point such as this is, so far as I can tell, to beg the question. I claim this in particular because philosophers *have* in robust ways proposed forms or models of inquiry that, while not so much or strictly scientific, are indeed robust, reality-oriented, and, indeed, deeply valuable in the eyes of many. I take it that the examples I consider subsequently in this chapter could, for the most part, squarely

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[20] Lorraine Code, "Taking Subjectivity into Account," in *Rhetorical Spaces: Essays on Gendered Locations* (New York: Routledge, 1995), 24, previously published in *Feminist Epistemologies*, eds. Linda Alcoff and Elizabeth Potter (New York: Routledge, 1993).

[21] Ibid., 26.

fall under this rubric. Before considering these examples, though, beginning with something of an alternative epistemological paradigm proposed by Code, I want to note another salient respect in which such scientistic accounts seem beholden, so far as I can tell, to a kind of positivistic *assumption* about the sciences and their exemplarity among forms of inquiry.

I concerned myself in chapter two with the ways in which history, for Rosenberg, fails to meet the predictive and explanatory standards of the (harder) sciences. In a word, Rosenberg is dismissive of important varieties of historical inquiry and purported understanding because they are, for him, too *un*scientific. Interestingly, Hietanen et al. are quite content to countenance the "scientific" status of history, along with the panoply of social sciences. For them, these disciplines are all "sciences in equal degree," inasmuch as they abide by certain broad parameters or reasoning, which could even be seen on display, they claim, in certain refined forms of common-sense thinking and analysis.[22] I cite this contrastive example as a key instance of the kind of risk that, in my view, easily befalls varieties of scientism. For Rosenberg thinks that it is precisely *because* history and other social sciences fail to attain to the rigor and precision of the hard sciences that they thereby do not deserve to be counted squarely among the sciences; but at least some proponents of weak scientism, on the other hand, think that it is precisely on account of their *adherence* to such broad standards and norms that history and the social sciences *deserve* to be ranked among the sciences. I cite this example to draw attention a fundamental and glaring point of tension between two rival forms of scientism that in fact emerges in regard to a matter that they might, on the face of things, think themselves safe to assume: that history and the social sciences just are (not) sciences in a broad sense. To the contrary:

[22] Hietanen et al., "How *Not*," 536–9.

it turns out that scientistic accounts in fact need to adjudicate amongst themselves whether or to what degree this claim in fact holds.

At any rate, in offering her critique of the broad, as she calls it, "S knows that P" epistemological paradigm, Code notes the following—objecting to the way in which the characteristic objects of knowledge on such an approach are "simples," or medium-sized objects: "Rarely in the literature, either historical or modern, is there more than a passing reference to knowing *other people* . . . [or] how these 'knowns' figure into a person's life."[23] David Matheson, too, has recently echoed Code's contention: that the knowledge of persons and its epistemological implications have been striking lacunae in the literature.[24]

I do not want to wade into the details of these accounts, which strive to give a fuller and more exemplary role to the knowledge of persons within the broad epistemological project, but they do seem to me to pose an obvious point of concern for scientistic thinkers, particularly those of a more "humane" or weak stripe who would, as it stands, simply assume or take for granted that the sciences *ought to be* our paradigm for seeking knowledge or understanding of, or for inquiring into, objective reality. To the contrary, Code contends that there is unique promise to allowing the knowledge of persons to become more broadly paradigmatic in epistemology.[25] To this effect, she claims that knowing other persons demands that we be in some sort of relationship with them, and that this typically involves engagement with them in physical space, varieties of

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[23] Code, "Taking Subjectivity," 28.

[24] David Matheson, "Knowing Persons," *Dialogue* 49, no. 3 (2010): 435–53, doi:10.1017/S0012217310000466.

[25] This is a promise that Elenore Stump has argued for specifically in the domain of (philosophical) theology. See, e.g., Eleonore Stump, "Theology and the Knowledge of Persons," in *New Models of Religious Understanding*, ed. Fiona Ellis (Oxford: Oxford University Press, 2018), 172–90.

communication and interaction, and crucial dynamics of embodied give-and-take.[26] It also characteristically admits of *degrees* in ways that more standard propositional knowledge might not: I may know someone basically enough by having met her, but typically knowing another person advances along a sort of spectrum, crucially involving the kind of interpersonal interplay that one would typically have with, say, a co-worker, a friend, or a family member.[27] Louise Antony echoes Code and claims that the knowers of much contemporary Anglo-American epistemology are still largely what she (pejoratively) terms "Cartesian" knowers: That is, in her view, they are too often cast as agents whose *embodiment* is not crucially considered and the particularities of whose identities are effectively ignored. I take it that Antony would concur with Code that allowing knowledge of *persons* to be more paradigmatic could help to alleviate what she takes to be such a commonplace and critical oversight.[28]

Notice what I am and am not doing in raising these concerns: I am not attempting to claim that the knowledge of persons *ought* to be paradigmatic within epistemology. What I am simply noting is that at least some have vigorously argued that it *could* be, or that allowing it to be could help to alleviate a host of issues that have, in their view, become

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[26] As an interesting piece of support for this intuition, Michael Kremer draws attention to the strangeness of Russellian "acquaintance," which affords agents non-propositional knowledge of a thing through a kind of unmediated cognitive relation to it, but that also characteristically never develops by degree. Kremer notes in particular the puzzlement that his students typically face in reckoning with this traditional philosophical sense of the notion and how the analogy of knowing a person makes much better and clearer sense of the (commonplace) notion of acquaintance. See Michael Kremer, "Acquaintance, Analysis, and Knowledge of Persons," in *Acquaintance, Knowledge, and Logic: New Essays on Bertrand Russell's* The Problems of Philosophy, eds. Donovan Wishon and Bernard Linsky (Stanford, CA: CSLI Publications, 2015), 131ff.

[27] Code, "Taking Subjectivity," 46–7.

[28] Louise M. Antony, "Embodiment and Epistemology," in *The Oxford Handbook of Epistemology*, ed. Paul K. Moser (Oxford: Oxford University Press, 2002), 463–78. Recent work in, say, embodied cognition (among other things) could perhaps aid in a response to these concerns, which might seem to rely on something of a caricature of recent epistemology. Regardless, if these authors' critique is taken to be of modern and contemporary epistemology in a broader historical sense, such (relatively) recent work can only do so much to assuage their more (historically) expansive critique.

endemic in the broadly modern and contemporary epistemological project. Another way of putting this is to say that, in the knowledge of persons, we could have something of an alternative *contender* for the paradigm that various scientistic thinkers seem quite content to take for granted: viz., that the scientific *just ought* to be our paradigm for the pursuit of knowledge and inquiry into objective reality; or that it just *obviously* is the best available model for such endeavors.[29] Again, I am not contending that such scientistic thinkers are in fact wrong; but they ought to go to significantly greater lengths to show us that other such potential contenders, like those I am broaching in this chapter, in various respects *in fact* fall short.

3.2.2 Murdoch (and Company) on Literature and Art

The reading and writing of literary fiction, along with commentary on it, is traditionally and in a very widespread way (not just in the West) taken to be a worthwhile and valuable part of a human life. One thinks, in this vein, of the centrality that reading, discussing, and writing about fiction has had in the western educational enterprise, in particular within the liberal arts tradition. Indeed, within this broad tradition at least, there is an important sense that it is of comparable value to study certain canonical or classic works of literature as it is to study, say, calculus or chemistry.[30] Many people, similarly, would hold reading and engaging fiction to be a steadily important exercise in an educated and reflective human life. But one might wonder why this is so and, indeed, whether it can or should be so within something like a scientistic framework or outlook. I noted already the view in a sense offered to the contrary by Rosenberg: Viz., that we like to *tell ourselves*

[29] Indeed, this is the manner in which Code herself sketches the, shall we say, personal approach—as a more "everyday" contender for an epistemological paradigm. See Code, "Taking Subjectivity," 45.

[30] To be sure, this (at least) comparable value might well not typically be construed in *epistemic* terms, but that does not on the face of things, I think, render it any less significant.

that reading fiction, like studying historical narratives, confers on us certain kinds of insight, understanding, or perhaps even knowledge. In his view, however, such pursuits, however much we esteem them, amount to varieties of entertainment—at least in comparison to the sciences and the knowledge and understanding they afford.

I take it that a common, straightaway response to a view like Rosenberg's would be that it is, in a word, crass. Many would be inclined in some way or other to claim that reading, writing, and studying literary fiction can at least sometimes—though it would perhaps be similarly crass to claim that it always *must*—help us to see or understand certain kinds of matters in peculiarly or uniquely perspicuous ways, or even more, that it might have certain more edifying (moral and other) effects on us. I believe there are good reasons to think that this can be the case, and that it probably sometimes is. To this effect, Iris Murdoch famously contends that the study of literature, which she takes to be uniquely fundamental to human culture, "is an education in how to picture and understand human situations."[31] Flannery O'Connor, similarly, contends that "fiction is about everything human."[32] Or consider Hilary Putnam's take on the novels of Tolstoy or George Eliot, which have uniquely helped us, in his view, "to perceive what goes on in social and individual life."[33] Peter Lamarque offers a comparable angle, which he terms "humanistic," regarding the formative potential of studying "great tragic dramas": Namely, that they can uniquely help us to "engage imaginatively with some of the deepest concerns of human beings in [our] attempts and repeated failures at living a moral life."[34] Martha

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[31] Iris Murdoch, *The Sovereignty of Good* (New York: Schocken Books, 1971), 34.

[32] Flannery O'Connor, "The Nature and Aim of Fiction," in *Mystery and Manners*, ed. Sally and Robert Fitzgerald (London: Faber and Faber, [1972] 2014), 68.

[33] Hilary Putnam, "Science and Philosophy," in *Philosophy in an Age*, 49.

[34] Peter Lamarque, "Tragedy and Moral Value," *Australasian Journal of Philosophy* 73, no. 2 (June 1995): 241, https://doi.org/10.1080/00048409512346571.

Nussbaum contends, likewise, that reading fiction often helps us to have "not only a friendly participation in the adventures of the concrete characters" in a story, but also to see the story "as a paradigm of something that might happen" in our own lives.[35]

Notice that none of these approaches specifically commends, at least not in the first instance, the appreciation of literary fiction because it is likely to *improve* a person's life, though many of them, I take it, would likely contend that it can, at least in its better instances. The shared suggestion is not so much that the reading (and production) of fiction offers *solutions* to human concerns, but instead (at least sometimes) particular avenues by which one can *see* or appreciate aspects of them and of human life, particularly through a kind of reflective or imaginative engagement.[36] Commenting on the famous Leavis-Snow debate, Roger Scruton highlights the potential of this kind of reflection, particularly in regard to the typically crowning artistic works of a culture, which Matthew Arnold termed "touch-stones":

> In them we find neither theoretical knowledge, nor practical advice, but life: life restored to its meaning, vindicated and made whole. Through our encounter with these works our moral sense is liberated, and the fine division between good and evil, positive and negative, affirmative and destructive, made once more apparent, written everywhere across the surface of the world.[37]

If this line of thought is compelling, then notice what we have: the potential to see and reflect upon aspects of human life that is afforded us somewhat *uniquely* through literary engagement—and that, presumably, would not be similarly accessible by way of,

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[35] Martha C. Nussbaum, "'Finely Aware and Richly Responsible': Literature and the Moral Imagination," in *Love's Knowledge: Essays on Philosophy and Literature* (Oxford: Oxford University Press, 1990), 166, previously published in *Literature and the Questions of Philosophy*, ed. A. Cascardi (Baltimore: The Johns Hopkins University Press, 1987), 169–91.

[36] Cf. Lamarque, "Tragedy," 241–5.

[37] Roger Scruton, "Modern Philosophy and the Neglect of Aesthetics," in *The Symbolic Order: A Contemporary Reader on the Arts Debate*, ed. Peter Abbs (London: Routledge, 1989), 29.

among other things, scientific analysis.[38] In entertaining this possibility, I do want to be cautious—for I surely do not want to claim that reading literature is somehow just *plainly* another sort of inquiry that one could simply demarcate from the scientific. Often when people read and study literature, they *are* mainly interested in entertainment—or perhaps in examining a work historically or in a literary-theoretical manner. Nonetheless, I do think there is a kind of unique potential to be seized upon here, in this sort of way: viz., that literature, or the appreciation of stories, perhaps specially affords us means of viewing, construing, or reflectively considering various aspects of human life, and perhaps particularly human struggles or hardships and their potential for resolution.

In a word, I want to claim that literary appreciation can at least sometimes afford us unique means of reflection on such matters and, indeed, opportunity for a kind of *inquiry* into them. If this contention is workable, though, the scientistic thinker would be confronted with something like the following dilemma: Inasmuch as literary appreciation often stirs people to this sort of thought and reflection and at least sometimes affords such possibilities for inquiry—indeed, to matters that are often of fundamental human concern—how is it therefore to be classed vis-à-vis scientific thought or reasoning? For again, a principal contention of scientistic thinkers like Ladyman is that the sciences *just are* the means that we have of inquiring into objective reality. Are such literary inquiries, then—to the extent that we can call them that—just peculiar or rarefied instances of *scientific* inquiry? Or are they perhaps *inferior* to scientific inquiries or investigations because they depart in important ways from their paradigm? Many would be inclined to say that such literary inquiries, at least sometimes, *can* and *do* afford us certain windows into (important) aspects of objective reality—to be sure, various aspects of *human* reality or the

[38] This is not to claim, of course, that such insights or potential for reflection are *only* available through literary appreciation and engagement. I think the forthcoming distinctions from van Fraassen help to elucidate this.

sorts of human situations and considerations they perhaps allow us to consider with unique perspicacity. The answer that I take to be more satisfying is that, when literary appreciation does become a kind of humane inquiry of the sort just sketched, it is perhaps just an inquiry of a different kind that ought not to be cast or judged by the standards of the sciences—and one that, in some of the foregoing respects at least, might actually afford insights into and ways of thinking about certain matters that would generally be inaccessible to the sciences.

To be sure, I take it that many would find this line of thought fundamentally rather compelling: Namely, that there might well be certain insights into human life and experience that can be gleaned through literary appreciation that no particular (scientific) study or theory, or combination thereof, could ever justly capture, at least not to the same appreciable or resonant degree. An example might be, e.g., the way in which the value of certain virtues or, even more, the danger of certain vices, can be communicated through certain canonical narratives, dramas, or parables. For it is often *through* such means that people come to be most squarely convinced of the significance of such matters. One might be able to appreciate the peril of a vice like pride or boastfulness, for instance, by seeing its effects manifest within the lives of various *dramatis personae* in such a way that no amount of psychological research or studies could ever confirm or, as it were, communicate this to us with a commensurate level of cogency—in a way, that is, that would capture our attention, move, and affect us comparably.

Consider a related example from Murdoch and her approach to art, of which she says: "[G]reat art teaches us how real things can be looked at and loved without being seized or used, without being appropriated into the greedy organism of the self."[39] I do not

[39] Murdoch, *Sovereignty*, 65. I do not take it, either, that Murdoch's approach to art is fanciful or idealistic, for she says this of "great art," while also conceding that "[a]lmost all art is a form of fantasy-consolation and few artists achieve the vision of the real" (Ibid., 64).

hesitate to note how this sort of view might, for some, seem controversial or simplistic—though I take it that many others would find it *prima facie* quite plausible.[40] Suppose, at any rate, one considers it a lively possibility as regards the opportunities that the appreciation of art can afford a person. I wonder if a point similar to that about literary appreciation could apply here. Does artistic appreciation at least sometimes afford us a peculiar manner in which to *see* and thereby come to value certain people, places, or things—one that might not be similarly available in other (chiefly scientific) domains? In asking this, I want to reiterate a prior point, too: that one would be obviously remiss to think about artistic appreciation as mainly an *inquiry*; but that is not to say that it could not also, in certain striking respects, sometimes count as that *too*. One might think here, for instance, about the way in which a portrait could lead one who beholds it to see the person represented as having a particular sort of *dignity* (or, as it happens, hideousness) as a human subject; and arguably, that this insight could only be had, or had with such a degree of vigor, by beholding that person *as represented artistically*.[41]

I might particularly note that a dimension like the *dignity* or beauty of a person, if one takes it to capturable thus, might well be one that more easily or altogether escapes a *scientific* account or rendering of that person. Some have thus worried that scientific approaches to *people* especially tend to *desensitize* us to such considerations.[42] Roger Scruton, for instance, contends that the scientific picture of the world treats its constituents as *objects* whereas we, as persons, experience ourselves and others (at least some of the time)

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[40] One attendant risk to a view such as this, admittedly, is to stress one-sidedly this potential upshot of the arts while concomitantly emphasizing the abstractly *objectifying* tendency inherent in the sciences. Cf. Sorell, *Scientism*, 110ff.

[41] I think that such a dignity (or hideousness) could be taken in such a case to be with regard to the particular person portrayed but also to humanity more broadly.

[42] See Sorell, *Scientism*, 85–7.

as *subjects*. The scientific picture of the world, Scruton claims, has no place for how things seem to me, for me as an "I" or my friend as a "thou," or for the broader horizon of our experienced subjectivity or our operative self-conception as reasonably free, responsible agents.[43] This is why he contends, I gather, that the study of "our kind," ought most centrally be the "humanities," the *Geisteswissenschaften*, which tend to approach human beings not principally as members of a biological kind, but instead as beings who relate to each other *interpersonally*, as subjects to each other.[44] In similar fashion, Code stresses the way in which a knowledge-of-persons epistemological paradigm leads with considerations about subjectivity and its centrality in the knowledge economy. She takes this to be an upshot of such a paradigm vis-à-vis the "S knows that P" Anglo-American standard, which often, in her view, tends to *prescind* from more subjective or agent-particular considerations.[45] This point could be deepened in a manner that invokes the cultural and something like a humanistic outlook, toward which I am gesturing.

John Rist has drawn attention recently to what I take to be an importantly related point: viz., that our "mainline" conception of persons is foundationally *both* Graeco-Roman and Judeo-Christian in character, though not especially scientific as such.[46] I take him to mean that we have the inheritance of thinking of ourselves *as persons*, which we

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[43] Roger Scruton, "Scientism and the Humanities," in *Scientism: The New Orthodoxy*, ed. Richard N. Williams and Daniel Robinson (New York: Bloomsbury, 2016), 137–9. I return in chapter five to this category of *person* and the way in which it is most aptly handled within the kind of humanistic approach I sketch therein.

[44] Roger Scruton, *On Human Nature* (Princeton, NJ: Princeton University Press, 2017), 46. Scruton's invocation of the humanities and the *Geisteswissenschaften* synonymously might seem a bit crude or idiosyncratic, as the latter are often taken to denote the human *sciences*, though perhaps including as well what we typically think of as the humanities. At any rate, Scruton thinks that the study of human *kind* ought more characteristically to be about exercises in what Dilthey termed *Verstehen*—"the understanding of human action in terms of its social meaning"—rather about explanations that appeal to biological causality. See ibid., 22.

[45] See Code, "Taking Subjectivity," §§ 3 and 4.

[46] See John M. Rist, *What is a Person? Realities, Constructs, Illusions* (Cambridge: Cambridge University Press, 2020), ch. 1; 8ff.

commonly take for granted, particularly on account of the Roman legal tradition and the way it broadly became incorporated into the Judeo-Christian theological framework. I cite this observation to note that, very crucially, our thinking of ourselves *as persons* in particular is not a fruit (mainly) of scientific investigation, theorizing, or labor, but instead of something like a cultural outlook and synthesis, which is and was, among other things, juridical and religious—in a word, I think, *humane*. A scientific outlook might consider us as, say, *organisms*, but it is not at all clear that it would need to treat us also or differently as *persons*. In the West, at any rate, we tend to think of ourselves as persons in a key way on account of a cultural patrimony that, while having a crucially philosophical-scientific hue, has been shaped in very foundational respects by an age-old juridical and religious tradition. This is not to say, of course, that a decidedly scientific cast of mind has not *contributed* in very important respects to this outlook and its development—in regard to our acknowledging human biological likeness, e.g., across cultural and ethnic lines—but it is to say that the (ennobled) outlook of conceiving of ourselves *as persons* is an inheritance of a humane legal-religious cultural framework more than of a scientific one.

A scientistic, or even more restrained naturalistic, thinker might retort in several ways to a claim such as this. He could of course simply *dispense* with such concerns and claim that, while something like the beauty or dignity of a human subject might be humanly or culturally interesting or compelling, it is nonetheless fundamentally irrelevant or epiphenomenal to our more foundational scientific picture of the world. He could also contend, quite differently, that our scientific picture of the world in a ways *enhances* these considerations: that, e.g., coming to appreciate a person in his microbiological complexity renders him, say, *more* beautiful and awesome to behold. It strikes me, though, that both of these approaches would in a way miss the point: Seeing a person as beautiful or dignified is something that *does* matter profoundly to many people, institutions, and societies, such

that alleging its irrelevance to a scientific picture of the person will, to them, be ultimately inconsequential. That is, I take it that *their* rejoinder would simply be that the scientific picture somehow therefore does not tell us the whole story, if its tendency is to be dismissive toward something like the dignity or beauty of a human subject. To the second concern, it might well be the case that a scientific account of a person can enhance one's sense of the beauty or dignity of the person, perhaps through showcasing, e.g., his micro-level complexity. Still, even if a scientific account *were* to offer this sort of enhancement, it is not as though it would thereby capture the person's beauty in the same sort of way or on the same sort of plane as a worthy artistic representation. An account of microbiological complexity and its awesomeness can never showcase for us what a beautiful portrait can; and this is not, of course, to disparage either, but instead just to comment on the uniqueness of their respective potentialities.

At any rate, it strikes me that claiming something along these broad lines could be a way of suggesting that artistic work and appreciation can be a manner, at least sometimes, of *inquiring* into such humane matters or dimensions of life and experience. Painting a portrait of a person could indeed count as a kind of *exploration* or reflective presentation of his dignity as a human subject—though of course, as with the literary examples, it could count as many other things too. And again, I think the manner in which we tend to approach and enshrine these matters educationally lends itself strongly in support of this kind of outlook. Think about how we study ourselves, human beings, for instance, in a variety of respects; and in particular, consider questions of perennial interest, like those encircling the matter of *human nature*. We no doubt count it as important to study and inquire into our species *biologically* and particularly with regard to, say, our evolutionary history or microbiological structure. But we also tend to think that studying literary fiction is uniquely important and valuable, arguably for some of the key reasons

that I just adduced—that, among other things, reading and appreciating fiction can help us in peculiar ways to appreciate aspects of human life, predicaments, social dynamics, and so on, that we might not be able to access or envision otherwise, at least not to the same degree or with the same sort of vividness or vigor. I think the same considerations apply, too, within traditional education, to the artistic, construed broadly, and the ways in which it likewise is taken to afford us views into aspects of the world, and our lives with each other in it, that would not in the same ways be accessible were we just to *limit* our approach or outlook to the scientific.

This point, in my view, should not be understated. To see this more clearly, consider the following: If one wanted to engage rigorously some or other question pertaining to a purportedly fundamental aspect of human *nature*—dealing with our psychology, say—one might seek to delve into the best papers in evolutionary psychology or neuropsychology from, say, the past decade or two. One might just as well, however, peruse a host of canonical novels with especially memorable protagonists. I take it that one would be remiss, in the view of many, to contend that the former (more obviously scientific) approach would be *obviously* better or more astute than the latter. One could argue that it might be; but I take it that many would think the literary approach in some key respects, or all things considered, to be better, wiser, and more deeply profitable for such an inquiry.

Indeed, my contention that one might prefer to take this sort of more humane or literary approach to studying human nature is not without precedent and is perhaps crucially reflective of the disposition of, among others, the literary humanists of the Renaissance. For a key dimension of their approach to learning and education, in addition to returning to the sources or founts (*ad fontes*) of the classical tradition, was to attempt to shift the educational enterprise away from what they took—perhaps at times in a

romantically critical spirit—to be the aridly logical categorical approach of Aristotle and his Scholastic commentators and toward a more linguistically focused approach that was characterized by the study and cultivation of good style and form, in speech and in writing, and that sought to relocate various educational themes and concerns more squarely with regard to human life and experience. One could claim, then—at least as they conceived of themselves and their work—that the Renaissance humanists were striving to combat what they took to be a kind of prevailing Aristotelian-Scholastic *scientism*, which in their view failed to admit other deeply important, *humane* forms of analysis and inquiry into the intellectual and formative enterprise.[47] Put differently, they wanted to resist the temptation and trend, as they saw it, to allow "any particular metaphysical or scientific framework to become too ahistorically monolithic in regard to our approach to life, culture, or various institutions."[48] And quite crucially, they took the process of learning and education not just or mainly to be about learning data, theories, or systems of analysis, but about—in a manner that was deeply indebted to Cicero in particular—the cultivation of the *humanitas* of the student, or the formation of the most distinctive (and elevated) aspects of his particularly human nature—and this through a host of practices and pursuits that, while characteristically human, are not for the most part especially scientific.[49] Indeed, for certain key Renaissance humanists—arguably Dante and Petrarch among them—scientific reasoning or inquiry was decidedly *not* the apotheosis of human intellectual activity. To the

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[47] For a good, recent historical summary of some of these trends, see Norman Klassen and Jens Zimmermann, *The Passionate Intellect: Incarnational Humanism and the Future of University Education* (Grand Rapids, MI: Baker Academic, 2006), ch. 3. Note, too, that *both* the Aristotelian-Scholastic tradition *and* that of the literary humanists came to be targeted as "unscientific" with the rise of the rhetoric of Modern science in Bacon et al., as I already noted in chapter one.

[48] Mabee, "Nascent Cybernetics," 49; cf. David E. Cooper, *The Measure of Things: Humanism, Humility, and Mystery* (Oxford: Clarendon Press, 2002), 139.

[49] Cf. Georg Henrik von Wright, "Humanism and the Humanities," in *Philosophy and Grammar: Papers on the Occasion of the Quincentennial of Uppsala University*, eds. Stig Kanger and Sven Öhman (Dordrecht: D. Reidel, 1980), 1.

contrary, rhetorical-poetic skill was—the exercise of "the unique potential for using language in a creative, metaphorical way."[50] Notice again, though, if one takes such a line of thought seriously, the implicit challenge present for even weaker forms of scientism: Why should we think that scientific thought, analysis, or reasoning *just is* intellectually exemplary, or superior, say, to other such intellectual capacities or potentialities? What if something like rhetorical-poetic skill is in fact more humanly admirable or exceptional than scientific reasoning?[51] I am not, for one, suggesting that we need to adjudicate questions like these—or even intimating that we *could*—but instead just noting the way in which all such preceding forms of scientism, even those of a weaker sort, seem just to *assume* an answer to them that is favorable to their accounts more broadly.

3.2.3 Rhees on Friendship

Consider another similar example from Rush Rhees, pertaining to friendship. Rhees treats this example within a commentary on our age or epoch and the way in which it has become more scientific—at least as we often fancy it. His contention is that one can think of our age as "scientific" specifically inasmuch as we tend to think that the *extension* of a scientific cast of mind or scientific methods beyond the proper spheres of the sciences themselves is generally, other things being equal, a commendable strategy.[52] Rhees thinks there is an endemic cast of mind according to which extending a scientific "outlook" will help us to have a more mature—and so less childish, crude, or

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[50] Louis Dupré, *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture* (New Haven: Yale University Press, 1993), 96.

[51] A consideration like this could be especially interesting and ripe in regard to artificial intelligence and the human likeness of automata. For if one sides with the humanists in regard to considerations like these, one might think it is largely irrelevant whether robots or cyborgs can calculate or even theorize, say, like or better than we do. One might think, instead, that it would matter much more if they could reflect poetically or generate art in the ways that we do.

[52] Rush Rhees, "A Scientific Age," in *Without Answers*, Studies in Ethics and Philosophy of Religion, vol. VIII (London: Routledge & Kegan Paul, 1969), 1ff.

unsophisticated—disposition toward any number of matters. Rhees himself, however, is skeptical of this sort of approach:

> To suggest that the spread of a scientific outlook will make the human race adult, seems to me itself a piece of childishness. . . . The idea seems to be that so long as anything is not treated in a scientific way, it is being treated in an imperfect ('infantile') way. But reflexion would show dozens of cases where this is not so.[53]

Rhees adduces numerous examples or domains to this effect, including education and pedagogy. He notes that scientifically *enhancing* our educational strategy in various ways—say, in regard to methodology, curriculum, or various other trappings—will not obviously thereby make it *better* or make the teachers conducting it *wiser*. The most central example he develops thus, however, is the institution friendship: In his view, if one is interested in thinking about or pursuing a friendship, "there can be no question of 'methods, . . . the scientific outlook would be beside the point."[54] I take it that he means something like this: Friendship is an important *humane* (cultural) practice or institution. It is something that we value in a basic way and have come to appreciate collectively and cultivate culturally. It is not, therefore, something whose goodness or efficacy we discovered, as it were, through a sort of scientific study or investigation—like by doing enough work through various psychological experiments—but rather just through the crucible and storehouse of human experience. It is not an institution or cultural practice that was engineered or worked out by precise design. It is instead rightly taken to be a kind of important or bedrock dimension of a holistic and integrated human life—one that we have good reason to promote and relish.

I think Rhees is onto something important here, though I think he could stand to qualify his contention. For there *is* a basic way in which one ought not to think about an

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[53] Ibid., 2–3.

