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DESTROYING MAN: PHILOSOPHICALLY SITUATING C. S. LEWIS' THE ABOLITION OF MAN

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DESTROYING MAN: PHILOSOPHICALLY SITUATING C. S. LEWIS' *THE ABOLITION OF MAN*

by

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ABSTRACT

DESTROYING MAN: PHILOSOPHICALLY SITUATING

C. S. LEWIS' *THE ABOLITION*

OF MAN

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Lewis' central argument in *The Abolition of Man* explains the philosophical consequences of extending assumptions implicit within scientific methodologies and originally used to treat Nature to include a treatment of humans. This thesis elucidates Lewis' philosophical concept of man's "Power Over Nature" by providing the historical and philosophical context out of which it developed. Multi-disciplinary research relying on primary source documentation, secondary academic literature, biographical material, and philosophical text was used to synthesize a descriptive philosophical narrative in two parts. The first part consists in the historical basis for the shift in ideas involved in Lewis' argument as manifest in the philosopher-scientists Galen and Bacon, and the second consists in contextualizing the argument within Lewis' broader corpus. It was found that

Lewis' argument, when situated within its historical-philosophical context, is understood better both as an argument and in its application to modern philosophies of science.

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CHAPTER 1

INTRODUCTION

When studying philosophy, it is only too easy to examine ideas while assuming the presuppositions of those ideas are valid, especially if the presuppositions are deeply ingrained in one's own society. Certain presuppositions are tacitly assumed within modernity, and they silently influence and direct scientific thinking by defining its sphere of operation. As such, the consequences accepting the scientific paradigm and extending it over broad areas of thought and life are overlooked at their deeper levels. When ideas are discussed and debated within a given framework, the framework itself is likely to remain unquestioned. Consequently, some of the most foundational critiques of a theory or mode of thinking may be missed completely.

Thus, it is not surprising that modern philosophies of science pay relatively little attention to exploring the deeper philosophical assumptions embedded within the modern sciences as well as the philosophical consequences of those assumptions, especially in their extension across broad areas of thought and life. Of those philosophers who have attempted a philosophical analysis of modern modes of thinking, few have contributed such a lucid, concise, and accessible treatment of the subject as C. S. Lewis in his work entitled *The Abolition of Man*.[1] His work is unique in at least two respects. First, he brings together the

[1] Modern, in this thesis, refers to the philosophical systems developed in the Enlightenment and 17th century scientific revolution.

relationship between man's conception of nature and man's belief about the place of qualitative (such as sacramental) realities within nature. Second, he explains certain philosophical consequences of allowing foundational assumptions within modern science about the above two ideas to become normative as a way of thinking. This depth of analysis allows him to explore the philosophical underpinnings of modern scientific thought that have allowed it to operate in a modern sense. Thus, Lewis provides a comprehensive argument which probes the relationship between the philosophy of science and wider philosophical systems.

Put another way, Lewis' argument about man's "Power Over Nature" in *The Abolition of Man* acknowledges the philosophy which undergirds modern science, the philosophy out of which modern science developed and in which it makes sense. By focusing on the philosophy beneath the scientific methodologies, Lewis is able to unpack the way this particular philosophy impacts thinking and action *outside* of science, and how the philosophy is manifested in apparently benign statements. What happens, Lewis asks, when our assumptions about how nature ought to be treated and what nature is are extended to explain humans and human systems of value? The final result is an argument which addresses foundational philosophical assumptions which undergird modern modes of thought in both scientific and unscientific disciplines and the consequences of absolutizing such assumptions.

However, despite Lewis' depth of thought and clearness of argument, his work has received relatively little *detailed philosophical attention*. This has likely occurred for two reasons. First, since Lewis (1898-1963) is a rather contemporary scholar, his works simply have not had much time to be given a thorough scholarly treatment. If *The Abolition of*

Man is a classic, it is still a modern classic. *The Abolition of Man,* developed originally as a set of three lectures for the Riddell Memorial Lectures, was first published in 1943 and, having only been in existence for a single lifetime, cannot be expected to have the amount of research devoted to it as has been given to older works over a much longer period of time.[2]

Second, because Lewis is often better known as a popular writer of children's and adult literature, his rigorous training in philosophy and literature, and, indeed, his primary job as an Oxford professor and academic is overshadowed. Much current research, commentary, and analysis on Lewis deal with biographical material or focus on his more popular persona as the author of the Narnia series and Space Trilogy or his connections with JRR Tolkien. However, Lewis' philosophical work is perhaps his most important, for it underpins the rest of his writings, including his essays for public audiences and narrative fiction. His more serious academic writing cuts most clearly to the heart of his ideas; Lewis himself believed *The Abolition of Man* to be one of his best works ("almost my favorite") and was disappointed that it was not received by a broader audience.[3] He personally viewed *The Abolition of Man* as particularly important because it was not an apology for a specific doctrine but the deconstruction of a philosophy which rests on the unbridled application of certain destructive premises. Even more, this philosophy was swiftly infiltrating popular culture and actively promoted by colleagues of his, especially A. J. Ayers and I. A. Richards.[4]

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[2] Michael Ward, *After Humanity* (Illinois: Word on Fire Academic, 2021), 1.
[3] Ward, *After Humanity,* 1, 23.
[4] Ibid, 6-8.

However, the depth of Lewis' argument is difficult to understand without the background of philosophical and literary training he possessed as an Oxford professor. One of Lewis' biographers, George Sayer, explains that *The Abolition of Man* was not as well received by public audiences because, "the lectures are too closely argued…and it seems that few members of his audience understood them," although it is now considered "his most important pamphlet."[5] As such, Lewis' argument in *The Abolition of Man* stands in need of philosophical illumination and contextualization both as an academic work and for the benefit of wider audiences.

Although Lewis' *The Abolition of Man* could well use philosophical analysis on a multitude of levels, one specific and unexplored area of interest is how Lewis' argument within *The Abolition of Man* fits within a broader philosophical narrative which centers around his idea of man's "Power Over Nature." Descriptive philosophical research can be used to unpack the historical roots for the philosophies Lewis deals with in *The Abolition of Man* as well as the broader meaning of Lewis' specific idea of Power Over Nature in the context of his corpus. Lewis' argument, when situated within its historical-philosophical context, can be understood in terms of how Lewis saw the philosophies he critiques first conceived and then developed through time. Understanding *The Abolition of Man* in terms of Lewis' own wider body of thought further elucidates his arguments. The purpose, then, of this work is to uncover the deeper significance of Lewis' idea of Power Over Nature and its philosophical implications for modern man by contextualizing it within its philosophical backdrop both historically and within Lewis' own corpus. When properly situated, Lewis' argument becomes more clearly relevant to contemporary man's philosophical situation.

[5] George Sayer, *Jack: A Life of C. S. Lewis* (Wheaton: Crossway Books, 1994), 301.

A work of descriptive philosophy requires a synthesis of many philosophical ideas which relate a particular work to the whole of its philosophical situation. To provide such a philosophical narrative for *The Abolition of Man*, this thesis opens by detailing the philosophical question to be explored, the basic categories of thought to be used, and the purpose of philosophical evaluation itself. Specifically, it explains Lewis' argument as describing a shift from one philosophical framework to another, incompatible framework. The third, fourth, and fifth chapters are devoted to describing, synthesizing, and explaining the current philosophical and historical literature pertinent to Lewis' argument by forming it into a philosophical narrative. Since Lewis' argument in *The Abolition of Man* attempts to show that the assumptions within a particular philosophy are both unique to that philosophy and have absurd implications when extended indefinitely (*reductio ad absurdum*), chapters three and four are devoted to exploring the development of the philosophy in question as it grew out of a prior philosophical framework in terms of a shift towards fundamentally new philosophical assumptions. The philosophies of Galen and Bacon are described in depth to aid in illustrating the philosophies on either side of the shift. Each historic example of the philosophies in question is chosen based on the influence it had in both science and philosophy, the clarity and extensiveness of its explication in writing, and its lasting influence on intellectual inheritors. Chapter five provides a synthesized explanation of four central criticisms of the philosophy in question (termed the New Philosophy) from Lewis' own larger body of works. Chapter six brings the prior chapters together to bear on Lewis' central argument about the consequences of the indefinite extension of the assumptions of the philosophy in question and thus the unchecked development of the four criticisms addressed in chapter five. The final chapter

recapitulates the philosophical development of Lewis' argument in its proper context, demonstrates its pertinency in current conditions, and addresses the relevancy of its application to modern circumstances.

Such a work of descriptive philosophy required the use of a broad range of sources bearing on Lewis' argument, including primary source documentation, secondary academic literature, biographical material, philosophical text, and commentaries. In addition, historical material which influenced the lives and thinking of the various philosophers examined was utilized along with histories of science and medicine and pertinent scientific research. The multi-disciplinary approach permitted the creation of a comprehensive synthesis of material necessary for a fully developed philosophical narrative in which *The Abolition of Man* could be understood.

CHAPTER 2

THE SHIFT FROM PARTICIPATION TO POWER

The unexamined life is not worth living for men.
Plato, *Apology*

2.1 The Nature and Role of Philosophy Within *The Abolition of Man*

The Abolition of Man is a philosophical work inasmuch as it deals with both philosophical thought and action. In the classical sense, philosophy is not simply a rational application of the mind, a series of mental gymnastics tricks, but encompasses a manner of living by elucidating ideals and how those ideals ought to be implemented. Lewis held to this conception of philosophy—the idea that philosophy involves one's whole outlook and way of life—and his work must be approached as philosophical in this sense. Lewis himself recalls how Owen Barfield sharply corrected him once when he mentioned the "subject" of philosophy. Barfield told him, "It wasn't a *subject* to Plato, it was a way."[6] Lewis internalized this conception of philosophy as a way of life, not as purely abstract thought. Thus, when looking at his work, we must not be surprised if his philosophical arguments seem almost too concrete, too applicable to our lives. If they hit home hard, it is because the philosophy is meaningful. Only the unique practicality of the modern world could produce philosophy so detached from reality that it may have almost no bearing on life. Of

[6] C. S. Lewis, *Surprised by Joy: The Shape of My Early Life* (1995. Faded Page eBook #20150220), 180).

course, this does not preclude Lewis' philosophy from having an abstract character at times or even seeming out of reach; it only means that a real philosophy implicitly shapes a person's life in tangible ways.

When philosophy is understood as implicating a way, issues and distinctions that may have seemed to be nitpicky or unimportant show their true colors as entailing quite deep repercussions for how life is lived. Traditional philosophy then, can show us what "way" we have taken when we hold certain assumptions. Lewis wrote *The Abolition of Man* for just this reason. In looking at various systems of belief philosophically, he noted assumptions in a certain modern philosophy that differentiated it from any other. The fact that modernity had shifted towards holding this new set of assumptions was of great import to him because of the nature of the "way" the new philosophy implied. He wished to elucidate exactly what it meant for a society to accept this way of life.

The Abolition of Man is, then, at its core, a philosophical argument about the nature and implications of a certain shift in worldview that concerned Lewis greatly. Through *The Abolition of Man*, Lewis attempts to illuminate not only the implications of adopting or discarding a certain philosophical attitude but also the consequences of fundamentally reconceiving of the world in a particular manner. He saw the seeds of this shift ingrained in many modern institutions and wished to expose its natural ends when accepted in full. In fact, the shift he describes is so central to his argument in *The Abolition of Man* (as well as in his broader thought) that this shift will frame this exploration of his ideas.

A shift naturally implies a transition from one outlook to another, and this shift is between what Lewis sees as the two most basic outlooks humanity can take. The one outlook I will call the "Participation" view, and the second, the "Power Over Nature" view

(or simply, "Power" view).[7] Lewis saw a basic, irreconcilable divide between the two views that separate them philosophically. The questions to be asked are: what does it mean to see the world from the Participation view versus the Power view? What does it mean when one view is normative to our thinking and actions, determining the filter through which we view the world in general? Finally, what is the nature of the grounding for each viewpoint, the grounding for the shift, and therefore the philosophical implications of that shift?

In short, this exploration will show how Lewis understood the nature, basis, and implication of the Participation view to Power view shift as a change in the way the world is conceived.

The discussion of the shift will begin by sketching the basic contours of each perspective in turn, beginning with the Participation view.

2.2 The Participation View

The Participation view, for Lewis, is held broadly across all cultures prior to the shift towards modern thinking, around the seventeenth century. This "view" is not so much a single perspective as a shared understanding by all premodern human beings about the essential and basic nature of reality. It is Lewis' way of describing something that is deeply ingrained in humanity's shared understanding of itself and the world and which has only rather recently been replaced by a wholly different manner of understanding reality.

Essentially, peoples that hold to the Participation view see the world and everything in it as an ordered whole, a Cosmos, where participating in the Order of things is

[7] This particular method of naming the two views Lewis describes the Participation and Power views is an original way of framing his argument, though drawn directly from *The Abolition of Man.*

participating in the reality of things. Chapter three is devoted to better explaining this idea, but for now I shall give a basic account of what this means.

To believe that you live in a cosmos means, etymologically, that the nature of what moderns call the universe is structured so as to embody a proper ordering of things. The Order permeates reality and fills it from within; it is not imposed on the universe from without. A cosmos, in its very being, participates in its every element in a harmonious order. The idea of cosmos is quite distinct from what we may think of as an "ordered universe," where the various parts of the material world are fitted out according to a certain planned, imposed order (it makes no difference if the order is imposed by divinity or humanity).

In a cosmos, what participates in the harmony and order of things is in contact with the reality of things. To participate in the great Cosmic Ordering of reality is to align and be in contact with the true nature of reality as opposed to an illusory mass of appearances. To be clear, the Order, though often associated with the Divine, is not only in contact with what we may think of as spiritual elements of the world. Every single part of the world, from rocks to humans to the gods, is in touch with reality inasmuch as the Order resides within. You know the true nature of reality when you understand what is most Real in each object, when you understand how the harmonious order is within it.

What this means for humans is that, in holding the Participation view, one acknowledges that there exists beyond oneself an Ordering which to align with and be permeated by is to be truly human, and that everything and everyone is meant to align with

it. In Lewis' words, "as long as we remain within [the order], we find the concrete reality in which to participate is to be truly human."[8]

Moreover, since the world is so permeated by this reality, it may merit certain attitudes, actions, and responses from us. The Order demands our alignment on the pain of our losing touch with our own reality. To acknowledge our own true nature implies a recognition of the true nature of the whole. A lack of participation is a step towards unreality, a certain blindness.

Lewis' name for what I call the Participation view is the *Tao.* In describing the universality of the assumption of participation, Lewis gives examples of Participation in action across time and place, ending with the Chinese Tao, and using the name "Tao" for brevity's sake.[9]

Let us look ourselves at a few examples of the Participation view, or the Tao, from Lewis himself. In Hinduism, conduct is understood in terms of conformity to or participation in the *Rta*, "the great ritual or pattern of nature and supernature which is revealed alike in the cosmic order, the moral virtues…is constantly identified with truth, correspondence to reality."[10] He describes how both Plato and Aristotle hold that "ordinate affections" are to be nurtured within the child so that he responds properly to his surroundings.[11] The Chinese Tao is, "Nature, it is the Way, the Road…It is also the Way which every man should tread in imitation of that cosmic and supercosmic progression, conforming all activities to that great exemplar."[12]

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[8] C. S. Lewis, *The Abolition of Man* (United States of America: HarperCollins, 1970), 74-75.
[9] Lewis, *The Abolition of Man,* 18.
[10] Ibid, 17.
[11] Ibid, 16.
[12] Ibid, 18.

If this idea needs explaining, it is not so much because the idea is complicated as because it is foreign to our thinking. Yet, as Lewis argues, this is the way humanity has always seen the world at a most basic level—prior to the shift in question. As these examples show, what I call the Participation view simply describes a foundational outlook where the self is called upon to respond to reality, in some form or fashion, by entering into the Order imbued in the nature of things.

2.3 The Power Over Nature View

We now turn to our second basic outlook which I call the Power Over Nature view. Simply put, this view rejects the need for alignment, not by merely accepting that one can flourish by working against the Order of things, but by outright rejecting that there *is* an Order with which you could align. This distinction is crucial. Once the Tao is fully rejected, everything that was formerly within the Tao is something that humans can control and manipulate. All the phenomena that humans experience are, in the Participation view, rightly understood in terms of an Order, but if the Order itself is rejected the whole notion of reality changes. The phenomena do not disappear, but they must be understood differently. They no longer conform to anything unless imposed on from without. And that thing which is "without" may be (and is usually understood as) humanity.

The shift occurs as humanity denies that the cosmos has the potential to align with an Order. But, again, if the elements of our world are not seen as harmonizing with anything, they do not just disappear. Once the possibility for something beyond the natural to indwell in objects is denied, the objects are recast as existing independently of any spiritual element (and "spiritual" is used here in the broadest possible sense). The only parts of the world that are real are now those parts now called Natural—the quantitative,

material side of things. As for Man, he is able to exercise dominion, or power, over what he calls Nature. Humanity imposes order on that which participates in no Order.

This shift is slow and long in coming. What Lewis is acutely interested in, however, is the final conclusion the shift may come to. Lewis argues that when the quantitative, Power view is fully normalized to the inclusion of humanity in the realm of pure Nature, a final and irreversible step has been taken. He calls it the Abolition of Man.

2.4 The Relationship of Philosophy to Human Experience

What Lewis is interested in is what it means for a person or society to begin to deny the very possibility of Participation and, in fully normalizing this view, eventually include all the universe within the new framework. He argues that, philosophically, once you step completely outside the Tao, the framework of Participation, you find yourself in an entirely different philosophical system or anti-system. Importantly, he never sees the shift as a mere denial of a previous view, what Charles Taylor calls a "subtraction story" in *A Secular Age*.[13] On the contrary, he holds that the denial of Participation also entails a whole new way of approaching thought and action.

When one makes normative the idea that what people have viewed as the essence of reality (the Order imbued in phenomena) is really just a natural, controllable process, one has moved to a position that is wholly incompatible with the Participation view.

It is necessary to stress this point up front, because sometimes the way people think and act in their lives can make a strong philosophical distinction seem blurry. Most people do not live philosophically homogenous lives. They hold contrary views at the same time—and probably do not realize it. They may claim to hold to one set of beliefs but tacitly use

[13] Charles Taylor, *A Secular Age* (Cambridge and London: The Belknap Press of Harvard University Press, 2018), 22.

another set to actually guide their lives. Or they may flip-flop between two conflicting views.

Yet, this does not at all detract from either the truth or the benefit of Lewis' strong distinction. The fact that people hold incompatible views does not make them less incompatible. And, if we recall our definition of philosophy, it may be understood that every philosophy will designate a certain way of life. A person may oscillate between following two ways, but he cannot follow two ways at once. He may retrace his steps endlessly, but he cannot tread two paths.

Even more, the way a person lives is usually influenced strongly by what we might call framing ideas, or ideas that conceptually frame the way the world is perceived. These usually don't change much, often going unexamined and being deeply ingrained in entire societies. When a philosophy, a way of viewing the world, becomes entrenched, it becomes normative for society. Once entrenched, philosophical assumptions frame and guide the categories in which it is possible for a person to conceive the world. These framing ideas produce customs and institutions and ways of exploring the world that would not make sense outside of its frame of reference. They delineate what it means to look at the world in a normal way. Framing ideas will necessarily alter even the interpretation of other beliefs.

Thus, when the Participation view frames one's world, one can (and people did and still do) work against the Order and choose to deliberately misalign with it. However, when the Power view frames one's world, the alignment and Order itself is denied validity. There is no way to either align *or* misalign. The conceptual framework is altered.

This exploration, then, deals primarily with what it means to internalize and normalize the Power Over Nature view in society. There will always be what Lewis calls "half-hearted skeptics," those who preach the assumptions of the Power view and act in partial contradiction to their precepts because the Power view is only normative for the way they see parts of their world.[14] However, by coming to understand the basis and implications of each position, we can better understand how the two positions undermine each other. We can also address Lewis' most serious concern: the consequences of making the Power Over Nature view a normative way of looking at parts of and even all of the world.

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My intent in the following pages is to elucidate the shift just outlined in four ways and thus contribute to a better understanding Lewis' philosophical evaluation of the shift in question. First, although philosophy does great work in clarifying arguments, ideas don't develop in a vacuum, and it is useful to put his argument into historical perspective by showing the distinct philosophical viewpoints in their historical setting. After setting out a broader historical context, the work of two philosopher-scientists will be described as representative of each position. In addition, the shift will be contextualized as it is manifested in contemporary historical time, in the recent past as well as in modern science. Third, Lewis' argument in *The Abolition of Man* will be situated within his larger corpus of works to provide a better insight into his thought. Finally, contemporary examples of Lewis' ideas playing out in our world will be offered since his work is dated by nearly a hundred years, and fresher examples only show his work to be more pertinent than ever.

[14] Lewis, *The Abolition of Man,* 51.

CHAPTER 3

THE PARTICIPATION VIEW

In the Tao itself, as long as we remain within it, we find the concrete reality in which to participate is to be truly human.
C. S. Lewis, *The Abolition of Man*

3.1 A Recapitulation of the Tao

It is well beyond the scope of this paper to consider the reasons for holding to one view or another, for accepting or rejecting the full implications of the Participation or Power view. The task at hand is to fully uncover the implications of each view. Lewis' argument in the *Abolition of Man* is formed within a background of understanding that Lewis obtained through his extensive knowledge of philosophy and literature at Oxford. To the general reader, the deeper meanings his arguments hold are often lost due to our waning sense of our own place in history, including the history of philosophy. As such, it would appear wise to obtain a sense of the full import of Lewis' argument by investigating its historical situation. In this way, Lewis' thought may be properly situated for the general reader. This exploration will begin to unpack Lewis' thought with an examination of the idea of Participation as a worldview.

Towards the close of *The Abolition of Man*, Lewis summarizes his conception of the Participatory view of the world: "For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-

discipline, and virtue."[15] What, exactly, does this statement mean? It shows that Participation is a much deeper way of life than 'moral living' or 'proper action,' for the essence of living and being consists in conforming the human to reality, not adopting external practices that have nothing to do with the *essence of reality*. Again, a few pages prior, he explains that by remaining in the *Tao* "we find the concrete reality in which to participate is to be truly human."[16] Thus, participating in reality is not something people only happen to be concerned about, but something they believe is integral to their humanity. People are not "reading rationality into an irrational universe, but responding to a rationality with which the universe has always been saturated."[17]

This universal understanding of a need for humans to participate in Rationality itself, in Order, in Reality, Lewis sees reflected across time and place. He sees this need reflected, as we have mentioned, in the Chinese idea of a supercosmic progression to which humans conform, the Way.[18] He sees it in the Rta, Jewish law, St. Augustine, Plato, Aristotle, and many others who show that the essence of reality is a rational, often sacred, Order.[19] In his autobiography, *Surprised By Joy*, he recalls when he realized that his knowledge, the logic of his mind, the rationality with which he made choices was "participation in a cosmic *Logos*" because the rationality of his own mind could only operate within a larger framework of rational reality.[20]

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[15] Lewis, *The Abolition of Man,* 77.

[16] Ibid, 74-75.

[17] C. S. Lewis, *Christian Reflections* (Glasgow, Collins, Fount, 1967), 89, quoted in Mary Midgley, *Science As Salvation: A Modern Myth and its Meaning* (London: Routledge, 1992), 14.

[18] Lewis, *The Abolition of Man,* 18.

[19] Ibid, 16-17, 83-101.

[20] Lewis, *Surprised by Joy,* 197.

It becomes apparent that Lewis sees the rejection of what he terms the *Tao* as far more than a replacement of long-held moral principles with a new and reinvented set. Rejecting the Participation view for the Power view means reconceiving the world so that reality is not something that can be participated in at all. The shift changes every aspect of the way humans live. As he explains, *The Abolition of Man* is "not necessarily a refutation of subjectivism about values as a theory."[21] Lewis wishes to address a shift in foundations, not a simple recasting of what it means to act morally.

3.2 The Participatory Cosmos

Lewis is not alone in describing and addressing the world-picture shaped by Participation. To fully describe what it means to live in a participatory cosmos, I will draw on other scholars who address the concept of Participation as well as scholars who analyze Lewis' own work.

The idea of a participatory cosmos is most easily understood if considered in terms of the following four aspects of reality: matter, space, time, and humanity. It must be clearly understood that every aspect of a world saturated with a Cosmic Ordering, there is no distinction between what moderns (Enlightenment and post-Enlightenment thinkers) understand as the natural and supernatural realms. There is no barrier between what Mircea Eliade famously calls the Sacred and the Profane.[22] All that is real, all that is worth knowing, participates in Reality, in the sacred. Whatever is profane is illusory, the outward appearance, and in a strong sense, unreal. Lewis considered the world, as Participatory,

[21] Lewis, *The Abolition of Man,* 27.

[22] Mircea Eliade, *The Sacred and the Profane,* trans. Willard R. Trask (Orlando, Austin, New York, San Diego, Toronto, London: Harcourt, Inc., 1959).

"charged with spiritual life" and thought that "all of creation is a kind of sacrament."[23] For early Christians as well as nearly every other culture on earth, the "natural" world does not exist as a valid sphere apart from the sacred. This does not simply mean that people believed the supernatural was a necessary causal force to bring the natural into existence, sustain it, and give it meaning. In a participatory cosmos, the sacred must also completely permeate the natural, revealing, manifesting itself in the cosmos and in objects which are transformed by participating in real Reality and yet remain themselves.[24] Naturally, peoples who perceived this in the world desired to be close to the sacred, to that which gives everything being: "religious man thirsts for *being*…a desire to live in a pure, holy cosmos."[25]

In sharp contrast, the modern world is able to conceive of objects as solely consisting of matter. Matter can act independently; objects are not considered as somehow invalid because they are just matter, pure and simple. If a spiritual realm is admitted at all, it acts externally, imputing meaning onto matter from the perspective of the human observer and, at best, touching matter itself only in exceptional, standalone cases that defy normalcy (e.g., miracles or specific sacraments). In the Participatory view, "nature is never only natural."[26] The Real is the sacred; the profane is illusory. As such, only that which is filled by and finds its being in the sacred Order that is wrought into the very structures of the cosmos is knowable. Independent matter as profane nature does not exist within this

[23] Dermot Quinn, "Lewis, Chesterton, and the Uses of Enchantment." *The Chronicle of the Oxford University C. S. Lewis Society* 3, no. 2 (2006): 8.

[24] Eliade, *The Sacred and the Profane,* 11-12.

[25] Ibid, 64-65.

[26] Ibid, 116.

way of viewing the world other than as the very definition of unreality. Philip Sherrard explains that in the sacramental idea of creation:

> Creation is an embodiment of the divine…and all nature has therefore an intrinsically sacred character…It means that nature is regarded not as something upon which God acts from without. It is regarded as something through which God expresses himself from within. Nature…is perceived as the self-expression of the divine, and the divine is totally present within it.[27]

The sacred is thus embodied in what we think of as inert, cold, impenetrable, and most certainly distinct from anything 'spiritual'. However, the world, Lewis says, is understood within the Participation view as "packed with will, intelligence, life, and positive qualities."[28] This world which breathes life and being, the same being which man desires to participate in, is the Cosmos of the Participatory view. In such a world nothing is inanimate; the sacred exists at every turn and impinges on us. Charles Taylor calls it an "enchanted" world and explains that when spirit is everywhere, human minds cannot be bound up, buffered from the sacred which influences them at every turn .[29] Humans do not impose meanings onto inert objects; the meaning exists within the object and influences people quite independent of their minds.[30] Thus, a person living within a Participatory framework would not think that depression is caused by an imbalance of black bile in the body but would consider black bile to *be* melancholy itself.[31] The spiritual is fully within and acts from within the natural.

For the person living within the Participatory view, space is also understood within the framework of a sacred cosmology. Space, when conceived as homogenous, empty,

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[27] Philip Sherrard, *The Rape of Man and Nature* (Suffolk: Golgonooza Press, 1987), 92-93.

[28] C. S. Lewis, "The Empty Universe." In *Present Concerns,* ed. Walter Hooper, 103-118, (New York: HarperCollins Publishers, 1986), 103.

[29] Taylor, *A Secular Age,* 30-31.

[30] Ibid, 33.

[31] Ibid, 37.

continuous, and even infinite, is just as invalid a concept to the premodern mind as the concept of inert matter.[32] It is not that those living within the Participation view are unable to comprehend the idea of empty space, but that empty space, being profane space, is illusory. The entire modern construct of inert material objects moving in empty, measurable space and time is as foreign to the premodern mind as a fully sacramental cosmos is to a modern one. Just as with matter, space becomes real place inasmuch as it touches the Real.

The sacred space is central to premodern man's existence in the cosmos, for sacred space is the avenue by which the cosmic Order breaks into what would be an endless expanse of profane world and, in touching space, makes it real. Thus, when man dwells in a sacred space, he can dwell close to that which gives him true being and escape the chaotic mess of illusions, of profane space, that surrounds him. Thus, the sacred space is not only the center of his universe; the manifestation of the sacred, in Eliade's words, "ontologically founds the world."[33] The sacred creates a "break in the homogeneity of space" and reveals "an absolute reality, opposed to the nonreality of the vast surrounding expanse."[34]

For a person who views the world as framed by cosmic participation, the center of the world, or any place in the world, is not defined in the spatial terms of geometrical space. Space is made real because it participates in the Order, and humans want to be closest to that which is Real, since it also transmits being for humanity. This is what Sherrard means

[32] Premodern refers to those cultures which held (or still hold) the Participatory assumptions which were normative prior to modernity.

[33] Eliade, *The Sacred and the Profane,* 21.

[34] Ibid.

when he explains that "divorced from the cosmos, [man] has no real existence" because he is deprived of everything that gives life real value and being.[35]

It may be difficult for modern minds to understand what it means for the sacred to ontologically found the world. However, considering that a Participation view entails a Cosmic Ordering that is Real and transmits reality to the profane world, it makes sense that the only spaces worth inhabiting are those which can touch this reality and thus have true being. In most cultures, especially ancient ones, the broader idea of Cosmic Ordering is practically synonymous with the divine or supernatural. Of course, there are some philosophers (Aristotle for instance) who abstract the divine considerably. Nevertheless, it should be clear why space, like matter, must be Participatory to be Real. Practices in religions such as consecrating spaces like temples, houses, hearths, and cities take on new and serious meaning. Most importantly, man senses that he *must* live in a sacred cosmos, "because it is only in such a world that he participates in being, that he has a *real existence*."[36]

One excellent way of understanding sacred space is to consider the concept of a map. Veronica Della Dora describes how most ancient concepts of space can be better described with the word "place," or *topos,* a Greek word which, in its original context, implies a sense of beauty, of sacredness, of emotional connection in addition to a geographical location.[37] Many ancient maps were topological, not geometrical, depicting a place according to its spiritual value as a *topos* instead of its spatial location; this meant

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[35] Philip Sherrard, *Human Image: World Image: The Death and Resurrection of Sacred Cosmology* (Limni, Evia, Greece: Denise Harvey, 2004), 15.

[36] Eliade, *The Sacred and the Profane,* 64.

[37] Veronica Della Dora, *Landscape, Nature, and the Sacred in Byzantium* (Cambridge: Cambridge University Press, 2021), 1.

that holy sites like Jerusalem or places mentioned in Virgil were depicted disproportionately large *on purpose*.[38] It was not that people who believed in sacred space were unable to depict things as if they were in homogenous geometrical space, but that they found the geometrical depiction inferior to the spiritual depiction of the core of reality, the place. They would say that their topological maps are more "realistic" than modern geometrical ones.

As the idea of a spiritual core is discarded, places become disenchanted and mapped as if they are identical, inert points on an infinite stretch of space. Della Dora explains that this is only possible when space is "systematized and mathematicised" via outlooks which adopt the "objectifying, scientific attitude peculiar to the West."[39] This outlook destroys the sacrality of space by assuming space to be "an absolute dimension pre-existing its contents…that could be mastered and controlled through geometry."[40] The depiction of maps using linear perspective and gridlines reflects a model of the world which marginalizes or denies the possibility of sacrality in space.

Time is, under the Participation view, naturally understood in a manner similar to space. As with every aspect of the cosmos, the degree to which the sacred is manifested in time is the degree to which it takes on being. Time is not the regular, infinitely divisible succession of identical moments that defines the modern concept of time. In the Participation view, this kind of time is only profane, and man seeks to live in time(s) that transcend this. One might think of the time of origins, the founding of cities, important

[38] Della Dora, *Sacred in Byzantium,* 13-15.
[39] Ibid, 3-4.
[40] Ibid, 14-15.

births and deaths of heroes or gods, or the times of sacred events.[41] These times are higher, sacred times that exist on a separate plane from profane time. Further, when a city celebrates a religious new year's festival, for instance, they relive that sacred time.[42] They are "in" the time of origins, and that time is closer to the celebrants than last week. Taylor explains that events are understood in relationship to multiple kinds of time (or eternities) that may create warps in profane time, so to speak.[43] In the Greek philosophic tradition, the profane time is a moving image of an unchanging and perfect eternity, in Christianity all times are present to God, and in many ancient traditions, the "time of origins" is the sacred time.[44] Regardless of its expression, participation in sacred time allows man to participate in the reactualization of a sacred event in the present.