[54] Ibid., 5.

interpersonal matter like friendship just or *mainly* through a kind of scientific lens, however that would look. Friendship is more an institution that ought to be engaged by way of inherited custom, received wisdom, personal and family experience, and so on. And this is not, of course, to claim that friendship's value and place in human life is *not* susceptible to a kind of *theoretical* assessment or evaluation—though if it is, this assessment would not presumably in the first or most central instance be *scientific* as it is or would be, say, philosophical or metaphysical. In a word, then, friendship is the kind of institution that is normally approached, on the face of things, by way of those avenues or sources of insight that Ladyman puts variously *at odds* with the sciences. Notice, though, that saying this is *not* to say that scientific input and guidance could not, in a sense, be quite useful in thinking about and engaging in friendship, either in principle or in the concrete. There might, for example, be plenty of interesting data drawn from personality psychology that could help one to navigate a friendship more gracefully or shore it up more confidently. But it *is* to say that one can assert fairly straightforwardly that friendship is the *kind* of matter that we ought not to approach mainly or in the first instance scientifically.[55]

To return to our interlocutors: With regard to an important cultural practice or institution like friendship, a scientistic approach—even a more restrained or purportedly "humane" one like Ladyman's—would tell us that it ought not in principle be off-limits as a domain for scientific investigation. As I have said, this methodological injunction is not especially objectionable in itself, but it also does not offer anything positive about a specially *humane* cultural practice or institution like friendship, its place in a human life, or key and perennial aspects of its significance. This is because, I think, friendship is a

[55] To claim all of this is also not to claim, of course, that the practice or institution of friendship is somehow, say, immune to the application of *methods*. Presumably, it could often be aided by various sorts of methods, but they would be, again, more likely drawn from something like the storehouse of common sense and inherited wisdom than they would be from some or other source that is more properly scientific.

cultural practice and institution that we have and know and care about not in any key way because we have discovered or learned about it in some way or other scientifically but instead because we generally cherish it as a matter of basic human and cultural concern; and this care has been communicated and shared with successive generations, in a way that friendship has perennially been found to be a rich and enduring dimension of human life.[56] The point here is parallel to the preceding one about the beauty or dignity communicated through a portrait: Viz., we might imagine having a most exhaustive scientific account of friendship and its place in human life; but this account could easily miss what is most significant and valuable *to us* about the institution and why we care so much to preserve and share it as a key dimension of our cultural and human patrimony.

I want to be careful again, to be sure, to stress that I do not take friendship as such to be a form or variety of *inquiry*—to think of it thus would be plainly wrongheaded. One does not enter into or engage friendships to get *answers* to various questions. But it is a cultural practice or institution of great and enduring value, and there is not uncommonly a sort of inquiring that does happen within it—both *into* oneself, typically, and into another, as one's friend. And though there are no doubt similar manifestations of companionship, mating, and the like in the broader animal kingdom, friendship is a distinctly human practice or institution that is taken to safeguard and promote certain distinctly human goods; and its value as such has been perennially appreciated and transmitted culturally.

Interestingly, what I am claiming here about friendship as a kind of institution or cultural practice is not terribly unlike the way in which we commonly tend to conceive of the sciences and their relationship to other cultural practices or avenues of understanding.

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[56] Cf. Mikael Stenmark, "Scientism and Its Rivals," in *Scientism: Prospects and Problems*, 75. It might seem as though, in claiming such a cultural place and value for an institution like friendship, I am somehow *relativizing* its value or worth. I want to claim I am in fact doing the opposite, as I argue at greater length in chapter five.

For indeed, it is not as though we have and care about the sciences because we, as it were, came to appreciate them or be convinced of their value *scientifically*. To the contrary: We have the sciences and prize them and their accomplishments within a kind of broader cultural matrix in which they have been cultivated and sustained. And in some key sense, reference to this matrix must *always* be at play when we tout them or their achievements and successes.[57] Indeed, Ladyman's own scientistic account leans heavily upon an *institutional* approach to the sciences, their component practices, and relevant norms of inquiry. That is, his key means of delineating them (from non-science) is by looking to them as they exist and perdure *institutionally*—in laboratories and universities, and by way of their mechanisms of responsible inquiry, like peer review.[58] But cultural institutions do not just appear from nowhere—they are nourished and cultivated within a broader framework in which they, and the things they sustain yield, are taken to be *valuable* and worthwhile—in the case of the sciences, the way in which they help us to get at *truth* about the natural world and its workings, or to understand these matters more deeply.

3.2.4 Van Fraassen on (Non-)Objectifying Inquiry

These preceding points about literary and artistic appreciation, and also about friendship, and the ways in which they are in various respects resilient to, or do not mainly invite, scientific investigation or insight, but instead something different or peculiar, might in a way seem pedestrian or uncompelling. I do think, however, they spring from an arguably larger and more significant set of concerns, and I want to look to Bas van Fraassen to help develop these points. Within his broad consideration of the empiricist tradition, van Fraassen invites us to "contrast two forms of inquiry, two cognitive

[57] I develop this line of thought in much greater detail in chapter five.

[58] Ladyman, *Every Thing*, 28ff.

approaches to ourselves and the world we live in."[59] The first of these fundamental two approaches he terms "objectifying inquiry," which is typified, broadly speaking, by science. For him, to say that science is characteristically objectifying is to say that it treats its inquirers, objects of inquiry, procedures, and norms of inquiry in an objectifying manner—i.e., one that abstracts from individuality and particularity for the sake of universality, theoretical precision, and (a kind of) objectivity. Regarding its inquirers, science demands a certain sort of marked "distancing," according to which scientists *prescind* from themselves and their particular perspectives and viewpoints, toward an outlook that is more impersonal and so universally accessible. Relatedly, van Fraassen takes science to involve a kind of "neutralization," according to which the *preferences* and values of those involved in the endeavor are methodically eschewed or suppressed, such that the data and hypotheses under consideration can be evaluated more neutrally.[60] Indeed, both of these movements, away from the particularities of scientific agents and their respective perspectives and preferences, are commonly thought to mark scientific objectivity, and perhaps objectivity more broadly.[61] In addition to this, for van Fraassen, science proceeds methodologically, within its institutional organs, in a regimented manner that specifies relevant domains, parameters, and quantities for consideration, so experiments can be reliably performed and results assessed and evaluated according to

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[59] Bas C. van Fraassen, *The Empirical Stance* (New Haven: Yale University Press, 2002), 154ff.

[60] Much work has no doubt been done in recent years regarding the aesthetic, epistemic, and other values that are regularly at play in scientific work and theorizing. Nonetheless, inasmuch as values play operative roles in the sciences, it seems safe to say that they are therein more codified, institutionalized, and carefully limited than in various other (e.g. aesthetic or moral) domains.

[61] Cf. Thomas Nagel, *The View from Nowhere* (New York: Oxford University Press, 1989), 5: "A view or form of thought is more objective than another if it relies less on the specifics of the individual's makeup and position in the world, or on the character of the particular type of creature he is. The wider the range of subjective types to which a form of understanding is accessible—the less it depends on specific subjective capacities—the more objective it is. A standpoint that is objective by comparison with the personal view of one individual may be subjective by comparison with a theoretical standpoint still farther out."

appropriate institutional canons. The questions that scientists ask and the ways in which they ask them are highly delimited. These fundamental dynamics, he contends, are the preeminent constitutive criteria of scientific practice, broadly construed as objectifying inquiry.[62]

He also wonders, though, whether there are significant forms of *non*-objectifying inquiry; and he adduces, as one might expect, aesthetic and literary inquiry, along with coming to know another person empathically, as typical examples of this sort of approach or disposition.[63] In regard to the latter, van Fraassen invites us to consider the engagement with tragedy to which Aristotle invites his audience in the *Poetics* and the sort of learning about human nature and life that can be taken to issue from it: "To be a viewer [of tragedy] is in part to open yourself to be led by the hand through an inquiry into a side of human nature that will be newly revealed to you. And we can add to this that the poet, in the writing, was also involved in such an inquiry of which we here see the fruits."[64] In a similar vein, he reminds us, as I treat at greater length in the subsequent chapter, of how certain classic religious texts—Augustine's *Confessions* or Ignatius's *Spiritual Exercises*—invite or characteristically inspire readers to undergo a certain kind of *inquiry* into the human heart or soul, or into aspects of the religious significance of human life.[65] But in these cases, the kind of inquiry at play is not so much one of an objectifying or scientific

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[62] And he does not just see these tendencies at play in scientific practice more specifically, but more generally in regard to *all* domains—be they literary or biblical criticism, e.g.—that strive for a certain sort of scientific objectivity (or something like it) in their work and disciplinary canons. See van Fraassen, *Empirical*, 169.

[63] Ibid., 170ff. Cf. Rudolph Bultmann, "Science and Existence," in *New Testament Mythology & Other Basic Writings*, trans. and ed. Schubert M. Ogden (Philadelphia: Fortress, [1955] 1989), 139–40. Indeed, Bultmann develops in this essay a version of the objectifying/non-objectifying dichotomy well in advance of van Fraassen. For present purposes, though, I prefer the latter version of it, particularly given the way he elaborates the abovementioned criteria.

[64] Van Fraassen, *Empirical*, 170–1.

[65] Ibid., 171.

sort; and in some key respects, it is typically rather of a *contrary* kind. That is, while reflective of certain aspects of how *human* life ought to be handled, dealt with, or discerned on the spiritual plane, such texts often speak in a decidedly *personal* and *intimate* manner about how the author *himself* underwent a certain sort of spiritual journey or transformation but also how others might—in the particularities of their own hearts, souls, memories, and lives—follow suit. That is to say, if we can take these sorts of journeys or processes of discernment or discovery to be, in certain key ways, (personal) inquiries of a sort, then it would seem that we ought *not* to take them as characteristically *objectifying*, as the sciences in a most exemplary way are. We would be remiss, in other words, to view them in a manner that *extracts* the individual's particularity from the inquiring process. Instead, we perhaps ought to treat them as something almost like the opposite (in certain respects): as *non-objectifying* and thereby putting the person *in* to the inquiry more markedly and profoundly. Their orientation, as John Cottingham puts it, is decidedly one of *engagement* and personally tinged *involvement* rather than one of self-abstraction or -deletion.[66]

Conclusion

For my purposes here, I do not need in a particular way need to defend van Fraassen's working dichotomy. But I do take it as nicely illustrative of and consonant with the examples I adduced in anticipation of it. And again, I highlighted these chiefly to fortify the kind of response I was offering to Ladyman et al.—which was not an outright objection but instead a contention that a scientistic orientation toward inquiry *might well* crowd out other arguably important ways of probing, reckoning with, or inquiring into

[66] See John Cottingham, *How to Believe* (London: Bloomsbury, 2015), 82; also see Edward Kanterian, "Naturalism, Involved Philosophy, and the Human Predicament," in *New Models of Religious Understanding*, ed. Fiona Ellis (Oxford: Oxford University Press, 2018), 59–78.

aspects of life and the world. That is, treating the sciences as *the* means we have for inquiring into such matters, or even just the *best* means, would seem to preclude almost *on principle*, or at least without serious argumentation, that such other modes of inquiry might be quite viable and important, if in different ways. To draw attention further to this scientistic tendency toward preclusion, I develop in the subsequent chapter some ways of thinking about religious orientation and practice that further these insights.

Chapter Four: Scientism, Secular Humanism, and Religious Comportment

Introduction

My contention thus far has been that a panoply of versions of philosophical naturalism, but especially of scientific naturalism and scientism, invoke as a sort or critical starting point or first premise a kind of condensed *history* of the sciences and their successes—and, as I have also argued, typically one that is not *itself* particularly scientific in form or rigor. I have stressed that this sort of preliminary invocation is not especially troublesome for at least some of these varieties of naturalism, particularly those (like I noted in Larvor) that explicitly acknowledge their need for and reliance upon it. Instead, this invocation becomes especially troublesome for forms of naturalism and scientism that would proceed—as Rosenberg and, to a degree, Sellars do—with the contention that non-scientific forms of explanation or description are *not* ultimately necessary within such projects.

I attempted, then, in the previous chapter to highlight ways in which, in my view, even more restrained forms of scientism still tend to do something similar to what Rosenberg's strong variety does with regard to history: viz., they tend to occlude or overlook the importance or significance of other potential models or paradigms for understanding and inquiry. I want to argue now in this chapter that certain basic approaches to religious comportment, practice, and experience pose perhaps a comparably keen and acute threat to such scientistic (and, by extension, secular humanist) approaches—that these approaches, in other words, characteristically tend to mishandle or misconstrue such matters with, as I note especially in chapter five, a kind of unjust *prejudice*.

4.1 Scientism, Secular Humanism, and the Religious

It is quite common among naturalistic, and especially scientistic, thinkers to maintain something like a traditional dichotomy between science and religion—one that commonly presupposes a certain degree of discord or conflict between the two.[1] Rosenberg, for instance, sketches his broadly scientistic account as a sort of default for atheists and claims that, in particular, it promises to offer a series of robust *answers* to the sorts of questions that religions have traditionally taken to be chiefly within their ambit. He thinks of these as the characteristically "big questions"—matters like whether God exists, whether we have immaterial souls, or whether we have something like free will.[2] His contention is that people have rested content for far too long with *religious* answers, however consoling they may seem, to such foundational questions which, for him, science can in fact answer more honestly and without illusion. He thinks that varieties of evolutionary science can especially highlight for us why we tend to be so gullible in the face of such religious answers.[3]

Peter Atkins, in a similar vein, takes a strongly contrastive (and antagonistic) view of science vis-à-vis religion:

> There are two central features of science that distinguish it from religion. One is its mode of action: its reliance on publicly accessible experimentation, in contrast to private introspection. The other is its attitude: that the ultimate fabric of reality is determinable and in a certain sense comprehensible, in contrast to the ultimate indeterminability and incomprehensibility of the explanations offered by religion. Whereas science is meticulous in its objectivity, and false observation is soon exposed by parading data on public platforms, religion grasps at wisps of observation, and if they strike a sentimental chord, readily and enthusiastically

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[1] For an important study, which I consider herein, that traces the history of this alleged dichotomy and sounds a skeptical alarm regarding key aspects of it, see Peter Harrison, *The Territories of Science and Religion* (Chicago: The University of Chicago Press, 2015).

[2] Rosenberg, *Atheist's Guide*, viiff.

[3] Ibid., 10ff.

> absorbs them into the fabric of belief. In short, whereas science relies on experiment, religion relies on sentiment.[4]

Atkins's take on this supposed contrast seems to be roughly that of Rosenberg: That religions have variously attempted to give answers to the "big questions," along with characterizations of "the ultimate fabric of reality," but that these attempts simply pale and falter in comparison to the more intersubjectively robust, testable, and observation-driven answers yielded by the sciences. Indeed, Atkins takes many of the more traditionally religious questions that have perdured historically—like what the nature and attributes of the soul are—to be "extrapolations of human experience" and, indeed, "a waste of time." As such, he takes them to be more amenable to resolution by force than by appeal to reason or evidence.[5]

Another category of thinkers that emerges along strikingly comparable lines is those who, often in a more public forum, style themselves secular humanists. Rosenberg, for instance, thinks his scientistic read on such "big questions" amounts to a kind of defense of secular humanism.[6] In a similar fashion, consider this passage from Andrew Copson in the introduction to a recent handbook on secular humanism:

> In our account of humanism itself, we have barely mentioned religion or gods. This is because, in a simple account of humanism, there is really no need to do so. Gods, in the universe described by science, are unnecessary hypotheses and ones for which there is no evidence. As far as a humanist is concerned, all religions and all ideas about gods are outmoded attempts by human beings to make sense of the universe and give meaning and purpose to human life. . . . Gods and religions are human inventions. As such, they are clearly of historical, anthropological, sociological, and aesthetic interest, but they offer a flawed and inaccurate account

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[4] Peter Atkins, "Atheism and Science," in *The Oxford Handbook of Religion and Science*, ed. Philip Clayton and Zachary Simpson (Oxford: Oxford University Press, 2006), 124–5.

[5] Peter Atkins, "Why It's Only Science That Can Answer All the Big Questions," *Aeon*, August 21, 2018, https://aeon.co/ideas/why-its-only-science-that-can-answer-all-the-big-questions.

[6] See Rosenberg, *Atheist's Guide*, ch. 12.

> of external reality and of the human person, an unsatisfying meaning-frame for life, and an implausible basis for ethics.[7]

This sort of approach is similar in key respects to Rosenberg's and Atkins's scientism, for it exemplifies the sense that religions have tended to offer *accounts* of the nature of human beings, the structure of the universe, or whatever else, and that these accounts simply fail or pale in comparison with our best scientific ones. It also suggests that religions have attempted variously to *add* meaning or value in various ways to the universe—attempting in particular ways, one might say, to *enchant* it. The secular humanist's contrary contention, for Copson, is that the scientific picture of the universe—which he takes to be preeminently, uniquely reliable—shows it in fact to be devoid of such dimensions.

As one final initial example, consider A.C. Grayling's recent book-length defense of secular humanism *over and against* religion. He begins by noting that religion has been a pervasive dimension of human life that has accounted for great meaning and depth in countless people's lives and that has helped, e.g., generate timeless works of art and music.[8] In contrast, he notes various repressive tendencies and social arrangements that are, in his view, largely attributable to various religions. His argument at its heart proceeds thus:

> [T]he case against religion goes deeper than an argument for secularism. It is that religion's claims and beliefs do not stand up against examination. Briefly put, critical examination of religion's claims places it in the same class as astrology and magic. Like these systems of thought, religion dates from mankind's less educated and knowledgeable early history, and like them it has been superseded by advances in our understanding of the world and ourselves.[9]

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[7] Andrew Copson, "What is Humanism?," in *The Wiley Blackwell Handbook of Humanism*, 1st ed., eds. Andrew Copson and A.C. Grayling (Hoboken, NJ: John Wiley & Sons, 2015), 24–5. Copson does note ways in which, for him, a person might be both religious and humanistic; but he takes this sort of balancing act to be tolerable only, more or less, if the person takes a non-cognitivist approach to religion—that is, if he does not take it in any important ways to offer truth claims about human life and the world.

[8] A.C. Grayling, *The God Argument: The Case Against Religion and for Humanism* (London: Bloomsbury, 2013), 1.

[9] Ibid., 2.

Grayling acknowledges, in other words, the role that religions have played in people's lives as sources of meaning, value, and appreciation of the world and their supposed place in it; but he much more pointedly contends that, at the end of the day, the *claims* religions make about human life and the world do not stand scrutiny or hold water—and that *this*, in his view, is their preeminent problem.

4.1.1 Resurgent Narration

I want to draw attention to an aspect of such scientistic and secular humanist accounts that recalls the material of the first chapter: namely, that they invoke a kind of summarized or narrated history of the sciences and particularly the alleged ways in which their view of the world *conflicts* with those of various religions. It is well-known, for instance, that the motif of conflict in regard to the relationship between the sciences and various religions, particularly Christianity, was emphasized vigorously in certain late-nineteenth and early-twentieth century polemical works on the matter, especially John William Draper's *History of the Conflict between Religion and Science* and Andrew Dickson White's *History of the Warfare of Science with Theology in Christendom*.[10] Such accounts are fundamentally *narrated* histories of an alleged bone of contention—that is, they tell a historical story of alleged conflict by recounting various episodes, like the Galileo affair, that supposedly highlight such conflict. As histories, though, these and related accounts have been found particularly wanting and unduly contentious. Peter Harrison, for instance, offers the following take on certain crucial episodes of alleged conflict recounted in these two landmark volumes: "A significant number of these episodes are sheer fabrications."[11] He notes, too, that such narrations of a supposedly contentious history are properly

[10] See Harrison, *Territories*, 172; also see Kelly James Clark, *Religion and the Sciences of Origins: Historical and Contemporary Discussions* (New York: Palgrave Macmillan, 2014), 24–5.

[11] Harrison, *Territories*, 172.

mythical in his view: That is, they work to validate a certain worldview and set of practices (over and against another)—in this case, the myth that religions are hostile or inimical to the sciences—even *despite* the efforts of historians of science to contend more rigorously to the contrary.[12] William Cavanaugh has argued convincingly along similar lines regarding the alleged predilection of religions for violence. That is, in his view, the narrated historical claim that religions have a unique track record of fomenting violence is, again, quite properly mythical, or customarily employed to galvanize a certain culturally valuable set of distinctions—as he sees it, the Enlightenment dichotomy between the religious and the secular.[13] He does *not* contend that religions are not violence-prone; but for him, the violence that religions do tend toward becomes difficult to distinguish from the violence that is characteristic of, say, modern nation states—which, according to a certain sort of dominant view, are taken to be *safeguards* against or improvements upon more traditional (and purportedly violent or oppressive) religious or theocratic regimes.[14] So he takes the role that religious violence plays in this sort of secular political mythology to be what chiefly sustains the notion.

In my estimation, Grayling himself invokes such a simplistic narrative-historical rendering of such matters, as he speaks precisely in the manner that Cavanaugh rebukes: "History attests to the weight of suffering that religious tyranny and conflict have together generated, from individuals struggling with feelings of sinfulness because of perfectly natural desires, to nations and civilisations engulfed in war and atrocity by interreligious hatreds. Religions have often been cruel in their effects, and remain so today."[15] Later in

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[12] Ibid., 173.

[13] William T. Cavanaugh, *The Myth of Religious Violence: Secular Ideology and the Roots of Modern Conflict* (Oxford: Oxford University Press, 2009), 1ff.

[14] Ibid., 16.

[15] Grayling, *God Argument*, 1–2.

the same work, he claims, "even a cursory overview of history tells us that it [i.e., religion] is one of the most destructive forces plaguing humanity."[16] To make claims such as these responsibly, though, Grayling needs to say a good deal more than he in fact does. That is, it is quite insufficient simply to advert to what a "cursory overview of history" might suggest or manifest. To make such a damning claim in regard to such a perennially valuable (if controversial) dimension of human life and set of human institutions and practices, he owes us precisely the sort of *rigorous* reading of religious history and these purported controversies that, e.g., Harrison and Cavanaugh—who both demur from his thesis of conflict—offer. It is insufficient and, I believe, *prejudicial* in such matters simply to advert to widely held and demonstrably simplistic narrative-historical renderings of matters that are almost surely more complex. Mark Johnston, for one, who would no doubt agree with broad aspects of Grayling's critique of religion, finds this familiar sort of disapproving historical narration to be among the "set pieces" of a kind of "undergraduate atheism" sometimes manifested by those of a scientistic bent—for whom scientism must do battle with superstition, and predictably win.[17] At any rate, Grayling's way of approaching such points is largely comparable to that of the other thinkers I have considered thus far in this chapter: namely, seemingly quite content to invoke religions and the religious in a broad sense that is effectively monolithic, and that sees them in particular as beholden to simplistic and crude *views* about human beings and the world—and ways of life that embody this crudity.

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[16] Ibid., 127.

[17] Mark Johnston, *Saving God: Religion after Idolatry* (Princeton, NJ: Princeton University Press, 2009), 37ff. Johnston seems content to ascribe this sort of intellectually puerile tendency, as he sees it, to various popularizers of science (and scientism) and opponents of religion. I wonder, though, whether he can so easily consign it to such types. A good deal of my argumentation in this chapter is engagement with philosophers and scientists who, so far as I can tell, *themselves* manifest the same sorts of vices.

A more honest and equitable approach to leveling such a critique would be to point to *particular* claims or episodes for which this or that religion is purportedly responsible or guilty.[18] Grayling and company could contend, for instance, that young earth creationists' claim that the earth is six to eight thousand years old, rather than four and a half billion, is wrong and laughable. But to level a particular accusation like that responsibly, they would also need to tease out that very many religious groups and adherents do *not* hold to such a view, but are instead quite content with the going scientific consensus on the matter. To narrow the scope, however, of such a contention thus, and thereby seek to level more *precise* claims against particular religious doctrines or traditions, largely declaws such an argument rhetorically. Indeed, such claims characteristically pack a punch largely on account of their *sweeping* and categorical character. It is much more enticing, especially to an unreflective audience, to say that *religions* are responsible for such mistaken views or social misdeeds than it is to note, say, that Seventh Day Adventists seem to be mistaken in regard to some particular point of cosmology.

4.2 Dispositions and Systems

I do not want to deny, of course, that various religions *do* in fact make particular claims that can and at times do rub up against those of the sciences.[19] Indeed, many major traditional religions assert various claims or doctrines about humanity, the universe, the moral life, and other issues that might variously seem at odds with our best or current scientific accounts of such matters. Many forms of traditional Christianity insist, e.g., upon

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[18] Cf. Clark, *Religion*, 44. In a basic sense, I take it that such an approach would be more honest and equitable simply because there have been a great many religious traditions and manifestations of religious life in human history, such that speaking about the tendencies of religion*s* en masse amounts to something typically hopelessly nondescript, like speaking of human societies in such a wholesale manner.

[19] In this sense, my approach here is avowedly *cognitivist* in some key respects as regards religions, or at least certain important aspects of them. Cf. John Cottingham, *The Spiritual Dimension: Religion, Philosophy, and Human Value* (Cambridge: Cambridge University Press, 2005), 2.

there having been a real, particular primordial couple (Adam and Eve) who are singularly ancestors of the entire human race. But again, if they do in fact contend for such a claim, it is a *particular* claim whose alleged conflict with the sciences can be treated accordingly. And teasing out *how* there might in fact be such conflicts can itself often be a rather tedious and unclear matter. For many religious texts are not, as Cottingham calls them, "bald narratives" of events that are just plainly accessible to any observer. The Gospel narratives, he notes, often are marked by "a strange, luminous, paradoxical quality, a kind of 'aura of resonance'," such that what they are striving to teach and inculcate is not just, as it were, plainly there and available for *anyone* to grasp with ease, but "only . . . those who have 'eyes to see' and 'ears to hear'."[20] This dynamic is worth mention, I take it, because it hints at the fact that many *supposed* points of contention—particularly between, say, a dimension of a sacred text and some matter scientific—might not in the end be that contentious at all, if the alleged sources of contention are approached with a kind of respect and diligence due to their particular modes of presentation.[21] Perhaps stressing this dynamic is another way of highlighting, as Cottingham notes, "that much religious discourse is multilayered – it carries a rich charge of symbolic significance that resonates with us on many different levels of understanding, not all of them, perhaps, fully grasped by the reflective, analytical mind."[22]

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[20] John Cottingham, *Why Believe* (London: Continuum, 2009), 102.

[21] The biblical creation narrative, told in the beginning of the book of Genesis, might be a useful and familiar example of the need for such interpretative nuance. Familiarly, the narrative speaks of the work of creation as having happened over the course of six days, followed by a day of divine rest. Of particular note, though, is the fact that those who interpret this timeline *literally*—i.e., as having unfolded over six normal calendar days—are, for the most part, historically and institutionally aberrant. That is, the predominant approach to this foundational moment has been to understand it at least somewhat figuratively (while still preserving, e.g., the cosmically creative work of God), specifically so as to avoid unnecessary conflict with scientific approaches to the same issue.

[22] John Cottingham, *Philosophy of Religion: Towards a More Humane Approach* (Cambridge: Cambridge University Press, 2014), 8.

I should address a concern that a critic might have here: Namely, that such gesturing—e.g. to having "eyes to see" or being attentive to unique and diverse modes of presentation—might seem like a sort of hand-waving or smoke and mirrors, or perhaps as a sort of mystery mongering[23] that seems intent to shield such approaches from the kinds of scrutiny that various non-religious accounts might typically face, and that such religious accounts would themselves therefore face *ceteris paribus*. I think that this criticism is too quick, however, as there are important examples in key religious traditions that substantiate this point of methodological modesty quite robustly. As an example, consider the Christian patristic-medieval approach to biblical exegesis, which is known characteristically for its attentiveness to the different *senses* of biblical texts. A biblical text can be considered in a literal-historical manner, and this is what exegetes often try to reckon with first and foremost. As Christopher Hall notes, however:

> The [church] fathers . . . saw the grammatical-historical meaning of a text—what they would probably call its "literal" meaning—as only one of its possible senses. All the fathers expected to find layers of meaning within a biblical text. The question they posed to each other is in what way and to what degree this layering manifests itself.[24]

These various other senses or "layers" of meaning of the biblical text are typically taken, in addition to the literal or historical, broadly under the rubric of the "spiritual," which is then traditionally subdivided into the allegorical, the moral, and the anagogical—pertaining, respectively, to the typology of various past events and their fulfillment or symbolic realization in later realities; to the moral formation or cultivation that the text is

[23] Cf. Rosenberg, *Atheist's Guide*, xiiff.

[24] Christopher A. Hall, *Reading Scripture with the Church Fathers* (Downers Grove, IL: InterVarsity Press, 1998), 133.

meant to inspire and kindle; and, finally, to the eschatological significance of the text and the ways in which it orients readers toward such forthcoming realities.[25]

I raise this example of the patristic-medieval approach to biblical interpretation as a significant and concrete instance that helps, I think, substantiate the counsel offered by Cottingham. The operative thought in this case is that having the "eyes to see," so to speak, could well involve being sensitive to a host of layers of religious (alongside historical) meaning and significance at play in the biblical text. An important corresponding consideration, in my view, is that failure to acknowledge this sort of panoply of dimensions to such a text, if they are in fact warranted or called for, could easily lead one to see conflict—between the text, say, and some scientific datum or theory—where there need not be, or where such a fuller reading and appreciation of the text could gracefully sidestep it. And so I take it that Cottingham offers this accompanying cautionary point in the same sort of vein: "for this reason it may be a serious error to try to reduce all religious thinking to a bald set of factual assertions whose literal propositional content is then to be clinically isolated and assessed."[26] In a word, it is effectively *this* sort of reductionistic error that I am flagging in the scientistic and secular humanist thinkers currently under consideration.

At any rate, I do think that lingering too much on the potential or actual conflict between various particular religious *claims* about this or that matter that is *also* of scientific concern can miss something very important and in a way more basic about religious approaches to life and the world. For to think of most religions as sets of *claims* about the

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[25] This quadripartite approach is captured pithily by the medieval couplet: "The Letter speaks of deeds; Allegory to faith; The Moral how to act; Anagogy to our destiny." For this and the foregoing summary, see *Catechism of the Catholic Church*, 2nd ed., revised in accordance with the official Latin text promulgated by Pope John Paul II (Vatican City: Libreria Editrice Vaticana, 1994), 115–9.