3.3 Human Participation

The Participation view necessarily culminates for man in mankind's participation in the cosmic ordering which saturates everything and in which he finds his being. A human being, rightly situated, is open to the reality of the entire world, including himself. Man participates in that which gives value, quality, and reality. To be reduced to the level of profane is to move towards nonbeing, to absolutize pseudo-reality and illusions: "openness to the world enables religious man to know himself in knowing the world—and this knowledge is precious because…it pertains to being."[45]

Man, properly situated, bridges in himself the dichotomy moderns draw between natural and supernatural. The subject/object split, the gap between minds and matter is

[41] Eliade, *The Sacred and the Profane,* 68, 78, 81.
[42] Ibid, 76-77.
[43] Taylor, *A Secular Age,* 55.
[44] Ibid, 55-57.
[45] Eliade, *The Sacred and the Profane,* 167.

"overcome in a participatory fashion."[46] Yet man only realizes this truth in realizing all men are sacred beings in a sacred cosmos. To not realize it is to assume a certain blindness, to be out of touch with reality. Taylor explains that this idea of participatory ordering is one where the material world manifests forms akin to a sort of "emanation" where the order is "at work, striving for realization."[47] "The dominant image," he notes, is one of, "a soul in harmony. The master idea was of a form which was already at work in human nature, which the virtuous person has to help emerge, rather than of a pattern imposed ab extra."[48] One may believe in an ordered universe (i.e., imposed order) without believing the order is of a participatory kind.

What it means for man to live attuned to this order with a "soul in harmony" has far-reaching consequences. The social order, family, home, city, livestock, and tree in the backyard all demand a proper response from man. Some attitudes, actions, and judgements are really congruent or incongruent with the nature of reality. A lack of reverence or even a lack of disgust at the proper things reflects an inability to align oneself with the nature of things. This is a tall order, and people might fall far short of it, but what is important is whether one believes that ideally, one *could* align with the nature of things. This is the essence of Lewis' statement that, under the Participation view, value judgements are not contingent on circumstances or psychological facts but responses to the reality of things: "…certain attitudes are really true, and others really false, to the kind of thing the universe

[46] Ward, *After Humanity,* 32.
[47] Taylor, *A Secular Age,* 125-126.
[48] Ibid, 112.

is and the kind of thing man is."[49] Thus, our responses may be unfit in the sense of bringing us out of contact with "what the universe is"—with the source of being and reality.

Conforming the soul to reality, to the cosmic order, is thus far more than a mental exercise; it requires active Participation and the recognition that a reality exits to which one has the ability to conform. Further, it is evident that the necessity of participation enters into all aspects of life—there is no place where we are safe from the demands of the universe. If we try to hedge ourselves about, we will lose the source of our being. This is why Plato could speak of philosophy as a universal way. He believed that, because we must live out philosophy, it becomes a universal way of life where the soul, by living according to its nature, obtains wisdom and lives properly.[50]

3.4 Saving the Appearances

What place then, has the study of the "natural" world in a Participatory framework? In a world where the natural participates in something higher, natural philosophy will have to recognize that it deals only with the illusory and changeable aspect of the natural world. Observing a river while ignoring its higher element is to ignore its core reality. This meant that if science was even seen as an independent discipline, it dealt only with the appearances of things. Lewis, in *The Discarded Image*, explains that "the business of the natural philosophers is to construct theories which will 'save appearances'… in the sense of getting them all in, doing justice to them."[51] A theory is not factual because it only reflects how things appear externally to the human observer. Theories are accepted because they are able to account for all the observed appearances of a phenomena with the simplest

[49] Lewis, *The Abolition of Man,* 18.

[50] Plato, "Phaedo." In *Plato: Complete Works,* ed. John M. Cooper and D. S. Hutchinson, trans Donald J. Zeyl, 49-101, (Indianapolis, Cambridge: Hackett Publishing Company, 1997), 144c.

[51] C. S. Lewis, *The Discarded Image* (Cambridge: Cambridge University Press, 2012), 14.

explanation.[52] Of course, an instance of a phenomena, such as the fact that a particular rock fell to earth, is factual, but the *supposal* given to explain the behavior of the rock only describes how the rock appears to behave to a human. The fact that nature is observed to act in certain ways is fact, but to treat hypotheses about the nature of reality based on appearances alone as fact is, according to the Participatory view, absurd. David Hicks explains: "Philosophy dictated, therefore, that one could *save* appearances with hypothetical models, but one could not *know* appearances in a manner commensurate with modern empirical proof and technological innovation."[53]

Since the appearances of things are constantly fluctuating and do not constitute a fixed and knowable reality, any supposal might be supplanted by a better one that 'saves' more appearances with a simpler theory—or else a new phenomenon might be observed that makes a supposal implausible. For this reason, Lewis explains, scientific models and theories may save sensible appearances without being strict proof of anything.[54]

"Science" is thus inherently limited because it deals with the changeable and illusory side of nature. Yet ancient science was not just limited in its claims. It was also distrusted because "its preoccupation with unstable appearances hindered man's climb to a knowledge of the changeless immanent realities," which in turn opened man up to vice.[55] Thus, studying nature in a one-sided manner was seen as liable to cripple a person's ability to align with Reality simply because that person does not seek Reality when engaging in one-sided studies.

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[52] Lewis, *The Discarded Image,* 15.
[53] David Hicks, *Norms and Nobility* (United States: University Press of America, 1999), 55.
[54] Lewis, *The Discarded Image*, 16.
[55] Hicks, *Norms and Nobility*, 57.

This outlook accounts for two traits in ancient scientific endeavors that distinguish ancient from modern science. First, it was thought that the lower levels of knowledge about the natural world could only be understood well if a person also obtained higher knowledge.[56] One's inner state, one's degree of Participation would dictate whether one could properly understand and situate lower levels of knowledge. Second, hypotheses often stood in contradiction of each other, but this was not seen as problematic because each theory was only a supposal, the point of which was to logically fit all appearances to an ideal mathematical theory. The goal was to create simple and beautiful mathematical descriptors for observed phenomena. Thus, logic and simplicity were valued over empirical verification; in fact, the heliocentric theory was originally dismissed because a theory of infinite space between the earth and stars was needed to account for a perceived lack of stellar parallax.[57]

As such, ancient science was conducted in order to fit the changeable, profane appearances of nature to a simple and logical theory which ideally reflected a higher order within nature. However, no theory about appearances could be fixed or final (even in principle) because appearances themselves are neither fixed nor final nor even correspond to the essential nature of reality. The reason why Galileo was so furiously rejected was not because of his theory, but because he treated his theory as fact. For a culture that believes that science deals only with contingent appearances, to claim one can humanly explain appearances is "not philosophy, but sorcery."[58] Lewis, echoing Owen Barfield, explains

[56] Hicks, *Norms and Nobility*, 55.
[57] Ibid, 53.
[58] Ibid.

that while Copernicus only "offered a new supposal" Galileo presented "a new theory on the nature of theory."[59]

Finally, some scientific endeavors along with their technological applications were rejected as beneath the dignity of man. Mechanical and technological pursuits were scorned as for laborers, not for great minds.[60] Sherrard explains that premodern cultures often rejected technological processes, and what we see as an inability to develop techniques may well have been a rejection of "technical processes that upset the overriding conceptions of harmony, beauty, and balance."[61] If Participation in a cosmic order is the central goal in life, concern with appearances will be second-tier knowledge at best and disrupting the natural order of things at worst. This idea is also reflected in myths and folk tales such as Plato's myth of Theuth[62] and the Russian Icarus[63] which warn man against blindly accepting technological pursuits that place him in opposition to nature.

3.5 A Summary

This Participatory framework is both a foundational and, Lewis thinks, universal assumption shared by humanity, despite being manifested in many different (and often competing) forms. The nymphs, spirits, animistic objects we tend to associate with "primitive religion" reflect the Participatory view as well as the concept of Forms, divine Ideas, a Way, a sacramental cosmos or simply the recognition of qualities like objective beauty, value, and rationality in the universe. Whatever its manifestation, the Participatory

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[59] Barfield, A. O. *Saving the Appearances* (1957), quoted in Lewis, C. S. *The Discarded Image* (Cambridge: Cambridge University Press, 2012), 16.

[60] Hicks, *Norms and Nobility,* 54.

[61] Sherrard, *The Rape of Man and Nature,* 65.

[62] Plato. "Phaedrus." In *Plato: Complete Works,* ed. John M. Cooper and D. S. Hutchinson, trans. Donald J. Zeyl, 506-557 (Indianapolis, Cambridge: Hackett Publishing Company, 1997), 274c-276e.

[63] Palmer, Scott W, *Dictatorship of the Air: Aviation Culture and the Fate of Modern Russia.* (Cambridge: Cambridge University Press, 2006), 4-5.

view signifies a recognition that there is something to which man and the cosmos must conform on the pain of losing touch with what gives reality. This view, explains Mary Midgely, "exalts contemplation as reverent wonder as a means of union with the divine," pointing out that, "even Aristotle, who eventually dropped all belief in a transcendent God or immortal soul, thought that the point of knowledge was contact with the rational order of the universe, an immanent, divine order… which is the ultimate object of our love as well as of our understanding."[64] It is one thing to argue over which values are appropriate to reality or which divinities are real and another to deny the possibility of an underlying Order altogether.

It is also worth reiterating that "believing" in a Participatory framework does not mean a person believes in the cultural gods or seeks to align with what is claimed to be sacred. A person may believe he has found the true sources of sacredness and reject others commonly held. Another may take "the opposite side"—such as trying to align with evil spirits. However, even if a person is agnostic about which gods/spirits/forces were real or overtly aligned with the other side, that person could still hold that the world is imbued with *some* kind of underlying, participatory Order.

When the Participatory view is normalized and every element of cultural life, from festival to hearth to agriculture, is imbued with sacred meaning, it is extremely difficult to completely conceive of a world existing apart from an underlying Order. Those that might manage to deny a cosmic order altogether would be hindered on two fronts. First, the opposing framing ideas around them would make it hard to see or act on all the implications of such a denial. Broad social and cultural structures (and even ideas of space and time) do

[64] Mary Midgley, *Science As Salvation: A Modern Myth and its Meaning* (London: Routledge, 1992), 71.

not exist in support of this view.[65] Second, even if an individual could work out the implications of rejecting the Participatory view, the sphere of influence of that person's ideas would be mostly limited to that person. When the Ordered Cosmos is normative, everything about the structure of the universe and society seems to support the reality of the Order. For the idea of a standalone world participating in nothing to take root, the structures of reality as understood for a society have to be reconfigured. Thus, we return to the importance of framing ideas. Philosophies matter most when, as foundational assumptions, they influence the way people broadly conceive of reality. It is hard to fully deny a philosophy if it is normative for a culture.

Taking the step of denying the existence of any type of Participatory framework is just the step the Lewis wishes to investigate, and it ought to be evident that such a step would entail a completely new understanding of matter, space, time, humanity, and the relationship between man and the cosmos in terms of wisdom, ethics, and science. In rejecting the Participatory view, no stone is left unturned. Moreover, the shift towards uprooting the Participatory view as a fundamental assumption does not occur instantly. Lewis traces the implications of its replacement by another, opposing view and suggests the philosophical implications of a full uprooting. His argument can be difficult to understand, however, if, blinded by the assumptions that frame our world, we take a mistaken view of what Participation fully means. The first part of this chapter was dedicated to uncovering what is meant by the Participation view when it is working in full force; the second part will deal with a working example—Galen of Pergamum.

[65] Taylor, *A Secular Age,* 42-43.

3.6 Galen of Pergamum

Since there is only so much that description can convey, the second portion of this provides a detailed account of an author who can adequately represent the Participation view. I have chosen Galen, for he stands at the crossroads of several worlds and bridges several disciplines in his work. Galen was a physician, philosopher, philologist, logician—and he wrote on every subject to such an extent that he is the most prolific of ancient writers. Full collections of his work span 133 tracts on a vast number of subjects from anatomy to morality.[66] So much of Galen has survived in no small part because his corpus guided medical practice unrivaled for fifteen centuries in the Byzantine Empire, medieval West, and Arabic world.[67] His influence is certainly unparalleled in the medical field, and our interest in him lies in the fact that, as a healer, he could not help but be interested in the relationship between soul and body, between the material and the spiritual. As a medical practitioner, he necessarily dealt with how a human must live the best life in order to maintain health, and if this included spiritual or material ordering (or both), he was bound to investigate it.

Galen was born around 129 AD in Pergamum to a wealthy architect and a shrewish, volatile mother who apparently had the habit of biting her servants and attacking her husband.[68] Prompted by a certain dream of Asclepios, Galen's father sent him to receive an excellent education in medicine. Galen studied seriously and did not begin to practice in earnest until age 28, giving him a much more thorough education than most medics of

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[66] Conrad, et al, *The Western Medical Tradition* (Cambridge: Cambridge University Press, 1995), 60.

[67] Osler, William. "The Evolution of Modern Medicine." Project Gutenberg, 1913. https://www.gutenberg.org/files/1566/1566-h/1566-h.htm.

[68] Hankinson, J., et al, *The Cambridge Companion to Galen* (Cambridge: Cambridge University Press, 2008), 2.

his time.[69] His first job was tending wounded gladiators, and he was extremely successful; only two died under his care as opposed to the 60 who perished under his predecessor.[70] Here he learned valuable information about the internal workings of the body by viewing open wounds. He was eventually summoned to doctor Marcus Aurelius during a military campaign and subsequently became the royal doctor because of his successes, tending Marcus and his notoriously ridiculous son Commodus.[71] He is well known for his public displays of anatomy, such as when he demonstrated the role of cranial nerves by publicly tying the nerves of a screaming animal to show how stopping nerve signals stopped the animal's noises.[72]

Galen saw himself as an inheritor of a longstanding tradition and adhering to the wisdom of the ancients was of great import to him. He believed he was, like all physicians, protected by Asclepius, son of Apollo (who holds the familiar snake coiled around a staff), but, humanly speaking, he sees Hippocrates (footnote on Hippocratic oath), whom he often calls divine, as foremost within the medical tradition and unmatched by the men of his time.[73] He was strongly influenced by Plato and Aristotle as well, but had little regard for new-fangled opinions of his day—a testament to his rooted trust in traditional wisdom. His works were compiled by men such as Oribasius and Aetius and well used in the Christian Roman Empire, as in the case of Saints Cosmas and Damian, who "mastered the healing of Hippocrates and Galen" in conjunction with their divine gifts of healing.[74] Galen was

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[69] Conrad et al, *The Western Medical Tradition,* 60-64.

[70] Ibid*,* 62.

[71] Ibid.

[72] Hankinson et al, *The Cambridge Companion to Galen,* 13.

[73] Galen, *On the Natural Faculties,* ed. and trans. Arthur John Brock (Cambridge, Mass: Harvard University Press, 1952), Project Gutenberg eBook https://www.gutenberg.org/files/43383/43383-h/43383-h.htm

[74] Conrad et al, *The Western Medical Tradition,* 74-79.

similarly adopted in the Arabic and North African worlds and even rediscovered in the Latin West, putting him in a central place in the medical tradition as a whole.

Galen's philosophy is best introduced with a short but famous tract of his called *That the Best Physician Is Also a Philosopher*. The title itself sums up a key element of his thought: disciplines (especially the medical discipline) do not operate independently of an individual's other abilities, knowledge of other disciplines, personal vices and passions, and ability to judge. The only proper physician is the one that lives out a proper philosophy, the prime example of which is Hippocrates.[75] Galen explains that just as athletes must have natural skill *and* much practice, so doctors must work diligently to train in all the necessary fields of study, which is impossible "for a man who regards wealth as more worthy of honor than virtue."[76] In fact, he holds that it is impossible to both care for business and practice "so great an art," for one or the other must be despised. A physician, then, cannot simply know a series of facts intellectually; he must put his knowledge, especially of ethics, into practice.[77] He must exercise logic in order to determine remedies and diseases, have a knowledge of physics (meaning all body parts and environments and which requires observation, travel, geometry and astronomy), and apply himself to virtue.

Yet, to embark on such a rigorous path he must not only despise riches but embrace a difficult life, living temperately—for such a life is not for one "who is a slave to his genitals or his belly."[78] And, because all virtues are connected, as if "on a string," he must

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[75] Jouanna, Jacques, and Neil Allies. "GALEN'S READING OF HIPPOCRATIC ETHICS." In *Greek Medicine from Hippocrates to Galen: Selected Papers*, ed Philip van der Eijk, 259–86 (Brill, 2012. http://www.jstor.org/stable/10.1163/j.ctt1w76vxr.18), 261.

[76] Galen, "That the Best Physician is Also a Philosopher." (*CarlosCardosoAveline*. 2019), quoted in P. Brain, "Galen on the Ideal of the Physician" (*SA Mediese Tydskrif*, 1977, 936-938).

[77] Jouanna and Allies, "Galen's Reading of Hippocratic Ethics", 265.

[78] Galen, "That the Best Physician."

have every other virtue as well.[79] Thus, moderation is a prerequisite for discovering truth, but those who "are no physicians, but poisoners, are daily before our eyes: lovers of money who abuse the Art for ends that are opposed to its nature."[80] All aspects of life are intimately tied together, and a moderate, properly ordered life is necessary to escape working against the nature of things. It is not simply that a doctor becomes short-sighted, neglectful, or even unprincipled when neglecting a true philosophy; he perverts the true nature of a divine Art and forces it to work against its natural order.

Galen's idea of what it means to live an orderly, temperate life was heavily influenced by Plato, and, to a lesser extent, Aristotle. He held that virtue is obtained when the parts of the soul (he believed in a tripartite soul like Plato) are properly organized and controlled—the passions of the non-rational soul must be subject to the rational through an ongoing process of "training and habituation which will make its appetites appropriate."[81] Through daily self-monitoring and the like, one is expected to work to obtain the types of desires appropriate to the object or situation through the ordering of the soul.[82] Here, one cannot but help recall Lewis' assertion that, within the Tao, the nature of ethics and reality is such that "the head rules the belly through the chest," as through "trained habit" we acquire "stable sentiments."[83] It is these "just sentiments" that allow us to like, hate, or feel pleasure where we ought.[84] Galen's emphasis on the idea of ordering the soul such that the passions are ordinately expressed reflects what Lewis sees as a universal idea of the

[79] Galen, "That the Best Physician."

[80] Ibid.

[81] P. N. Singer, "Galen." *The Stanford Encyclopedia of Philosophy*. Last modified 2016. https://plato.stanford.edu/entries/galen/.

[82] Singer, "Galen."

[83] Lewis, *The Abolition of Man,* 25.

[84] Ibid, 16.

necessity of conforming the human soul to the nature of an underlying reality.[85] For Galen, there is an objectively proper way to order the soul's parts to be in harmony internally and in relationship to various circumstances. As he explains in *That the Best Physician Is Also a Philosopher,* neglecting this human demand will result in a perverted practice of whatever one does—such as when a physician becomes a poisoner.[86]

Importantly, Galen's belief in a properly ordered human being as an ethical person extends to an idea that the ordering of soul and body are interconnected. We have already seen a hint of this in his mention of being enslaved to the appetites (connected for him with the lowest part of the soul). In *On Moral Character,* Galen explains that, despite the wonder we ought to feel at the Creator's ability to make the sexual organs work so well to their purposes, ungoverned sexual passion is not just bestial, making a life of philosophy impossible, it "is harmful to both the body and to the soul."[87] We see that an improper subjugation of the soul to the body (resulting in disorder of the soul internally and in regard to its nature and purpose) results not only in spiritual but *bodily harm as well*. Moreover, drawing on Aristotle's idea of a "golden mean" from *Nicomachean Ethics*,[88] Galen holds that "physical states of good balance will accord with good ethical states."[89] This strong correlation between bodily health and the proper ordering of the soul can be difficult for the modern mind to grasp. Yet, if one relates the correlation back to the idea of Participation, it makes sense that a soul properly ordered would accord bodily health and that obtaining a state of bodily balance would require an ordering of the soul. The human

[85] Lewis, *The Abolition of Man,* 77.

[86] Galen, "That the Best Physician."

[87] Hankinson et al, *The Cambridge Companion to Galen,* 3.

[88] Aristotle's famous concept of the golden mean outlines the idea that ethical behavior avoids extremes and tempers passions and appetites to the appropriate "mean."

[89] Singer, "Galen."

participates in conforming to an objective order; to work against this order would be to work against one's own nature, creating disease of body and soul.

Galen did not limit his writings to discussions on the ordering of the soul alone. In addition to his conviction that "man had a soul that required both ethical and intellectual training" he had a strong sense of cosmic teleology and of the universe as stable and ordered.[90] This cosmic organization, explains Nutton, is what allows one to exercise logic and rationality in relationship to the natural world in medicine.[91] Galen's ideas about a tripartite, ordered soul were strongly influenced by Plato;[92] likewise, his descriptions of a Divine Craftsman and Forms when giving a teleological explanation of the world bear especial similarity to the *Timaeus*. In the *Timaeus,* Plato describes a Divine Craftsman, the eternal god (as opposed to merely the familiar, created Pantheon) who creates the celestial bodies, the gods, the heavens, and the earth—all things—as a whole and complete body, a single harmonious organism, at the center of which is placed a soul or intelligence which naturally fills all things.[93] This is perhaps one of the most beautiful and complicated descriptions of what Lewis sees as humanity's sense that the world is permeated by a concrete ordering to which man must conform. Some, like Plato, take a strong and vivid position, but, once again, Lewis is not here concerned with which position (a stronger myth-like position versus a vaguer one) is closer to the truth—his main focus is on the rejection or acceptance of the Order as such.

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[90] Conrad et al, *The Western Medical Tradition,* 64.

[91] Ibid, 67.

[92] Galen even created an anatomical theory that associated the liver, heart, and brain with the appetitive, spirited, and rational parts of the soul, respectively. Singer, "Galen."

[93] Plato, "Timaeus." In *Plato: Complete Works,* ed John M. Cooper and D. S. Hutchinson, trans Donald J. Zeyl, 1224-1291 (Indianapolis, Cambridge: Hackett Publishing Company, 1997), 30a-40a.

Galen's work closely reflects Plato's image of cosmic Order. *On the Usefulness of the Parts of the Body* (*UP*) is expressly made out to be a hymn to the divine Creator, glorifying the skill of the Maker in crafting each part of the body for its suitable purpose.[94] The purpose or teleology of each body part is imbued in the natural part "because it is better so;" some parts have functions which are "suited to the characters of our souls," but others exist simply for the sake of beauty (the beard, for example).[95] Not only does the soul have an order that requires an alignment with an underlying order, nature itself is filled with purpose which is derived from the broader cosmic Order. It is not simply that body parts are well-made, like a well-designed machine. Each part is developed within an Order with a form that is an integral piece of its reality, just as the matter it is made of is integral to its reality. This form naturally dictates proper mechanical function, but this cannot be divorced from its broader purpose in relation to the human body, human soul, and cosmic Order which pertains to ideas of goodness and beauty.

Galen is also well known for his scathing rhetoric against the idea that one could wholly omit any sense of teleology when describing how body parts are used.[96] Just as a doctor cannot properly heal a patient without putting himself in check, a true study of body parts cannot ignore their deeper purpose. It is perhaps surprising, when actually reading *UP*, to note what care Galen takes to include detailed empirical descriptions of phenomena not just *alongside* praises of the Demiurge, but *as* a hymn in themselves.[97] The biting critiques he made of physicians who lacked a detailed knowledge of the physical body did

[94] Singer, "Galen."
[95] Ibid.
[96] Ibid.
[97] Galen, *On the Usefulness of the Parts of the Body,* ed and trans Margret Tallmadge May (Ithaca: Cornell University Press, 1968).

not exclude the possibility of an equally heated attack on ignoring the Form of a body part.[98] It is also worth noting that, despite his deep philosophical convictions about the order which involves man and the cosmos, he remained agnostic about some issues in philosophy and cosmology such as the essence of the Divine and the immortality of the soul.[99] Though it seems that he believed in celestial gods, and certainly Asclepius (whom he claims to have personally experienced), "it is to the divine intelligence manifest throughout the universe…which is the object of his religious—and by the same token of his intellectual, indeed his scientific—fervour."[100] Galen thus embodies Lewis' concept of holding to a Participatory view. His deep understanding of the underlying Order which permeates the cosmos and demands that humans align themselves properly with the nature of things is expressed poignantly in his concept of the healer-philosopher who, in ordering himself, is able to bring healing to others by helping them order both body and soul.

[98] Christopher E Cosans, "Galen's Critique of Rationalist and Empiricist Anatomy." *Journal of the History of Biology* 30, no. 1 (1997): 51. http://www.jstor.org/stable/4331419.

[99] Conrad et al, *The Western Medical Tradition,* 64.

[100] Singer, "Galen."

CHAPTER 4

THE POWER VIEW

The modern masters promise little; they penetrate into the recesses of nature…ascend into the heavens…they have acquired new and almost unlimited powers. They mock the invisible world with its own shadows. Such were…the words of the fate, enounced to destroy me.
Mary Shelley, *Frankenstein*

4.1 Introduction to the Basic Assumptions of the Power View

The previous chapters have shown that, whatever the specific consequences of going from a world where everything is assumed to fit within the Participatory view to assuming that alignment is not an option (because there is nothing to align with), such a shift entails a wholesale change in world-picture. Before, everything conforms to an Order which is understood as beyond the thing itself and *internal to its operation*. Moreover, if everything aligns properly, the world will become a harmonious whole. The modern era, especially during the 17th century Scientific Revolution and the advent of the "New Philosophy," sees a shift away from this viewpoint. It became possible to conceive of objects operating independently in their own valid sphere, and, as time has progressed, more and more of the world was seen as operating in that detached sphere. This constitutes not simply an "update" of prior ideas or customs or theories. To shift away from the

Participation view required the destruction of one world and its replacement by another.[101] Lewis' goal is to elucidate the consequences of this movement.

Before proceeding, it will be useful to pause a moment to consider again the relationship philosophy has to what were called "framing ideas" in chapter two. Framing ideas are those (often unexamined) narratives, frameworks, and defining concepts which shape the way experience is filtered and understood. These framing ideas may also be called "myths," not in the sense of a false statement to be debunked, but in the sense of a rooted set of assumptions that form a working narrative through which one understands the world. Philosophy may be thought of as the reflective representation of a myth. Its job is to uncover the assumptions within myths or framing ideas, illuminating what consequences, inconsistencies, and (most of all) what way of life a given set of assumptions entails. In adopting a philosophy, one reflectively adopts a way of life.

The point is that, in one sense, the Participation view is a philosophy when accepted as a way of life and in another sense influences thought, action, and practice by pre-defining categories of thought. The Participation view is a myth, a framing set of ideas, but when it is examined and lived out as wisdom, it is a reflective way of life, a philosophy. In just this way, the Power view, the subject of this chapter, is a myth, explicated and adopted in the New Philosophy. This is important because, as we shall see later on, even when the New Philosophy is not reflectively adopted as a way of life, the Power view, the Power myth, infiltrates practices with its assumptions. Lewis explains through essay and depicts through narrative how the Power view, as a myth, influences ideas taken for granted such as the

[101] Sherrard, *The Rape of Man and Nature,* 63.

empty, inert nature of space or the tendency of things to progressively improve.[102] This chapter will deal with the New Philosophy as an explication of the Power Over Nature view. The "New Philosophy" is almost interchangeable with "Power view," only the latter is often a more disguised, unnoticed version once normalized. One could say that the Enlightenment philosophers expounded the New Philosophy, the assumptions of which mythically influence the practices they set up, which in turn are often unquestioningly accepted today *as if* they are neutral, not philosophic.

The New Philosophy is characterized by three basic assumptions or features: first, by an eroded sense of participation, second, by the idea of a two-tier world, and third, by a prevailing conception of the universe as mathematical. These three assumptions are, of course, overlapping and interrelated.

The loss of idea of a Participatory cosmos has been called the "disenchantment" of the universe by Taylor and consists in the process of seeing parts of the universe as simple, inert, mindless matter without internal qualities, teleology, and the like. Although, in a disenchanted universe, spirits and fairies are usually no longer believed in, the thrust of the non-participatory world lies in the fact that mundane objects no longer have any potential to be more than mundane. Being inert matter is the fullest reality an object can possess; this excludes objects from being filled with forces, spiritual indwellings (like grace in sacraments or relics), and objective qualities like beauty or goodness. Believing that objects can consist of nothing more than inert matter does not mean that those whose sense of a Participation is eroded or gone altogether necessarily disbelieved in gods, sacraments, or

[102] C. S. Lewis, *The Funeral of a Great Myth,* quoted in Wright, John C. "Funeral of a Great Myth by CS Lewis." *John C. Wright Author.* Last Modified April 23, 2021. Accessed April 11, 2022. https://www.scifiwright.com/2021/04/funeral-of-a-great-myth-by-cs-lewis/.
C. S. Lewis, *Out of the Silent Planet,* (New York: Scribner Classics, 1996).

qualities. It did mean that gods (or a God) were detached from objects, sacraments were the exception to natural laws, not the rule of the cosmos, and qualities were imputed by man onto essentially dead matter. And, as more of the world was seen as operating without participation, "spirituality" presided over an ever-shrinking domain of the non-inert. Thus, the underlying shift is great, even if the surface-level beliefs seem similar.

A decreasing sense of participation in the universe was made possible by the concept that the world consists of two tiers, a natural realm and a supernatural realm, that operate independently of each other in ways that are independently valid. As previously mentioned, under the Participation view, the natural/supernatural distinction does not exist. However, no longer were objects seen as having a material appearance which manifests an internal spiritual core. The natural world consisted in the purely material objects, and the supernatural contained all spirituality, quality, and mind. Again, although an occasional overlap of the realms (such as in the human or in a miracle) was acknowledged by some, in the main, the worlds were entirely distinct and operated according to separate principles. Increasingly, miracles and the like were denied possibility as the separateness of the realms solidified in people's minds. The split is acknowledged most clearly by Descartes, who radically and completely divided mind from matter. Sherrard explains the assumption as the "claim that there are two levels of reality; that each level can be studied apart from, and without reference to the other; and that knowledge gained as a result of studying the one level is just as valid in its own terms as the knowledge gained as a result of studying the other level."[103] The natural world is thus a self-contained sphere which operates with reference to its own valid terms of operation.

[103] Sherrard, *Human Image,* 7.

The natural world gained this sort of independent dignity because of the new place mathematics held in the minds of the New Philosophers. The world was understood to be inherently mathematical, and the world, being mathematical in nature, operated according to measurable mathematical laws. Moreover, it was the world perceived by the senses, the phenomenal world, that was of most interest and seen to operate according to measurable mathematical principles. Thus, there arose a wholly new idea that a true knowledge of natural world existed based off of mathematical knowledge of the phenomena humans observe. Additionally, because mathematical formulae are limited to quantitative descriptions, true experiences of phenomena were defined in terms of the quantifiable aspects of objects discernable through mathematical analysis.

Furthermore, because everything in the natural world is seen as dead, inert, mindless, and quantifiable material, objects in nature are seen as open to being shaped and imposed on by an exterior will. This will, of course, could be a sort of Deistic-style god or Providence, but it need not be. More often, it was believed that the world could be shaped according to an order determined by human beings.[104] Either way, the natural world consists of many material parts operating through purely efficient causes, and the key is that, if any order exists, it comes from the outside, imposing itself on the independent laws of the natural world (or, perhaps, even setting them up). It is possible to exercise power over nature, to control and manipulate it according to human will. The movement from seeing nature as participating in cosmic Order to viewing nature as inert and subject to exterior control is the essence of the shift from Participation to Power.

[104] Taylor, *A Secular Age,* 112.

Lewis gives a very concrete description of how the Power view addresses nature: "Now I take it that when we understand a thing analytically and then dominate and use it for our own convenience, we reduce it to the level of 'Nature' in the sense that we suspend our judgements of value about it, ignore its final cause (if any), and treat it in terms of quantity."[105] Lewis is explaining that, on the new view, one may look at an object in a way that relegates it to the realm of Nature by viewing it analytically, which, by definition, excludes any consideration of internal qualities or final causes. An analytical approach can only quantify the quantifiable, and so an object understood by the analytical mind cannot include teleology or quality.

4.2 A More Detailed Consideration of the Assumptions of the Power View

Let us look at what this means in more detail. The New Philosophy, expounded by well-known figures such as Bacon, Locke, Boyle, Galileo, Descartes, and Newton, asserts that the knowledge that is most accessible and most important to humans (and for Descartes, the only accessible knowledge) is the knowledge of phenomena as construed through mathematics. The world of sense data was "by now regarded as virtually the real world, and as the basis for all knowledge" and thus "mathematical entities contained in the theories used to describe the 'appearances' are taken to be identical with the substance of the real world."[106] Science no longer saves appearances because what were formerly appearances are now taken to be the reality of the thing. This recalls Lewis' point that Galileo's real revolution was one of theory—the insistence that his mathematical schemes actually reflected the essence of the natural phenomena he observed.

[105] Lewis, *The Abolition of Man,* 69.
[106] Sherrard, *The Rape of Man and Nature,* 97.