[26] Cottingham, *Philosophy of Religion*, 8.

world obscures something often more basic and fundamental to them. Again, many of them no doubt *do* involve such claims—doctrines, creedal definitions, and the like—along the way, but they also in a sense more *primordially* often involve something like a religious *orientation* or outlook—a sort of disposition that a person can have with respect to God, the universe, and other people. I take it that Linda Zagzebski is gesturing at this sort of dimension of the religious when she stresses that emotions like reverence are often of more foundational importance in various religious traditions and ways of life than any particular *beliefs* or epistemic attitudes.[27] In this sense, she echoes the sense that Abraham Heschel, among others, had about the Jewish religion and the primacy of *awe* (*yirat hashem*) within its practice, as a sort of "cardinal" and elemental virtue. In regard to this sort of approach, Howard Wettstein notes, "Heschel would have us shift focus from the cognitive to something more attitudinal, something more like a posture, a manner of carrying oneself, a way of facing life, the universe, God."[28] I take it that other philosophers have also recently drawn attention to the significance of such a foundational religious outlook or *sense* within religious life and practice.

Consider Thomas Nagel to this effect: For him, the "religious temperament" is roughly a kind orientation or disposition from which one seeks a kind of existential "*completion*"—i.e., by way of which one comes to see himself, within the cosmos, in a different and elevated sort of light, as living "a life in the sight of God, or an element in the life of a world soul."[29] This sort of orientation fundamentally involves not only a sense of the universe but also a sense of oneself *as situated* in a particular manner within it. As a

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[27] Cf. ibid., 156.

[28] Howard Wettstein, "Awe and the Religious Life: A Naturalistic Perspective," in *The Significance of Religious Experience* (New York: Oxford University Press, 2012), 29.

[29] Thomas Nagel, "Secular Philosophy and the Religious Temperament," in *Secular Philosophy and the Religious Temperament: Essays 2002–2008* (Oxford: Oxford University Press, 2010), 4–5.

"temperament," it could perhaps be contrasted with that, arguably characteristic of the sciences and other more typical forms of (objectifying) inquiry, according to which one simply seeks to appreciate the universe *in itself* or *as such*. In contrast, a religious orientation is one by which a person (or group of people together) beholds the universe in a certain meaningful, purposive light that shines particularly onto the matter of his (or their) own place or role within it all.

I might note, in conjunction with the points adduced from van Fraassen in the previous chapter, that asking these sorts of questions and seeking thereby to grapple with *one's own* place in the universe or cosmic order might well be a robust example of a kind of non-objectifying inquiry. For within such questioning and existential grasping, one would precisely *not* be excluding his or her own self from the process but, indeed, in a way doing the contrary: Wondering, e.g., where or how *I* might fit in to this broader scheme; or what role *I* might have to play within it. And also: What might be the broader significance of *my* having this sort of cosmic place or playing this sort of role?

Notice, too, that if one takes the notion of such an orientation or temperament seriously, one need not in any particular way—at least not *initially* or in the first instance—invoke *claims* about the universe that would in any noteworthy respects potentially conflict with those of the sciences. The sort of dynamic at play here is in a basic way something like having a sense of cosmic *significance*, to return differently to a notion I introduced in chapter two. One could indeed have roughly the same sort or set of *scientific* views that one might otherwise have but, additionally and crucially, see *oneself* as being part of the whole in a different sort of light. And such a take on things might ultimately involve something or someone like God, or it might not. To be sure, living with such a sense of oneself within the cosmos might well involve more particular *views* or *claims* about specific aspects of this arrangement; but it also might just as well not, at least at such a general level. It might, e.g.,

be just something like a lively yet nebulous awareness of or sensitivity to some mysterious and perhaps unspecifiable dimension of life and reality.

Nagel's construal is somewhat more generic but nonetheless not terribly divergent, in certain key respects, from Cottingham's take on similar concerns: "*What is it to relate to the world religiously?*," Cottingham asks, or *What is it to understand things in a religious way?*"[30] Consider the way, for instance, that Cottingham construes a sort of emblematic religious understanding—of oneself and one's place in the cosmos, before God—as expressed by the Psalmist, who cries out to God in praise:

> The "religious understanding" involved here is, in short, the kind of awareness which enables one to see the world transfigured, so that it is irradiated with meaning and value, and the human subject, caught up in that mystery, is unmistakably called on not to be a spectator any longer, a mere "tourist," but to *respond*, to be a morally responsive agent, part of a cosmos that is *diaphanous*, transparent to the divine.[31]

Cottingham further delineates this sort of peculiarly religious understanding by contrasting it with scientific understanding. Roughly, in his view, scientific understanding inclines toward experimental analysis and dissection of the world, whereas religious understanding inclines one toward a kind of "moral and spiritual opening of the self to the presence of the divine"—a kind of, following Nussbaum, "porous" posture and a concomitant

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[30] John Cottingham, "Transcending Science: Humane Models of Religious Understanding," in *New Models of Religious Understanding*, ed. Fiona Ellis (Oxford: Oxford University Press, 2018), 29, italics in original.

[31] Ibid., 34. This sort of assessment could easily seem unfair to one who might challenge or demur from it—as though, among other things, a secular humanist or scientistic thinker would somehow be precluded from thinking of people as "morally responsive agent[s]." I do not think this is the case, though I do think such thinkers might owe us a fuller account of how it is that they *could* or do have such an outlook. For as I noted with Scruton in chapter three (n. 43), thinkers who defer just or mainly to a *scientific* view of the world and our place in it might well not need a notion like morally responsive agency or the second-personal categories with which we are most familiar. This is of course not to assume that they in fact do not, but just to say that they might well need to tell us more clearly *why* they do than, say, a thinker who is more deferential to various common-sense or religious approaches to such matters.

"epistemology of receptivity."[32] Consider this exposition from Cottingham in regard to another Psalm:

> If we look at the Judeo-Christian scriptures, for example, we find that although God is spoken of as the maker of heaven and earth, there is very little material that emphasizes the explanatory role of this claim, or attempts to demonstrate its theoretical power and scope. Instead, what we often find is language whose focus we would probably classify (in our somewhat impoverished modern vocabulary) as "aesthetic" or "moral," as in the following verses from a well-known Psalm:
>
> > Let the heavens be glad, and let the earth rejoice: let the sea roar, and all it contains.
> > Let the field exult, and all that is in it: then all the trees of the forest will sing for joy
> > Before the Lord, for he comes, he comes to judge the earth: he will judge the world in righteousness, and the peoples in faithfulness.
>
> God is not here an immaterial force that is supposed to *explain* the behavior of the oceans and the fields and the woods; rather, the vivid beauty and splendor of the natural world is that which *makes manifest* the divine. The world as understood *religiously*—not as a blank impersonal process . . . but as "charged with the grandeur of God," to quote the first line of the famous poem by Gerard Manley Hopkins.[33]

Now, this is not to suggest that *only* a religious outlook could afford a person this sort of perspective—one of seeing the universe as, among other things, "irradiated with meaning and value"; and it is also not to say that in various ways a scientific (or non-religiously moral) outlook could not yield something comparable. But it does seem right to say that such a perspective is *more properly*, in a key sense, religious than it is scientific. It might be one, no doubt, that *coalesces*, upon deeper reflection, with a maturely scientific view of the world.[34] But if someone striving to be more strictly scientific or just secularly moral

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[32] Ibid., 31–3. Cottingham's contrast between religious and scientific outlooks or approaches to the world is strikingly reminiscent of Heidegger's between the meditative and the calculative—the latter of which he takes to be particularly characteristic of modern science, technology, and philosophy. See Linda Wiener and Ramsey Eric Ramsey, *Leaving Us to Wonder: An Essay on the Questions Science Can't Ask* (Albany, NY: State University of New York Press, 2005), 79ff. Also, see Martin Heidegger, [Die Frage nach der Technik] "The Question Concerning Technology," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, [1955] 1977), 3–35.

[33] Cottingham, "Transcending Science," 33.

[34] It is precisely this sort of coalescence that I advocate for in chapter five.

attempted to speak of the world, or himself within it, along these lines just noted from Cottingham (or Nagel), he would rightly be taken to be confused, mistaken, or in the wrong business. On the contrary, if he did so in a religious milieu, his reflections would count as quite apt and at home.[35]

I do want to stress a further point that bears repeating: Conceiving of such a religious outlook or sense of comportment in the abovementioned ways does not, of course, preclude one's having and advocating particular *claims* about oneself, the divine, one's place in the universe, and the like. To the contrary: at least in some key respects, it would presumably *require* that one have at least certain broad and basic views about these matters. Nonetheless, there is a sense in such broad construals that the claims or views held are not the chief or primary matter of interest—at least not *initially*—but instead something like a fundamental sort of openness to the transcendent or divine—a way of relating to God, even (or especially) though his presence or reality may seem quite nebulous or unspecifiable.

In conjunction with this, it should also be noted that, traditionally, views or claims held or advocated for in such contexts are often handled with a peculiar sort of delicacy and caution—even with a sort of theoretical asterisk alongside them. This is, I take it, why in traditional theology the *apophatic* approach to God is given such keen emphasis: For according to it, we rightly give greater attention to saying who or what God is *not* than who or what he is.[36] In regard to the passage just cited from the Psalmist via Cottingham, the idea might be something like this: that the God whom the Psalmist is acclaiming and

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[35] This is of course also not to say that a religious approach to the world would just or mainly yield something like the abovementioned outlook. Religions and religious approaches to life and the world have often yielded, for instance, fairly exacting moral demands that are taken to be reflective of divine law. I take it that Wittgenstein was gesturing at precisely this in his remark: "Religion says: *Do This! – Think like that!*," Wittgenstein, *Culture and Value*, 29e: » Die Religion sagt: *Tu dies! – Denk so!* «

[36] Cf. Cottingham, *Spiritual Dimension*, 159–61; *Philosophy of Religion*, 40–3.

to whom he is crying out is *not* a creature or created being in the world (but wholly different and greater); and that this is the reason he can sing to God so uniquely joyfully, unlike how he would (if at all) to any other (created being). The traditional theological caveat, in other words, would be to recall such negative interpretative guideposts in a certain way *prior* to adducing anything positive about God—like that he is patient, kind, or merciful, or even that he has this or that specific arrangement with respect to the world or creation.

4.2.1 The Loss of a Virtue?

There is an interesting historical case, in my view, to be made on behalf of the sort of approach here to which Nagel and Cottingham are broadly adverting. I take them, again, in different respects to be getting at something like a religious *outlook* or *comportment* with regard to oneself, others, and the world (and possibly also to God)—something akin to what traditionally might have been counted as, among other things, the *virtue* of religion. Before attempting to highlight this notion further, I do want to add a cautionary point about my invocation and sketch of it. I am certainly not claiming that it is somehow, say, more historically honest to think of 'religion' in the following sense. I do think, however, that there is good reason—historical and otherwise—to think that both religions in some key instances and a kind of fundamental religious outlook or sense call for, very primordially or in the first instance, something like this sort of attitude or disposition. I also think that it is precisely a dimension such as this that scientistic and secular humanist thinkers of the sort already surveyed tend in an important respect to miss or overlook.

At any rate, the fundamental idea at play here, within a certain kind of broadly traditional outlook (at least in key strains of western thought), is that 'religion' would have typically been conceived *more* along dispositional lines than in reference to *systems* or organizations, in the way that we typically tend to deal with the notion nowadays, and as is

evinced strongly in the authors that I have noted thus far, particularly in this chapter. Raymond Geuss notes, for instance: "[T]he Greeks had no single simple substantive to designate what we call 'religion' that is at all parallel to our concept. The closest expression they had was τὰ τῶν θεῶν, 'the things / matters / affairs of the gods', which is not the same thing at all."[37] To be sure, they of course had a lively notion of *worship*, or forms of praise or sacrifice offered to the gods, with their various ritual components and trappings[38]; but not so much *religion* as we tend more recently to conceive of it in a systematically institutional or denominational fashion. Peter Harrison has recently drawn attention to the way in which, in scholastic developments of ancient Greek thinking, *religio* was taken—in Aquinas and his contemporaries, e.g.—principally as a sort of moral *virtue* that a person can develop—much in the way that he might develop, say, prudence or temperance. (Such an approach no doubt had firm roots in its classical forebears, though its generally favorable assessment of *religio* might well have been, by some of their standards, quite optimistic or generous.[39]) To think of religion in such a manner is notably in contrast to how we tend, *ceteris paribus*, to think about it nowadays—viz., as a *system* of belief, practice, and institutional membership—in Christianity, Judaism, Islam, Buddhism, Hinduism, and other particular religion*s*. (Arguably, this strategy of separating out religion*s* along such systematic-institutional lines traces importantly to Nicholas of Cusa and other

[37] Raymond Geuss, *Changing the Subject: Philosophy from Socrates to Adorno* (Cambridge, MA: Harvard University Press, 2017), 77–8.

[38] Ibid., 81ff.

[39] As Geuss notes, there is good reason to hold that in antiquity *religio* was an ambivalent notion in its development and varied usage: That it often was taken—e.g. by Lucretius and various philosophers who followed him—to have a *pejorative* connotation, more suggestive of fanaticism or fundamentalism, say, than something like a moral virtue. It was *religio*, on this sort of reading, taken as a kind of spellbinding force, that compelled Agamemnon to sacrifice Iphianassa, his daughter. See Geuss, *Changing*, 79ff.

Renaissance Christian Platonists, for whom it amounted to a sort of distinctive paradigm shift vis-à-vis their intellectual predecessors.[40])

More particularly, in this sort of broadly medieval outlook, *religio* was taken to be a part of the cardinal virtue of justice, such that one who had or exemplified it exhibited a kind of proper and *just* cosmic gratitude, if you will, and expressed this gratitude largely through various acts—primarily interior, but also ritual[41]—of thankfulness, piety, and the like.[42] So it surely did implicate public acts and cultic expressions of worship, though it arguably did not give primacy to such external manifestations. On a traditional form of Christianity, a virtue or disposition like *religio* would no doubt be taken to find fulfillment or consummation in the life of faith, with its creedal, liturgical, and sacramental acts of devotion.[43] What is more, on such a traditional Christian gloss, stemming principally from Augustine and Aquinas, there would be an insistence on the distinction between *true* and *false* religion—though again, this contrast historically would not have been drawn principally along doctrinal or institutional lines as much as it would have been in regard to

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[40] See Cavanaugh, *Myth*, 70ff.

[41] Interestingly, as Christianity became more established and institutionalized, 'religion' came to refer very commonly, particularly in medieval usage, to monastic and similar ways of life and their observances. See ibid., 64.

[42] See Harrison, *Territories*, 7ff. Cf. S. Thomae Aquinatis, *Summa Theologiae*, cum textu ex recensione Leonina, ed. De Rubeis, Billuart, P. Faucher, O.P., et aliorum notis selectis ornata (Romae: Marietti, 1948), IIaIIae, q. 106, art. 1, resp.: « In Deo autem primo et principaliter invenitur causa debiti: eo quod ipse est primum principium omnium bonorum nostrorum. Secundario autem, in patre, quod est proximum nostrae generationis et disciplinae principium. Tertio autem, in persona quae dignitatae praecellit, ex qua communia beneficia procedunt. Quarto autem, in aliquo benefactore a quo aliqua particularia et privata beneficia percepimus, pro quibus particulariter ei obligamur. . . . inde est quod post religionem, qua debitum cultum Deo impendimus; et pietatem, qua colimus parentes; et observantiam, qua colimus personas dignitate praecellentes; est gratia sive gratitudo, quae benefactoribus gratiam recompensat. »

[43] To stress the primacy of such a disposition or orientation is not, of course, to take one's assessment of it in a non-cognitivist direction, so as to preclude concomitant dimensions of faith or *belief* that would be rooted in or attendant to them. I take it that Wettstein, though he ultimately seeks to appreciate religious practice naturalistically and so without its typical metaphysical trappings, acknowledges this point aptly: "To say that we have undervalued awe and given pride of place to belief, or religious faith, is not to dismiss these latter concepts. . . . Awe, you might say, is most fundamental, it is *k'neged kulam*, but it finds its completion in faith. We need to begin with awe, to provide it with sustained attention and nurture, to heighten our awe-responsiveness, if we are to attain faith." See Wettstein, "Awe," 29.

what was taken to be true or false *worship*—that is, the right sort of worship (in their view, of the living and true God) in comparison to the wrong sort (of, say, various pagan deities or creatures).[44] In a word, this is to say that *religio* would have variously implicated doctrine but not in the first or primary instance have been about it. Instead, *religio* was broadly taken to be more a *virtue* of a person—whose primary manifestations were internal[45]—than a system of belief and practice or a set of institutional structures.[46]

I take this admittedly provisional and broad historical aside to be of interest because it highlights the way in which, arguably, religion *as such* was taken on various traditional models more to be a kind of existential attitude or comportment through which one nurtured a sense of cosmic gratitude and engaged in acts of *worship* than it was taken to point to or deal with the *systems* of belief and practice that we nowadays primarily take to be various religion*s*. (There were of course in these prior schemas ways of getting at or pointing to the systems themselves—say 'sacred doctrine' or 'the Catholic faith,' e.g., in the case of Christianity.) It seems to me that in a broad, fundamental sense, thinkers like Nagel and Cottingham, who are pointing to the significance of a sort of cosmic comportment of the kind just sketched, are getting at something like what would have traditionally counted as a religious attitude or something akin to the virtue of religion. In the first instance, much more than being about assent to a particular creed or statement of beliefs, or about involvement or membership in a specific religious body, this sort of approach is about a kind of personal and existential openness and receptivity to matters of

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[44] Harrison notes how even Augustine, who is perhaps the most well-known patristic proponent of the Christian notion of 'true religion' (*vera religione*), in his end-of-life *Retractions*, stressed that he did not want simply to identify Christianity (construed in a more systematic or institutional sense) as *the* true religion, for there was, for Augustine, some sort of true religion at play, if only in seedlike form, in various religious manifestations and practices that preceded the institution of the Christian faith. See Harrison, *Territories*, 9.

[45] See ibid., 38.

[46] See Cavanaugh, *Myth*, 63ff.

divine significance—perhaps, say, of having and cultivating a worshipful way of living and being.

Harrison, Cavanaugh, and others offer fascinating genealogical takes as to how this sort of paradigm shift—from approaching 'religion' in this sort of broadly traditional way to the more systematic-institutional way that we are more currently accustomed to—was effected, e.g. through the more official and entrenched delineation of varieties of Christianity in the wake of the Protestant Reformation and the impetus in that milieu to separate out true and false religion*s*; and, relatedly, the western (Christian) institutional tendency to take stock and account for theoretically, with greater precision, various eastern and other world religions.[47] I do not want, however, to divert too much attention to these important and fascinating historical issues. The significant point for my purposes is that there is robust ancient-medieval pedigree for thinking of something like a basic sort of religious openness or piety as a virtue or disposition that could count as a normal dimension of a human life—in the same sort of way, arguably, that temperance, benevolence, or magnanimity might.[48] That is, there is a kind of track record for thinking of religion as *primarily* regarding some such orientation and then only subsequently and *further* as regarding more specific systematic developments and institutional enshrinements of this human potential. This sort of openness need not be, as with Nagel or Cottingham, so much in itself (or at first) about assenting to creeds or professing anything dogmatic, but instead simply about having a kind of existential awareness of and receptivity to a

[47] See, e.g., Harrison, *Territories*, ch. 4 and Cavanaugh, *Myth*, ch. 2.

[48] Note that I am not, as it were, saying that the notion of 'religion' *must* be construed as something like a virtue—particularly in the sort of strong sense on which ordinary people *ought* to have or manifest it, other things being equal. Instead, I am simply noting a cluster of approaches on which it is or was seen as very important, in the first instance, to think of 'religion' in regard to a sense of inward, personal orientation, with a focus on worship more than on just belief or embrace of doctrine. (On many such approaches, no doubt, belief and the embrace of doctrine would also be very important, even critical, though they might also in a key sense *follow upon* such a kind of fundamental openness or orientation.)

more expansive or personally charged conception of the universe or world and one's place in it, particularly with respect to the divine—and in some way or other engaging this sense of openness and receptivity through various concomitant acts.[49]

As a coda to this historical foray: Though Wittgenstein himself exhibited a kind of marked skepticism[50] about the likelihood of God's existence as traditionally construed, he gestures at something of relevance in this remark, which follows upon some of his ruminations regarding, in his view, the inefficacy of *arguments* for God's existence in the lives of believers: "Life can educate one to a belief in God. And experiences too are what bring this about; but I don't mean visions and other forms of sense experience which show us 'the existence of this being', but e.g. sufferings of various sorts."[51] One gloss on this comment might be that he is getting at the way in which aspects of *life*, particularly more challenging ones, can help or aid a person in coming to believe in or rely upon God or have a greater openness to a transcendent or divine dimension; or perhaps even just to do something like embrace a sort of ascetical path toward greater understanding of oneself and the world. The point, for my purposes, is that this sort of opening up of a person is something that can and does indeed often happen, particularly as people face various hardships in life. And inasmuch as it is a sort of opening of oneself amidst such circumstances, it is something more like, in the first instance, a change of heart than the

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[49] Also note that I am *not* attempting to *equate* or tightly liken the broadly ancient-medieval conception of *religio* with the sense of religious openness or understanding sketched by Nagel or Cottingham. I am instead just trying to stress that *religio*, broadly thus construed, arguably affords us a kind of interesting historical point of comparison that seems to lay emphasis, on the face of things, on a certain noteworthily comparable orientation.

[50] See Severin Schroeder, "The Tightrope Walker," *Ratio* 20, no. 4 (December 2007): 442–63.

[51] Wittgenstein, *Culture and Value*, 86e: » Das Leben kann zum Glauben an Gott erziehen. Und es sind auch *Erfahrungen*, die dies tun; aber nicht Visionen, oder sonstige Sinneserfahrungen die uns die 'Existenz dieses Wesens' zeigen, sondern z. B. Leiden verschiedener Art. « Cf. Peter Winch, "Doing Justice or Giving the Devil His Due," in *Can Religion be Explained Away?*, ed. D.Z. Phillips (London: Macmillan, 1996), 168.

embrace of a doctrine. It is perhaps reflective, in other words, of an increase in the sort of religious openness toward which I have been variously gesturing in this chapter, which is not so much about integration into a systematic structure or the embrace of various dogmatic points, but instead about a kind of personal expansion to and comportment with a sort of transcendent dimension or set of possibilities.

4.2.2 Fashioning Competing Theories

I highlight this broad line of thought—for which I think there is interesting and compelling pedigree—of conceiving of religious openness as something like a temperament, a disposition, or a virtue, because it seems to me that the scientistic and secular humanist thinkers that I considered in the first section of this chapter effectively miss this dynamic and its significance, attempting to render the religious or religions simplistically in terms of scientific-grade explanatory claims that they, in some key instances, put forth or generate. In other words, they tend to construe religion, while noting its various aspects of significance, as chiefly something that gives a person *claims* about the (natural) world—and claims, at that, which typically *get at* the same sort of matters or questions that the sciences do.[52] As I already noted, many religions no doubt do this in various ways; but the extent to which they in fact do so is itself quite arguable. Many conciliar and other clarifications of the claims that constitute Christian doctrine, for instance, have not so much been empirically about the natural world, *as* the sciences treat it, as they have been about, say, the person and two natures of Jesus Christ or the

[52] Thinking of religions as mainly being about generating and safeguarding such claims might be quite comparable to the positivistic tendency I noted in chapter one, from Feyerabend, that would have us think of the sciences as mainly generating *statements* about the world and its workings.

substance of the sacraments and the grace they confer. Matters like these, though, are not so much, as such, within the purview of the sciences anyway.[53]

The broader point here, however, is that conceiving of religions or a religious approach to life and the world as constituted mainly by *claims* about life and the world or *answers* to questions regarding such matters in some way arguably misses or occludes this more primary or primordial matter of a kind of temperament, disposition, or virtue, according to which one comes to appreciate[54] oneself in a different or new light within the cosmos and to express a certain gratitude or appreciation (or perhaps, contrariwise, dismay)[55] for this arrangement. I want to claim more specifically that casting such matters in the former sort of manner constitutes a kind of characteristically scientistic miscue.

Again, many religious traditions—particularly the three major monotheistic ones—no doubt *have* devoted a great deal of time and energy to sharpening, promoting, and safeguarding various claims about the world and our place in it. We see this, for instance, in their traditions surrounding the exposition of sacred texts, theological and moral doctrine, and creedal and conciliar pronouncements. Christianity in particular, especially roughly since the Reformation, has tended to place a premium on believers' assenting to the *propositional* content of the faith. I say all this simply to note that I do not take this tendency—this miscue, as I am calling it, of casting the religious too much in terms or

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[53] Such matters are of course about God who is taken to have come into the world, in history, in Christ; but they are not about the world *itself* more broadly, as the sciences are interested in it—about, say, trees, atoms, butterfly species, quantum gravity, and so on.

[54] As I stressed already, such an appreciation might well eventually involve more determinate views about oneself, the cosmos, and the interrelation between the two; but it might also remain quite nebulous, perhaps like that of the Athenians whom the apostle Paul engaged in the Areopagus, who were scrupulously worshipping at an altar erected "to an unknown God." See Acts 17:22–31 (RSV).

[55] It could seem inauthentically one-sided to claim that one would presumably or likely be *grateful* for this state of affairs. One could, indeed, be dismayed or depressed by such a realization. Nonetheless, I think the important point, for my purposes, is that one would acknowledge and in some way or other *engage* this dimension.

views or *claims*—evinced by such scientistic and secular humanist thinkers to be just or mainly *their* problem. In a certain way, these religious traditions *themselves* have often helped cultivate and promote this kind of arguably lopsided self-conception. Nonetheless, it does seem to me that the scientistic approach tends to exacerbate it. For such traditional theological systems would typically tend to make irenic space for and delineate *both* something like a more fundamentally religious sense or disposition and *then too* the way(s) in which this sense or disposition is meant to be taken up, filled out, or honed by faith and religious practice and formation.

The scientistic and secular humanist views I have considered specifically in this chapter, on the other hand, largely seem to take religious approaches to life and the world to be *tantamount to* the claims that they have typically come to maintain or enshrine.[56] That is, none of these views thus far under consideration makes a sufficiently sort of *nuanced* space for something like a more fundamental religious sense or temperament—in a word, the notion that religion or *being religious* in some basic sense could be a more generally human virtue or sort of basic disposition—*as distinct from* or in some sense *prior to* the worldviews or theological systems that particular religious traditions have come to maintain or proffer. In other words, I think that such scientistic and secular humanist approaches to these matters are wont to obscure a very important dimension and fundamental contrast that is, and that traditionally has been, at play in regard to them. I should note, however, that there are philosophers who do make room for this sort of contrast and, in doing so, offer stern criticisms of various religion*s*, specifically by claiming

[56] I claim this while already having noted, e.g., some of the nuance, which I still find lacking, in an account like Grayling's.

that they tend to wound or do injustice to this more primordial sort of religious disposition or attitude.[57]

Given what I have argued thus far, at least in regard to stronger forms of scientism, it is unsurprising that they tend to mishandle matters religious in these sorts of ways. I noted in particular in chapter two the way that Rosenberg's mischaracterization of history leads him to overlook various key aspects of how historical accounts tend to work and be employed and, in particular, how they tend to *matter* to or be significant to us in various ways. I argued that he ends up dismissing history as a cognitively meaningful approach to understanding the world and its past because he attempts to make it look too much like or fit the mold of the harder sciences, particularly physics. I continued this line of thought in chapter three, where I contended that even weaker or more purportedly "humane" forms of scientism tend in principle to exclude various non-scientific varieties or models of inquiry from being exemplary or variously paradigmatic. Indeed, I think the same sort of broad mishandling can and does happen quite easily with regard to the religious and religions, perhaps particularly in philosophical treatments, as they have been broadly defended (or criticized) under the guise of "theism." Cottingham raises this concern: That if philosophical *theism* is cast mainly as a sort of hypothesis or theory that can account for and *explain* various matters in the way that the sciences do—but ultimately, say, somehow more comprehensively—then there would seem to be obvious reasons for finding it wanting.[58]

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[57] For a provocative and recent articulation of this sort of critique, see Galen Strawson, "Religion is a Sin," *London Review of Books* 33, no. 11 (June 2011), https://www.lrb.co.uk/the-paper/v33/n11/galen-strawson/religion-is-a-sin, which is a review of and commentary on Johnston's *Saving God* and its companion volume on immortality.

[58] Cottingham, "Transcending Science," 24–5.

But one might wonder seriously how much various religious traditions and their adherents in fact strive for something like this at all; or whether something like the theism that many philosophers hold to, or contend against, is all that relevant in the first place to being religious or to the religious lives of people who believe, and to the God or gods they worship.[59] Jewish people have traditionally, for instance, believed in the God of Abraham, Isaac, and Jacob, but certainly not in a way that is chiefly reached by *argument*, but rather because he is *their* God. Traditionally for them, he is the God who, e.g., led their forebears out of slavery and fed them when they were journeying and starving in the desert. Similarly, as far as Christianity goes, many people who hold to and practice it are born into it, and often their cultures or societies were historically brought or converted to it; but those who are not and who later come to it themselves are often drawn to it specifically by the example and witness of Jesus as a person and the resonance (and truth) for them of his (and his followers') preaching and example. The thought here is that "theism" might serve as a kind of argumentative apparatus for philosophers and theologians; but it is questionable how much it does or needs to factor into any sort of ordinary framework of religious living and believing. This in a sense was Pascal's worry: whether the God of Abraham, Isaac, and Jacob, whom he took to have roused his heart, was in any significant respects *also* the God of the philosophers.[60] One might wonder, too, how much arguments about God do, or even could, serve to bring people to or generate in them the kind of conviction or reorientation of heart and life that a process like conversion, say, typically demands.[61]

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[59] Cf. Cottingham, *Philosophy of Religion*, 28–35.

[60] See Cottingham, *Spiritual Dimension*, 6.

[61] See ibid., 21–2.