Science, then, now operates without reference to the internal forms of things because it has been redefined as a practice dealing exclusively with the quantifiable world. But this situation only reflects the truth that the world of natural phenomena itself (now a part of a separate tier in a two-tier world) is changed. Phenomena, as described by sense data, are now fully knowable within an independent, material realm, and modern science operates on and provides knowledge of such phenomena. Thus, what is taken to be the real natural world under the Power view is comprised of matter "fully debunked…inert, passive, mindless stuff, devoid of spontaneity and all interesting properties such as sympathy and antipathy."[107] What is now recognized as true Nature excludes non-quantifiable elements—and this exclusion is necessary for modern science to be reliable, for its reconstruction reflects the nature of the matter it analyzes. Modern science, which analyzes matter exclusively in terms of quantity, is only credible as providing real, full knowledge of nature if matter is assumed to have this quantitative character. For example, formative virtue in embryos was rejected as the Power view took root precisely because "such a virtue could not be observed [analytically] and did not work mechanically."[108]

The pioneers of the New Philosophy were clear when explaining that the natural world consisted in nothing but inert matter. Descartes clarifies, "Know that by nature I do not mean some goddess or some sort of imaginary power. I employ this word to signify matter itself," and Boyle rails against men who "are taught and wont to attribute stupendous unaccountable effects to sympathy, antipathy, *fuga vacui*, substantial forms…"[109] La Mettrie, in 1748, proclaimed that man was a machine, Borelli explained the body structures

[107] Midgley, *Science As Salvation,* 76.
[108] Conrad et al, *The Western Medical Tradition,* 352.
[109] Midgley, *Science As Salvation,* 75.

in terms of physical forces, and air particles moving like a pendulum accounted for the motion that produces life.[110]

Advocates of the New Philosophy were equally clear in expressing the idea that mathematics accurately measures and describes phenomena in a way that corresponds to reality. "Newton's laws of motion…seemed, through their mathematical language, to reflect nature itself," Andrew Wear explains, and people like Galileo wrote that the *Book of Nature* was "written in the language of geometry."[111] What is so radical is the idea that the very structure of all phenomena is mathematical and knowable through mathematical laws as such. Moreover, since mathematics can only quantify, the only true elements of nature are the quantifiable elements. Thus, nature itself consists only of quantity. "All spiritual qualities," Sherrard points out, "are *ipso facto* excluded from the objects science investigates, and at the same time it is tacitly assumed that there is nothing else to know about these objects except what can be observed by the so-called scientific method."[112] "Modern man," explains Hicks, "with his eyes fixed on matter, can see only a world broken up into numberless quantifiable chunks."[113] William Petty (1623-1687), for example, held that what was real could be quantified, and, of course, "what could be enumerated could be expressed as natural laws."[114] The ideas that the universe is fully described by mathematical laws and that the reality of phenomena is quantifiable go together.

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[110] Conrad et al, *The Western Medical Tradition,* 346, 355-356.
[111] Ibid, 354.
[112] Sherrard, *The Rape of Man and Nature,* 98.
[113] Hicks, *Norms and Nobility,* 59.
[114] Conrad et al, *The Western Medical Tradition,* 376-377.

Of course, mathematics had been used to characterize the universe in ancient times, well before the New Philosophy.[115] However, before, mathematics was meant to draw the human away from appearances to contemplate the divine Form or spiritual core that was imperfectly manifested in the object through its material appearance. The higher order participates in the natural manifestation, and the perfect mathematical ideal is meant to bridge the observer from looking at the imperfect material manifestation to the ideal geometrical manifestation to the underlying Order. The New Philosophy, however, claimed that mathematics could accurately describe the phenomenal world via quantitative analysis, that this knowledge of the sense-world was of the greatest importance, and that it also constituted the core of natural reality.[116] If a spiritual realm did exist, it did not exist in the sense-world and is not accessible to human understanding in a direct way (revelation, or direct input from the Divine into the human mind, became the only source of spiritual knowledge, and many denied even this). For the purely natural *object*, the spiritual is wholly inaccessible.

The question naturally arises, where does the spiritual world exist, if everything immediately observable is out of touch with the spiritual? And how do we perceive qualities in things at all? Lewis answers this question himself—as the world is slowly emptied of all its qualities and spirit and termed "Natural," all that is emptied is transferred to the human mind. The universe is emptied "first of its gods, then of its colors, smells, sounds, and tastes, finally of solidity itself as solidity was originally imagined" which are attributed to productions of the human mind, "classified as our sensations, thoughts,

[115] Plato, for instance, holds ideal geometrical figures to be closer to divine Forms on the chain of being than sensory objects.

[116] Sherrard, *The Rape of Man and Nature,* 97.

images, or emotions."[117] What we perceive of matter that is not "actual matter" is then a projection of our minds onto the matter. When I think of a horse as beautiful, the beauty is a sensation produced in the mind and the horse is disparate parts of flesh and blood bound together. The reality is the quantity, the quality the illusion. Consider the difference between this idea of a horse and a horse for Plato, which manifests a Form of Beauty, or an animist's horse which has a spirit, or a horse for a Christian who believes the horse participates in a sacramental reality. According to the New Philosophy, our experience of objects through the senses may not correspond to everything our senses detect, because only the mathematically quantifiable realities, like number and magnitude and motion are real.[118] As such, our experience of quality, Forms, or sacraments is denied. This is Dicken's point in *Hard Times* when a boy defines a horse as graminivorous quadruped with forty teeth, etc., to the bewilderment of a little girl whose idea of a horse extends beyond the quantifiable.[119] Mr. Dickens is satirizing a tendency to look at the natural world exclusively in terms of quantifiable material.

This is also Lewis's point in speaking of Coleridge's waterfall. He realized the implications of believing that calling a waterfall sublime corresponded to something in the reality of the waterfall itself, in the reality of the cosmos, versus believing that the reality of the waterfall is only the water and the sublimity only self-referential emotion.[120] In the first case, the waterfall merits a certain response; in the second, no response can correspond to qualities in the external world.

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[117] Lewis, "The Empty Universe," 103.
[118] Sherrard, *Human Image,* 37.
[119] Charles Dickens, *Hard Times* (United Kingdom: Peter Haddock Publishing), 5.
[120] Lewis, *The Abolition of Man,* 15.

This transfer of everything that is not quantity to the mind occurs when it is assumed that the world is divided into two separate spheres, one of which is mathematically defined and constitutes the reality we perceive daily, the other being a vaguely spiritual world that contains qualities projected from the mind and does not correspond to sensory reality. Mathematics is the basis for differentiating between real sense-data and illusory sense data in the Natural world, between what Sherrard calls primary and secondary qualities.[121] The real sense-data pertains to knowable characteristics, which are mathematical, and tacitly excludes ideas of value, purpose, spirituality, and quality from objects. These latter characteristics are secondary, illusory, and relegated to another sphere. For Descartes (and his followers), the "spiritual" sphere is the thinking sphere, the realm of thought—the mind, which is the same as soul (for him).[122] "This means," says Sherrard, "that in so far that we experience [qualities] in sense-objects it is because we ourselves project them on to these objects."[123] This is familiarly expressed by the idea that all real characteristics of objects can be explained "scientifically" (i.e., in terms of quantity) and what cannot be so explained is only in the mind.

As the West transitioned from a Participation to Power view, a spiritual world was also believed to exist beyond humanity for a short time. However, that spiritual world (the Deist Christian god, for example) does not interact with anything in the Natural sphere and humanity cannot contact It unless It decides to impose Itself on man or nature. There is no natural contact between minds and matter, and human minds are only capable of dealing with the Natural world in a tangible, knowable way through mathematics. The knowledge

[121] Sherrard, *Human Image,* 38-39.
[122] Ibid, 39.
[123] Ibid.

available to humanity about Nature greatly restricts the possibilities for the Natural world. It is forced into a system of interlocking parts driven by efficient cause according to mathematical laws. One is left with a natural world that functions fully on its own, described by mathematical laws, and known by man through mathematical study. The natural world has no dependency on minds or quality, however, and is driven by efficient cause. What exists outside of the natural world stays within another, separate category that occupies a second-tier position because, being non-mathematical, it cannot be a true part of phenomenal reality. Ultimately, the natural world can work on its own just as well with or without minds. God may be useful as a first cause for a while, but the need eventually drops out. "The Creator has absolutely no job to do."[124]

Nature is now viewed in terms of mechanism and "all hint of intrinsic teleology is expelled," radically altering science, which, no longer being "the search for Aristotelean or Platonic form, [must] search for relations of efficient causality; but the manipulable universe invites us to develop a Leistungswissen, or science of control."[125] Since the natural world is a series of quantifiable parts, it is conceivable that humanity might be able to rework the patterns in nature to his own ends by imposing his own pattern on nature. One can direct the efficient causes, manipulate the parts, and dissect the whole. Everything is, in theory, predictable and mathematically reducible. The new world is "a vast field of mutually affecting parts. This has been designed…to produce certain results."[126] (Again, the crucial shift which makes the essence of nature manipulable quantity can occur whether or not God is at first regarded as designing, or imposing order, on nature externally.) Thus,

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[124] Peter Atkins, *The Creation,*(Oxford and San Francisco: W. H. Freeman, 1987), 17, quoted in Mary Midgley, *Science As Salvation: A Modern Myth and its Meaning* (London: Routledge, 1992), 76.

[125] Taylor, *A Secular Age,* 113.

[126] Ibid, 98.

if humanity can obtain the correct knowledge, a proportional amount of power will come with it, for the knowledge is precisely a knowledge that reveals how nature can be shaped to a will and made to produce results.

4.3 Francis Bacon

As with the previous chapter, at least one concrete figure will be introduced in detail to represent the New Philosophy or "Power Over Nature" view in order to connect more abstract descriptions with a historical presence. Lewis' argument in *The Abolition of Man* is best served when understood in the context of philosophical explanation linked to historical manifestation, for that is the context in which he would have understood it himself.

Francis Bacon (1561-1626) will be used for this purpose, for he, like Galen, was both a philosopher and scientist.[127] The Father of Inductive Philosophy, he stands as the first to influentially expound the philosophy of the empirical, inductive method that forms the basis of the modern scientific method.[128] Equally important, he extended this vision to include not just material phenomena (the strict scientific domain) but many other domains of knowledge, advocating the formation of a complete, cohesive body of knowledge for which systematic induction was to be the foundation. He also strongly insisted that philosophy (meaning inductive philosophy) and religion must not mix together, reflecting the modern idea of separation between the natural and supernatural worlds by advocating separate methodologies for each tier of reality.[129] Thus, he both extended the New

[127] Jürgen Klein and Guido Giglioni, "Francis Bacon." *The Stanford Encyclopedia of Philosophy*. Last modified 2020. https://plato.stanford.edu/entries/francis-bacon/.

[128] C. D. Broad, *The Philosophy of Francis Bacon* (Cambridge: Cambridge University Press, 1926), quoted in Chrucky, Andrew, "Digital Text International." *Ditext.* Last modified May 2001. Accessed April 11, 2022. http://www.ditext.com/broad/bacon.html.

[129] Sherrard, *The Rape of Man and Nature,* 95.

Philosophy into new domains and cut it off from outside influence in a way previously unknown.

In addition to being the founder of the modern scientific method and bridging the disciplines of philosophy and science in his studies, Bacon produced a philosophy which ended up undergirding the Royal Society of Great Britain, the "institutional flagship of the new science."[130] The Royal Society, having adopted the New Philosophy in its Baconian form, did not just champion inductive methods—it also waged war against the well-rooted Galenic schools embedded in the universities.[131] Bacon's philosophy influenced a whole school of thought deeply antagonistic to the old structures of science and medicine which had been inherited from Galen and gone unchallenged for over a thousand years.

This inquiry will begin by exploring Bacon's conception of matter and the universe. In *The Great Instauration* and *Novum Organum,* he goes into great detail about his inductive method, giving the reader a distinct idea of matter as inert and subject to predictable, mathematical laws. "In nature," he explains in his second book of Aphorisms, "nothing really exists beside individual bodies, performing pure individual acts according to a fixed law."[132] Again, while critiquing "abstract forms and final causes and first causes" in natural philosophy (which is synonymous with science) he accuses moderns of "seeking for the dead among the living"—a repurposing of Christian Scripture to explain the uselessness of looking for explanations of dead matter in the wrong sphere, the religious

[130] Conrad et al, *The Western Medical Tradition,* 341.

[131] Ibid.

[132] Francis Bacon, "The Great Instauration and Novum Organum." In *The English Philosophers from Bacon to Mill,* ed Edwin A. Burt, 5-123 (New York: Random House, 1939), 89.

sphere.[133] Already we see a natural world in which forms and final causes are banished and natural bodies obey laws in a self-contained system.

The absence of forms (or any sort of thing outside of matter that could conceivably participate in matter) is strongly impressed on the reader: "For forms are figments of the human mind, unless you will call those laws of action forms."[134] Here, Bacon also introduces the concept that the human mind operates independently of nature and that it can produce false concepts of what nature is (namely, anything that is not a law of action is false). In fact, Bacon ends up redefining the idea of Form as a Law of Action for convenience, but he "would not be understood to speak of abstract Forms or Ideas…for when I speak of Forms, I mean nothing more than those laws and determinations of absolute actuality, which govern and constitute any simple nature, as heat, light, weight, in every kind of matter and subject that is susceptible to them."[135]

Bacon is absolutely clear that Forms, traditionally understood, are nonexistent. For Bacon, the Form of Heat is the Law of Heat, and to say that the Form of Heat is not Rare means that it is not possible to "superinduce" rarity on heat (or force heat to be rare), according to the law or nature of heat.[136] Three interesting conclusions can be drawn: first, that laws themselves constitute the natural world and phenomena are instances of those laws, second that laws are defined in terms of how it is possible to change and manipulate nature, and third, that matter operates, and must be understood, separately from mind. This latter point is made clearer in Bacon's explanation that the reason for doing inductive

[133] Bacon, "Novum Organum," 45.
[134] Ibid, 38.
[135] Ibid, 111.
[136] Ibid.

science is because the mind, upon receiving sense-data, can mix up "its own nature with the nature of things."[137] Induction is used to take simple facts and bypass the mind's tendency to project its own nature on the natural sphere, which has nothing to do with it. This characterization of mind and matter is ultimately good for humanity because it allows the mind to "exercise over the nature of things the authority which properly belongs to it."[138]

Bacon's main purpose, however, is to describe a way to obtain knowledge. His inductive method streamlines with his division of mind from matter and ideas about matter itself. Induction is meant to bring into systematic order an extensive range of collected facts from which higher principles (laws) are inferred, step by step. This process in theory bypasses the possibility of interference from the mind and ultimately, by giving humans insight into how the natural world operates, gives people power to manipulate the known means of operation. The inductive process entails a "humiliation of the human spirit" and a "better and more perfect use of human reason in the inquisition of things."[139] The analytical reason is exalted in its triumph over the secrets of nature because the mind, with its tendency to get in the way, "must be guided by a clue [induction] and the whole way from the very first perception of the senses must be laid out upon a sure plan."[140] Bacon stresses that induction requires very little wit or understanding because the reliance on the mind is replaced by reliance on experiment, which "shall analyze experience and take it to pieces, and by due process of exclusion and rejection lead to an inevitable conclusion."[141]

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[137] Bacon, "The Great Instauration," 18.
[138] Ibid, 6.
[139] Ibid, 11, 15.
[140] Ibid, 11.
[141] Ibid, 16.

Man becomes "a servant" or "interpreter" of nature by carefully analyzing the natural world, inferring its mathematical laws, and thus obtaining insights into its workings.

Along with the method of induction stands one of Bacon's most well-known ideas: the identification of knowledge with power. Knowledge being power is far more than a cliché or even a new axiom. It is integral to the development of inductive science and dependent on the view of nature developed in the New Philosophy. Knowledge of nature is construed as insights into the operation of laws on bodies or particles in motion, and this type of knowledge allows the knower to apply the insights by manipulating the operation of the laws in action. Moreover, the analytical process, the discovery of knowledge, works best when man attempts to force nature to do certain things in incremental, systematic steps (i.e., experiments): "the secrets of nature reveal themselves more readily under vexations of art than when they go their own way."[142] Nature must be put to the test, man must *try* to force nature to do certain things to most easily know how nature operates. So, not only does knowledge imply man has power, the attempt to exercise power also facilitates knowledge.

However, knowledge and power are not just linked together, they are also the primary object of man. "Those twin objects, *human knowledge* and *human power*, do really meet in one" because "it is from ignorance of causes that operation fails."[143] Putting it even more distinctly, Bacon explains that human power is the ability to "generate and superinduce a new nature" on a given body and that human knowledge is to "discover the form, or true specific difference, or nature-engendering nature or source of emanation"

[142] Bacon, "Novum Organum," 65.
[143] Ibid, 23.

which produces that new nature.[144] Again, in *The New Atlantis*, Bacon expresses that, "The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible."[145] Thus, knowledge is that which gives man power over the natural world, for, once man perfectly understands the law that makes a material substance behave the way it does, he will know how to produce or manipulate it.

Needless to say, Bacon sees man's "enlargement of his power over nature" as a very good thing, an "improvement of man's estate" through the production of new material comforts.[146] His method is one that permits man to "command nature in action" and "penetrate, as true sons of knowledge" into nature's "inner chambers."[147] The knowledge is one completely intertwined with power over the natural world. There is no sense of nature participating in something higher that would either prohibit this type of investigation or better employ man's faculties. Man misses nothing in an object by treating it as only an object. Nature consists only in the conquerable.

Furthermore, the knowledge obtained is most useful and meant to be useful in the present life. Bacon's anthropocentricity is extremely strong, and although this does not preclude a belief in, say, the afterlife, it does refocus man to his life on earth in the natural world. Bacon explicitly rejects the idea of producing and contemplating beautiful models of the universe as speculative and unprofitable. He acknowledges, "many theories of the heavens may be supposed, which agree well enough with the phenomena and yet differ

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[144] Bacon, "Novum Organum," 88.

[145] Francis Bacon, "New Atlantis." In *Essays, Civil and Moral and New Atlantis, Areopagita and Tractate on Education, Religio Medici* (New York: P. F. Collier, 1910), 172.

[146] Bacon, "Novum Organum," 123.

[147] Ibid, 15, 27.

with each other" but claims his goal is to extend the "power and greatness of man."[148] The goal is power for man; Bacon intends that the saying "man is a god to man" will be justified.[149] This goal can only be achieved through knowledge which produces "fruits and works" as "signs and sureties for the truth of philosophies," not through supposals about appearances that logically fit all the phenomena.[150] This is a crucial shift. Before, the appearances, always in flux, could be fit into a contingent model whose limiting characteristics were beauty, logic, and simplicity. The model was never seen as describing the essence of the objects. Bacon has shifted to claiming that the true philosophy (induction) takes material phenomena as instances of laws which constitute the whole of the natural world. Once known, these laws can be manipulated and produce "works" which are proof of the truth of the philosophy. Evidence of power verifies true knowledge.

Bacon criticizes the older view that he wishes to replace for not producing results and increasing the fruits of science (technologies). This outlook was influenced by his belief that the New Philosophy was to bring people into touch with the *realities* of the natural world, which would inevitably result in an increase in human material products.[151] His progressive stance and confidence in fruits as a sign of knowledge reflects his belief that the New Philosophy is capable of seeing more than just appearances—Bacon believes he can know, at least theoretically, the reality of Nature itself. His knowledge will not bring "the promise of the thing but the thing itself," he says, referring to human power via technology, because, "[He is] building in the human understanding a true model of the

[148] Bacon, "Novum Organum," 77.
[149] Ibid, 85.
[150] Ibid, 51.
[151] Ibid, 7, 43.

world…truth therefore and utility are here the very same things."[152] It is difficult to overstate the strength of claim here; Bacon leaves no room for doubt that inductive methods bring man into contact with a *true* model, which is ultimately the same a model which *produces results*.

Bacon does not deny that this type of empirical activity and pursuit, this "dwelling with experience and matter and the fluctuations of individual things, drags down the mind to earth…removing and withdrawing it from the serene tranquility of abstract wisdom" but accepts the new situation as "preferred, the very thing which I am about."[153] The inductive method "goes far to level men's wits" and leaves little space for "individual excellence"; the mind "must not be supplied with wings but hung with weights to keep it from leaping and flying."[154] Far from disagreeing with earlier beliefs that studying the appearances narrows one's outlook by engrossing a person with only one "side" of reality, thus chaining the mind to earth, Bacon wholeheartedly accepts the idea, anticipating that such a path, though embroiling man with nature, will only expand man's greatness. Unlike the ancients, Bacon does not believe man's overall dignity is at all lowered with the lowering of his mind and studies. For man is studying all there is to know about the natural world; nothing about a natural world characterized by efficient causes is missed or lost by such a study, and nothing about that world prohibits man from treating the world as such. Man only stands to gain: by conquering the knowable material reality of natural phenomena, he can improve his earthly situation.

[152] Bacon, "Novum Organum," 65, 82.
[153] Ibid, 82.
[154] Ibid, 71, 81.

Bacon's most unique contribution, however, lies in his confidence in extending the New Philosophy into almost all branches of human knowledge, a plan vividly portrayed in his utopia, *New Atlantis*. He opens his *Great Instauration* with a call to "try the whole thing anew upon a better plan, and to commence a total reconstruction of sciences, arts, and all human knowledge, raised upon the proper foundations."[155] His statement means that every subject—including "moral and political philosophy," human emotions like "anger, fear, shame" and mental abilities like judgement and memory—will pass through the lens of the analytical scientific methods.[156] Induction is a science that will "embrace everything."[157] Yet, for science to embrace these subjects, the subjects must also conform so that science *can* analyze them. Just as rocks and plants can only be measured as part of a quantifiable natural world, if human emotions, judgements, and moral philosophies are to be scientifically studied, only the "natural" types of characteristics will be detectable. If moral philosophy has another side, science cannot see it. Indeed, later on, Locke ends up holding, along these lines, that human ideas are the result of sensations and experiences, thus giving purely natural or mechanical explanations to human thought.[158]

Bacon, of course, held this New Philosophy in conjunction with beliefs about the existence of God and the supernatural, which is evident in his many invocations of the divine throughout his works. However, this detracts nothing from his claims, for the natural and supernatural do not mix in Bacon's world and should not be mixed in the mind either. Bacon explicitly cautions against using the supernatural as an explanation for natural

[155] Bacon, "The Great Instauration," 6.
[156] Bacon, "Novum Organum," 56, 84.
[157] Ibid, 84.
[158] Conrad et al, *The Western Medical Tradition,* 346.

events, warning against forms and final causes as well as superstitions about spirits or genii.[159] In general, religion must not be "commixed together" with natural philosophy.[160] Thus, in the natural realm, the inductive method reigns supreme. The religious (or supernatural) sphere is left to itself, having little to do in the self-sufficient natural world.

4.4 Conclusions

Let us step back briefly to examine how Bacon and the New Philosophy alter the way the world is understood. The change in outlook, being a foundational shift, influences nearly every part of man's world-picture. Matter, once imbued with spiritual meaning via some sort of Participation, is inert and lifeless. It moves in homogenous, empty time according to measurable laws in equally empty and homogenous space. Time is no longer seen as layered or warped or being interfered with by a higher time and space is treated likewise.

The universe, once seen as a cosmic whole, is separated into distinct tiers, the natural and supernatural realms, where the real properties of natural objects are mathematically quantifiable, and all other characteristics are projections of the mind (associated with the supernatural). Phenomena can thus be known in their essences through sense-data and analysis of their real characteristics, producing True Models of the world, whereas before the outward appearances were only transient manifestations of a more concrete reality. Knowledge of the natural world based off analytical methods and verified through results is man's only way of contacting natural realities. Before, a person was seen as capable of interacting with the world on multiple levels, including, but not limited to,

[159] Bacon, "Novum Organum," 43, 45.

[160] Francis Bacon, "Advancement of Learning", quoted in Philip Sherrard, *The Rape of Man and Nature* (Suffolk: Golgonooza Press, 1987), 95.

the profane material level. A contemplative or spiritual knowledge could bring one to the reality underlying appearances.

Before, the goal of humanity (and the rest of the cosmos) was to conform to the Order, to the reality of things, by acknowledging and aligning with it. (Of course it was possible *not to* align, but alignment was the ideal.) Now, within the natural realm, which corresponds most strongly to everyday life, the goal is to conform the patterns of nature to the wishes of humans for their material benefit. Nature is to be conquered for the good of human society.

The coming of the New Philosophy was accompanied by attitudes of scorn towards so-called superstitions and most tradition, contrasting sharply with, for instance, Galen's deep regard for the wisdom of antiquity (he often called Hippocrates "divine") and scorn of contemporary practice. It was also, as Mary Midgley has pointed out, accompanied by a pervasive power rhetoric—whereas before Nature was seen as a goddess to be worshiped, she is now seen as a woman to be raped.[161] This is accompanied by the acceptance of hitherto unacceptable practices such as human dissection and boasts of experiments on animals en masse.[162]

Regardless of one's perspective about the value of this trend, if this view becomes normative, it entails a colossal shift in perspective. Further, as this view of the natural world begins to solidify as people's default mode of thinking and living, as it begins to frame their perspective, more of the universe is seen through this one lens. As the norms for a test of truth, evidence, and the character of reality within the natural sphere become more

[161] Midgley, *Science As Salvation,* 77.
[162] Conrad et al, *The Western Medical Tradition,* 347.

deeply rooted in societal assumptions and institutions, they begin to be applied almost universally. We see the first calls for action of this sort with Bacon. Yet any subject, discipline, or area of reality viewed under the new norms used for analyzing the natural world must be seen in a wholly different light. That reality must be, in Lewis words, "reduced to the level of Nature."[163]

Lewis, of course, took an interest in the progression of this shift and how it has affected our conceptions of ourselves and the universe. The next chapter will discuss this shift in some detail. His unique argument that I wish to bring into focus, however, deals with what happens when this tendency to treat nature as quantity is extended over humanity itself in full. I refer to the project of Locke, Hobbes, and many others which claims that humanity itself, including the mind/soul and all the qualities that reside in the mind, are also mere nature. What happens when Bacon's project of extending the analytical methods to every subject is fully completed? *The Abolition of Man* is addressing what happens when the natural world *is* the world.

[163] Lewis, *The Abolition of Man,* 69.

CHAPTER 5

LEWIS' EVALUATION OF THE SHIFT FROM PARTICIPATION TO POWER

> In fact, while it is entirely recognized that in order to be a scientist—or a musician, or a ballet-dancer, or even an international football player—these long years of study and practice are a prerequisite, it is somehow tacitly assumed that the capacity to think coherently, and to set down one's thought cogently, does not require much training but is the automatic prerogative of whoever is proficient in any other profession or skill.
> Philip Sherrard, *The Rape of Man and Nature*

When the Power view, the New Philosophy, becomes normative within the framework a culture uses to make sense of the world, the philosophy is necessarily intertwined in the actions of the people within the culture. In *A Secular Age,* Charles Taylor explains how, in the integration of theory and practice, just as theory can give rise to new practices or modify the meanings of old ones, so do practices "carry" and imply certain theoretical understandings.[164] An action we take requires a certain understanding of the world to be possible, and our taking it also normalizes the understanding. Actions and philosophies thus feed each other and are difficult to disentangle.

Thus, when Lewis writes of the philosophical shift towards the New Philosophy of Power Over Nature, he understood that theoretical consequences, when normative, are very concrete. Even when theory is not consciously understood, practices (necessarily rooted in certain understandings of the world) require background understandings that imply specific consequences. Philosophical work, then, can be of great help in tracing the consequences,

[164] Taylor, *A Secular Age*.

intended or not, of ideas embedded in a culture and its practices. For a simple idea, once rooted in the way a society *frames reality itself,* is no longer just an idea, but a way of life.

Lewis wrote of several consequences of varying magnitudes implicit in fully adopting the New Philosophy. These "different consequences" really correspond to the same framework being applied to different areas of life in different ways and to different extents. Ideas are not embedded in a cultural framework instantly, and, as people adjust to new ways of conceiving the world, old norms often end up shaping the way people view some aspects of the world and not others. Thus, two incompatible frameworks may shape separate "domains" of life and influence practices to different extents. Yet, the deeper, foundational, normative idea will predominate and over time shape and modify the way almost every aspect of life is viewed.

The New Philosophy developed by men such as Bacon, Newton, Locke, and Boyle was deeply intertwined with the emerging practice of modern science. Science was the practice that succeeded in "carrying" the New Philosophy the best, and, consequently, the New Philosophy impacted the way scientific disciplines (and disciplines that relied on science) were conducted most strongly. As such, several of Lewis' evaluations of the New Philosophy consider the philosophy within the discipline in which it first flourished—science. For Lewis understood that the shift from a Participatory view of the cosmos to the Power Over Nature view not only reshapes the way man views science, but also reconfigures man's conception of nature. Moreover, as scientific thinking extends over more "domains" of thought, bearing the assumptions of the Power view, it alters man's understanding of other areas of life as well. The following pages will discuss four of Lewis'

evaluations of the New Philosophy as manifested in scientific methodologies and in its role shaping modern man's background understandings of the world.

5.1 Scientistic Thinking

The most basic critique Lewis makes of the New Philosophy in its cultural application has to do with a tendency modern man has to extend the methods and assumptions of the New Philosophy into domains which would appear to be off limits to it. Having acclimated to the methods of modern sciences, people often miss the complex set of assumptions and background understandings—the New Philosophy—that undergirds and makes the new science possible. Not realizing that science implies a philosophy to work, they believe it possible to extend the scientific methods to any domain of thought, including politics, social life, ethics, and spirituality.

The New Philosophy, however, was meant to deal with only one tier of reality. Granting that the idea that there is a two-tier universe, the methods of the new science still deal only with the material side of the universe. Even if it is assumed that science can give full knowledge of everything material and natural, on what basis can politics, ethics, philosophy, and religion be termed natural and given a scientific treatment? Yet, this is just what is seen in universities, for instance, when politics are called "political science," the study of society "social science," the study of the mind "psychology" and so on. Behind the term "science" lies an entire outlook, the New Philosophy, which is being extended with the scientific practice into new domains.

Lewis speaks to this concern when he complains of "government in the name of science" and "specialists speaking outside their special subjects."[165] His worry is that

[165] C. S. Lewis, "Is Progress Possible? Willing Slaves of the Welfare State." In *God in the Dock,* ed Walter Hooper, 311-322 (Michigan: William B. Eerdmans Publishing Company, 1970), 315.

people will trust the scientific disciplines as somehow exempt from relying on a philosophical backdrop and allow scientific work to overstep its bounds by using the New Philosophy to direct ethics and politics, domains that are implicitly out of the reach of science. Science, as construed within the New Philosophy, deals with discovering complete understandings of the natural world. Thus, any area to which its methods are extended must be treated as if that area is only natural. Ethics and politics, which, for Lewis, deal with the qualitative realities such as justice, goodness, and the human spirit, are understood to reside within a domain over which the New Philosophy (and thus science, as based off that philosophy) could not extend.[166]

This tendency to extend the scientific methods can be seen in the earliest writings about the methods of the New Philosophy. Bacon, as we have seen, despite warning that religion and science ought not be mixed together, cannot help but advocate allowing the inductive method to "embrace everything."[167] His ideas were quickly solidified by figures such as Hobbes, La Mettrie, and Pavlov who respectively claimed that society, the human body, and behavior were all susceptible to scientific analysis.[168] The temptation to go from using science to deal with anything from physics to ethics runs back quite far and, by modern times, appears almost normal. Yet there is no particular reason to assume that a single discipline that deals only with the quantitative aspects of existence can be expected to analyze and cover the whole vast range of human experience.

Lewis is not alone in his concerns about the extension of science. The claim that science can be extended beyond its specialty, as Mary Midgley explains, was developed

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[166] Lewis, "Is Progress Possible?" 315.
[167] Bacon, "Novum Organum," 84.
[168] Sherrard, *The Rape of Man and Nature,* 69.

seriously by Auguste Comte and is echoed in modern day scientists such as Rudolf Carnap, who claimed that unlimited scientific knowledge means "that there is no question whose answer is in principle unattainable by science."[169] David Hicks quotes Arnold Toynbee, who explained that even when a methodology works well for its own limited task, it may "be counted on to produce some inordinate effect in a different set of circumstances" which ends in "certain disaster."[170] It is unreasonable to suppose science can answer unscientific questions. Sherrard wonders at the general acceptance of long years of training being a prerequisite to legitimately doing science along with the tendency of "scientists to venture beyond the confines of their specialties into the metaphysical or philosophical realm" as if philosophic thought requires no training whatsoever.[171]

The extension of modern science betrays a lack of awareness that science, being grounded in philosophy, is given legitimacy by philosophy as well as curbed to its rightful and useful place. To claim that any discipline can be dealt with by a scientist *working only in a scientific capacity* seriously mistakes the nature of scientific work on two fronts. First, one ignores the fact that science itself requires a philosophical and metaphysical justification for its methods as well as its assumptions of validity, truth, the possibility of knowledge, the existence of a universe, etc. Michael Aeschliman, in his book on *The Abolition of Man,* explains that what people think is science becomes scientism when people ignore the fact that, "procedures and validity of rational thought and argument are presuppositions on which scientific thought and experiment rest, but they are themselves

[169] Mary Midgley, *The Myths We Live By* (London and New York: Routledge, 2003), 14.
[170] Hicks, *Norms and Nobility,* 61.
[171] Sherrard, *The Rape of Man and Nature,* 12.

not 'scientific': they are philosophical."[172] The fact that an experiment could be true implies a concept of truth that is not itself susceptible to experimentation.

Second, scientific discipline, which deals only with the material world, or "appearances," cannot be extended infinitely across all disciplines dealing with the non-material sphere without further philosophical justification. As Lewis points out in his essay *Religion and Science*, since science deals only with the natural, it cannot determine if anything *other* than the natural exists or not.[173] Science is unable to determine where analytical scientific methods are applicable since the question entails determining whether something beyond the scientific exists in a given domain. It is a question for a philosopher of science.