In a similar vein, take the traditional business of natural theology, which is the argumentative enterprise of trying to offer proofs of God's existence either through *a priori* appeals to reason or *a posteriori* considerations of the world and its various attributes. It is true that such efforts traditionally have been framed as such—as *arguments*; but to consider many important examples of them *just* or mainly as such can miss something quite important about their character. One should not hesitate to emphasize, that is—while perhaps for a moment "bracketing off" these arguments *themselves*—the context of religious commitment and spiritual praxis in which they so often came to be and, in a sense, have their proper home.[62]

Anselm, for instance, proffered his famous ontological argument for God's existence, which he surely took to be a convincing *argument*—indeed, a "purely logical demonstration"[63]—within a series of conferences for his monastic confreres, which were ordered to helping them hold to and flourish in their communal religious life and observances. He specifies in the prologue of the *Monologion*, for instance, that he wants to offer his brothers in religious life a set of considerations that will aid them, not so much in evangelical or apologetical efforts, but instead in their own personal meditation and deepening engagement with the fundamental reality that God, who is truth, is personal. Anselm's Augustinian orientation, as is well known, is that such exercises can help those who *already* believe to understand more deeply—such that theology can chiefly amount to faith seeking understanding (*fides quaerens intellectum*).[64] Bonaventure, in similar fashion,

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[62] See Cottingham, *Philosophy of Religion*, 153.

[63] Gilson, *Reason and Revelation*, 25.

[64] See *S. Anselmi Cantuariensis Archepiscopi Opera Omnia*, volumen primum, ed. F.S. Schmitt, O.S.B. (Edinburgh: Thomas Nelson and Sons, 1946), prologus: « Quidem fratres saepe me studiosque precati sunt, ut quaedam, quae illis de meditanda divinitatis essentia et quibusdam aliis huiusmodi meditationi cohaerentibus usitato sermone colloquendo protuleram, sub quodam eis meditationis exemplo describerem. »

wrote any number of more exacting philosophical commentaries on classical sources—for instance on the Aristotelian corpus—but his *Journey of the Mind to God*, which he intended as accessible for simpler friars, is framed not just or mainly as an *argument* for God's existence. Instead it is openly proposed as a kind of contemplative guide for one seeking to find *peace* and happiness in God, particularly through being purged of sin and its effects.[65] What is more, the work, which was drafted in the wake of St. Francis's having received the stigmata (the visible wounds of Christ in the person's own body), was crucially for Bonaventure a reflection upon, and systematization of aspects of, the *life* of St. Francis of Assisi, who was his spiritual father and exemplar. *Journey* of course offers at least several varieties of articulated natural theological arguments; and it does so, indeed, within a decidedly systematic theological framework. But again, to think of the work as just or mainly offering arguments for the unconvinced is in a way to miss what it is about.

We might also consider Thomas Aquinas in a similar vein, as being sometimes or often crudely mishandled by commentators. Fergus Kerr has recently drawn attention to this issue—to the way in which Aquinas has often been taken, first, as a kind of paradigmatically systematic thinker in an anachronistic sense; but then also how he is standardly taken to be one from whom we largely have a series *arguments* pertaining to "epistemology, theistic proofs, natural law ethics,"—which can just be extracted and treated in a more neutrally philosophical vein—rather than as one who offered a more

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See also Thomas Williams, "Introduction," in Anselm, *Monologion and Proslogion, with the Replies of Gaunilo and Anselm*, trans. Thomas Williams (Indianapolis: Hackett, 1995), xiiff. Cf. Cottingham, *Philosophy of Religion*, 33.

[65] St. Bonaventure, *Itinerarium Mentis in Deum*, Latin text from the Quaracchi edition, vol. II, revised and expanded, of *Works of St. Bonaventure*, ed. Philotheus Boehner, O.F.M. and Zachary Hayes, O.F.M., trans. Zachary Hayes, O.F.M., ch. I, § 7ff. (Saint Bonaventure, NY: Franciscan Institute, 2002).

comprehensive theological vision that, in a way comparable to Anselm or Bonaventure, was deeply integrated with his mendicant way of life and practice as an itinerant preacher.[66]

We might also note the risk inherent in at least some natural theology of, as it were, reifying God, who is meant to be the terminus of such arguments. Paul Moser notes—rightly, I think—that "the epistemology of Jewish-Christian theism disallows God's being trivialized as an undemanding object of knowledge for our convenient examination or speculation."[67] All of this is not, of course, meant to be dismissive toward arguments about God and his existence and attributes, but it is to note that they call for a peculiar kind of delicacy, for they might surprisingly easily, in light of the traditions they are attempting to buttress or defend, actually reach, as it were, something that is by their own lights unsatisfactory. Suppose certain arguments for God's existence *can* roughly work and yield the conclusion that, in some way or other, God exists. It might still be the case, though, that such a conclusion in a sense *misrepresents* the God that it ultimately seeks to defend. In the Christian tradition, for instance, God is taken not to be *part* of the world but, indeed, its creative source and sustainer, as Robert Sokolowski emphasizes. But one might wonder whether certain natural theological arguments arrive at something more like the pagan gods, who are supremely powerful *beings in* the world but not being *itself*, or the source of all that is.[68] Kerr commends this dimension in particular of Aquinas's natural-theological *oeuvre*: viz., that while it does not terminate at the fatherly God of Christian revelation, neither does it reach just to the God of the ancient philosophers, but instead to

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[66] See Fergus Kerr, OP, "The Varieties of Interpreting Aquinas," in *Contemplating Aquinas: On the Varieties of Interpretation*, ed. Fergus Kerr, OP (South Bend, IN: University of Notre Dame Press, 2006), 30–1.

[67] Paul K. Moser, "Cognitive Idolatry and Divine Hiding," in *Divine Hiddenness: New Essays*, ed. Daniel Howard-Snyder and Paul K. Moser (Cambridge: Cambridge University Press, 2002), 127.

[68] Robert Sokolowski, *Eucharistic Presence: A Study in the Theology of Disclosure* (Washington, D.C.: Catholic University of America Press, 1994), 38; and *The God of Faith and Reason: Foundations of Christian Theology*. Washington, D.C.: Catholic University of America Press, [1982] 1995, ch. 2. Also, cf. Ellis, *God,* ch. 5.

a more "layered" conception of the one God, who is most radically distinct from and greater than what he has made.[69]

I should note, additionally, that these concerns I am adducing about the practices and ways of life bound up with various forms of natural-theological reflection and argumentation are not, to be sure, peculiar to the (medieval) Christian ambit. A prominent and noteworthy example from the medieval Muslim world is that of Abu Hamid Al-Ghazâlî, the scholar and mystic who eventually repudiated his prestigious academic chair in Baghdad to pursue the mystical path of Sufism. What is striking about Ghazâlî's life and search for understanding is the way in which his quest for peculiarly *philosophical* answers—to questions about, e.g., the foundations of knowledge—culminated not so much in the theoretical propounding of an argument for such a set of corresponding answers, but instead in his taking up a deeply religious and ascetical way of life, which he took ultimately to be about purifying his heart from the excesses of the passions and affording himself a more direct and deeply personal "fruitional" experience of the presence and activity of God. My point in noting this dimension, once more, is not to discount the arguments he does in fact make along the way but instead just to see them within the context of a spiritual life and its dynamics, within which they took hold and were offered.[70]

At any rate, an overarching thought at play in these assorted historical examples is that there can be a besetting risk inherent in arguing about something like God's existence, for the matter might easily be misconstrued in the process, especially when handled along more ordinary scientific or philosophical lines—with a sense of "analytical detachment," as Cottingham puts it.[71] In a way, I take it that my concerns here are reflective of some

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[69] See Kerr, "Varieties," 33.

[70] See, e.g., Abu Hamid Al-Ghazâlî, [*al-Munqidh min al-Dalal*] *Al- Ghazâlî's Path to Sufism* and his *Deliverance from Error*, trans. R.J. McCarthy, S.J. (Louisville, KY: Fons Vitae, 2006), esp. 19ff. Also see Kojiro Nakamura, "An Approach to Ghazâlî's Conversion," *Orient* XXI (1985): 46–59.

that I broached in the preceding chapter, where I noted there that if one wanted to make a serious inquiry into certain fundamental aspects of human nature, one might look at, e.g., the best recent papers in evolutionary psychology or neuropsychology. I also stressed, however, that one might—and I trust, again, that many would think of this approach as in ways preferable or superior—spend time instead thinking about or reflecting upon important characters in canonical fiction. I think one could approach, in a similar vein, the question of the existence of God. It might be good and well, that is, to consider it philosophically from a more abstracted (or objectifying) argumentative standpoint, but it might be much more worthwhile—and, again, I take it that many religionists would themselves find this approach preferable—to try to *engage* the matter, so to speak, from within one's own life, to wrestle with the matter personally and in a way that is *self-implicating* and, indeed, dialogical.[72] The important contrast in both cases, I think, is that there is an approach to inquiry available that contrasts with the more squarely scientific (or objectifying) one. And it seems to me, on the face of things, that in both instances many would find this sort of non-scientific (or not-so-scientific) approach to be in key respects preferable to the more characteristically scientific (or objectifying) one. It also seems to me that, in this religious case, such a more engaged, humane approach in fact dovetails on the whole much more gracefully with the peculiar purposes that more abstracted argumentation about God has often played traditionally.[73] These include, I take it,

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[71] Cottingham, *Philosophy of Religion*, 8.

[72] This is the sort of vein in which Norris Clarke contrasts (speculative) metaphysics with religion and religious practice, which characteristically, in his view, "involve a response of the heart and *practical* commitment of the whole person to live according to the plan of, and seek union with, what one takes to be Ultimate Reality." See W. Norris Clarke, S.J., *The One and the Many: A Contemporary Thomistic Metaphysics* (Notre Dame, IN: University of Notre Dame Press, [2007] 2001), 7.

[73] Though I am not suggesting that Bonaventure would appreciate this contrast drawn quite as such, my contention is striking to consider particularly in light of the supplication-driven caution he offers at the outset of *Journey*: "Therefore, I first of all invite the reader to groans of prayer through Christ crucified, . . . Do not think that reading is sufficient without unction, speculation without devotion, investigation without admiration, circumspection without exaltation, industry without piety, knowledge without charity,

manifesting a kind of credible internal *coherence* among aspects of a theological outlook; or highlighting a *convergence* between such outlooks and the data of the sciences; or especially, affording an opportunity for those who already believe, as I have stressed, to deepen their own faith and contemplation, rather than trying primarily to evangelize the unconvinced.[74]

4.2.2.1 Arguments, Ways, and Wonders

What I am herein contending about religions and the religious, and the ways in which I take these scientistic and secular humanist thinkers to characteristically mishandle them, is in certain key respects analogous to the way in which Pierre Hadot has criticized philosophers' preoccupation with the *views* or claims of their forebears rather than, also, the ways of life in which these views were sustained and inculcated.[75] What Hadot finds most striking about the ancient practice of the pursuit of wisdom is that it was widely taken to be a sort of shared, communal, therapeutic spiritual "exercise." For the Stoics, e.g., Hadot notes that

> [P]hilosophy did not consist in teaching an abstract theory—much less in the exegesis of texts—but rather in the art of living. It is a concrete attitude and determinate lifestyle, which engages the whole of existence. The philosophical act is not situated merely on the cognitive level, but on that of the self and of being. It is a progress which causes us to *be* more fully, and makes us better. It is a conversion which turns our entire life upside down, changing the life of the person who goes through it. It raises the individual from an inauthentic condition of life, darkened by unconsciousness and harassed by worry, to an authentic state of life,

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intelligence without humility, study without divine grace, the mirror without the inspiration of divine wisdom."

Bonaventure, *Itinerarium*, Prologus, § 4: « Igitur ad gemitum orationis per Christum crucifixum, . . . primum quidem lectorem invito, ne forte credat quod sibi sufficiat lectio sine unctione, speculatio sine devotione, investigatio sine admiratione, circumspectio sine exultatione, industria sine pietate, scientia sine caritate, intelligentia sine humilitate, stadium absque divina gratia, speculum absque sapientia divinitus inspirata. »

[74] Consider another Anselmian dictum, and the way it is couched deeply *personally*, to this effect: *Credo ut intellegam*—"O Lord, . . . I long to understand to some degree thy truth, which my heart believes and loves." See Gilson, *Reason and Revelation*, 24.

[75] Cf. Cottingham, *Philosophy of Religion*, ch. 7.

> in which he attains self-consciousness, an exact vision of the world, inner peace, and freedom.[76]

For many such ancient schools, Hadot notes, philosophy served as a sort of comprehensive, therapeutic, (inter)personal practice whose main orientation was to deliver its practitioners from the reckless influence of the passions, which lead to unchecked desires and besetting fears. For them, in other words, the goal of philosophical practice was to offer, through the disciplined undertaking of *askesis*, a deep and thoroughgoing *metanoia*.[77] The practice of philosophy was therefore meant to be a kind of purgative journey, which one rightly took in dialogue with others on the way, and which prepared one for death and helped to sort out the inner life of the soul. Hadot sees in the exercises of much of the classical philosophical world an analogue to various other noteworthy quasi-philosophical practices and practitioners since: among them, Ignatius of Loyola and his *Spiritual Exercises*, or even Henry David Thoreau and his reflective sojourn at Walden pond.[78]

To sympathize with Hadot on a point like this is not, of course, to suggest that philosophy needs to be beholden somehow to this sort of paradigm. But it is to note that many of the philosophical views or claims that have historically tended to preoccupy us—chiefly those drawn from various key ancient philosophers—were specially at home in the abovementioned sorts of lived contexts. In a sense, that is to say, they were not just or mainly arguments to be handled or dealt with as such, on their own. They were instead

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[76] Pierre Hadot, [*Exercices Spirituels et Philosophie Antique*] *Philosophy as a Way of Life: Spiritual Exercises from Socrates to Foucault*, ed. Arnold I. Davison, trans. Michael Chase (Malden, MA: Blackwell, [1987] 1995), 83.

[77] Ibid. Cf. Cottingham, *Spiritual Dimension*, 4–5.

[78] See Arnold I. Davison, "Introduction: Pierre Hadot and the Spiritual Phenomenon of Ancient Philosophy," in Ibid., 33; and Hadot, *Philosophy as a Way*, ch. 4. Cottingham sees the fundamental Christian invitation to a change of heart, a *metanoia*, as exemplifying this sort of narratively life-implicating "call" to a new way of living. See Cottingham, "What is Humane," 244. Also, cf. Cottingham, *Philosophy of Religion*, 148ff.

meant to be imbibed and taken on within a shared way of life, a key component of which was a received understanding of oneself and one's fellows, and their collective place in the cosmos. A correlate of this notion, then, is that to try to consider or evaluate such views *as extricated* from this context might itself constitute a kind of fundamental misstep. We might be remiss to suppose that they *just can* be thus extricated unproblematically.[79]

All this is to say that the scientistic tendency—with regard to the religious and perhaps also at times the philosophical—is particularly conducive to *construing* the religious (or philosophical) mainly or simply in terms of claims or views about the world and our place in it, particularly of the sort that are supposed to be more straightforwardly commensurate with those proffered by the sciences. I take this to be the case because a key dimension of scientistic thinking, as I have noted, is its insistence that the sciences are the paradigm *par excellence* of knowledge-seeking or rational inquiry—in such a way that other alleged paradigms are to be measured or sized-up with respect to them. So, again, philosophers like Rosenberg tend to dismiss the historical for failing to reach the standards of the *scientific* paradigm for inquiry, explanation, and understanding. As I argued in chapter two, though, in regard to history, there is something wrongheaded to thinking that it *ought* just to meet a standard set by the harder sciences, particularly physics. Indeed, I want to claim something comparable about religions and the religious. For, again, it *is* true that many religious traditions offer various claims and doctrinal statements about the world and our place in it, in addition to things divine. But to think of these claims as simply comparable to those made within or by the sciences is often to miss something quite crucial about them. No doubt: There might be cases in which such claims *do* rub up

[79] This is the sort of critique that Alasdair MacIntyre has leveled against key strains of contemporary moral philosophy: that they too easily become abstracted from the sorts of practices that are, in different contexts, typically constitutive of the moral life and formative of our moral outlooks. See Alasdair MacIntyre, "On Having Survived the Academic Moral Philosophy of the Twentieth Century," in *What Happened in and to Moral Philosophy in the Twentieth Century? Philosophical Essays in Honor of Alasdair MacIntyre*, ed. Fran O'Rourke (Notre Dame, IN: University of Notre Dame Press, 2013), 31ff.

against—and either agree or conflict with—aspects of our best current science; but such claims, I take it, are generally the exception more than the rule and can thus be carefully handled individually. Indeed, to think such matters can be systematically gathered into a theoretical body or philosophical apparatus like "theism," which can do scientific-grade explanatory work, is importantly to miss what they are often fundamentally about, which is often something like the systematization of some body of *revelation* and the concomitant gathering of moral and spiritual guidance that is meant to lead followers along a path of deliverance, sanctification, and perhaps even salvation. And this sort of fundamental religious enterprise is typically *built upon*, in a way, an even more primordial *acknowledgement* of one's place in the world, within the cosmos, or vis-à-vis God its creator.

While on this point, a word more should be said about a category like *revelation* specifically. Indeed, at least among the three major monotheistic traditions—Judaism, Christianity, and Islam—the notion of extraordinary divine revelation plays a fundamental and indispensable role in their respective broader religious outlooks and schemes of salvation. But we do well, with these current concerns at hand, to note something of critical importance about this notion: It is characteristically *given* by God freely—in his goodness, mercy, and love—and so not something that is earned, merited, or, indeed, *discovered* by any sort of primarily human initiative or seeking. And in its most characteristic instances, it is taken to be given by God so as to be *otherwise inaccessible* to human beings left to their own devices.[80] In some sense, then, the notion of revelation *should*, as a very

[80] A typical traditional distinction would be between something like natural and *super*natural revelation, the former dealing with what is taken to be, say, discernible about God and his attributes via reflection upon the created order; and the latter with what is made known to us by his special (and immediate) action in this order. I am thinking here mainly about the latter category, which the major monotheistic traditions would adduce at least in certain centrally important cases—moments, that is, in which God made something known to his people in ways that otherwise would have been inaccessible, e.g. when he dictated the Decalogue to Moses on Mount Sinai or became incarnate in the womb of the virgin Mary. This distinction between these two types of revelation is lively in the medieval notion of the two "books" that are meant to be studied by us, respectively, in the sciences and in prayer or worship—i.e., the (natural) book of nature and the (supernatural) book of special divine revelation. See Clarke, *The One*, 7.

important preliminary point, be treated and approached differently than, say, most matters that we deal with or think about through the sciences. For these latter matters do not in any key sense depend upon otherworldly *disclosure* and are, in principle, accessible to us without particular (explicit) transcendent help or aid.[81] This concern relates, I should add, to the issues I treat at length in chapter five, pertaining to the scientistic and secular humanist outlooks and the ways in which they tend, in my estimation, to be *prejudicial* with regard to the religious.

4.2.3 Vanquishing a Sense of Significance?

I want to consider, then, several paradigmatic cases of a kind of particularly *religious* openness or awareness that I think the scientistic and secular humanist accounts that we have considered in this chapter would, in my view, broadly mishandle. In all these cases, I think, while there no doubt would be ancillary religious (and other) claims at play, what is more fundamentally at work is a kind of *awareness* of oneself, with respect to the world and God. First consider this passage from Bonaventure and his *Journey*:

> [C]reatures are shadows, echoes, and pictures of that first, most powerful, most wise, and most perfect Principle, of that first eternal source, light, fullness; of that efficient, exemplary, and ordering Art. They are vestiges, images, and spectacles proposed to us for the contuition of God. They are divinely given signs. These creatures are copies or rather illustrations proposed to the souls of those who are uneducated and immersed in sensible things, so that through sensible things which they do see they may be lifted to the intelligible things which they do not see, moving from signs to that which is signified.[82]

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[81] I do not want to push this point too hard, for surely some scientists and philosophers of science would tend to think of scientific work phenomenologically, as a sort of disciplined response to aspects of nature which are taken to be (metaphorically) self-disclosing. Nonetheless, with a traditional category like extraordinary or supernatural revelation, the point of emphasis remains—that such matters could not *in principle* be discovered apart from the extraordinary action of God.

[82] Bonaventure, *Itinerarium*, ch. II, § 11: « [P]ro eo quod illius primi principii potentissimi, sapientissimi et optimi, illius aeternae originis, lucis et plenitudinis, illius, inquam, artis efficientis, exemplantis et ordinantis sunt *umbrae*, *resonantiae* et *picturae*, sunt *vestigia*, *simulacra* et *spectacula* nobis ad contuendum Deum proposita et *signa* divinitus data; quae, inquam, sunt *exemplaria* vel potius *exemplata*, proposita mentibus adhuc rudibus et sensibilibus, ut per sensibilia, quae vident transferantur ad intelligibilia, quae non vident, tanquam per signa ad signata. »

Bonaventure takes creatures and the world to have a sort of *sign* value that is meant to point and direct people to God, their creator and source. The world we inhabit and experience is meant, for him, to strike a person as artful and exemplary of a vastly greater creative origin. Now, one could of course dispute this claim: e.g., that it just seems *mistaken* to think that the world actually has this sort of semiotic hue to it—perhaps especially in light of various findings of contemporary science. Nonetheless, it is the kind of outlook that is far from idiosyncratic to Bonaventure and that, on the contrary, has animated and sustained substantial traditions—not just of religious life and inquiry, but also of cultural, artistic, and other achievements. It is reflected in Gerard Manley Hopkins's exclamation that the world is "charged with the grandeur of God"[83] and also, in my estimation, in Mary Oliver's "I Wake Close to Morning":

> Why do people keep asking to see
> God's identity papers
> when the darkness opening into morning
> is more than enough?
> Certainly any god might turn away in disgust.
> Think of Sheba approaching
> the kingdom of Solomon.
> Do you think she had to ask,
> "Is this the place?"[84]

In a crucial respect, Oliver seems to be getting at something quite similar to Bonaventure and Hopkins: Namely, there is a way in which, for her, contemplating the world before her, particularly in the morning, gives her an overwhelming sense that God is creatively present, so to speak, behind what she beholds. She also, in expressing this, seems to have a certain sort of exasperation with those of a skeptical bent who would demand that she or others who are thus inclined would need or feel obliged to adduce

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[83] Cf. Cottingham, *Spiritual Dimension*, 87.

[84] Mary Oliver, "I Wake Close to Morning," in *Felicity* (New York: Penguin Press, 2016), 19.

something *further* than such morning scenes in defense of their sense of the creative presence of God—that the pre-dawn beauty is, in a sense, sufficient in this regard.

Again, one might contend with such an approach or even express something quite contrary to it—like that looking out at the world just fills her with despair or leaves her without the faintest sense of something like God's presence or existence. What I want to note, though, is that, in regard to all three of these thinkers alike, there is a very basic way in which it *neither* seems that science could *confirm* nor *disconfirm* what they are highlighting. What they are articulating is a kind of religious awareness that sees a personally creative power at work within or behind, as it were, the world that we experience and behold. Now, almost surely for all of them (or at least for Bonaventure and Hopkins), this awareness would in a key sense flow from and hang together within a broader and more articulated or rigorous theological and religious outlook or system. But at a more basic level, they see a sort of transcendent sign value to the world and their and others' experience of it. How, I want to ask, could *any* sort of science conceivably *falsify* this sort of take on things? Considered at such a basic level, what they are articulating is more like an inborn *sense* about how things are and what is at play more deeply within them than it is a concrete or determinate or precise view or *claim* about themselves, the world, or God.

As a rejoinder, one could try to offer a sort of longish connection between any number of theories that supposedly tell us *why* or *how* we tend to view things in this sort of way—maybe in the way that a good deal of evolutionary psychology has attempted. But offering an account like that would and *could not* disabuse someone of such a perspective, even if the account were (conceivably) exhaustively correct, for it would be unable, really, to speak to the kinds of matters that such approaches fundamentally highlight. Such a scientific account might be able to elucidate, for instance, how we tend, evolutionarily or environmentally, to have these sorts of attitudes or dispositions; but telling us *this* would

certainly not vitiate these approaches or explain away their transcendent significance—which would be taken, to some degree or other, to be operative on a different plane than the scientific analysis of them. I take it that Fiona Ellis keenly grasps this dimension:

> [W]e might even go so far as to say that there is a scientific explanation for everything. After all, this could simply mean that for any subject-matter we can raise explanatory questions that can be answered scientifically. However, it does not follow from this that, for everything, the *only* explanations are scientific explanations . . . we must resist this implication so as to allow that there are other sorts of explanations which are consistent with scientific explanations but which make things intelligible in a different, non-scientific way. . . . [P]hilosophy raises doubts about whether the scientist has the monopoly on things, and it also grants us the right to allow that these things have theistic significance.[85]

Consider another claim from Bonaventure, which he makes earlier in *Journey*: that one can profit greatly by thinking of his soul as microcosmic vis-à-vis the cosmos.[86] In a parallel vein, this is a kind of *synthesizing*, perhaps characteristically religious outlook, according to which one takes his own life and interiority to be in crucial ways reflective of aspects of the universe, which he sees as created. With regard to such counsel, it becomes difficult to see how scientific data might be marshalled *either* to confirm or disconfirm this sense; or indeed, whether this sense could be confirmed or disconfirmed in the first place. To speak of it in this sort of light, of course, is not to vaunt or demean it: Instead, it is just to acknowledge that it is not the sort of contention that can be *squarely* approached via standard scientific inquiry or investigation, and so its kind of characteristic "analytical detachment."[87] Such a sense or outlook could surely be creatively or figuratively interwoven with a scientific one; but to say that it could itself simply be approached or

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[85] Ellis, *God*, 199.

[86] Bonaventure, *Itinerarium*, ch. II, § 2. This notion of the human being as microcosmic of the universe also, of course, has ancient pedigree and was a staple of ancient Greek natural philosophy and proto-science. Cf. Von Wright, "Humanism," 2. Also, cf. R.G. Collingwood, *The Idea of Nature* (New York: Oxford University Press, [1945] 1960), 9.

[87] See n. 71 in this chapter.

treated in a straightforwardly scientific manner seems, in my view, inapt. For there is something fundamentally *figurative* or metaphorical about it; and also a way in which, to return to the previous discussion about natural theology, it is plainly *not* just or mainly intended to be an *observational* or theoretical claim[88] about the universe or the human soul, but instead a sort of outlook or sense that helps a person to *cultivate* or tend to her own interiority as she reflects upon it as a dimension of the larger work of creation.

Consider yet another example, manifest in the following passage from John Henry Newman's *Apologia pro Vita Sua*, his spiritual autobiography, as regards his own belief and confidence in God vis-à-vis alleged proofs of his existence:

> Starting then with the being of a God (which, as I have said, is as certain to me as the certainty of my own existence, though when I try to put the grounds of that certainty into logical shape I find a difficulty in doing so in mood and figure to my satisfaction,) I look out of myself into the world of men, and there I see a sight which fills me with unspeakable distress. The world seems simply to give the lie to that great truth, of which my whole being is so full; and the effect upon me is, in consequence, as a matter of necessity, as confusing as if it denied that I am in existence myself. If I looked into a mirror, and did not see my face, I should have the sort of feeling which actually comes upon me, when I look into this living busy world, and see no reflexion of its Creator. . . . Were it not for this voice, speaking so clearly in my conscience and my heart, I should be an atheist, or a pantheist, or a polytheist when I looked into the world. I am speaking for myself only; and I am far from denying the real force of the arguments in proof of a God, drawn from the general facts of human society and the course of history, but these do not warm me or enlighten me; they do not take away the winter of my desolation, or make the buds unfold and the leaves grow within me, and my moral being rejoice. The sight of the world is nothing else than the prophet's scroll, full of "lamentations, and mourning, and woe."[89]

On the face of things, Newman's outlook on the world is not nearly as optimistic or symphonic—at least not obviously so—as Bonaventure's, Hopkins's, or Oliver's. Rather than looking out at the world and finding himself broadly led by *that* to have a sense of

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[88] Within Bonaventure's own theological framework, this proposal likely *does* amount to such a robust sort of claim; but again, to think of it *primarily* in this guise would presumably be to misrepresent it.

[89] John Henry Cardinal Newman, *Apologia pro Vita Sua*, ed. David J. DeLaura (New York: W.W. Norton, [1864] 1968), 186.

God's existence and presence, Newman contends quite the contrary: that he finds looking out at the world bleak, and that it even leads him, of its own accord, to the brink of despair. Nonetheless, as he grapples inwardly with certain stirrings of his *heart* and *conscience*, he takes himself *therein* to experience a peculiar (divine) consolation, reassurance, and resonance that simply overwhelm him—and in ways, I should add, that he most aptly describes figuratively: they "make the buds unfold and the leaves grow within me, and my moral being rejoice." The *heart* of a person is for him a kind of privileged space or place, as it were, for the personal acknowledgement of God and his presence. In claiming something like this, as Cottingham notes, Newman is in venerable company: for there is precedent in Augustine, Bonaventure, and Descartes, among many others, for confidence in the fruits of such interior probing.[90] The broad sense shared by them all is that there is a kind of *via veritatis* that one can engage by reflectively looking inwardly, so to speak, upon the stirrings of one's own heart and soul.[91]

The point I want to highlight here is that it very quickly becomes difficult to see, in a case like Newman's, how a scientific perspective could *at all* controvert what he is claiming as regards his heartfelt sense of divine presence and transcendent accompaniment. Again, one could conceivably offer an account—drawn, say, from evolutionary psychology—as to how or why people tend to have this sort of disposition or inward sensation; but such an account would in no way be fit to *disabuse* him of what he experiences and claims. (In fact, someone sympathetic to him might even contend that

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[90] John Cottingham, *In Search of the Soul: A Philosophical Essay* (Princeton, NJ: Princeton University Press, 2020), 102.