We are left then, not with a choice between science and philosophy but with a choice between one philosophy and another. As Aldous Huxley put it, "The choice that is given is not between some metaphysic and no metaphysic: it is always between a good metaphysic and a bad metaphysic."[174] The philosophy chosen will shape both ideas of the proper use of science as well as its methodology. Either one must admit that science (as currently understood as dealing exclusively with the natural) cannot adequately deal with subjects outside its specialization and bar science from dealing with metaphysical subjects or claim that such subjects *can* be dealt with by science because those subjects fall within the domain of the natural world. One can either deny science access to the non-natural or

[172] Michael D. Aeschliman, *The Restoration of Man: C. S. Lewis and the Continuing Case against Scientism* (Seattle: Discovery Institute Press, 2019), 48.

[173] C. S. Lewis, "Religion and Science." In *Essay Collection: Faith, Christianity, and the Church,* ed Lesley Walmsley (London: HarperCollinsPublishers, 2002), 144.

[174] Aeschliman, *The Restoration of Man,* 77.

redefine what was non-natural as natural. Either science cannot give an explanation of the metaphysical soul, or it can because the soul is really only part of the natural world.

Either one of these options may be seriously argued for, but both require a philosophical justification, because both perspectives delineate the boundary or the domain to which the natural extends, even if the latter perspective may extend it over every part of life imaginable. It is a philosophical idea to state that ethics is a natural discipline just as much as it is to state that ethics must be dealt with as a non-natural affair. Even a sort of blended stance, a claim that some things about politics can be known through natural means and others by supernatural means still requires a philosophy to explain and justify which parts can be known in what ways *and why*.

One may very well end up holding a philosophy which claims that many or all things formerly thought to be metaphysical are simply physical and can thus be treated as science. One may opt, like the physicist Paul Davies, to defend a theory of everything based on physics and attempt to form a philosophical system.[175] But, as Midgley points out, "the connection of physics with other studies is not itself a part of physics."[176] A scientist like Davies must also become a philosopher. The claim that man can create a scientific ethics *because ethics is a product of nature* is not a scientific claim. It must be recognized that such a claim is a philosophical one that is up for legitimate debate and must be defended on philosophical grounds.

What Lewis and many others have warned against is the idea that science can exist in a vacuum and can envelop any subject. This perspective ignores the fact that modern

[175] Midgley, *Myths We Live By,* 20.
[176] Ibid.

science was developed to suit a very particular way of viewing the natural world (the New Philosophy) and that to extend science is to extend a certain philosophy. Further, to act as if science could exist without a background philosophy to legitimize its methods and truth-claims undermines science itself as dealing with the natural world because science cannot prove its own legitimacy. All that happens is that one metaphysic is adopted under the name of science and deals with any subject while claiming to be attached to no philosophy whatsoever. The result is a dogmatic ideology, a good example of which is "scientific socialism," or Marxism, which has been criticized by Dostoyevsky and many others as a "pseudo-science" that uses scientific methods to explain what science cannot touch.[177] Communism became a faith backed by a "science" which was not science but an extending of the philosophic principles underlying science to apply to a social theory. In accepting "science" people were blinded to potential problems in what was actually a metaphysical theory.[178]

Lewis' first critique of the New Philosophy, then, has to do with its unbridled extension under the title of "science." He realizes that accepting a transition from a Participatory framework to the New Philosophy only within the natural world is at least clearly debatable, whereas the blurry confusion the modern world exhibits applying its New Philosophy everywhere simply evades philosophical evaluation, mostly due to an ignorance of the fact that modern science is intertwined with a philosophy. Those who (often unwittingly) act as if pure science can deal with metaphysical questions Lewis asks to reconsider what science is, namely, a discipline which deals only with the natural and

[177] Aeschliman, *The Restoration of Man,* 68-69.
[178] Midgley, *Science As Salvation,* 140.

recognize that the philosophy undergirding the modern sciences deals with the natural world in a very particular way. Those who claim that the natural world extends much further than he does (and thus claim the extensions can be treated as scientific material) and are willing to justify it philosophically he addresses separately as philosophical equals. They cannot be accused of scientism in the sense of attempting to use science to examine the non-natural.

5.2 A Quantitative View of Matter Misses Part of Reality

The tendency to extend the New Philosophy over any area of thought under the guise of science is problematic, but it is really a rather superficial mistake. Thomas Storck correctly notes that although Lewis does critique popular "scientism" and is well known for it, his more rigorous philosophical critiques of the New Philosophy (and its implications for modern science) are far more interesting and less well-studied.[179] Lewis makes several critiques of modern science, the primary carrier of the New Philosophy in modern times, that address the philosophical issues that arise when a culture shifts from holding the Participatory view of nature to the Power view. Lewis does not rest with considering the problems that may arise when one treats the immaterial as Bacon treats the material; he also evaluates the Baconian treatment of material itself.

The first consideration Lewis brings to the table concerning the scientific treatment of matter deals with what is possible to understand about matter when it is treated in exclusively quantitative terms, and whether scientific data about matter can conclusively give man an accurate picture of matter. Lewis lays out his considerations very clearly:

> It is not the greatest of modern scientists who feel most sure that the object, stripped of its qualitative properties and reduced to mere quantity, is wholly real. Little

[179] Thomas Storck, "Saving the Appearances? C. S. Lewis' Critique of Scientific Knowledge." *Sehnsucht: The C.S. Lewis Journal* 10 (2016): 1. https://www.jstor.org/stable/48579618.

> scientists, and little unscientific followers of science, may think so. The great minds know very well that the object, so treated, is an artificial abstraction, that something of its reality has been lost.[180]

What, exactly, is Lewis speaking of when he talks about "reducing nature" and thereby losing touch with part of reality? He is pointing out what is evident when one considers the scientific revolution in terms of the shift in perspective about nature outlined in the previous two chapters. Under the Participation view, nature participates in a broader reality, a cosmic ordering, and nature's material elements are only one part of its full manifestation. The participation is so integral to being that the distinction between natural and supernatural only exists insofar as man abstracts and treats nature as such. On the other hand, the New Philosophy, which manifests most strongly today in the form of inductive science, utilizes the rational, analytical capacity to study only the aspects of nature susceptible to a quantitative-based inquiry. The results are further understood to correspond to the full reality of the object because it is assumed that the object exists in a sphere separate from the immaterial world of qualities (the two-tier universe). Thus, to move from a natural philosophy that organizes and situates the external appearances of objects to treating an object as consisting of nothing but its external aspects is a reduction of the natural world.

This reduction ends up producing ideas of nature far more abstract than those of the Participatory view because it excludes a whole range of human empirical experience of nature simply because that experience does not conform to the idea that only quantitative realities detectable by science are real. Sir Arthur Eddington famously explained this concept by describing "two tables." The first table is commonplace, familiar, has quality

[180] Lewis, *The Abolition of Man,* 70-71.

and permanency, color and substance—"it is a thing."[181] The second table is scientific, and it consists of:

> mostly emptiness…scattered in that emptiness are numerous electric charges rushing about with great speed; but their combined bulk amounts to less than a billionth of the bulk of the table itself…I need not tell you that modern physics has by delicate test and remorseless logic assured me that my second scientific table is the only one which is really there…[182]

The scientific table is the real table because it is described in terms of its "real" parts, which are exclusively quantitative.

Despite the mental difficulties in conceiving of the world in physical terms and literally denying much of our day-to-day experience of objects, it is commonly thought that science, being objective, must give us an accurate picture of reality. Yet, being objective while one studies and treating "what you study as itself an object" are not the same things.[183] There is nothing about nature, as we experience it, that demands us to treat matter as inert, dead, and purely quantitative. This is a philosophical dictate which has become, in modern times, synonymous with science and objectivity. Yet, there is no reason that science must take this character. Hicks explains that an education based upon the New Philosophy, in "limiting [experience] to what is scientifically verifiable excludes huge tracts of human experience."[184] This reduction of experience only makes sense if one has already adopted a philosophy of nature that defines the natural as quantitative and has legitimized a discipline to study nature that is only capable of measuring quantity.

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[181] Storck, "Saving the Appearances?" 55.
[182] Ibid.
[183] Midgley, *Science As Salvation,* 47-48.
[184] Hicks, *Norms and Nobility,* 65.

When modern scientific analysis is understood to give full insight into nature, as is claimed by the New Philosophy, this type of reductive process is inevitable because science can only deal with those aspects of nature susceptible to quantitative analysis. Thus, Storck explains, "this merely quantitative world became the real world for science because it was the world which was susceptible to manipulation by mathematical techniques."[185] In other words, methods which depend on mathematical modelling to describe physical experience in terms of quantity will always produce explanations of nature that are quantitative in nature. The only way it makes sense to justify these methods as *fully* describing reality is by using a form of circular reasoning, claiming that science can account for all of nature because all nature is quantitative, which is proved by a science that can only quantify, etc. One recalls the fact that, within the New Philosophy, only the primary mathematical aspects of nature count as reality, whereas secondary, qualitative aspects are imposed by the mind and relegated to a separate sphere. Sherrard traces this circumstance to a New Philosophy assumption that the world of nature is inherently mathematical, only susceptible to mathematical analysis, and therefore exclusively quantifiable.[186] He points out that the New Philosophy prioritizes mathematical knowledge in the study of the parts of the natural world accessible to the senses (as Descartes and Bacon did) and concludes that the only legitimate parts of the natural world are those accessible to their favored way of studying it.[187] The New Philosophers, in assuming that nature does not participate in a reality beyond quantity, developed analytical methods that would never be able to contact such a reality, should it exist.

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[185] Storck, "Saving the Appearances?" 55.
[186] Sherrard, *Human Image,* 37.
[187] Sherrard, *The Rape of Man and Nature,* 97-99.

Lewis, and philosophers like him, describe this as a "repression of elements" in our experience of nature and in our scientific treatment of it.[188] Lewis thought that if nature is always treated by science as if only consisting in the quantifiable, and if scientific methods are assumed to give full accounts of nature, aspects of nature other than the quantifiable will never be accessible to humanity. In one of his novels, *Perelandra*, he has a character state, in reference to nature, that size and shape is not primary to being.[189] This is a direct reversal of the assumptions that legitimize a view of nature influenced by modern scientific methods. Similarly, a character in his children's novel, *Voyage of the Dawn Treader*, is pointedly corrected when he claims that stars are nothing but flaming balls of gas. "Even in your world," replies a living star, "that is not what a star is but only what it is made of."[190] In both instances, Lewis is attempting to depict how the quantifiable elements which modern science studies may not constitute the reality, the *being*, of an object. Lewis is not denying the value of quantitative elements themselves, or their contribution to the existence of an object, but he is rejecting the conflation of quantity with reality.

This issue has escalated in modern times as scientists begin to come to terms with what it means for nature to be mathematical and studied through mathematical science. Because true nature is mathematical, the formulae or laws which describe natural phenomena are seen as more real than physical nature itself. For laws describe the full reality of nature in all instances, whereas particular instances of phenomena are simply instances of mathematical laws being carried out. One begins by seeing a falling apple as a certain combination of atoms moving in space according to designated laws; the next step

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[188] Lewis, *The Abolition of Man,* 67-68.
[189] C. S. Lewis, *Perelandra* (New York: Scribner Classics, 1996).
[190] Ward, *After Humanity,* 167.

is to realize that a given falling apple is one instance of nature performing a combination of such laws. Thus, the reality of nature is the collection of laws of falling apples, and the falling apple itself is an instance of reality at work. Thomas Fowler explains that scientists, having made "an implicit identification of nature with law" concluded that "the law, expressed in the formula, [was] more real, so to speak, than the phenomena which were instances of it."[191] If modern science is absolutized as a means of studying nature, the New Philosophy, which undergirds the science, comes along with it. This entails a very particular view of nature which excludes any non-quantifiable aspect of reality, resulting, according to Lewis, in a pure abstraction of objects.

What results is a world where certain facts of experience are denied legitimacy and instances of natural phenomena are viewed as instances of laws in operation. Nature, redefined as mathematical, can be accurately described mathematically. It is no large step to conclude that if mathematical science describes the reality of nature, other ways of describing nature are metaphorical, misleading, illusory. They may be helpful analogies, but to believe the analogy to be reality is a mistake. "The mathematics," Lewis worries, "are the nearest to the reality we can get. Anything imaginable, even anything that can be manipulated by ordinary (that is, non-mathematical) conceptions…is a mere analogy, a concession to our weakness…"[192] Since laws are both accessible to the mind in a way nature is not (due to the two-tier view of the universe) and constitute the purest way to express the quantified aspects nature, they are the closest we can get to understanding natural realities.[193]

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[191] Storck, *"Saving the Appearances?"* 55.

[192] Lewis, *The Discarded Image,* 218.

[193] See chapter three for an explanation of the two-tier universe. Under the New Philosophy, laws are understood to be mental conceptions, and thus accessible to the mind or spiritual tier.

5.3 Concerns with Scientific Theory Being Treated as Fact

If modern science misses part of the reality of an object by analyzing it without reference to an underlying Order and assuming that no such Order exists, it absolutizes this analysis by insisting that the methods of science do not really neglect anything at all. Observing the external appearances of an object is not a concern for Lewis until it is claimed that the appearances have no grounding in the Tao and are all there is to be studied. Thus, Lewis' worry is not so much that science cannot ever investigate anything beyond quantity as the idea that the quantitative investigations are capable of investigating all that nature is.

This recalls the crucial point Lewis makes in claiming that the scientific revolution was not brought about by a new theory but by a new theory of theory.[194] The issue is not simply that scientific methods can only understand tables as speeding atoms or falling apples as nature performing a law. It is the fact that people are persuaded that scientific tables and apples are the only tables and apples that really exist. Yet, this assertion is clearly a philosophical one, for it is the business of scientific methods to explore nature, and the business of philosophy to tell us what nature there is for science to explore. Pure science cannot determine what is or is not natural or what it means for science to explore nature. It is the New Philosophy which asserts that since nature is in reality quantifiable, science can accurately represent it to us.

Recalling the Participation view of science from chapter three gives insight into the changeover that occurs in the theory of science in the 17th century. Since there was no formal divide between the natural and supernatural, science (or natural philosophy) was an

[194] Lewis, *The Discarded Image,* 16.

exercise in saving the appearances. This (as previously explained) entails explaining how the external appearances of objects appear to behave to the human observer using a theory. The philosophy undergirding this type of science dictates that, since the physical, quantitative manifestations of an object do not constitute the whole of its reality, the study of externals cannot produce a full explanation. Only a wholistic understanding of an object can yield true knowledge. A theory of appearances explains how nature appears to behave, not how it does behave.

The reference to appearances, however, does not imply a denial of the human experience of material manifestations. Saving the appearances does not relate to the experience of phenomena but to the explanation of them. It is not disputed that a given apple really fell from a tree. However, to claim that a given theory based only on the appearances of the apple could in principle describe why the apple fell, and generalize the behavior of all apples, is out of the question. There is also nothing particularly wrong in attempting to save appearances, or engage in this type of science, provided one recognizes the limitations of one's study and conforms the practice of science to an understanding of higher realities. One may prefer to contemplate forms or enjoy saving the manifestations of forms by describing how phenomena *appear* to behave. Even if the latter person studies "lesser things," and has tentative knowledge, he does not suppose that an appearance is the full reality, that the tentative knowledge is absolute. Hicks echoes this idea: "Philosophy dictated, therefore, that one could *save* appearances with hypothetical models, but one could not *know* the appearances…"[195] Scientific knowledge can only be absolute if nature only consists of that which is susceptible to science.

[195] Hicks, *Norms and Nobility,* 55.

Saving the appearances is based on a philosophy that assumes that an object participates in a reality beyond its natural externals, and that those externals are part of a world that is constantly in flux. Not only are appearances unable to give full information about a reality, they only give information about changeable and fluctuating aspects of the universe. Scientific theories reflect the changeable and produce no fixed information or exact, concrete descriptions of such appearances.[196] To the ancients, it would be no surprise to see that three central theories of modern science are evolution, relativity, and indeterminacy, all of which reflect a changing and fluctuating world.[197] Lewis believes, however, that they would be shocked to consider modern theories about appearances as descriptions of reality.

Lewis points out that scientific theories not only miss part of reality but, even in their attempts to objectively study externals, are guided by a selective framework, which he calls a model.[198] The world is filled with too many appearances, too many instances of phenomena, for people to be able to study even a single instance of a phenomena from every possible angle. Models provide a framework for exclusion and interpretation of data, a guide by which researchers can form research questions, relate experiments, and synthesize information in a meaningful context. Researching a phenomenon in a certain way requires a choice about what will be studied, in what way, what constitutes evidence, and how conclusions ought to be drawn. "The scientist," explains Storck, "works within the confines of a model that simultaneously guides and restricts his research choices."[199]

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[196] Hicks, *Norms and Nobility,* 53.
[197] Sherrard, *The Rape of Man and Nature,* 82.
[198] Lewis, *The Discarded Image,* 219-223.
[199] Storck, "Saving the Appearances?" 58.