[91] Now, to be sure, in certain cases this sort of reflection would involve a more *theoretical* consideration, say of the faculties of the soul or mind, and so would, in that sense, have a more traditionally philosophical, or even scientific, character to it. But it would not obviously thereby be the kind of reflection or argument that could be decisively resolved one way or the other by appeal to scientific investigation or analysis.

such an account could *fortify* what Newman alleges.) Notice the contrast here between Newman's reflections on his interiority and something like a familiar formulation of the design argument. With the latter, there is often a contention that constituents of the world *must* be designed because they, all things considered, *seem* to be designed; and so therefore someone considering them can make an inference to the best explanation that they *are in fact* designed. But roughly since Darwin, of course, one can retort that they do indeed *seem* to be designed but that that is simply how evolutionary processes leave things looking. I do not think, though, that in the case of Newman's comments on his interiority, or in Bonaventure's, Hopkins's, or Oliver's reflections, there is a similar risk. For in none of these cases is there strictly speaking a demand that one *must* see things in such a particular way—though for some of them a rebuke would surely await those who demur.[92] Instead, there is a lively sense of the divine significance at play in the world or in oneself, as seen and experienced, and in the manner in which this significance is received *personally*, especially in the heart. *Even if* one could write out a scientifically satisfactory account of how or why this is the case—or subsume this sort of dynamic under some preexisting theoretical account—that would not in itself *override* this sense of significance that is appreciated in the world or in oneself, and in certain aspects of their experience of them.

Perhaps one further example in this sort of vein is the way in which a prayerful disposition can lead people to have a sort of grateful attitude in life, even to the point of seeing things routinely as *gifts*.[93] We might recall here the earlier passage from Wittgenstein and the way in which especially the experience of suffering or poverty, e.g., can engender this sort of disposition. So imagine a person, especially poor and afflicted, who tends to

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[92] Bonaventure, for one, thinks of those who fail to appreciate the divine significance or sign value of created reality as fools (in the biblical sense)—like those who are spiritually blind or who, with a fatal pride, think there is no God. See Bonaventure, *Itinerarium*, ch. I, § 15.

[93] Cf., e.g., Cottingham, *Spiritual Dimension*, 122–3.

view aspects of his life along these sorts of lines—seeing even his ordinary meals, his "daily bread," as *gifts* or *blessings* from God (via others). One could offer such a person an explanation of how he concretely gets his food—through the supply chain, and so on—and how these processes are normally within the workings of the ordinary natural world. But again: Such an explanation could not be taken to ward off this man's perspective on the food that he receives and eats, as gift. That is, even if such an account were thorough and complete in otherwise natural terms, it would not *preclude* his meals' being (to him) blessings in a deeper sense or on a more transcendent, spiritual plane.[94]

The idea at play in all these cases, I take it, is something like that of *traces* of the divine or transcendent, in the way that John Cottingham has described them:

> [T]he praxis of the religious adherent generates a certain mode of receptivity such that the world we experience is seen as carrying *traces* of the transcendent divine world that is its ultimate source. These traces are not to be experimentally verified like the measurable properties of science, nor indeed are they capable of being established in a way that would command the assent of any detached and objective observer. But they are vividly consistent with the experience of the religious adherent, and they connect up with a metaphysical vision that, while not being able in principle to satisfy accepted Humean and Kantian standards of human knowledge, is at least expressible via a certain figurative mode of discourse.[95]

Consider again Newman's reflections on the movements of his own heart. Even getting at a notion like that, the *heart*, is rather tricky in its own right. It is a notion, no doubt, that often has great ordinary experiential appeal, and which carries great weight in aesthetic contexts, but which is perhaps philosophically more difficult to circumscribe. Biblically, for instance, it tends to be evocative of the *core* of the person and so to gesture at

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[94] Here again, it is worth striving not to be simplistic in this regard. One might no doubt have a contrarian sense and so conceive of various aspects of life not so much as blessings or gifts but, instead, as misfortunes or scourges. I do think, though, that this possibility ought not just to be entertained theoretically. For there is good empirical reason, I believe, to think that many more people in the world, and throughout its history, have tended to conceive of things in the former light, rather than in the latter—particularly people of this sort of lot in life.

[95] Cottingham, *Spiritual Dimension*, 123. One might also think of such traces as "hints and guesses," in regard to the divine, following Eliot. See Cottingham, *In Search*, 123.

something like the seat of a person's affectivity or interiority, in the kind of way that Newman invokes it. But how well could a scientist get at something like the stirrings of our *hearts*, particularly as they relate to things like what Newman is discussing—namely, a sense of personal engagement or companionship with God? Psychologists and neuroscientists no doubt profitably scrutinize our affectivity (and interiority) in all sorts of fruitful ways, but it would be difficult indeed—perhaps in principle *impossible*—to see whether, in variously doing that, they were ever in fact getting at, or coming sufficiently close to, what Newman is gesturing at when he speaks of his heart and its transcendent movements.[96]

To further this point, consider again Ladyman's negative core commitment of his humane scientism—that nothing drawn from religion, common sense, or various traditional sources ought to have any sort of privilege or priority with respect to what could be said about some matter scientifically. I think an approach like Ladyman's is obviously wanting in regard to a reflection like Newman's, which is not at all an uncommon orientation. For Newman's contention is that in the sanctuary of his interiority, so to speak, he has an overriding sense and conviction that God is present to and with him. But again, how might a scientific view on such a matter speak in *any* sort of way that is more authoritative than what *he himself* is claiming, along with many others like him? As I noted, one might offer a kind of psychological or neuroscientific perspective as to how or why people tend to have moments of intimate consolation in regard to things religious; but offering such an account would only, I take it, roundaboutly touch upon or gesture at what centrally concerns Newman. And to think that the matter of his concern

[96] To note this is perhaps to note significantly how or why much historical argumentation about the heart—or the soul, as has no doubt been more common—has been primarily *philosophical* in character rather than scientific. This is *not* to claim, to be sure, that such deliberations are immune to more properly scientific considerations and evidence, but instead just that the questions themselves are more properly philosophical in kind.

itself could be dealt with scientifically is, I think, mistaken. To be sure: There might be some cases in which a person claiming such things might seem more obviously crazy or delusional. These cases, of course, could be handled and treated psychologically in the normal course of things. But to note this does not speak to the great many people—of whom Newman is perhaps quite exemplary—who have lively senses of this sort and are otherwise quite psychologically stable and healthy; and who are generally capable of *integrating* such a disposition into an otherwise normal, healthy, and even scientifically sophisticated *Weltbild*.

Also reconsider, in this vein, the reflections of Bonaventure, Hopkins, and Oliver: Suppose one could offer some sort of scientific account of how or why it is that people tend to see the world and themselves within it in these sorts of ways. Even if one could, such an account would ultimately, as I noted, lack the power to disabuse one of these sorts of views. For they could ultimately, if needed, simply claim that there is a kind of transcendent dimension that the sciences *in principle* cannot reach to and account for—the dimension from or on which these sorts of matters have or carry this peculiar sort of significance. To Cottingham's point, I think many religious people would claim that something would be *amiss* if such significance could just or plainly be reached or established in the way that things typically can be scientifically. This is of course *not* to say that such senses could not converge or *cohere* with what is more broadly appreciated scientifically, but just that the manner of appreciation would be in some fundamental way distinct or different.

It strikes me that Rilke perhaps gets at this sort of contrast in the way that he speaks of traces of the divine in *The Book of Hours*:

I find you there in all these things[97]

[97] Interestingly, Susan Ranson and Marielle Sutherland render Rilke's » Ich finde dich in allen diesen Dingen «: "I find your *trace* in all these things." This may seem a translator's embellishment, but I think it is

> I care for like a brother.
> A seed, you nestle in the smallest of them,
> And in the huge ones spread yourself hugely.
>
> Such is the amazing play of the powers:
> they give themselves so willingly,
> swelling in the roots, thinning as the trunks rise,
> and in the high leaves, resurrection.[98]

The simile here of being careful for a brother is striking and helps illuminate what is often taken to be at play in tracking or latching onto such traces of the divine or transcendent in the world (or oneself) and one's experience of it. That is, it is not as though one simply *sees* them, say, in the way that one sees an object or person. There is instead meant to be something crucial at work like *getting to know* them or becoming acquainted intimately with them; or perhaps learning to appreciate and love them patiently over time. (It is worth noting, too, that the "God" whom Rilke finds in all things is not the God of traditional theism or Christianity, but instead something like a presence that permeates reality. His approach arguably tends in this sense to be rather more pantheistic.[99]) These dynamics speak to Cottingham's contention that such matters cannot typically just be *pointed out* to or explained, as it were, impartially to the disinterested observer. One instead has to spend

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not unreasonable, particularly given how Rilke speaks subsequently about the *seedlike* presence of God. Cf. Rainer Maria Rilke, *Selected Poems*, with parallel German text, ed. Robert Vilain, trans. Susan Ranson and Marielle Sutherland (Oxford: Oxford University Press, 2011), 11:

> Ich finde dich in allen diesen Dingen,
> denen ich gut und wie ein Bruder bin;
> als Samen sonnst du dich in den geringen
> und in den großen giebst du groß dich hin.
>
> Das ist das wundersame Spiel der Kräfte,
> daß sie so dienend durch die Dinge gehn:
> in Wurzeln wachsend, schwindend in die Schäfte
> und in den Wipfeln wie ein Auferstehn.

[98] Rainer Maria Rilke, [*Das Studen-buch*] *Rilke's Book of Hours: Love Poems to God*, trans. Anita Barrows and Joanna Macy (New York: Riverhead, [1905] 1996), 68.

[99] Cf. Robert Vilain, "Introduction," in Rilke, *Selected Poems*, xix. To this effect, note that many of the poems surrounding "Ich finde" even explicitly disavow matters like petitionary prayers or seeking miraculous intervention.

time with and reflect upon them, perhaps such that they come to be progressively *unveiled* over time.[100]

Another striking dimension of this idea of tending to *traces* of the divine at play in the world is the *mystery* that is meant to be at work typically in the religious domain. To this effect, consider Herbert McCabe's contention that invoking and thinking about God is not so much like attempting to solve a puzzle as it is like opening oneself up to a mystery.[101] A puzzle, on the one hand, is something that we are meant to *solve*, and that, as it were, beckons us to do so. We are meant to *figure it out*. A mystery, on the other hand, invites a sort of fundamentally *opposite* posture—not so much an attitude of looking to solve or figure it out, but instead something like an attitude of awe, reverence, or fear (in the sense of humbled respect).[102] It strikes me that something similar might be at play with this sort of idea of traces or *vestiges* of the divine at play in the world and one's experience of it—that they are characteristically not the sorts of matters that one can just deal with straightforwardly or by ordinary theoretical means; or that one would even *want* in principle to explain all that much or thoroughly. Instead, they are like beckoning signs that lead one into contact with a mystery.

4.2.3.1 Conscience, Sense, and Resonance

I do not want to make too much of this point here now, but the preceding discussion does call for its mention. The idea of picking up or grasping such traces or intimations of the divine in the world need not lead one down a path of a kind of fideism according to which such matters *just are* of a different realm or dimension, such that they thereby become inscrutable to others, in particular to those that find them, say,

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[100] See Cottingham, *Why Believe?*, 103.

[101] Ibid., 25.

[102] Cf. Michael Foster, *Mystery and Philosophy* (Westport, CT: Greenwood Press, [1957] 1980), 18ff.

unconvincing or unintelligible. The worry here would be that, because such matters are not susceptible to investigation in the way that ordinary matters (scientific) are, they can therefore be *anything* one would like them to be—just matters of fancy, to recall Atkins's take. One could develop such an approach; but it seems to me that this kind of approach would be idiosyncratic among religious traditions and brazen with regard to their typical outlooks and claims. In the example drawn from Bonaventure, his sense of such matters would no doubt be integrated into a larger theological system that would seek to harmonize such points with, among other things, a conception of the world drawn from the sciences. I think the same would apply to Newman's outlook: It would not of course be the case for him that his heartfelt sense of God's presence just happens to be his *own*. He would take it, rather, to be something that could and would be comparably accessible to others in the midst of their own lives and experience.

As a relevant aside to Newman's point, consider Kant's reflections on *conscience*, which is an aspect of human interiority that would have, for many, a certain sort of trans-traditional appeal and cross-cultural resonance. In his *Metaphysics of Morals*, Kant claims that

> Every human being has a conscience and finds himself observed, threatened, and, in general, kept in awe (respect coupled with fear) by an internal judge; and this authority watching over the law in him is not something that he himself (voluntarily) *makes*, but something incorporated in his being. It follows him like his shadow when he plans to escape. He can indeed stun himself or put himself to sleep by pleasures and distractions, but he cannot help coming to himself or waking up from time to time; and when he does, he hears at once its fearful voice. He can at most, in extreme depravity, bring himself to *heed* it no longer, but he still cannot help *hearing* it.[103]

Kant continues by suggesting that the phenomenology of conscience, so to speak, is that its stirrings and rebukes are typically experienced "as at the bidding *of another person*."[104] He

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[103] Immanuel Kant, [*Metaphysik der Sitten*] *The Metaphysics of Morals*, trans. and ed. Mary Gregor (New York: Cambridge University Press, [1797] 1996), 189.

[104] Ibid.

thinks it wrongheaded to claim that these are just typically borne of the person *himself*, and so contends that they are better taken to be as coming from another person in fact or from reason itself, but in some way under the guise of a constituted ideal person.[105]

I raise this point from Kant to attest to the way in which it seems insolent, I think, to write off views such as these as simply being fanciful. Kant's remarks on conscience, whatever we might make of them, are quite similar to Newman's, who similarly takes its deliverances to be those of a "stern monitor" that also have a markedly *personal* character to them.[106] And in such reflections, I think, there is a strong sense of *resonance* at play. That is, these alleged dimensions of human interiority are such that *many*, though not all—I think Newman and Kant would both argue—would pick up on or be struck by them. And this point is especially important, I think: the idea that such traces or divine intimations, of which the stirrings of conscience would be an important traditional example, are matters that are commonly taken to *confront* us, say in the way that moral or aesthetic values might.[107] To those who advocate for them, they are not just made up or fancied whimsically, but they are instead matters that we can claim, with a peculiar degree of intersubjective confidence, to strike *us*. This does not of course make them beyond reproach; but it also protects them against criticism for just being fabricated, idiosyncratic, *ad hoc*, or whimsical.

One may we might stress or note this alleged resonance is to point to the manner in which it has been manifested or, in a sense, borne out in works of creative expression. The way that Newman speaks of his heart or that Kant describes the conscience are the

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[105] Ibid.

[106] Cf. Zachary Mabee, "The Natural Law: Theoretical Insights and Prospects for Renewal from G.E.M. Anscombe," *Lex Naturalis* 1(Spring 2015): 68ff.

[107] Cf. Cottingham, *In Search*, 93.

sorts of approaches that dovetail with a great deal of artistic, literary, and other creative aesthetic work—from the parable of the prodigal son, to the *Confessions* of St. Augustine, to Macbeth, to Miller's *Death of a Salesman*. What I mean by this is that the heart or conscience, construed in roughly these sorts of ways, are critical dimensions of any number canonical stories and testimonies that have become quite foundational culturally (in the West, at any rate)—and surely not just by fiat, but instead because they (perennially) seem to manifest a kind of deep resonance with and insight into this dimension (among others) of human experience. To claim this, of course, is not to claim that Newman and Kant are therefore *right* in what they say; but it is to note that one could claim for their views a kind of strong intersubjective resonance that cannot too easily be dismissed. I think that Graeme Marshall, following Henry James, highlights something similar about the way in which fiction needs a kind of sturdy grounding in reality:

> One cannot write a story about the very novel: too much novelty cannot be borne. It defeats memory, allusions are lacking, and, *ex hypothesi*, there is little for it to resonate with. It is not surprising, therefore, that Henry James, in *The Art of Fiction*, should have believed that 'the air of reality (solidity of specification) is the supreme virtue of a novel—the merit on which all its other merits . . . helplessly and submissively depend'.[108]

I want to be careful here *not* to liken too strongly reflections like Newman's or Kant's to the enterprise of creative fiction. The point of consequence, though, is that good fiction, even of a decidedly more imaginative or fantastical sort, has to be significantly grounded in what we take to be real; and if it drifts away too much from this, it stands to lose its coherence or significance for us. I want to claim that we can say something comparable about reflections such as Newman's or Kant's: A significant dimension of their appeal is presumably the way in which such observations are taken not to be just

[108] Graeme Marshall, "Intelligibility and the Imagination," in *Value and Understanding: Essays for Peter Winch*, ed. Raimond Gaita (London: Routledge, 1990), 18.

idiosyncratic or *ad hoc*, but how they instead exude a sort of *deep* human resonance. I should add, too, that a resonance of this sort is the kind that might well matter very crucially for many religions and their approaches to life and the world—for a key dimension of them is often a sense of seeking to *draw* or *insert* adherents into a kind of trans-generational sacred narrative that they take their way of life to constitute or embody. In my view, a key point of appeal or attraction for them, therefore, is the way in which such an invitation for incorporation seems humanly *credible* and compelling: the way in which it resonates with key aspects of human experience—with characteristic struggles, joys, and everything in between. Notice, additionally, that speaking of a religious way of life thus—as compelling, credible, or humanly resonant—does not prescind from the question of the *truth* of its concomitant teachings or claims; but instead, it impels one to consider such teachings or claims as rightly received within the context of an engaged human life—and so not just, to return to a prior point, from the perspective of a disinterested observer.

As a final example in regard to these general points, I think there is something at play in such reflections on conscience that is similar or comparable to the way in which, following Aquinas and Calvin, Alvin Plantinga has argued for Christian belief as being warranted or properly basic for people to take up. I do not wish to contend for *this* particular claim with Plantinga, but I do want to highlight aspects of the way in which he works toward it. In particular, he adduces the notion of a *sensus divinitatis* from Calvin and the line of thought from Aquinas that "to know in a general and confused way that God exists is implanted in us by nature."[109] In a word, the former notion from Calvin is that

[109] Alvin Plantinga, *Warranted Christian Belief* (New York: Oxford University Press, 2000), ch. 6, esp. 170ff. These particular citations from Calvin and Aquinas, respectively, are cited in Plantinga's text.

"there is within the human mind, and indeed by natural instinct, an awareness of divinity."[110]

For my purposes, the important thought is that such contentions, while no doubt seeming arguable and scientifically controversial, *persist* in resonance and significance for many. And inasmuch as they do, for reasons that I have gestured at in this chapter so far, I do not think they can be simply or obviously discounted or laid aside—particularly not by appeal to scientific considerations. One cannot just claim, that is, as Atkins might, that such contentions are merely whimsical and fanciful. One could perhaps, again, attempt to explain scientifically why people have or experience them; but to do so ultimately would and could not evacuate them of their significance and human resonance. Indeed, though these two theologians were no doubt themselves partial to these ways of thinking, I think they also would have been strongly inclined to say that *all* people can (and perhaps, in their view, *should*) experience life in this sort of way or have this sort of *sense* about themselves in the world. I do think that in this respect, this (alleged) sense is deserving of serious consideration and inquiry. Indeed, as I continue to argue, giving such a matter more careful and serious consideration is what a humanistic thinker has good reason to do, rather than dismissing it as fanciful or pernicious.

4.2.4 Mystery and Ritual

To revisit a prior point: The idea of coming into contact with a mystery highlights another important aspect of a fundamental religious comportment or way of life—an aspect that I take the scientistic and secular humanist thinkers of the sort we are considering herein to miss. Effectively, this aspect is that the *kind* of matters that are typically dealt with in such domains are not just or mainly susceptible to being approached

[110] Ibid., 171.

in the sorts of ways that more normal or mundane matters—or, indeed, matters that are characteristically the objects of scientific inquiry—typically are. This is one way of looking at the dependence in such settings on *ritual* and *liturgy* as modes of engagement with, say, God or things divine or otherwise transcendent. The thought here is that if we are addressing the one who is our creator and who is over and, so to speak, at work behind all that is, there is something inapt or impious about just doing so in a more mundane fashion—in the way that we might, for instance, address any other person. So a posture of *worship*, instead, becomes distinctively proper in such settings—a posture that is typically, among other things, a ritualized expression of gratitude. As Nicholas Wolterstorff puts it, speaking of Christian liturgy, "worship of God is a particular mode of Godward acknowledgment of God's unsurpassable greatness. . . . Facing God, they [Christians] acknowledge God's unsurpassable greatness in a stance of awed, reverential, and grateful adoration."[111] In a similar fashion, consider Richard Swinburne:

> [T]o worship . . . is more than just to show respect. It is to show respect toward a person acknowledged as *de facto* and *de iure* lord of all. Such a person deserves a peculiar kind of respect for two reasons. Firstly, whatever our dependence on other beings, they depend on him. He is our ultimate benefactor, and has the right to be such. Secondly, he has incomparable greatness; if greatness deserves respect, he deserves a peculiar respect.[112]

The idea at play here is that there is a kind of transcendent dimension and *sui generis* benefactor that cannot be seen or accessed in *just* the ways that the world ordinarily is, and so is best or most aptly accessed, so to speak, through acts of worship or praise, which express a kind of collective gratitude ritually, and with steady acknowledgement that their orientation is toward an unsearchable *mystery*. This speaks to the way in which, for many

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[111] Nicholas Wolterstorff, *The God We Worship: An Exploration of Liturgical Theology* (Grand Rapids: Eerdmans, 2015), 26.

[112] Richard Swinburne, *The Coherence of Theism*, rev. ed. (Oxford: Clarendon Press, 1993), 298. Cf. Richard Swinburne, *Faith and Reason*, 2nd ed. (Oxford: Oxford University Press, 2005), 168ff.

religious believers, this transcendent dimension is not accessible by typical appeals to reason or experience but in a crucial way *as mediated* ritually and liturgically, as Michael Rea puts the matter in touching on the problem of "divine hiddenness":

> Presumably the idea is that the presence of God is *widely* and *readily* accessible only if either there is conclusive empirical or a priori evidence of the existence of God, or many people are having subjective experiences that at least seem to be direct experiences of the presence of God. What this supposition ignores, however, is the possibility of *mediated* experiences of the presence of God through media that are widely and readily accessible.[113]

I take the operative idea here to be that the availability or *accessibility* of such matters, of particularly religious or divine significance, is not often *just* simply present or available by ordinary channels, but particularly *as mediated* ritually or liturgically. Hence the way, e.g., that *becoming* part of various religious bodies or communities often involves not just or mainly assenting to what they believe but, all the more, *going through* their rites of initiation, which typically have a uniquely *ritualistic* or liturgical character and which are also typically accessible and available, with appropriate preparation, to a wide variety of people who seek to undergo them. What is more, such initiation often involves becoming part of a community or a *people* with whom one shares her religious belief and practice. This dimension no doubt serves as an important complement to the preceding points about a religious attitude or disposition—especially parsed, as I just sketched them, in a more *personal* manner. Religious ways of life and comportment are quite characteristically *shared* in such a way that they are not just mine or hers, but indeed, *ours*. Also, the way in which the shape of such rites and practices often coheres with the broad contours of a human life—especially in regard to birth, death, and vocational commitments, for example—bespeaks, again, something profoundly noteworthy about the sort of *resonance* that religious

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[113] Michael Rea, "Narrative, Liturgy, and the Hiddenness of God," in *Metaphysics and God: Essays in Honor of Eleonore Stump*, ed. Kevin Timpe (New York: Routledge, 2009), 88.

approaches to life and meaning seek to secure through many and layered means. Consider Cottingham once more to this effect:

> [A] religious worldview is not an isolated set of doctrines, but a complex retiform structure, a fine-meshed net of praxis and belief and commitment that links together in a coherent fashion many diverse aspects of our human experience. Such a worldview finds expression not just at the narrowly intellectual level, but in a rich array of symbolic and figurative discourse; to use and to understand such discourse is to appreciate that in religion as in many of the most important areas of human life, meaning operates not through bald statements that correlate one-to-one with the facts they purport to describe, but rather through an intricate process of layering, where our understanding is constantly enriched by the interplay of conscious and unconscious resonances and allusions.[114]

The roundabout retort available in all this, then, to the scientistic and secular humanist thinkers I have been considering in this chapter is again something like: Why should such modes of engagement be discounted or discredited for people, especially in light of what the sciences say about life and the world? It becomes very difficult to see how or why this should be the case. The point I have raised with regard to latching onto traces of the divine and the like holds here, too, I think: Living with such a liturgical orientation or comportment, which affords one access to matters transcendent in a unique sort of way, is not fundamentally the kind of matter that can be *eschewed*, jettisoned, or trumped by appeal to various scientific considerations. And indeed, for many adherents of such practices, the opposite would be true: They would indeed strive for a kind of *integration* of such practices with an otherwise robust and scientifically normal view of the world. Their religious patterns of engagement, they would claim, help them to see and experience the world in a new and different light—as "sacramentalized" or raised up to a transcendent order—that would otherwise be inaccessible to them.[115]

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[114] Cottingham, *Spiritual Dimension*, 102.

[115] See Cottingham, *How to*, 65–6; cf. Anthony O'Hear, *Experience, Explanation and Faith: An Introduction to the Philosophy of Religion* (London: Routledge, [1984] 2013), 3–4.

Conclusion

I want to retain some of these points of nuance for the following (and culminating) chapter. For concerns such as these enable me to segue into a broad set of considerations that I take to be approached best under the rubric of *humanism*—and particularly, as I argue in chapter five, a more *expansive* form of humanism, which I take to be especially in contradistinction to, e.g., the forms of secular humanism (and scientism) summarized in this chapter. The kind of more expansive (or "integral") humanism that I advocate not only avoids some of the scientistic and secular humanist missteps regarding religions and the religious, but it also offers what I take to be a much more measured approach to the sciences and the sort of cultural place they hold. It is a kind of mediating approach that I take to be much more irenic as regards a gamut of such concerns—pertaining to the scientific, the religious, and a host of matters in between—that are herein at play.

Chapter Five: Integral, Expansive Humanism: Some Contours

Introduction

As something of an overarching recapitulation: In the first chapter, I drew attention to the ways in which varieties of contemporary philosophical naturalism (and scientism) crucially rely upon *histories* of the sciences, both to speak to their anti-supernaturalist credentials and on behalf of the methodological successes of the sciences—histories that they take typically as a foundational datum or first premise. Then, in chapter two, I noted the ways in which certain stronger forms of scientific naturalism or scientism run into a critical problem inasmuch as they often deride the value of either historical inquiry and (narrative) explanation, as in the case or Rosenberg, or of certain important forms of non-scientific description, as in the case of Sellars. In chapter three, I extended my critique to the broad position of weak or humane scientism, noting that it presupposes exemplarity for the sciences among potential broad forms of inquiry without substantial argumentation to that effect and, indeed, without apt consideration of other significant approaches, like those perhaps exemplified in varieties of literary or artistic creativity and appreciation, that might well count as comparable but distinct. In a similar fashion, in chapter four, I noted the ways in which religious approaches to life and the world might count as something like non-objectifying forms of inquiry or searches for truth and understanding that, in my view, characteristically come to be misrepresented by familiar scientistic and, by extension, secular humanist analyses of them.

I want now in this chapter to argue, in contrast, for an integral or expansive *humanistic* approach to such matters, as I am calling it, which I take to be a preferable rival at least to the stronger forms of scientific naturalism and scientism (and *secular* humanism) that I treated in chapter two (and four) and also a sort of theoretical corrective to the weaker or more restrained versions of scientism that I considered in chapter three—or,

indeed, of philosophical naturalism more broadly, like the varieties noted in the first chapter. I employ the notion of *humanism* here somewhat narrowly and do so particularly in light of some of the landscape that I have already surveyed—especially with an eye to showing how its invocation compensates for the most glaring deficiencies, in my view, manifest particularly in (weak and strong) varieties of scientism. In an initial and primary sense, I use it to speak of or pick out approaches that *admittedly* employ, or see as needful, cultural histories or genealogies of the sciences and other forms or domains of inquiry. I also seek to expand this line of thought to argue that a humanistic approach, in contrast to a scientistic one, carves out central room for the importance of *culture* in our conception of the sciences and various other similar (cultural) practices—and the way in which philosophy in particular, pursued in a humanistic vein, can very helpfully afford some of the same sorts of higher-order clarifications and points of emphasis that the category of culture can and typically does. Finally, I argue variously for the benefits of such an approach, particularly with respect to the more restrained forms of scientism or scientific naturalism surveyed in chapter three, along with even more liberal or professedly expansive varieties of non-scientistic naturalism.

In a sense, I see the following basic upshot to a broadly humanistic approach, in contrast (at least) to a scientistic one: More scientistic forms of philosophical naturalism, especially like those advocated by Rosenberg, fundamentally *leave no room* for the kinds of cultural histories of the sciences that their approaches, like so many others, critically invoke. Other more forgiving varieties of philosophical naturalism do not attempt, I take it, to forswear such histories; but they do not typically *acknowledge* their central need for them. (Larvor's admission to this effect, which I noted in chapter two, is thus particular striking.) A humanistic approach (to the sciences and other modes of inquiry and understanding) acknowledges the need for such cultural histories or genealogies

straightaway. This is because humanistic approaches stress a kind of central and inescapable role for *culture* more generally—when treating the sciences or, comparably, other (cultural) practices like the arts, for example.[1] So, in a sense, humanism, particularly as I construe it, unabashedly leads with what forms of scientism covertly rely upon but typically attempt to hide or denigrate.

5.1 A Renewed Humanism: Williams, Cottingham, and Cooper

An important first step in invoking a notion like *humanism* in contrast to varieties of scientific naturalism and scientism, is to limit its scope significantly, as it has many historically variegated senses. It is quite "elastic"[2] in this regard, much like *naturalism*, which is indeed quite susceptible, as I already noted, to many divergent and even conflicting renderings. In a broad sense, I am invoking *humanism* as a contrastive notion to scientism, and to varieties of scientific naturalism that tend in that direction. In some cases, though, *humanism* carries connotations that would tend to *liken* it to such forms of scientism. For it is sometimes invoked nowadays as synonymous with *secularism* or *irreligion*—as I highlighted in the previous chapter—in the case, for instance, of many humanist societies or public-interest organizations, which tend to trumpet the ideas and ideals of the sciences and secular society, typically over and against those of various religious traditions.[3] So I am *not* invoking the notion in this, often more popular, manner. In fact, the way in which I want to sketch a humanistic alternative to varieties of scientism and scientific naturalism in fact leaves *more* room for a kind of irenic space between the sciences and various religious traditions.

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[1] Cf. Mikael Stenmark, "Scientism and Its Rivals," 73ff.

[2] Cf. P.F. Strawson, *Scepticism and Naturalism: Some Varieties* (London: Routledge, [1985] 2008), 1.

[3] See Cooper, *Measure*, 64. Also, see the material that Cooper draws together in § 4.1.

Not unrelatedly, Bernard Williams and John Cottingham have invoked the notion (or something quite like it) in a different sense, to speak to the ways in which they take philosophy, in aspects of its style and aspirations, to have become *too* scientistic or too deferential to the trappings of contemporary science—an overzealous handmaiden of the sciences, if you will.[4] In a key respect, I want to agree with their broad invocation of the notion (within this sort of critique), and to do so in several respects. I also want, though, to invoke the notion, following David Cooper and others, in an even more broadly characteristic *historical* sense, particularly in response to some of the concerns raised in the previous chapters. To work toward this, I begin with the more broadly historical conception of *humanism* and then seek to work my way toward these more recent articulations; and I intend along the way to show how they offer apt responses to the more pressing concerns I have noted thus far.

5.1.1 History, Culture, and Things' Hanging Together

In chapter one, I concurred with Capaldi that western philosophy has a longstanding inclination toward offering the sciences and certain other disciplines a sort of cultural legitimation.[5] I think this line of thought is insightful and, indeed, difficult to contravene. Philosophical thinking about various disciplines characteristically helps us to abstract from their particularities and see, with a sort of higher- or second-order viewpoint, how they (ought to) compare or interact. This is the way in which Sellars famously conceives of philosophy: "The aim of philosophy abstractly formulated, is to

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[4] See Williams, "Philosophy as a Humanistic," 180ff. Also, see John Cottingham, "What is Humane Philosophy and Why is it at Risk?," in *Conceptions of Philosophy*, Royal Institute of Philosophy Supplement 65, ed. Anthony O'Hear (Cambridge: Cambridge University Press, 2009). Cottingham invokes the notion of *humane* philosophy, rather than philosophy as humanistic; my choice of the latter term becomes increasingly evident in the discussion that follows.

[5] See ch.1, n. 89.

understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term."[6] Sellars construes this point, true to his words, in a broad sense indeed, to "include such radically different items as not only 'cabbages and kings', but numbers and duties, possibilities and finger snaps, aesthetic experience and death."[7] But he gives particular priority within this sort of approach to the various special disciplines and the way in which the philosopher, in regard to them, can have a peculiar sort of "eye on the whole."[8] Each special discipline, for Sellars, in some or way or other "must . . . have a sense of how its bailiwick fits into the countryside as a whole," but philosophy, as it "has no special subject matter," can have "the aim of knowing one's way around with respect to the subject-matters of all the special disciplines,"[9] and so presumably, I take it, have something of a broader sense of how they themselves (should) hang together. What is more, as Tom Sorell notes, philosophy can be peculiarly useful, in its tendency toward such a higher-order view, to help us to see, with a kind of reflective abstraction, how "the inaccessible sciences" can (or should) interrelate with "common culture."[10]

I think that Sellars's take on the potential of philosophy to grasp interdisciplinary complementarity (or tension), along with Sorell's sense of philosophy as uniquely susceptible to engagement between the sciences and common culture, dovetails quite gracefully with what culture, broadly speaking, has traditionally done for us. Consider Wittgenstein in this regard:

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[6] Wilfrid Sellars, "Philosophy and the Scientific Image," 369.

[7] Ibid.

[8] Ibid., 371.

[9] Ibid., 370.

[10] Sorell, *Scientism*, 113.

> A culture is like a big organization which assigns each of its members a place where he can work in the spirit of the whole; and it is perfectly fair for his power to be measured by the contribution he succeeds in making to the whole enterprise. In an age without culture on the other hand forces become fragmented and the power of an individual man is used up in overcoming opposing forces and frictional resistances; it does not show in the distance he travels but perhaps only in the heat he generates in overcoming friction. . . .
>
> I realize then that the disappearance of a culture does not signify the disappearance of human value, but simply of certain means of expressing this value . . .[11]

I do not take it that this sort of basic contention, about the meta-level reflective role of philosophy or the value-ascribing role of culture, should be controversial for a naturalistic thinker. If we consider, e.g., Quine's foundational observations, upon which many recent versions of philosophical naturalism (and scientism) are predicated, we can see this:

> I see philosophy not as an *a priori* propaedeutic or groundwork for science, but as continuous with science. I see philosophy and science as in the same boat—a boat which, to revert to Neurath's figure as I so often do, we can rebuild at sea only while staying afloat in it. There is no external vantage point, no first philosophy. All scientific findings, all scientific conjectures that are at present plausible, are therefore in my view as welcome for us in philosophy as elsewhere.[12]

To say that the sciences critically rely upon certain culturally secured values and upon varieties of philosophical, historical, and other legwork for a kind of cultural legitimation is not, in my view, to claim a sort of pre-scientific, *a priori*, or first-philosophical priority for

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[11] Wittgenstein, *Culture and Value*, 6e: » Die Kultur ist gleichsam eine große Organisation, die jedem, der zu ihr gehört, seinen Platz anweist, an dem er im Geist des Ganzen arbeiten kann, und seine Kraft kann mit großsem Recht an seinem Erfolg im Sinne des Ganzen gemessen werden. Zur zeit der Unkultur aber zersplittern sich die Kräfte und die Kraft des Einzelnen wird durch entgegengesetzte Kräfte und Reibungswiderstände verbraucht, und kommt nicht in der Länge des durchlaufenen Weges zum Ausdruck, sondern vielleicht nur in der Wärme, die er beim Überwinden der Reibungswiderstände erzeugt hat. «

Wittgenstein is keen in this passage to distinguish *culture* in this sort of sense from modern (American and European) *civilization*, which he finds "alien and uncongenial" to his own sensibilities and more particularly on display through various colossal politico-economic achievements of industrialized society, like "industry, architecture, and music . . . fascism and socialism." For the moment at least, I am employing 'culture' in a rather broad sense that would not evince this sort of distinction. I return later in the chapter, though, to some concerns that call for a more precise rendering of the notion of culture and its implications.

[12] W.V. Quine, "Natural Kinds," in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), 126–7.

such tasks. In a sense, it is just to claim that the sciences *alone* are not sufficient to establish for themselves the place that they do in fact have, culturally or otherwise, or that we typically think they ought to. Think, for instance, about the medieval university (or the academies of the ancient world, for that matter) and the way in which it would have very concretely promoted a certain *hierarchy* of the sciences—in its case, one typically crowned by theology as queen of the sciences. The natural and other sciences would of course have had their place in this hierarchy; and their place, if you will, would have been the fruit of the development of a kind of cultural framework or matrix within which the sciences were pursued and more broadly appreciated. (It is *not* as though this cultural framework, of course, predated the sciences or vice versa. There was rather presumably a sort of mutual, concomitant development.) These cultural roles and dimensions of significance did not just somehow *emerge* from the sciences themselves and their theoretical output. Instead, they were promoted and advocated for within a broader cultural edifice and framework within which they and the ends they pursued or sought (like, say, truth or understanding) were prized.

A more recent example of the sciences' cultural placement and significance, which is so often on display and trumpeted nowadays, especially in colleges and universities, is the integral connection between the sciences and *technology*. Students are often told, for instance, that they have good reason to study math, biology, or mechanical engineering because doing so will equip them well to help further decode the human genome, work toward a cure for cancer, or design the next generation of Ford pickup truck. But again, these sorts of connections and practical payoffs are not just, as it were, *obviously* or *plainly* present in the everyday labors or work of mathematics, biology, or even engineering. They are instead *applications* of them, which tend to be championed within a kind of cultural framework that values the sciences and their achievements in various ways and applies

them with practical ends in mind—in this case, particularly with an eye to *motivating* and *recruiting* young students to pursue them. The broad sort of dynamic at play in such matters is not unlike that by which young people are encouraged to volunteer themselves for military service: That by doing so, they can work or fight to promote certain values or goals that are purportedly especially noble or worthwhile, like freedom, justice, or the spread of democracy—or at the very least, the patriotic defense of their homeland.

Consider one other example on this front: popular engagement with the sciences, particularly in regard to more pressing political and economic questions. As I write, we are still amidst restrictions and even lockdowns ordered toward helping the containment and mitigation of COVID-19, a virus whose spread has resulted in a devastating global pandemic. Similarly, think about climate science and the way it is commonly, in popular discussions in the media, marshaled on behalf of certain political and economic decisions or policies. In regard to both COVID-19 and climate science, it is not at all obvious that most people are even situated to *grasp* the relevant science, let alone to take the further step of applying it to issues of more practical import. So rightly, in many such cases, we defer to those with the scientific and politico-economic *expertise* to offer such extrapolations or to extend fairly abstruse scientific findings to more commonly appreciable practical circumstances.

In these two examples, I note such dynamics to highlight the ways in which the science in these cases does not, as it were, speak for itself. Instead, we have in place various cultural (institutional and other) apparatuses that speak to, showcase, and preserve its importance and afford us access to its results, technological payoffs, and the like. To claim what I just have, then, is *not* to claim that the sciences need a kind of first-philosophical foundation in order to do what they do and be what they are. It is simply to acknowledge that they do, in practice, rely upon various institutional and cultural

structures—which themselves have been shaped prominently by philosophical ideas, cultural histories, and the like—to function and thrive, and perpetuate themselves and their output as they do.

In a way, all this is to say that the sciences, particularly as we know and practice them nowadays, are in a certain sense crucially bound up with their own institutional cultures and the cultural histories or genealogies that these institutions serve to enshrine and perpetuate. This dynamic is reflective, I take it, of what was perhaps the most abiding and central insight of the Renaissance humanists, as David Cooper describes them: They saw especially keenly the way in which cultural history is necessary for grasping "the ways of men" and having a sense of how our various approaches to life and the world (are meant to) hang together.[13] Cooper notes that the Renaissance humanists are typically seen as admirers, even worshippers, of ancient culture and that they specifically venerated the holistic approach to life and thought, as I already noted, of Cicero. In particular, they were drawn to his notion of *humanitas*, which stressed the ennobling potential of human culture in contrast to the more primordial tendencies of uncultured barbarism. And they took history—and I see this as a crucial point for my line of thought—to be, following Petrarch, a kind of peculiar *repository* of human achievements and (practical) knowledge.[14]

This sort of broadly Petrarchan view of history and its (moral) potential, I think, is not divergent from the kind of philosophical-historical legwork that I underscored in the versions of philosophical naturalism surveyed in the first chapter. (It is also not unlike the classical approach to *mythos* or the belletristic style of history that generally preceded much modern historiography.) These approaches to naturalism, as I noted, nearly without fail tend to employ historical accounts of the sciences and their successes to highlight the *good*

[13] Cooper, *Measure*, 139.

[14] Ibid., 41–2.

that the sciences have done and to contend for a certain sort of preeminence for the view of the world they afford us. As I argued, these accounts employ something like *monumental* histories of the sciences that variously serve to help legitimate them or shore up their place culturally: to herald their successes, champion their institutional placement, and commend their characteristic cast of mind and manner(s) of inquiry. The main point I want to make in this regard is that a humanistic approach does not hide from this fact but instead, in a sense, *leads* with it. For it acknowledges rather straightforwardly the need for this sort of cultural support or legitimation that accompanies not just the sciences, but any number of practices of inquiry (or institutions) ordered toward seeking knowledge, understanding, or other valuable (epistemic and other) goals. In a certain sense, this happens because a humanistic approach, unlike a scientistic one, makes a critical *initial* acknowledgement of the importance of history and culture in general and about the significance of the cultural histories or genealogies that accompany various such (cultural) practices. It perhaps does this because it always works with the presupposition, as Cottingham says of "humane" philosophy, that "we cannot hope to fully grasp the significance of a set of assertions unless we know how they are embedded within a rich web of culture and practice."[15]

Another way of emphasizing these points is to return to Williams's (and Rosenberg's) contention that the sciences do not tend to be particularly mindful of their own histories. That is to say, the sciences *need* or expect histories to be done with or for them—concomitant to the more particular work and research that they and their practitioners accomplish. To say in this manner that the sciences need history to be done

[15] Cottingham, *Philosophy of Religion*, 22. Cottingham terms his approach (specifically to philosophy of religion) a "humane" one, which carries slightly different connotations than *humanistic*—though I take it to be largely synonymous with what I am herein calling humanistic. I have chosen to employ the latter term here, though, because it specifically hearkens back to the humanists' insistence on the centrality of cultural histories, as I am describing them, which is a critical point in regard to which I am taking this approach to be at odds with varieties of scientism and scientific naturalism.

in conjunction with and for them is perhaps just to countenance a point that Williamson sees particularly emphasized by Collingwood: Namely, that in a certain way, *keeping stock of* the results of the sciences is peculiarly a kind of *historical* task.[16] Inasmuch, therefore, as the sciences need to do this, they thereby need to rely upon a kind of historical bookkeeping for their own development and internal maintenance.[17] (This is no doubt a key point that we centrally have from Thomas Kuhn as well.[18]) Williams sees in Collingwood's philosophy a more general kind of esteem for history that we could squarely take as humanistic in our relevant sense and, indeed, opposed to forms of scientism:

> Collingwood respected science and based his entire philosophy on history. This at once places science as one activity among others, and reminds us of genuine and pervasive cultural variation. It therefore gives us richer resources for combating a stupid scientism in philosophy, since it invites one to think about the cultural role of science among other forms of understanding. At the same time, it provides a concrete sense of variations between actual "forms of life."[19]

Williams's assessment of Collingwood's *oeuvre*—I should add as a brief aside—is likely understated: For Collingwood did give a pride of place to history in his thought, and specifically in his philosophy; but his conception of how history ought to be done is quite peculiar and remarkable. Collingwood attempted, more exactly, to conceive of history as a sort of uniquely interactive discipline, specifically in regard to the way in which its practitioners, through a kind of *reenactment* of past events, could keep the past, as it were, animated and thereby prevent their inquiries from being simply concerned with what is

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[16] Timothy Williamson, "The Unclarity of Naturalism," in *Philosophical Methodology: The Armchair or the Laboratory?*, ed. Matthew C. Haug (London: Routledge, 2014), 37.

[17] Collingwood puts the matter thus in a provocative passage: "The facts first observed by Newton, Adams, and Pasteur have since then been observed by others; but every scientist who says that light is split up by the prism or that Neptune exists or that fermentation is prevented by a certain degree of heat is still talking history: he is talking about the whole class of historical facts which are occasions on which someone has made these observations" (Collingwood, *Idea of Nature*, 177).

[18] See Arthur Danto, "The Decline and Fall of the Analytical Philosophy of History," in *A New Philosophy of History*, ed. Frank Ankersmit and Hans Kellner (London: Reaktion Books, 1995), 72.

[19] Bernard Williams, "An Essay on Collingwood," in *The Sense of the Past: Essays in the History of Philosophy*, ed. Myles Burnyeat (Princeton, NJ: Princeton University Press, 2006), 357.

"dead and complete." He also took this sort of active and, in a sense, vicarious engagement with past (human) events to do a sort of hermeneutical justice to the way in which so many such events were the results of *free* human choices and their consequences.[20]

I am not claiming for now that we need in any robust sense to *base* philosophy or science upon history; but I am claiming that a humanistic approach, which I take to be superior to a scientistic one, *admits straightaway* or *leads with* the importance of history for any number of domains or cultural practices—philosophy and the sciences among them—and, indeed, for philosophy with regard to the sciences. And indeed, the scientistic error, in a sense, which we see most directly manifest in Rosenberg, is the tendency to think that history is insignificant, unimportant, or somehow rendered null by the example or standard of the (harder) sciences. I think an instructive analogue here, to highlight these points toward which I am gesturing, is recent work from Noël Carroll and Nicholas Wolterstorff on art as a cultural or social practice.

5.1.2 Art and Science as Cultural Practices

To help appreciate and further some of these points, I want to consider briefly art as a cultural practice, in the work of Noël Carroll, to see how culture and cultural histories, which a humanistic approach leads with, play a significant domain-shaping role. Consider Carroll to this effect:

> Calling art a cultural practice, it is to be hoped, is noncontroversial. To refer to something as a practice in its simplest sense is to regard it as an activity that is customarily or habitually undertaken; a cultural practice, in this sense, applies to the customary activities of a culture. Shaking hands is a customary activity of greeting in our culture. But though custom and habit have a large part to play in what I am calling a cultural practice, they are by no means the whole of it.
>
> The sense of cultural practice I have in mind here is that of a complex body of interrelated human activities governed by reasons internal to those forms of activity and to their coordination. Practices are aimed at achieving goods that are

[20] For more on Collingwood's views on these matters, see Jan van der Dussen, "Editor's Introduction," in Collingwood, *Idea of History*, xxxviii–xxxix. See also, e.g., Collingwood, *Idea of History*, 288–9.

> appropriate to the forms of activity that comprise them, and these reasons and goods, in part, situate the place of the practice in the life of the culture. Such practices supply the frameworks in which human powers are developed and expanded.
>
> Custom, tradition, and precedent are integral components of a cultural practice. Nevertheless, cultural practices need not be static. They require flexibility over time in order to persist through changing circumstances. They tolerate and indeed afford rational means to facilitate modification, development into new areas of interest, abandonment of previous interests, innovation, and discovery. Practices sustain and abet change while remaining the same practice. Practices do this by a creative use of tradition, or, to put the matter another way, practices contain the means, such as modes of reasoning and explanation, that provide for the rational transformation of the practice.
>
> In one sense, calling art a practice in the singular is misleading. For art is a cluster of interrelated practices. The plurality of practices here involves not only the diversity of artforms, whose interrelations are often evinced by their imitation of each other, but also by the different, though related, roles that different agents play in the artworld.[21]

Carroll continues by describing the way in which appreciating works or periods of art and their significance typically involves *placing* them within a sort of tradition-continuum and so seeing them as either amplifications or repudiations of their respective tradition-backgrounds or cultural milieus. So we need an analysis of this sort, he thinks, to appreciate Classicism vis-à-vis Romanticism; Soviet montage versus deep-focus realism in cinema; the rise of postmodern architecture in response to Le Corbusier; or the way in which early modern dance was significantly a repudiation of European ballet.[22]

I find Carroll's analysis quite sensible and want to note that it broadly conduces with the sort of humanistic approach that I am advocating in this chapter. Art, or the arts, is a kind of cultural practice (or cluster thereof) that is perpetuated through generations. Its

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[21] Noël Carroll, "Art, Practice, and Narrative," in *Beyond Aesthetics*, 66. Wolterstorff offers a strikingly similar analysis of art as a social practice in Nicholas Wolterstorff, *Art Rethought: The Social Practices of Art* (Oxford: Oxford University Press, 2015), ch. 8. The *locus classicus* for this broader notion of (social) practices is (among various editions) Alasdair MacIntyre, *After Virtue*, 2nd ed. (South Bend, IN: University of Notre Dame Press, [1981] 1984), 187ff. Also, cf. Mark A. Wrathall, "Introduction: Background Practices and Understandings of Being," in Hubert A. Dreyfus, *Background Practices: Essays on the Understanding of Being*, ed. Mark A. Wrathall (Oxford: Oxford University Press, 2017), 4ff.

[22] Carroll, "Art, Practice," 66ff.

history, the tradition that in a certain sense constitutes and sustains it, "supplies its practitioners with strategies for identifying new objects as art,"[23] and so allows them variously to perpetuate and help to shape or alter the tradition which they inherit and of which they become a part. As Wolterstorff notes, "social practices," which he takes in a very similar sense to Carroll's cultural practices, "are . . . spread out in space [and] extended in time. They have, or they *are*, traditions."[24] And a key part of keeping such traditions alive, Carroll notes, is having a certain sort of running repository of their histories—often a sort of roughly narrated and inherited sense of whence they came and where they are (or seem to be) going.[25]

It seems to me that this sort of analysis could largely be applied, and fruitfully so, to the sciences, too—and perhaps indeed it has been through a basically Kuhnian approach to them. For the sciences certainly also are, I believe—whatever *else* they are—*cultural practices* in some key and broad sense.[26] Heidegger, among others, squarely concedes this point, though he thinks that (excessively) emphasizing it can be singularly perilous, as doing so can easily distort our sense of the "essence" [*Wesen*] of science:

> In keeping with the view now prevalent, let us designate the realm in which the spiritual and creative activity of man is carried out with the name "culture." As part of culture, we count science, together with its cultivation and organization. Thus science is ranked among the values which man prizes and toward which, out of a variety of motives, he directs his attention.[27]

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[23] Ibid., 71.

[24] Wolterstorff, *Art Rethought*, 88.

[25] Ibid., 75.

[26] Cf. Rom Harré, *Varieties of Realism: A Rationale for the Natural Sciences* (Oxford: Basil Blackwell, 1986), ch. 1. Also, cf. Marjorie Grene, "Perception, Interpretation, and the Sciences: Toward a New Philosophy of Science," in *Evolution at a Crossroads: The New Biology and the New Philosophy of Science*, ed. David J. Depew and Bruce H. Weber (Cambridge, MA: The MIT Press, 1985), 11ff.; and the contributions in *Science as Practice and Culture*, ed. Andrew Pickering (Chicago: The University of Chicago Press, 1992); and Joseph Rouse, *Engaging Science: How to Understand its Practices Philosophically* (Ithaca, NY: Cornell University Press, 1996). MacIntyre, e.g., lists among characteristic practices "the enquiries of physics, chemistry and biology, . . . the work of the historian, and . . . painting and music." See MacIntyre, *After Virtue*, 187.

[27] Martin Heidegger, [Wissenschaft und Besinnung] "Science and Reflection," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, [1954] 1977), 155.

To count the sciences as cultural practices is to emphasize that they are structured *activities* that we pursue in (precisely) circumscribed and coordinated ways in order to realize various goods that are sought in accordance with their guiding values.[28] And they are sustained institutionally through *cultural* apparatuses and institutions—colleges and universities, laboratories, funding and advocacy agencies, and the like—that are tasked with perpetuating their constitutive practices and the goods they are taken to yield. What is more, these apparatuses and institutions are tasked with imparting to future generations the skills and tools needed to advance the sciences. As Wolterstorff puts it, "intrinsic to social practices is the phenomenon of *handing on the know-how*: the know-how of the present practitioners and teachers is handed on to the would-be practitioners. Some of the handing on takes place by explicit teaching; much of it takes place by modeling."[29] This is a point that Michael Polanyi emphasizes, too, in his arguments against the objectivist paradigm, which I discussed already. Scientists, for him, must come to a level of *connoisseurship* that is normally cultivated through extended interpersonal tutelage and the formative experiences that are part and parcel of it.[30] It is through this sort of process that scientists come to attain, in Rush Rhees's words, "a nose for what is sound and important"[31] in their fields and so become mature practitioners of them who can thereby discern or target, among other things, matters of nascent promise or importance that

[28] Cf. Helen Longino, *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry* (Princeton, NJ: Princeton University Press, 1990).

[29] Wolterstorff, *Art Rethought*, 88. Cf. Wrathall, "Introduction," 7.

[30] Polanyi, *Personal*, 54–5.

[31] Rush Rhees, "Science and Questioning," in *Without Answers*, Studies in Ethics and Philosophy of Religion, vol. 8, (London: Routledge & Kegan Paul, 1969), 20.

could help to advance these fields fruitfully.[32] In a key sense, then, to become a scientist is not just to imbibe or come to appreciate a body of theoretical knowledge or a particular set of analytical skills, but also crucially to develop and take on a certain sort of *sensibility*. And taking on a sensibility, in particular, is the sort of formative dynamic that is generally quite central to being shaped in or by *any* human culture. Reminiscent of the prior point about culture from Wittgenstein, consider Roger Scruton to this effect:

> To possess a culture is not only to possess a body of knowledge or expertise; it is not simply to have accumulated facts, references and theories. It is to possess a sensibility, a response, a way of seeing things, which is in some special way redemptive. Culture is not a matter of academic knowledge but of participation. And participation changes not merely your thoughts and beliefs but your perceptions and emotions.[33]

It is worth adding that Scruton is among those who, like Wittgenstein, are wary of the culture-forming or -buttressing potential of the sciences.[34] For in his view, receiving and living within a culture is about a particular kind of personal (and corporate) formation, particularly of our affectivity and manner of seeing and engaging the world; and he thinks that the scientific paradigm—perhaps if allowed to become too broadly archetypal—can in ways be injurious to this sort of personal and corporate development:

> Could it be that scientific knowledge leads precisely in the opposite direction from a culture—not to the education of feeling, but to its destruction, not to the acceptance and affirmation of the human world, but to a kind of sickness and alienation from it, an overbearing sense of its contingency?[35]

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[32] Cf., e.g., Michael Polanyi, *The Tacit Dimension* (Chicago: The University of Chicago Press, [1966] 2009), 31. Polanyi speaks of the cultivation of this sort of expert sense as the development of the scientist's heuristic passions. Cf. *Personal Knowledge*, 134ff.

[33] Scruton, "Modern Philosophy," 29.

[34] Indeed, Scruton articulates concerns similar to Wittgenstein, as to whether the sciences can rightly count as key or foundational elements of a culture, or whether they are inherently pernicious to its formation and development, taken in a more precise (and traditional) sense. Wittgenstein's pessimism on this front may well have traced to his indebtedness to Spengler and his contention that, as cultures *become* civilizations, certain of their more foundational elements tend to get, in the process, overshadowed or lost—key among them, their art and religion. Cf. Jonathan Beale, "Wittgenstein's Anti-Scientistic," 66–7ff.

[35] Scruton, "Modern Philosophy," 29.

For my present purposes, I want to bracket or lay aside the question of whether the sciences can or do contribute in a more robust (or traditional) manner to the edification and maintenance of a human culture. What I want to stress, instead, is that the sciences—and our support for them, teaching of them, and generally furthering the work of them—are distinctly reflective, as I have just noted, of dimensions of human culture or human cultural practices more broadly—like the arts or various religious traditions.[36] What is more—and this is a critical point for a humanistic account like mine, and one which I already broached in chapter three—is that the sciences as we know them survive and are perpetuated because they have an important place within our cultural (or civilizational) matrix. This is not to say, e.g., that the sciences are only with us because we have the particular cultural framework or system that we in fact do; but it is to say that the sciences matter so centrally to us because we have, among other things, deep and abiding concerns for certain values like truth or understanding, the pursuit of which have been enshrined institutionally. The sciences are very important *human* pursuits that typically matter to us alongside various other such pursuits—including literary, religious, and aesthetic ones, like those I sketched over the past two chapters. Indeed, I take it that Polanyi captures this insight clearly when he notes: "[S]cientific value must be justified as part of a human culture extending over the arts, laws and religions of man, all contrived likewise by the use of language."[37] Murdoch offers a similar consideration, if more forcibly:

> Words are the most subtle symbols which we possess and our human fabric depends on them. The living and radical nature of language is something which we forget at our peril. It is totally misleading to speak, for instance, of 'two cultures', one literary-humane and the other scientific, as if these were of equal status. There is only one culture, of which science, so interesting and so dangerous, is now an important part. But the most essential and fundamental aspect of culture is the study of literature, since this is an education in how to picture and understand

[36] Ladyman seeks to emphasize this dimension in sketching his humane approach to scientism, claiming that science is "a uniquely universal form of culture." Ladyman, "Scientism with," 115.

[37] Polanyi, *Personal*, 173.

> human situations. We are men and we are moral agents before we are scientists, and the place of science in human life must be discussed in *words*. This is why it is and always will be more important to know about Shakespeare than to know about any scientist: and if there is a 'Shakespeare of science' his name is Aristotle.[38]

Murdoch and Polanyi alike stress the way in which science is a language-based human achievement; and Murdoch, to be sure, offers a strong and admittedly controversial contention that literature is the basis or foundation of human culture.[39] The insight I want to highlight from her, at any rate, is that science is something (or a set of things) that *we do* and have done—and, in conjunction with this, that our pursuit of it is carried out *within* a broader human culture that is animated and sustained by various values that are not themselves just or mainly scientific in character or provenance. This is not to say that, among other things, people would not wonder about questions of fundamental scientific importance if our culture, broadly speaking, were different than it is. But it is to say that science, especially as we currently know and have it, and in particular as naturalistic and scientistic philosophers discuss and tout its accomplishments, is squarely a human *cultural* accomplishment.

I should add this as well: A humanistic approach, like that which I am advocating, sits much more comfortably with this sort of acknowledgement, I think, than does a scientistic or scientifically naturalistic one. For a humanistic approach acknowledges straightaway the centrality of *human* culture, and the values that animate and undergird it, as it heralds the sciences as important (and foundational) cultural practices, but *also* many

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[38] Murdoch, *Sovereignty*, 34.

[39] Counting this contention from Murdoch as merely "controversial" might seem euphemistic in the highest degree. I think it would be unwise, though, to dismiss this sort of claim too easily for how extreme it might seem *prima facie*. For I think she highlights a fundamental and important point quite rightly: viz., if *anything* has tended to be at the root of human cultures traditionally, it is not so much *inquiry* like the sciences but instead, for example, narrative or history, taken as a *people*'s shared story or self-conception. One could add a point like Josef Pieper does in this regard—that festival and *worship*, which are so often bound up with such stories and (religious) self-conceptions, have traditionally been uniquely central to the formation and upbuilding of human culture. Cf. Josef Pieper [*Musse und Kult*] *Leisure, the Basis of Culture*, trans. Gerald Malsbary, with an introduction by Roger Scruton (South Bend, IN: St. Augustine's Press, [1948] 1998), esp. 50ff.

others alongside them—including aesthetic, literary, and religious ones. In my view, scientistic accounts, like those surveyed thus far, contend so specially for the uniqueness of the sciences that they in practice eclipse or distort the value of other such practices; and I have argued at length thus far about how this eclipsing tends to look concretely, as they variously misrepresent historical and religious forms of inquiry and exclude the *possibility* that certain forms of non-objectifying inquiry might in some respects be of similar or comparable, if different, value to the sciences.

Put differently, a humanistic approach keeps a keen eye on the way in which cultural practices and their respective insights or fruits have, stem from, or, in Wolterstorff's words, "are" traditions. And a stronger scientistic approach—like Rosenberg's, for instance—would tend to deny or underplay the importance or significance of such traditions. But as I have noted, scientistic *accounts* of the sciences and their achievements inevitably *invoke* such traditions, of which they consider themselves the philosophical keepers or apologists. If MacIntyre is right about a key mark of the Enlightenment, which scientistic thinkers still broadly count themselves as perpetuating and safeguarding the spirit of, it should not surprise us that their approaches embody this sort of forgetfulness or scorn toward something like the category of tradition, which they nonetheless subtly invoke:

> What the Enlightenment made us for the most part blind to and what we now need to recover is . . . a conception of rational enquiry as embodied in a tradition, a conception according to which the standards of rational justification themselves emerge from and are part of a history in which they are vindicated by the way in which they transcend the limitations of and provide remedies for the defects of their predecessors within the history of that same tradition.[40]

We have the sciences as we know and practice them because we are inheritors of an intellectual and institutional culture that has sustained and perpetuated them and, indeed,

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[40] Alasdair MacIntyre, *Whose Justice? Which Rationality?* (London: Duckworth, 1988), 7.

reiterated their significance and value to subsequent generations. What is more, this culture (construed admittedly broadly) and its history helps us to appreciate how the sciences (ought to) relate to other disciplines or cultural practices, like the humanities or arts, and also to broader (humane) cultural practices that many people and societies value and prize, like friendship or religion.

There is an important caveat that I should add to close this section: Claiming that the sciences are cultural practices is of course not to relativize them. Taking this sort of approach might seem to lead one in this direction, as it has certain practitioners of sociology of the sciences. But there is a very straightforward means, in my view, of resisting this sort of temptation, and that is to note that there is a good or sensible way of approaching the sciences sociologically and then also a crude or bad way. The good and healthy way, I think, following Susan Haack, is to note that the sciences are indeed cultural practices, as I am roughly counting them here, but that, as such, they are "attempting to discover how the world is, to devise explanatory theories that stand up in the face of evidence."[41] That is, they are not just *any old* cultural or social practices that could be counted on equal standing with plumbing or chess, say, or banking or fashion design. In a very peculiar way, they are cultural practices *ordered to* something like discovering and modeling the most fundamental aspects of the deep structure of the (material) world and reality.[42]

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[41] Susan Haack, "Towards a Sober Sociology of Science," *Annals of the New York Academy of Sciences* 775, no. 1 (June 1995): 259. To say this of the sciences is not to say, in my view, that other such practices (of inquiry, say) are *not* aimed at investigating how the world is and discovering the truth about it. But it might be, for instance, that they tend to do so in different ways. If my argumentation in chapter three is convincing, literary and artistic appreciation can at least in some cases afford us *critical* insights into how the world is, though these insights would not tend to arrive in the way that scientific insights or discoveries typically do. Likewise, I stressed in chapter four that religious forms of "inquiry," so to speak, often yield, or are taken to yield, such kinds of fundamental truth, though they often do so in a way that is *self-implicating*—i.e., in a way that does *not* just allow, as it were, the participant to filter herself out of the picture.

[42] What is more, the cross-cultural emergence of important scientific questions and standardized methods of answering them arguably bespeaks their foundational character and sense of perennial

This sort of further qualification regarding the sciences *among* various cultural practices would also apply, I take it, to various religious traditions.[43] In the major monotheistic traditions, for instance, there is a very keen emphasis on *God's* initiative in reaching out to and interacting with humanity. So while these traditions and their constitutive practices would count as activities that *we* engage in certain key respects, we would always need an asterisk of sorts affixed to that claim, which would stress that our activity or engagement in such settings is taken to be *in response to* (and prompted by) God's own initiative and self-revelation. Avoiding the cheap relativization of various such cultural practices, in other words, can be achieved more ably by considering them with delicacy and particularity. Notice, too, that this is specifically the sort of precision and care that I called for in chapter four but that, with regard to matters religious, key scientistic and secular humanist accounts are sorely lacking.

5.2 Cultural History, Genealogy, and Philosophy

I have said a good deal thus far about how I see a sort of cultural history or genealogy of the sciences to be centrally at play in, for instance, the versions of philosophical naturalism and scientism that I surveyed in the first chapter. Another way I described these cultural histories or genealogies is as *philosophical-historical* takes on the sciences, their methodologies, and their achievements. I want to say a bit more about these notions and how I am invoking them. In the first chapter, I footnoted a passage in which

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importance. For more on this, see John Paul II, Encyclical Letter *Fides et Ratio*, on the relationship between faith and reason (Boston: Pauline, [1996] 1998), introduction.

[43] The invocation of practices here, both with regard to the sciences and various religious traditions, is no doubt admittedly loose—for in both cases, it is probably more apt to speak of various practices *within* these broader cultural practices and so therefore to consider them in a more fine-grained manner.

Putnam speaks of the need for "cultural history" to be done or offered in regard to a philosophical sub-discipline like ethics.[44] Consider at greater length how he spells this out:

> I speak of "what we have come to call *ethics*," because my claim is that ethics is something with a long cultural history. Ethics has developed and changed throughout recorded history (and doubtless had a prehistory that is much longer than recorded history.) . . .
>
> To illustrate what I mean by the "cultural history" of ethics, I will offer a much-too-brief account of a few moments in the development of Western ethics . . . . [T]he term "ethics" in the West assumes something like its present meaning with Aristotle's lectures, particularly the ones written up by his students and preserved for us as the *Nicomachean Ethics*.[45]

Putnam continues this sketch, this cultural history of ethics, in a variety of ways, in particular by highlighting various Enlightenment developments after having laid such a summary classical foundation.[46] Regardless of its particularities, the point here is that, to some degree, a philosophical domain like ethics or moral philosophy, in order to retain its vitality, needs to be accompanied by a cultural *history* that speaks to its origins and subsequent developments and also to the present-day state and significance of various debates within it. Though many more recent philosophers might balk at a claim such as this, they surely cannot dispense with it altogether. For even the very ordinary practice of highlighting *recent* research on a topic—giving the *status quaestionis* via, say, a literature review—involves basically this technique. For in doing so, one is *placing* her own research within a broader arc or trajectory and showing how, even if only recently, it *fits within* other debates of note.

Another basic reason for stressing this dimension, as Williams notes, is so that philosophers themselves do not, failing to heed Santayana's warning, overlook historically

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[44] I take Putnam in this discussion to be adverting to something like *philosophical* ethics, broadly speaking—that is, not just to any old moral analysis or evaluation by human beings, but instead to something like a more formal and philosophical approach to such topics.

[45] Putnam, "What Evolutionary Theory," 57.

[46] Ibid., 58ff.

relevant treatments of issues or problems that would in fact interest them nowadays.[47] There is no need, in ethics or elsewhere, to reinvent the wheel.[48] It also true, of course, that ethics as a philosophical sub-discipline is crucially *practiced* or defended in certain cultural institutions—colleges and universities chief among them—that are taken to be its key guardians and, in some sense, its perpetuators. So these institutions need—perhaps especially nowadays—to keep such cultural histories vivacious for the sake of defending and maintaining, for instance, the role of ethics within a philosophical and more broadly humane education.

More can be said to this effect, as Williams also notes. There can be a felt need to *argue* nowadays for the value, role, or place of a discipline like philosophy—or a specific sub-discipline like ethics—amidst, sometimes, an ever-growing chorus of questions about its value and worth.[49] Once again, I think these are precisely the sorts of concerns to which cultural histories or genealogies, to emphasize these notions, generally speak. For they tell us valuable things about the role that the discipline has played, the problems it has helped to clarify, alleviate, or solve, and so on. They effectively do the kind of work that the varieties of naturalism I surveyed in chapter one do on behalf of the sciences—they capture in various ways their *spirit* and speak, with vindication, as regards their accomplishments.

It is also difficult to ignore the way in which cultural histories or genealogies are invoked—especially with regard to the sciences—to mitigate or (attempt to) settle various boundary disputes and issues pertaining to demarcation. A significant and fairly recent

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[47] What I have argued thus far suggests that various forms of scientism, scientific naturalism, and secular humanism would profit especially from heeding this sort of caution, particularly for the ways in which some of their practice-obscuring tendencies, as I have called them, tend in a decidedly positivistic direction—a direction that has been amply criticized historically.

[48] Bernard Williams, "What Might Philosophy Become?," in *Philosophy as a Humanistic Discipline*, 204.

[49] Ibid.

issue on this front is the discussion surrounding Intelligent Design (ID) theory. There has been a fairly loud chorus of voices arguing *against* the scientific legitimacy of proposals of this sort, principally on account of the fact that they purportedly look to or gesture toward *super*natural causes or entities in offering explanations of various natural phenomena. In not being methodologically (or ontologically) naturalistic, some claim, ID theory purportedly violates the causal closure principle regarding explanations or (scientific) accounts of the natural world. Proponents of the theory say, though, that they are simply pointing to the fact that various mechanisms found in nature *preclude* the normal varieties of (evolutionary) scientific exposition such that, by way of inference to the best explanation, something more or different is demanded. They also claim that the proposals they make are normally testable, even if of an atypical character.

It seems to me that the adjudication of such matters typically involves advertence to something specifically like a cultural history or genealogy of the sciences. For to think about whether a theory like ID *ought* to count as science, scientists and philosophers need to be able to *abstract* from current scientific practice in biology, chemistry, or physics and think about whether this particular sort of theory *ought to fit* within the more general parameters or boundaries of the sciences. Hence the role, as I see it, of cultural history or genealogy, according to which—as we see in the various expositions of philosophical naturalism and scientism—the sciences *characteristically* have avoided the invocation of, say, supernatural causes and entities; and therefore, in these particular current circumstances they have good reason to as well. This is at least, I take it, how such a case would typically be argued.

5.2.1 Collingwood, the Second Degree, and Humanistic Philosophy

All this is to say that cultural history or genealogy—like philosophy, at least in certain fundamental respects—is characteristically, as Collingwood puts it, of the *second degree*. Consider how he speaks of philosophy in particular in this way:

> Philosophy is reflective. . . . Philosophy may thus be called thought of the second degree, thought about thought. For example, to discover the distance of the earth from the sun is a task for thought of the first degree, in this case for astronomy; to discover what it is exactly that we are doing when we discover the distance of the earth from the sun is a task for thought of the second degree, in this case for logic or the theory of science.[50]

I do not want to attempt to speak monolithically about the practice of philosophy; but there is an unmistakable manner in which it uniquely allows, and has allowed, us not so much to *do* this or that form of inquiry, but instead to *reflect upon* what we are doing when we do some such thing—say scientific investigation, composing fiction, or engaging in moral deliberation. Put differently, philosophy tends to prescind from the given activity or mode of thought or inquiry at hand and offer, as I highlighted with Sellars, a kind of bird's-eye view of how it compares, for instance, to other activities or forms of thought and inquiry. This is in a sense, too, what various forms of cultural history or genealogy tend to work toward or accomplish.

To this effect, if we recall again the versions of philosophical naturalism and scientism that I surveyed in chapter one, we see about them something decisively *second-degree*. That is, they step back and abstract from the sciences and also from their present-day status to offer a kind of recapitulation of them (and their successes) that carries philosophical and rhetorical weight on their behalf. And in some cases they can help to adjudicate boundary disputes and the like, as with the example of ID theory and its credentials. They help us to see or think about the sciences and what they yield from, as it

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[50] Collingwood, *Idea of History*, 1–2.

were, a different altitude or to appreciate them—to invoke Collingwood again—in ways that we might not have previously, at least not explicitly.[51]

Humanistic philosophical reflection, along with the engagement of such cultural histories or genealogies, can help us, again, to think more clearly and responsibly about different approaches to life or modes of engagement with the world. In contrast with the varieties of scientism surveyed thus far, and certain stronger forms of scientific naturalism, a humanistic philosophical outlook gracefully tends, in my view, in the direction of *integration*. It can particularly do this, I take it, because it begins with a rather more inclusive starting point: Not one of claiming that the sciences, say, have given us the best view of the world and our experience in it, but instead that they have given us a particularly good view into such matters *considered in a particular light*.[52] The humanistic thinker would be quick to add, though, that literary approaches have variously done likewise—along with, if he is more inclusive, religious ones too—at least in some important instances. In other words, rather than beginning with a posture of superiority regarding the sciences and their achievements and, in some cases, a concomitant *antagonism* regarding other modes of inquiry or approaches to life and the world, a humanistic approach in principle lends itself toward seeing how various such approaches fit or hang together. Its posture, then, I take it, is decidedly more irenic and reconciling. Bearing these considerations in mind, I want now to return to the material of the previous chapter and claim that a humanistic approach to such matters—specifically with regard to certain points of tension regarding

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[51] See Collingwood, *An Essay on Philosophical Method* (Oxford: The Clarendon Press, 1933), 161.

[52] In this vein, one might advocate for something like the following line of thought: Physics affords us the best understanding of *physical* reality; chemistry the best understanding of *chemical* reality; and so on. This sort of approach faces more obvious concerns, however, when the subjects at hand shift toward more distinctly *human* realities and domains of concern. Is it the case, say, that psychology (or neuroscience) *just* gives us the best account or understanding of *psychological* reality? The concerns that I raised in chapter three might lead one to think otherwise, or at any rate to be circumspect toward an affirmative response. A humanistic orientation to such matters would lead one not to feel pressure toward simply deferring to the domain-specific science in such cases but would instead opt for a more holistic approach to an answer.

the sciences and the religious—handles such matters more respectfully and with greater nuance than a scientistic one does, and that such an expansive or inclusive humanism, as I am calling it, is in fact generally much more apt and attractive, in light of such considerations, than a *secular* or exclusively humanist one.

5.3 An Improvement: Integral, Expansive Humanism?

Recall my primary contention in the previous chapter: That certain key scientistic and secular humanist approaches tend in crucial respects to misconstrue the religious—often casting it too much in terms of scientific-grade *claims* and so insufficiently as a matter of *comportment* with regard to oneself, others, the universe at large, and God or the divine. I want to say a bit more to this effect and argue that such forms of scientism and secular humanism are in fact *unjustly* restrictive with regard to the religious: that is, that they display a certain sort of intellectual vice, namely prejudice, with regard to religions and religious approaches to life and the world. I want also to contend that a more integral, expansive sort of humanism, of the sort I am proposing, does not face such problems.

Note again that I am invoking the notion of humanism especially in contrast to scientism, specifically to point to the ways in which, in my view, stronger scientistic accounts like Rosenberg's seem to lack the resources for owning up to the *cultural* components of the sciences and, indeed, the cultural *histories* or genealogies of them that naturalistic and scientistic philosophers tend to adduce on their behalf. I take it, on this front, that a humanistic approach to such matters can deal more ably with these realities, for a humanistic approach, conceived in the manner that I am proposing, *leads with* cultural concerns, proceeding with them front-and-center. In particular, it acknowledges straightaway that the sciences, among many other pursuits, are cultural (or social) practices that are sustained, cultivated, and justified within a broader humanistic matrix; and it

thereby presupposes, accordingly, that cultural histories or genealogies will variously be put forth on their behalf.

My question or concern now is: Why should we *not* think of religions and religious approaches to life and the world in roughly the same sort of way that we do the sciences, within such a humanistic matrix? My contention is that varieties of scientism and secular humanism that would strive to treat such religious approaches or various religion*s* markedly differently are in fact being *prejudicial* and unfair to them in certain key respects. To begin, consider some prefatory remarks from Andrew Copson regarding the notion of humanism: "We use the single words 'humanism' and 'humanist' unqualified, to denote a non-religious, non-theistic, and naturalistic approach to life."[53] In a similar vein, consider Nagel's non-endorsing comments on characteristically modern and contemporary humanism:

> There is another type of response that tries at least partially to fill the gap left by the death of God, working from the inside out. This is humanism, the view that we ourselves, as a species or community, give sense to the world as a whole. Human beings collectively can fill the place of the world soul. The significance of an individual life does depend on its embeddedness in something larger, but it is the collective consciousness of humanity rather than the cosmos the plays this role.[54]

The idea at play, I take it, in both of these passages is that *humanism* characteristically offers a kind of approach to life, meaning, and value that specifically eschews reference to a kind of cosmic, transcendent, or divine significance but that instead locates such matters more *simply* humanly—i.e., with ultimate reference to *us* and our collective concerns. Noting this typical emphasis, however, my crucial question is: Why should we think that humanism *ought* to call for this sort of eschewal of the transcendent or religious in any particular way?

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[53] Copson, "What Is," 4.

[54] Nagel, "Secular," 10.

I want to claim that striving thus in fact leads to greater tension for scientistic and secular humanist views.

5.3.1 Humanism's History

I noted briefly in the first part of this chapter the pedigree of humanistic thinking—how in the western tradition it flourished in a particular way out of a desire to resource classical texts, languages, and approaches to the arts and culture, especially during the Christian Renaissance. Charles Taylor has recently made a further claim about the subsequent development of the notion of humanism and its import, particularly through the modern era:

> [T]he coming of modern secularity . . . has been coterminous with the rise of a society in which for the first time in history a purely self-sufficient humanism came to be a widely acceptable option. I mean by this a humanism accepting no final goals beyond human flourishing, nor any allegiance to anything beyond this flourishing. Of no previous society was this true.[55]

Taylor notes that, at various junctures, there were no doubt ancient and other iterations of a kind of self-sufficient humanism, e.g. ancient Epicureanism, but that these approaches were never *widespread* in the way that a peculiarly non-religious form of humanism broadly is nowadays.[56]

To note this is simply to contextualize and make better historical sense of sketches of humanism like Copson's or Nagel's. But again, I want to ask whether they are in fact more sensible than the alternative. Return to the prior passage from Wittgenstein about the way in which a person's suffering might lead him to belief in God—not so much as through an argument, but rather in the midst of his life's trials. Take a similar consideration from Taylor. The question that in a sense motivates his concerns about

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[55] Charles Taylor, *A Secular Age* (Cambridge, MA: The Belknap Press of Harvard University Press, 2007), 18.

[56] Ibid., 19.

secularity is the following: "[W]hy was it virtually impossible not to believe in God in, say, 1500 in our Western society, while in 2000 many of us find this not only easy, but even inescapable?"[57] Taylor adduces a host of considerations to this effect, about how, for instance, the common view of the world then was more enchanted—with divine, angelic, and demonic forces—and that this view was supported and maintained by the most prevalent political orders of the day, viz., monarchies with religious affiliations.[58] In a word, the *culture* then was much more characterized by a religiously transcendent orientation, making it quite understandable that such an outlook would have been the ordinary person's default—as, say, in the manner that a contemporary person in the industrialized West nowadays would tend, other things being broadly equal, to have a kind of liberal-democratic (in the broad sense) political temperament.[59] Taylor draws this reflection together thus: "in the outlook of European peasants in 1500, beyond all the inevitable ambivalences, the Christian God was the ultimate guarantee that good would triumph or at least hold the plentiful forces of darkness at bay."[60]

As Taylor himself contends, *this* sort of sensibility does not largely hold in the same way, at least in the western world, nowadays as it did then. But I want to ask or wonder whether trying positively to *avoid* or *discount* such a sensibility is in fact detrimental to the aspirations of a more broadly humanistic outlook. That is, is attempting to *make* a humanistic approach more secular—and so less religious or transcendently oriented—

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[57] Ibid., 25.

[58] Ibid.

[59] To advert again to Wittgenstein's observation: There might well have been something about the rigors of life then, and the concomitant absence of various technological comforts and solutions to various problems, that lent itself to such a disposition.

[60] Taylor, *Secular*, 26.

actually, in some sense, self-defeating? Consider Jacques Maritain on this front, who considers such matters in a particularly Christian vein:

> Here we see the peculiar vice of classical humanism. This vice, in my judgment, concerns not so much what this humanism affirms, as what it negates, denies and divides. It is what we may call an *anthropocentric* conception of man and culture. . . . We might say that the error in question is the idea of nature as self-enclosed or self-sufficient. . . .
>
> Instead of an *open* human nature and an *open* reason, which are real nature and real reason, people pretend that there exists a nature and a reason isolated by themselves and *shut up* in themselves, and excluding everything which is not themselves. . . . for human life, for the concrete movement of history, this means real and serious amputations.
>
> Prayer, divine love, supra-rational truths, the idea of sin and grace, the evangelical beatitudes, the necessity of asceticism, of contemplation, of the way of the Cross,—all this is either put in parenthesis or is once for all denied. In the concrete government of human life, reason is isolated from the supra-rational.[61]

Maritain's take on these matters, to be sure, is specifically Christian, but I think the point that he is making in regard to "classical humanism," broadly construed, can be taken more generally: That is, that a certain approach to humanism can actually tend to amputate, as he puts it, matters of concern that, for a great many people, are quite *integrally* human—like prayer, asceticism, or engaging in contemplative practices or supererogatory works of compassion. Indeed, as Taylor notes—in conjunction with the discussions of religion as a virtue in the previous chapter—such vertical concerns are quite common and fundamental to a whole range of eastern and western philosophical-religious traditions of thought and practice:

> Higher beings, like Gods or spirits, or a higher kind of being, like the Ideas or the cosmopolis of Gods and humans, demanded and deserved our worship, reverence, devotion or love. In some cases, this reverence or devotion was itself seen as integral to human flourishing; it was a proper part of the human good. Taoism is an example, as are such ancient philosophies as Platonism and Stoicism. In other cases, the devotion was called for even though it be at our expense, or conduce to our good only through winning the favour of a God. But even here the reverence called for was real. These beings commanded our awe. There was no question of treating them as we treat the forces of nature we harness for energy.

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[61] Jacques Maritain, "Integral Humanism and the Crisis of Modern Times," in *Scholasticism and Politics*, trans. and ed. Mortimer Adler (New York: Macmillan, 1940), 2–3.

> In this kind of case, we might speak of a humanism, but not of a self-sufficing or exclusive humanism, which is the contrast case which is at the heart of modern secularity.[62]

Taylor's contention herein, I take it, is that such outlooks or worldviews might well exhibit a kind of crucially *humanistic* approach or disposition, but that this approach or disposition need not at all be taken to *exclude* such dimensions of vertical reference or transcendent orientation. That is to say, especially in the grander historical scheme, the thought that a humanistic approach ought somehow to be irreligious or transcendently inoculated is, in a sense, the aberrant view.[63]

To this effect, consider a comparable reflection from Wittgenstein:

> We could almost say, man is a ceremonious animal. This is partly false, partly nonsensical, but there is also something in it.
>
> In other words, one might begin a book of anthropology in this way: When we watch the life and behaviour of men all over the earth we see that apart from what we might call animal activities, taking food &c., &c., men also carry out actions that bear a peculiar character and might be called ritualistic.
>
> But then it is nonsense if we go on to say that the characteristic feature of *these* actions is that they spring from wrong ideas of the physics of things. (This is what Frazer does when he says magic is really false physics, or as the case may be, false medicine, technology, &c.)[64]

Wittgenstein's contention here, in a sense, seems to be: Why should one—say an anthropologist, which Frazer was—who is attempting to take stock of or catalog human behavior and societies *not*, in doing so, take respectful account of various kinds of

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[62] Taylor, *Secular*, 18–9.

[63] I do note that such historical aberrance might not deter many advocates of a more secular humanism: In fact, they may well take this sort of relative aberrance to be a badge of honor.

[64] Ludwig Wittgenstein, [*Bemerkungen über Frazers* Golden Bough] *Remarks on Frazer's* Golden Bough, trans. A.C. Miles, ed. Rush Rhees, (Doncaster: The Brynmill Press, [1967] 1979), 7e: » Man könnte fast sagen, de Mensch sei ein zeremonielles Tier. Das ist wohl teils falsch, teils unsinnig, aber es ist auch etwas Richtiges daran.

» Das heißt, man könnte ein Buch über Anthropologie so anfangen: Wenn man das Leben und Benehmen der Menschen auf der Erde betrachtet, so sieht man, daß sie außer den Handlungen, die man tierische nennen könnte, def Nahrungsaufnahme, etc., etc., etc., auch solche ausführen, die einen eigentümlichen Charakter tragen und die man rituelle Handlungen nennen könnte.

» Nun aber ist es Unsinn, so fortzufahren, daß man als das Charakteristiche *dieser* Handlungen sagt, sie seien solche, die aus fehlerhaften Anschauungen über die Physik der Dinge entsprängen. (So tut es Frazer, wenn er sagt, Magie sei wesentlich falsche Physik, bzw. falsche Heilkunst, Technik, etc.) «

(religiously) *ritual* human activity and observance?[65] Why should one feel inclined, save perhaps through an unjust spirit of animus, to castigate such elements, or to diminish them within the anthropological picture—as being just crudely proto-scientific—when they seem so utterly fundamental across epochs and cultures? And why, if one were trying to do so, should one think that scientific data—say physical theories—are the apt grounds on which to excoriate or jettison them?

In a basic sense, Wittgenstein's observation is not unlike Aristotle's at the beginning of the *Politics*: That man, even more than bees and various other "gregarious" species, is uniquely a political animal, having as he does the faculty of speech.[66] A most striking aspect of Aristotle's foundational claim, in my view, is that he does not try to *justify* how or why this is the case, but instead—in anticipation of a sort of spirit that I am favorably describing as humanistic—simply to acknowledge and work with it. Why should one not, in other words, do the same with the religious or the broadly ritualistic?[67] Why, instead of viewing such dimensions of human life and practice as somehow uniquely perverse or intractable, should one not think of them in some basic light as the practices and behaviors of "natural beings in a natural world"—though their explicit orientation within such practices and behaviors is taken, at least at times, to transcend this natural order? Why not think of such behaviors and practices, individually and corporately—especially viewed historically—as *an* important and in some sense inescapable dimension of human life and culture? This is the sort of central concession, I take it, that those who

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[65] I surely should note that there are many varieties of ceremonial and ritual activity that are not religious (like military parades and graduations, say); but it is also worth noting that, in all likelihood, the religious dimensions of cultures and societies have often sustained their ceremonial or ritual dimensions more than any others.

[66] Aristotle, [*Politica*] *Politics*, in *The Basic Works of Aristotle*, ed. and with an introduction by Richard McKeon (New York: Random House, 1941), 1253a.

[67] The various "natural" relationships that, for Aristotle, predominate in human society share the end, as Richard McKeon puts it, of helping specially to foster "mere living." See Richard McKeon, Introduction, in *The Basic Works of Aristotle*.

study religion from the perspective of cognitive science make when they claim that it is cross-culturally natural. Recently, consider Aku Visala and Justin Barrett to this effect: "Religion is natural in the sense that there are general patterns of behavior and ideas that can be seen in most, if not all, human cultures. This *cross-cultural naturalness* entails that at least some aspects of religion are not culture-specific but have to do with something universal about humans."[68]

I think that approaching religions or the religious thus, from such a more *integrated* humanistic perspective—approaching them, in a word, as normal or ordinary dimensions of human life and society—avoids in a crucial way what Bernard Williams considers the "very obvious paradox" that besets more aggressively non-religious or secular forms of humanism. For humanism is generally taken, as I have already noted, to be concerned with a fundamental *affirmation* of human potential, activity, and ingenuity—be it political, scientific, moral, or whatever else. For Williams, though, religion is very squarely something that humans have, like the sciences or other forms of engagement with each other and the world, so to speak, *invented*—or fostered and perpetuated very steadily throughout our history as a species.[69] So non-religious or secular humanists, presumably like scientistic thinkers, are faced with a troubling question: "[I]f humanity has invented something as awful as . . . religion . . . what should that tell them about humanity?"[70] That is, such positively irreligious humanists have a snare to face that those of a more expansive or integral ilk, of the sort I am sketching, do not: namely, accounting for how or why so

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[68] Aku Visala and Justin L. Barrett, "In What Senses Might Religion be Natural?," in *The Naturalness of Belief: New Essays on Theism's Rationality*, eds. Paul Copan and Charles Taliaferro (London: Lexington Books, 2019), 70–1.

[69] I do not take him to be invoking the notion of "invention" here especially pejoratively, but instead just to emphasize, in the way that I have been stressing, that religion is something that *we* characteristically do.

[70] Bernard Williams, "The Human Prejudice," in *Philosophy as a Humanistic Discipline*, 135.

many of the things that human beings peculiarly do are, on the grand scheme of things, worthwhile and laudable—e.g. political activity, moral development, cultivation of the arts and music, love, and so on—but also why, on the other hand, this *one* central component of human life and society, religion, so especially pervasive, is somehow singularly pernicious or detrimental.

5.3.2 Inherent Vices?

The question I am now broadly reckoning with, then, is: Why should we think that it is *better* for a humanistic approach to be *secular*—i.e., to be non- or ir-religious? I am not wondering whether a humanistic approach needs to be *specifically* religious. But what is the upshot of its being particularly non-religious in its orientation, or specifically arranged *against* what is religious in its outlook or disposition? A similar question can be posed, indeed, to some of the forms of scientism that I have considered herein—and, to be sure, to forms of philosophical naturalism more broadly: Why suppose that *religious* approaches to life and the world, or religion*s*, should be counted as the chief or particular antagonists of a robustly humanistic outlook?

From what I can tell, this sense of antagonism specifically with regard to religions, or religious approaches to such matters, is largely culled—to return to my most central contention—from a take on the purported *history* of such matters: namely, that religions and religious ways of thinking have supposedly been uniquely antagonistic to the pursuit of the sciences or more enlightened and sophisticated ways of thinking. But again, this is a case that would need to be considered more rigorously on its historical (de)merits; and so far as I can tell, it is often made, if at all, in a kind of roughshod narrative fashion, according to which religions, religious leaders, and the like have been particularly antagonistic to the work of scientific progress. The trouble with such a line of thought, though, is that it arguably has things quite backwards.

One could just as well claim in response to such arguments that religious milieus, like those of medieval Christianity and Islam, uniquely *helped* the sciences to develop and flower—particularly within the nascent university system. And indeed, a humanistic thinker—and especially one who cares about the centrality and exemplarity of the sciences—might have especially good reason to countenance a point like this. For in the West at least, the Christian medieval synthesis, which strove for a vital integration of faith and reason, sought in a very important way to *make more space*, intellectually and institutionally, for the practice of the sciences, the study of philosophy, and the study of and commentary on various classical texts within the university system. More precisely, the medieval synthesis crucially *shifted* the western paradigm away from the monastic schools that were, in a word, somewhat less scientific and more liturgical-symbolic in their orientation to education and learning, and toward the university system, in which the sciences as we have come to know them developed and thrived most ably. The older monastic model tended to emphasize, among other things, a more spiritual approach to learning, with a keen emphasis on the symbolic *significance* of the world and our experience of it. From a spiritual perspective, this might have been a more holistic approach, but it arguably did not cultivate as lively a setting for the institutional development and consolidation of the sciences as did the university system—the development of which numerous historians consider a key manifestation of a particular brand of science-conducive medieval humanism.[71]

These considerations segue, I think, into another problem for many scientistic and secular humanist accounts. I have noted thus far that an advantage of a broadly humanistic approach to the sciences, in contrast with a scientistic one, is that it can account more ably

[71] For a fuller commentary on and development of these points, see Klassen and Zimmermann, *Passionate Intellect*, ch. 2.

for the *cultural* dimensions and apparatuses upon which the sciences depend—through which they live and move, so to speak, and have their being. In noting this, though, I might also note that *this* dimension in particular shows forth a certain likeness between the sciences and religions. Mikael Stenmark thinks that emphasizing this likeness is the single *most* promising avenue for considering the sciences and religion in conjunction with each other:

> In fact, the starting point for a more detailed account [of science and religion] should be that science and religion are not merely sets of beliefs or theories plus certain methodologies, but are two social practices. That is to say, whatever else science and religion might be, they are complex activities performed by human beings in co-operation within a particular historical and cultural setting. [72]

These considerations from Stenmark of course dovetail with the preceding sketch of cultural practices drawn from Carroll et al. We do well to recall here, too, something like the cautionary remarks from Heidegger and Haack: One runs an obvious risk of thinking of the sciences or various religions as *just* cultural practices; and neither he nor I is commending this sort of approach. (Indeed, we might note that this sort of approach arguably became the pernicious outlook of certain Renaissance humanists who too sweepingly thought, in a proto-relativistic vein, that *all* cultural practices, institutions, and edifices were *just* subject to judgment and criticism as such, being the human artifices they are.[73]) But I take it that we are both noting that such an acknowledgement ought to be foundational in any sort of comparative engagement between the two.[74] And the risk, I

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[72] Mikael Stenmark, "Ways of Relating Science and Religion," in *The Cambridge Companion to Science and Religion*, ed. Peter Harrison (Cambridge: Cambridge University Press, 2010), 292. See also Mikael Stenmark, *How to Relate Science and Religion: A Multidimensional Model* (Grand Rapids, MI: Eerdmans, 2004).

[73] See Cooper, *Measure*, 49.

[74] Mark Johnston, who quite openly seeks—through his "legitimate naturalism"—to distance himself from the aforementioned undergraduate atheist tendencies of some of his apparent intellectual allies, offers something of a similar characterization of likeness between (the) science(s) and religion(s): "Science is first and foremost a complex and open-ended collection of ways of finding out about the world. . . . Religion, for its part, is a complex and open-ended collection of cultic practices from which the practitioners derive, or hope to derive, 'existential strength,' that is, a deepened capacity to deal with manifest, large-scale structural defects of human life." See Johnston, *Saving God*, 43–4.

take it, that such a preliminary acknowledgement staves off is, in the first instance, the positivistic, practice-obscuring tendency variously on display in, e.g., the forms of scientism and secular humanism that I have surveyed herein—a tendency manifest not just in regard to the sciences, but also in regard to religions and the religious. Additionally, notice the humanistic orientation to an analysis like Stenmark's, and especially its *convergence* with regard to these two classes of (surprisingly) similar human cultural practices—rather than its assertion of a sort of radical divergence or difference between them. In light of this, the problem for scientistic and secular humanist thinkers, on my view, is: If the sciences and religions *are* strikingly similar in this fundamental respect, then why consider them so particularly to be at odds with each other?[75] Why not consider them, to the contrary, to be important dialogue partners and potential sources of a more *convergent* view of the world—as significantly distinctive religious traditions, notably including Catholic Christianity and Bahá'í, have contended?[76] It seems to me that such a strategy is much more available to an *expansive* (or inclusive) humanistic approach, as I am calling it—for it generally invites and welcomes this sort of coherence-seeking, rather than alleging conflict. The expansive or inclusive humanist, that is, feels no pressure or need to balk at religiosity or religions, for he sees them as important, meaningful cultural practices that, as such, ought to be given their due, among many others. He feels no pressure or need to *single them out* as being somehow antagonistic toward human life, wellness, and flourishing,

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[75] I of course do not want to sound as though this *broad* dimension is the only or main one on which these two classes are noteworthily similar. Both also generally, for instance, seem keenly oriented toward helping us to *understand* better our place or role in the cosmos, even if that place—as some scientistic thinkers would hold—is taken, at the end of the day, to be quite devoid of special significance or meaning. Such an insistence seems to be at the core, e.g., of Rosenberg's argumentation in *Atheist's Guide*.

[76] Interestingly, both Catholic Christian and Bahá'í thinking embraces the notion of convergent harmony between the insights of faith and those of reason; and what is more, they both embrace the metaphor of these two avenues' being as wings upon which one can ascend to contemplation of the truth about humanity and the world. See John Paul II, *Fides et Ratio*, introduction; also see Johnston, *Saving God*, 45. Indeed, in both traditions, there is also a corresponding insistence *against* advocating for views that ostensibly contradict our best science.

particularly according to a purportedly scientific cast of mind. I want to claim that the scientistic and secular humanist authors I highlighted in the previous chapter are effectively *exclusively* humanistic and that *this* sort of exclusivity actually poses greater problems for them than it does solutions. Notice, too, that an integral, expansive humanist who takes a more sympathetic and less contentious posture with regard to religions and religious approaches can also offer criticism of them within such a framework. If some sort of religious comportment or system seems, for instance, to be injurious to other *humane* goods—like familial and friendship bonds, political solidarity, or adherents' psychological wellness and stability, say—then an integral, expansive humanist could surely criticize it on *these* grounds as being, at the very least, *humanistically* wanting. And indeed, I take it that many traditionally would have offered such a critique as a sort of important demarcation criterion between robust religions, on the one hand, and *cults* and varieties of superstition and fanaticism on the other. (Part of the trouble, of course, with many forms of scientism and secular humanism is that they want to chalk *all* things religious up, without a great deal of care or nuance, as being cultish or fanatical.[77]) In general, the latter sorts of movements tend to be particularly harmful toward various other humane goods whereas, arguably, the former tend to at least in some respects have avenues for integrating them and supporting their development in adherents' lives.

A particular problem, then, that scientistic and secular humanist accounts face, as I have been gesturing, is that of being *prejudicial*—that is, of exemplifying a particular sort of intellectual vice, prejudice, particularly vis-à-vis religious approaches to life and the world and various (prominent) religious traditions. Ian James Kidd has recently argued to this effect regarding scientism: that it especially tends toward *close-mindedness*.[78] The thought

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[77] Cf. ch. 4, n. 17.

[78] Ian James Kidd, "Is Scientism Epistemically Vicious?," in *Scientism: Prospects and Problems*, 152ff.

here is that if one takes the sciences to be the *only*—as Rosenberg does—or even just the best or most paradigmatic—as the advocates of weak scientism do—avenue(s) for epistemic success or reliability, one might thereby easily *close himself off* to other significant ways of seeing or appreciating the world and rendering his and others' experience of it intelligible. I have argued already that this tendency is on display in Rosenberg's treatment of history, and that weak forms of scientism veer in this direction with regard to various non-objectifying forms of inquiry. Kidd commends, instead, an attitude of *humility* in the face of religious and other not-directly-scientific claims about various matters.[79] This is not to say, of course, that one needs to countenance *all* such claims equally; but it is to say that one does well to show them a sort of principled *respect*, particularly if they are emanating from a source different than what the sciences normally consider—and also if they are truly and deeply meaningful to others in peculiar ways. An example like Newman's treatment of his heart's movements and their predilection toward the divine, which I noted, might well be a useful example of this sort.

I want in effect to raise a similar flag to Kidd's as regards scientism and secular humanism. But I want to claim that the tendency of scientistic or secular humanist approaches, of the sort I have surveyed herein, is particularly one of *prejudice*. I say this because they in effect *single out* religions as being culprits in bearing various (epistemic and other) negative fruits. These purported ill effects are manifold, they claim, as I have noted: causing conflict, strife, and war; leading people to think irrationally; proposing misleading explanations of various phenomena; and so on. But again, why should one think that *religions* or being religious lead people to do these things in any *peculiar* sort of way? Politics and political affiliations certainly lead people to do these same sorts of things, as do sexual and romantic desires and commitments (gone awry). But many scientistic, and especially

[79] Ibid., 160ff.

secular humanist, thinkers seem quite content to accept and praise these other dimensions of human life and culture as just that—important (and commendable) dimensions of human life and culture. To be sure: There might in fact be convincing histories on which religions or religious ways of thinking *do* tend to yield such problems uniquely; but there also surely are competing histories that point to the ways in which such *other* cultural practices yield comparably bad fruits. (Indeed, one angle on the problem of religious violence, e.g., is that it is more often *political* violence that comes to be affiliated with or cloaked in purportedly religious allegiances.) And there might likewise be different histories on which religions and religious approaches to the world tend to yield uniquely *good* or promising fruits. Kelly James Clark draws attention to this possibility:

> Religious critics, who trot out horrific anecdotes such as the September 11th terrorist attacks and female genital mutilation, ignore the goods delivered by religion. In addition to generosity and honesty, as noted above, religious belief has historically delivered many other great goods. Consider Christian involvement in the eradication of infanticide, gladiatorial games, and slavery. Granted, slavery wasn't abolished for centuries, but very early on Christian slave owners were admonished to treat their slaves with compassion, and their slaves were considered, unlike in pagan belief systems, equals in the eyes of God. What about religious involvement in poverty and famine relief, and the general kindness showed by the believer toward her children, neighbor, or even a stranger (not to mention widows, orphans, and prisoners)? In the West, institutions such as hospitals, universities, orphanages, and alms barns all owe their creation to Christians.[80]

Similar achievements could surely be adduced vis-à-vis various other religious traditions; but the overriding point is: Why do scientistic or secular humanist thinkers get to eschew *these* sorts of historical considerations in deference to contrary ones? To do so, in my view, just or mainly with regard to religions or religious approaches to life and the world is in a key way unfair and prejudicial toward these cultural practices or dimensions of human life. An integral, expansive humanist would not want to single out some such domain in the

[80] Clark, *Religion*, 163.

way that scientistic and secular humanist thinkers habitually do. My claim, in other words, is that there is in such scientistic and secular humanist accounts a kind of singular *injustice* being done to religions and the religious.

One way of conceiving of this trouble, I think, is along the lines recently proposed by Miranda Fricker—viz., that in such scientistic and secular humanist accounts, religions and religious approaches to life and the world (and their practitioners) are generally being *wronged* epistemically, in such a way that they face a *credibility deficit*.[81] That is, the sorts of comportments and views that people tend to have within them are treated, on such accounts, as inherently lacking or deficient in credibility *because* they allegedly do not attain to the standards set by the sciences. But if what I have argued thus far roughly holds, then many such matters should be approached at least somewhat differently than the sciences would approach them, if the sciences could even approach them ably at all. And if the histories employed rhetorically in such debates tend to be variously lopsided in the ways I have contended, then again, there would seem to be a kind of *prejudice* on display with regard to religious approaches and various religions that is simply unfair. (Notice, too, that I am claiming such an injustice as roughly *contemporary*, in light of scientistic or secular humanist casts of mind. It may indeed also be the case that there were comparable injustices at play in prior eras—and perhaps at times cutting in the other direction—with religious groups and powers at least sometimes having been the perpetrators.)[82]

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[81] Miranda Fricker, *Epistemic Injustice: Power and the Ethics of Knowing* (Oxford: Oxford University Press, 2007), 17ff. Cf. Ian James Kidd, "Epistemic Injustice and Religion," in *The Routledge Handbook to Epistemic Injustice*, eds. Ian James Kidd, José Medina, and Gaile Pohlhaus (New York: Routledge, 2017), 386–96.

[82] I should note that Fricker employs this notion specifically with regard to the credibility deficit characteristically faced by women and other groups who have been particularly marginalized in this respect. I of course do not want to claim that more broadly, say, religions or religious approaches to life and the world have (historically) faced a credibility deficit of a similar degree. I am just claiming, instead, that such a concerns can be raised *specifically* in regard to the sort of (academic) naturalistic and scientistic philosophical and cultural frameworks—which are, relatively speaking, fairly recent—that I have been treating at length in this thesis.

Now, there might be an obvious rejoinder to my charge of such injustice: namely, that religions and religious ways of thinking and approaching the world *ought* to be at a certain sort of epistemic deficiency vis-à-vis the sciences *because* the kinds of data, practices, and experiences they trade in are not *publicly* available or accessible in the way that those of the sciences are. Again, though, it might in fact be surprisingly difficult to see how this is supposedly the case. Many religions, for instance, *are* quite public in regard to their central rites and claims, such that others can freely join their ranks and participate in them. The worry might be, though, that the claims they make are not publicly accessible or *testable* in the ways that scientific claims are. Putting matters in this way, however, leads back to the concerns that I have been emphasizing in these past two chapters. Take another consideration in this sort of vein: One important category across various religious traditions is that of a holy person, sage, or *saint*. Such people are typically taken to be wise and exemplary, but in many cases they are also taken to *bear testimony to* what the tradition itself has to offer and can help to cultivate in a human life. The idea at play, in other words, is that the goodness or truth of the religion and its claims and practices is often taken to be *most manifest* not just or so much in written statements or documents but instead in *adherents' lives*, which can display, disclose, and communicate it to others in a particularly resonant manner. But a goal such as this is quite different, in a sense, than what the sciences can or do, in principle, achieve. (The sciences no doubt have exemplars at times—like Einstein or Newton, say—but their exemplarity is much more incidental to their work and ultimately inconsequential for its success.) And to acknowledge this point of contrast, at least for the integral, expansive humanist, is unproblematic and unsurprising.

The objection might continue, however: What religions or religious ways of approaching life and the world claim or practice is *esoteric* in a way that scientific data and

theories are not. Again, though, why should we think *this* about religions and religious ways of approaching life and the world *more than* about various scientific approaches to such matters? After all, much high-end contemporary science—physics in particular, to think like Rosenberg—is *deeply* esoteric and, indeed, far more inaccessible to ordinary non-specialists than many or most mainstream religions or religious approaches are to their adherents (or others), who are largely non-specialists. For non-specialists are typically taken to be quite apt for participation in these ways of life in a manner that they simply are not with respect to the sciences. And similarly, as *public* as most scientific results and findings are, they are not typically *intelligible* as such to *most* of the public, but instead to a rarefied group of practitioners and theoreticians with the right credentials and requisite levels of understanding.

5.4 Liberal Naturalism and Second Nature[83]

Having offered this extended critique of varieties of scientism and secular humanism, I want to pivot somewhat in conclusion and consider a noteworthy form of philosophical naturalism that is more congruous with the sort of approach for which I have been advocating. In particular, I want to note the ways in which I take a certain sort of "liberal" or "relaxed" naturalism, particularly as it has been articulated by John McDowell, to be consonant with some of the key concerns I have been adducing as regards a humanistic alternative to scientism and varieties of scientific naturalism. I highlight this comparison especially because I take McDowell's approach to be a kind of analogue for (and predecessor to) the humanistic approach I have been deploying in this chapter. In particular, two key aspects of a humanistic approach that I have stressed thus

[83] Though I do not treat them at length herein, I take Putnam's take on a kind of liberal naturalism and Dupré's "pluralistic" naturalism to be roughly compatible with McDowell's liberal naturalism. Cf. De Caro, "Introduction," in *Naturalism, Realism*, 11ff.; and, e.g., Dupré, "The Miracle," 57–8. I choose to focus on McDowell for the manner in which culture comes particularly to the fore in his account.

far are (1) its unabashed invocation of cultural histories or genealogies in conjunction with various (cultural) practices and, relatedly, (2) its second-degree sort of orientation with regard to such cultural practices—the sciences, the arts, and so on—that inclines toward seeing them always at home within a broader cultural framework or matrix. I do not take McDowell's naturalism to be especially relevant as regards (1); but I do think it is quite relevant and consonant with (2), in the following sense.[84]

McDowell himself is broadly reacting against a sort of scientism; and he typically terms the scientistic foil of his views "bald naturalism."[85] I intend to circumvent a host of details regarding McDowell's own and his rivals' views, but I do want to highlight a key point that he leads with and that he takes "bald naturalism," as I am taking varieties of scientism and scientific naturalism, to occlude. Fundamentally, for McDowell, this key point is that *nature*, as a category, ought to make crucial room for *second* nature, which is no doubt part of it, particularly in regard to human beings and our conceptual capacities. Consider how McDowell summarizes this line of thought:

> Our nature is largely second nature, and our second nature is the way it is not just because of the potentialities we were born with, but also because of our upbringing, our *Bildung*. . . . Our *Bildung* actualizes some of the potentialities we are born with; we do not have to suppose it introduces a non-animal ingredient into our constitution.[86]

That is to say, our nature, as animals of a particular (namely, rational) sort, is such that it largely consists of *second*-natural dispositions and manifestations—perhaps often the sorts of things that I am calling cultural practices: the various things that, from chatting, to playing, to having friends and doing science, constitute key components of our natural

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[84] I do also think that, in a certain sense, it becomes relevant to (1) by way of (2).

[85] See, e.g., McDowell, *Mind and World*, xxff.; and 88–9.

[86] Ibid., 87–8.

history and life as a species.[87] McDowell, for his purposes, is chiefly interested in how the cultivation of second nature, through *Bildung*—which is roughly our human and cultural formation and upbringing—affords us entry into the space of reasons, i.e., the conceptual domain of human life and thought. Again, consider him to this effect:

> Now it is not even clearly intelligible to suppose a creature might be born at home in the space of reasons. Human beings are not: they are born mere animals, and they are transformed into thinkers and intentional agents in the course of coming to maturity. This transformation risks looking mysterious. But we can take it in stride if, in our conception of *Bildung* that is a central element in the normal maturation of human beings, we give pride of place to the learning of language. In being initiated into a language, a human being is introduced into something that already embodies putatively rational linkages between concepts, putatively constitutive of the layout of the space of reasons, before she comes on the scene.[88]

While I believe that McDowell mishandles these points somewhat,[89] I think a key aspect of them is quite relevant to our purposes here: the thought, which he borrows from Gadamer, that there is a crucial difference between a *human* way of life, which unfolds in a *world*,[90] and a non-human animal way of life, which takes place in an *environment*.[91] Human life is characteristically, on this view, lived with a certain degree of freedom or "spontaneity" from immediate biological demands, whereas non-human animal life is constituted, in contrast, by a "succession of problems and opportunities" generated by such environmental imperatives.[92] So human life characteristically involves a "free,

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[87] Cf. ibid., 95.

[88] Ibid., 125.

[89] In a word, I think that McDowell critically overstates these points. As we saw in the previous passage, he takes human beings to have certain inborn potentialities that are typically characteristically actualized through *Bildung*. So to claim that we are born "mere animals," is, I think, extravagant. Nonetheless, I take it that McDowell is drawing our attention to something valuable in these passages—and something that dovetails with what I have been saying about the sciences and broader human culture.

[90] Cf. Jens Zimmermann, *Incarnational Humanism: A Philosophy of Culture for the Church in the World* (Downers Grove, IL: IVP Academic, 2012), 41.

[91] McDowell, *Mind and World*, 115ff.

[92] Ibid., 116.

distanced orientation" that does not constitute a "transcendence of biology," but that instead presents reality to us as "within our perceptual and practical reach."[93]

To appreciate what the sciences are—in a way similar to appreciating what a cultural practice or institution like friendship is, or the arts are, say—we need to appreciate how they are at home in a broader sort of cultural matrix or framework. This includes a variety of matters—for instance, thinking about how they, along with perhaps other pursuits or cultural practices, are taken to generate knowledge, understanding, or other crucial epistemic goods; or how they, like the arts, journalism, or forms of recreation, say, are variously situated institutionally. The key point, I take it, is that the cultural component, as regards the sciences, is akin to the second-natural component as regards our development as human beings, such that to miss or occlude it is to miss or occlude fundamentally what is going on in the relevant domain. Put differently, McDowell is reminding us that failing to acknowledge or occluding *second* nature as an important component or dimension of *nature-more-broadly* ends up being a critical, and characteristically scientistic, oversight. And I am claiming likewise as regards the sciences and their place among other cultural (or social) practices. That is, I am claiming that, *inevitably*, in a host of ways—and I take this, as I have shown, to be *manifest* in varieties of philosophical naturalism and scientism—attempting to tout the successes or achievements of the sciences without offering some sort of broader cultural placement or defense of them, or cultural history or genealogy of them and their virtues and successes, ends up in a sense either being contradictory—as in the case of Rosenberg's scientistic disavowal of history, or at least notably impoverished, as in the case of Ladyman's two core "humane"

[93] Ibid., 115; 116.

scientistic commitments.[94] To try to speak of or herald the sciences, that is, without speaking also in some sort of crucial way about their cultural placement and history—specifically within the broader sphere of human practices, pursuits, and achievements—is to miss something very crucial about what they are and why and how we appreciate them and their accomplishments.

McDowell notes—rightly, I think—that without some sort of robust reminder as to the role of second nature and *Bildung*, the formation of our conceptual capacities ends up looking rather *mysterious*. But those channels or pathways of development, when taken as an ordinary part of nature, give us a sort of basic key for making sense of how this formation normally happens. So it goes, I think, with the sciences and, broadly speaking, the intellectual and institutional culture(s) that has sustained them. They do not just, as it were, have their place of esteem and significance from nowhere, but instead within a human cultural matrix—consisting of various social practices, institutional structures, and the like—that sustains, defends, and perpetuates them. And it is this sort of framework and background that the humanist strives to stress or highlight, along with its associated history, and that the scientistic thinker, as we have variously seen, subtly exploits but too often characteristically fails to acknowledge.

5.5 Integral, Expansive Humanism or Naturalism?

I would like to touch upon one final, and quite salient, matter of concern as a means of commentary on approaches similar to mine. As I find in McDowell's blend of liberal naturalism many congenial points to the expansive or inclusive humanism for which I am advocating, so too there are quite obvious similarities, I take it, with Fiona Ellis's

[94] Ladyman no doubt, as I have noted, highlights the cultural components and placement of the sciences. My crucial complaint, in his case, is that he fails to accentuate the *broader* cultural framework in which—alongside a host of other pursuits and practices—they are characteristically at home and valued.

expansive naturalism, which is also greatly indebted to McDowell—or, indeed, with Mark Johnston's "legitimate naturalism,"[95] which I broached in passing earlier in this chapter. In a word, Ellis agrees with McDowell, and with the various naturalistic authors surveyed in the first chapter, that we fundamentally ought to be naturalistic; but she contends, differently, that an honest naturalism can in fact, contrary to what many of them would contend, be quite consonant both with religious practice and a certain kind of theism, if not traditional supernaturalism.[96] In particular, she invites us to consider the relation of human beings to God as in key respects analogous—following McDowell and Levinas, among others—to our engagement with and relationship to moral and other *value*.[97]

I take it that, in many respects, my project as articulated thus far is quite congruous with Ellis's, and I want to stress this. I do, however, want to note a key dimension in which I find it favorable to argue for an expansive or inclusive *humanism* rather than an expansive or inclusive *naturalism*. First, my project, both conceptually and with its various historical points of contact, is much more apt for the humanistic moniker. Second, however, and perhaps more deeply, a humanistic approach does not need, as I have argued, to be skeptical in any particular way of religious or theological categories, like for instance the *super*natural as it is more traditionally construed.[98] A key dimension of Ellis's project, to the contrary, is a certain kind of recasting of the theistic outlook and, in particular, a critique of fundamental aspects of, one might say, traditional supernaturalism—and all this from a particularly (though quite refined) *naturalistic* vantage

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[95] See ch. 5, n. 73.

[96] See Ellis, *God*, 2.

[97] Ibid., 5ff.

[98] Preoccupation with the supernatural is a key component of much traditional religion's "idolatry" for Johnston. See, e.g., *Saving God*, ch. 3.

point.[99] While one might find such an approach needful, a humanistic approach does not face this sort of pressure—to recast the supernatural out of a concern or preference for being more robustly naturalistic—but can simply leave this dimension as it more popularly or traditionally has been rendered. In this sense, I believe, an expansive (or inclusive) humanism feels less of a *revisionary* pressure (theologically and otherwise) than, I take it, a theistically or religiously *naturalistic* approach does.[100] And other things being equal, I take this less revisionary tendency to be a virtue and upshot to an expansive humanism as juxtaposed with a more expansive *naturalism*—for the former can allow, e.g., transcendent religious experiences and claims to be more squarely what they are or are ordinarily taken to be.

One might see the upshot of the less revisionary humanistic approach if one thinks particularly about, say, petitionary prayer and the role that it often plays within a religious life. Ellis, I take it, is sympathetic to Levinas' concern that there can be something idolatrous about the popular (or traditional) tendency to relate to God—rather than as wholly other—as a sort of consoling transcendent parent-like figure who lends an ear to our prayers and petitionary requests.[101] The concern here seems to be that, in such practice, there is an ever-present risk of anthropomorphizing God and making him more like the gods of classical antiquity who are not, to recall Sokolowski's cautionary point, outside the world as its creative and sustaining source. I take it that Ellis's concern, drawn from Levinas, is a legitimate one; but it is also one that perhaps bears an unforeseen risk.

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[99] Cf. ibid.; Wettstein, "Awe," esp. 48ff.

[100] I take it that "near-naturalism," another take on naturalism that is intended to be more respectful and appreciative of the religious, faces a similar difficulty. It tends to takes a principled attitude of a kind of *quietism* regarding God and the supernatural as traditionally construed. The risk with this, I take it, is that on such approaches, it is mainly or *only* such matters that receive this sort of treatment. So it can seem quite easily as though, theoretically, the traditionally religious or supernatural is being singled out or, as I argued already, treated with a kind of prejudice. Cf. Thomas J. Spiegel, "Is Religion Natural? Religion, Naturalism and Near-Naturalism," *International Journal of Philosophy and Theology* 81, no. 4 (2020): 351–68.

[101] See Ellis, *God,* 121ff.

For if one thinks of religious practice *as it is for so many people*—especially for the poor, the simple, and the philosophically unsophisticated—one cannot easily escape something more like the transcendent parent-like approach to God. That is to say, so many religious people, especially historically, tend to relate to God much more decidedly in *precisely* this sort of way. For my purposes, the operative point is that a humanistic approach to religious practice, unlike a naturalistic one, does not feel a sort of pressure to *refine* ordinary religiosity with an eye to making it say, more philosophically rigorous or respectable. It also does not, I should add, feel the pressure to *vindicate* the supernatural, say, as a category or domain; but it can rest content with affording a space in its outlook for a more ordinary, unrefined religious sensibility—not needing to recast such a sensibility in a philosophically rarefied form in order to vouch for its naturalistic *fides*.[102]

Conclusion: The Human World

These considerations from McDowell especially allow me to draw together the argumentation of this chapter and to assert particularly what I take to be the upshots of an integral, expansive humanistic approach and outlook. I have argued that such an integral, expansive (or inclusive) humanistic approach, as a rival to varieties of scientism and scientific naturalism, is advantageous inasmuch as it leads with the significance of culture and with the cultural histories or genealogies that tend to accompany various (cultural) practices, of which the sciences are important examples. It thereby staves off straightaway the sort of self-defeating conundrum that I noted in chapter two for Rosenberg's strong

[102] My worry for an approach like Ellis's is that, in striving to make religious practice more naturalistically viable, it also leaves this same religious practice looking potentially vastly more *unrealistic*. Put differently, it might seem easy for a philosopher to contend that relating to God ought *not* to be, say, filial in its most central respects, but rather more like the act of aesthetic appreciation; but it might be more challenging for an ordinary religious believer to take up this sort of approach or, so to speak, to fit her religious observance into it. A naturalizing philosophical tendency like Ellis's might easily, in other words, look *elitist* as regards much ordinary religious practice. A humanistic approach can be, in my view, more tolerant and welcoming of such practice as it typically is.

scientism. It also offers a more robust and amicable landscape for the sorts of questions of disciplinary interplay that no doubt surface in regard to the sciences and various other domains and cultural practices. Rather than simply stressing that the sciences ought not to be limited, a humanistic approach reminds us of the values that various such cultural practices have been traditionally taken to safeguard or cultivate and helps us thereby to see important pathways for interrelation and collaboration. It does not just, that is, lead with the sciences' being uniquely exemplary; instead, it situates them in principle within a host of other modes of inquiry and engagement that are taken in various respects to be rightly integrated and collectively complementary. In a key way, then, it gets at the overarching concern I have developed and articulated in critiquing varieties and scientism and scientific naturalism: that their *hamartia* is a tendency to overlook—or even explicitly argue against—the cultural, historical, and other frameworks or presuppositions that support them variously and allow them to carry the weight and authority that they do. An integral, expansive humanistic approach, in contrast to them, is far less disingenuous, I take it, from the outset: It simply concedes and acknowledges straightaway the vital importance of such factors and understands them quite gracefully as being, in a word, dimensions of our life in the human world.

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