Nature, according to Lewis, does not tell us anything directly, but "gives most of her evidence in answer to the questions we ask her."[200] Humans are not so omnicompetent as to be able to manage all phenomena at once; instead, phenomena (or certain ways of looking at phenomena) are discovered in response to human investigations. Just as the Greeks could not bear the idea of a universe stretching to anything as horrible as infinity, modern man has his own models that reflect certain psychological preferences and guide which scientific studies are undertaken.[201] Thomas Kuhn explains that "since nature is too complex and varied to be explored at random, that map [i.e., model] is as essential as observation."[202] Again, perceiving that a model influences scientific selection does not mean that nature cannot be known or that scientific conclusions are lies. It only means that science can only give provisional, tentative knowledge, which may prove extremely useful in theorizing about appearances and producing technologies.

Thus, the practice of saving the appearances acknowledges several characteristics of science which modern science ignores or marginalizes. First, it admits that since science can only study appearances, scientific theories can only be tentative and reflect a world in flux. Thus, to absolutize such theories by treating them as fact will absolutize a view of nature which misses key elements of nature. Moreover, saving the appearances assumes that the process of making theories (including deciding which experiments to do and how to interpret data) align with the Order of reality. However, if theories about appearances are factual without references to anything beyond the natural, there is no standard by which to create theories. Thus, "factual" descriptions of the universe will end up reflecting the

[200] Lewis, *The Discarded Image,* 223.
[201] Ibid, 222.
[202] Storck, "Saving the Appearances?" 60.

unguided choices human observers make about a partial reality. The danger is in thinking that a theory about how something works is factual, fully reflects reality, and is exempt from influence by a model (in other words, "objective").

Is this a fair picture of science which Lewis draws? Do scientists truly believe that their theories factually represent reality? As Lewis himself points out, many real scientists understand the tentative nature of their work; they know that a theory is only hypothetical, and that nature, treated as an object, has lost some of its reality.[203] This only underscores the point that the study of phenomena that is not the issue per se, but the underlying Power view that legitimizes an exclusively natural view of nature, with science as its chosen discipline of study. The issue lies in the normalization of the New Philosophy and is very much still alive. It is reflected in the widespread belief that nature consists in its quantifiable elements, and that science could, in principle, accurately describe those elements with more than a tentative theory, given enough proof or facts. It is the idea that science can independently give a factual *account* of nature.

5.4 Scientific Frameworks and the Exercise of Power

One might well wonder at the fact that the only studies that bear the New Philosophy are science and disciplines that have morphed into sciences by conforming to norms created by the New Philosophy. Why is it that there is only one discipline that can investigate nature within the New Philosophy? A discipline used to study nature must, under the New Philosophy, treat nature as an object and grant the knower, through an investigation of causes within the natural world alone (the only world in which the natural object participates), power to manipulate those causes. In truth, science was not the only

[203] Lewis, *The Abolition of Man,* 70-71.

discipline thought to be capable of providing knowledge and power over the natural world—but it is the only discipline developed to apply the principles of the New Philosophy that has lasted up to the present day.

In *The Abolition of Man*, Lewis explains that along with science, magic also throve in the sixteenth and seventeenth centuries.[204] Perhaps it would be more accurate to say that magic and alchemy were viewed by the leading thinkers as methods which, along with what they called physics, would be capable of granting man power over nature through a knowledge of causes. Newton is well known for his interest in alchemy, and Paracelsus, the father of modern chemistry, thought magic was integral to an understanding of how the body's chemical balance works.[205] In fact, his device for doing a uroscopy (a practice which he invented) looks more like a witch-doctor's tool than a machine to dissect urine.[206] The idea that magic had purposes similar to science is less surprising in light of the fact that magic was seen as dealing with large-scale causes and connections in nature, with "the correspondence and interconnectedness of the macrocosm (the universe) and the microcosm (the little world of the body)."[207] If the point of physics is to uncover the workings of a purely natural nature in order to manipulate nature, the point of alchemy is also to discover and control the forces that would allow man to change nature from one state to another. Astrology studies how stars influence natural objects and magic studies the "essential law" that undergirds nature.[208] The inductive method and New Philosophy assumptions are meant to apply to all these disciplines. From the outset, the goal of science,

[204] Lewis, *The Abolition of Man,* 76.
[205] Conrad et al, *The Western Medical Tradition,* 316.
[206] Ibid, 315.
[207] Ibid, 314.
[208] Bacon, "Novum Organum," 94.

alchemy, magic, and astrology was not simply to understand nature, for the control of nature came along with an understanding of it.[209]

Lewis believes that science and magic broadly share the same impetus: "They were born of the same impulse."[210] Both share the same basic assumption that nature operates according to causes that are controllable. "For the wise men of old the cardinal problem had been how to conform the soul to reality," Lewis writes of those within the Participatory framework. However, "For magic and applied science alike the problem is how to subdue reality to the wishes of men: the solution is a technique."[211] This statement reveals another critique Lewis has of science: science, like magic, is derived from the idea that man not only has the possibility of controlling and manipulating nature, but that man's power over causes is synonymous with his knowledge. Even those who believed that nature could be influenced by occult forces through magic, the principle that man can control nature by asserting power over that which influences nature remains. Others, like Bacon, simply believed that occult magic was a failure because it did not work and wished to use "inductive magic" to find true causes.[212]

This impulse towards control is borne directly out of the New Philosophy's conception of a manipulable universe, a universe which Taylor claims invites man to a "science of control."[213] The assumptions embedded within the New Philosophy are not neutral; they encourage an attitude of domination. For, treating something as nature means "we suspend our judgements of value about it, ignore its final cause (if any), and treat it in

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[209] John G West, "The Magician's Twin" in *The Magician's Twin: C. S. Lewis on Science, Scientism, and Society,* ed John G. West, 19-45 (Seattle: Discovery Institute Press, 2012), 30.

[210] Lewis, *The Abolition of Man,* 76.

[211] Ibid, 77.

[212] Bacon, "Novum Organum," 28, 29.

[213] Taylor, *A Secular Age,* 113.

terms of quantity."[214] Thus, to study nature in this particular way is, when looked at in another light, the conquering of nature. "We are always conquering Nature, because 'Nature' is the name for what we have, to some extent, conquered. The price of conquest is to treat a thing as mere Nature."[215] A discipline that assumes that nature is nothing more than the quantifiable is implicitly putting nature into the category of the conquerable.

Lewis is concerned that the mindset that champions Power Over Nature and runs through both science and magic opens man up to conducting experiments on nature "hitherto regarded as disgusting and impious."[216] Sherrard goes so far as to claim that, because man studies nature in a way that denies the full reality of nature, "inhumanity is built into the very premises on which modern science itself is based."[217] Nature is viewed as something to be controlled through science precisely because there is nothing inherent within nature that would prevent such manipulation. Man is unable to contact that part of nature which would merit reverence, awe, or respect because those elements are unquantifiable and thus illusory. Instead, knowledge of nature is one that gives knowledge of (and thus power over) causes, and such knowledge is best obtained by, as Bacon asserts, "vexing nature."[218]

There is no shortage of examples that reflect the opening of the floodgates of control for man. Thomas Willis, a seventeenth century scientist, writes that he had "slain so many victims, whole Hecatombs [a Greek 100 animal sacrifice] almost of all

[214] Lewis, *The Abolition of Man,* 69.
[215] Ibid, 71.
[216] Ibid, 77.
[217] Sherrard, *The Rape of Man and Nature,* 84.
[218] Bacon, "Novum Organum," 65.

Animals."[219] William Hogarth criticized the seventeenth century scientists for the cruelty of dissections, drawing cartoons showing the progression of a boy growing up who begins by tormenting animals, proceeds to murder, and ends up a dissected criminal.[220] Midgley reflects on the fact that the language used to describe scientific endeavors is one of abuse, speaking in terms of torturing, enslaving, and raping nature.[221]

Though magic, alchemy, and astrology were eventually seen as failed disciplines, they were seen as failures simply because, unlike science, they did not produce the fruits of control. They gave no knowledge of causes that could produce power over the causes. Lewis, then, critiques the fact that science still, like magic, seeks to conquer nature. This tendency is something inherent in modern science. Inasmuch as modern science is undergirded by the assumptions of the Power view, construing knowledge of the natural as power over the natural and nature as only quantifiable matter, it cannot help but ignore part of what nature is and open nature up to mistreatment. Lewis wonders if science must act like a basilisk "which kills what it sees and only sees by killing."[222] However, he hopes that it is possible to form a "regenerate science" which "when it explained it would not explain away."[223]

5.5 Conclusions

This chapter has outlined four of Lewis' critiques of science as the bearer of the New Philosophy. It described (1) his concerns with science analyzing non-scientific material (a practice called scientism by some), (2) the issues arising from science being

[219] Conrad et al, *The Western Medical Tradition,* 347.
[220] Ibid, 391.
[221] Midgley, *Science As Salvation,* 77-78.
[222] Lewis, *The Abolition of Man,* 80.
[223] Ibid, 79.

unable to provide full explanations of nature should there be a metaphysical element within nature, (3) the further issue of assuming that a scientific explanation could, in principle, be a description of nature in full despite its narrow scope of measurement and reliance on models, and (4) the issue that science shares with magic—a conflation of knowledge with power.

However, Lewis' most unique and significant contribution lies in his synthesizing argument which culminates in the third chapter of *The Abolition of Man*. His argument deals with what follows when the New Philosophy, with all the concerns which come in its application to the natural world, becomes a normative way of viewing the entire world. It deals with the extension of these concerns to their furthest logical consequences.

CHAPTER 6

NORMALIZATION OF THE POWER VIEW: THE ABOLITION OF MAN

And what shall it profit a man, if he shall gain the whole world, and lose his own soul?
Mark 8:36

6.1 Beginning to Normalize the Power View

The New Philosophy may hold that the qualities humans respond to in nature are only projections of mind; however, there still must be some kind of explanation for how and why the mind produces projections and how to determine which (if any) products of mind are *not* projections (i.e., reliable) and which are projections (i.e., illusory). For, if the experience of quality in nature is assumed to be illusion, unless all quality is equally illusory, there needs to be an explanation of what is or is not illusion. Lewis' *The Abolition of Man* looks at the consequences of using the assumptions of the New Philosophy to explain what goes on in the mind. He examines what it means to have completely normalized the New Philosophy to such an extent that everything, including mind and its projections, are dealt with by the methods of the New Philosophy as part of nature. In short, he is examining the result of using the assumptions and tendencies built in to the New Philosophy, as described in the previous chapter, to analyze the whole world, including Man, as Nature.

Lewis does not go into depth about the transitional period lying between a full-on Participation view of nature and the installation of the New Philosophy as a norm, but it is

helpful to have some description of how the New Philosophy normalized. For a short time, the modern West held a view that essentially used a concept of God as a means by which to get the values they wanted without the necessity of asserting that those values related to any realities experienced by humans firsthand. Descartes, for instance, claims that ideas and values (such as the belief that it is possible to be rational) are placed in the mind by God. This view, however, relies on a dogmatic belief that certain ideas in the mind are real (those put there by God) even though there is no way to verify that the ones you think are real are actually real. There is no reality experienced by humans in nature that manifests the reality of those ideas. No quality experienced in nature can be supposed to be real; moreover, no scientific methodology can prove the reality of quality.

Most importantly, nothing is altered about man's general view of his experience. As the Participatory view of reality is eroded, the Power view becomes the normative way of viewing and experiencing reality. When the world is looked at through the lens of the Power view, no element of order, value, or quality is perceptible, and this way of viewing things is seen as perfectly normal. In the New Philosophy, a type of divinity or sacredness has no role in a natural world that manifests no divine elements and works according to independent causation. Nature operates independent and machine-like, and it is possible for man to conform nature to his idea of order, instead of conforming himself to an order inherent within nature. Once the New Philosophy is normalized *as a way of looking at the world*, it follows that everything—nature, mind, soul, and man—is seen as Nature. Descartes' methods for looking at nature may easily construe mind as nature—especially since his scientific methodologies are the only methods he thought immediately accessible to humanity. Moreover, the New Philosophy provides absolutely no evidence for any sort

of divinity, sacrality, rationality, or order in any experience analyzed by its methods—not because it will not, but because it cannot.

6.2 The Consequences of Normalizing the New Philosophy

The step taken in normalizing the "debunking" of nature consists in claiming that all which really exists in nature is quantity and that what was formerly considered to be the participation of nature in some higher ordering is really the projection of human beings onto nature. A step of this kind not only denies qualities existence in nature, but also denies the possibility of humanity contacting real qualities in nature. For calling qualities in nature human illusion does not simply negate something about the reality of nature; it negates something within the human experience. The experience of quality, value, or beauty in nature was formerly supposed to be a reality experienced within a participatory cosmos. Now, not only do rocks and trees and stars lack qualities such as beauty or worthiness, but humanity is also denied the ability to contact nature in a way that acknowledges the experience of such qualities as real. Love expressed towards animals or awe expressed towards mountains corresponds to reality no more than cruelty or disgust because all man's responses to nature are simply products of the mind and thus essentially unreal. No value is more or less rationally applied in any circumstance because all values and rationality to which the person and cosmos were previously thought to conform now correspond not to reality but to products of mind. The cosmic order which humans thought they participated in along with the rest of nature is, in reality, a mirage which is mistakenly thought to be an experienced reality.

Lewis illustrates this point with the seemingly trivial example of Coleridge's waterfall mentioned in an earlier chapter. Within the Participatory framework, when a

person calls a waterfall sublime instead of pretty, that person's statement corresponds to a reality within the waterfall which can be experienced. Thus, when a person makes a value judgement about a waterfall, saying, for instance, "That's ugly!" the person is speaking about a reality to which "certain responses could be more 'just' or 'ordinate' or 'appropriate' to it than others."[224] Nature can "demand" certain responses from humans because some responses are more appropriate to the Order within nature than others. By recognizing the Order within nature and making appropriate responses, a person also aligns himself with the Order of things. If the statement that a waterfall is sublime only means that a person has feelings produced in the mind that make him *feel* that the waterfall is sublime, then the sublimity is only illusion of the mind, and the reality of the waterfall lies exclusively in its physical, material, external, and quantifiable aspects.

Thus, to deny that a waterfall could, in its nature, be sublime is to deny that humans could legitimately respond to sublimity within a waterfall. Put more generally, denying the existence of any qualitative order, rationality, or spiritual core within nature, debunking it, and attributing human experience of quality to mental productions also denies that humans can come into contact with a rationality that permeates the world. Along with denying that there is any order to which *nature* conforms, the debunker has denied the existence of part of the Order to which *humanity* supposedly conforms. If, for instance, the ideas of respect for nature or the beauty of sunsets are false realities, projections of the mind, on what basis is the affection for a child *not* a projection of the mind as well?

If someone says to me, "Your respect for trees and streams is not rooted in any concrete reality but is a product of the mind and self-referential feeling" what prevents me

[224] Lewis, *The Abolition of Man,* 15.

from replying, "What you take to be real love for your dog, child, and spouse is likewise a product of your mind. There is no reality in what you take to be love at all." In other words, under the Participation view, not just nature, but the *entire cosmos, including humanity* is seen as undergirded with First Principles, or Practical Reason, or the Tao. If a person calls one principle of the Tao an illusion, on what basis is the rest of the Tao not illusory? For, under the Participation view, it was assumed as axiomatic that the Order that underlies the universe is universally recognizable and must be conformed to. Again, recalling the chapter on Participation, a universally recognizable Order (what Lewis calls the Tao) is not universal agreement on specific doctrines, only agreement that there *is* a reality integral to the cosmos that is widely understood to exist. People who agree that there is an Order may dispute about the specifics of that ordering.[225] One person may claim that loving your neighbor is an improvement on doing no harm.[226] Lewis thinks, however, that if one claims that doing no harm is just an illusion of the mind, one cannot simply retain other claims of the Tao without dogmatism because one's process of correction involves a denial of the Tao. This same process could be applied in turn to whatever other parts of the Tao one might wish to keep. One must find grounds on which to call some elements of the Order illusory and irrational and others real. On what basis, then, can you retain some of the content of the Tao and reject other parts? To recapitulate, if the mind, when regarding qualities in the natural world, is only projecting irrational sentiments, on what basis could you defend a sentiment as rational, as if it ought to be followed?

[225] Lewis, *The Abolition of Man,* 44-45.
[226] Ibid, 46.

6.3 Possible Grounds for Quality or Value Outside the Tao

Lewis' primary concern in *The Abolition of Man* is with the consequences of the complete normalization of the New Philosophy not simply in terms of its treatment of nature but in its full assimilation as *a normalized set of assumptions which frame the way the world is viewed*. When the debunker of nature has fully integrated the New Philosophy as a guiding background framework, he is still left with the issue of finding "grounds" for value, truth, and rationality but has no recourse to any methods beyond those given by his philosophy.

Lewis explains that when it is denied that the human experience of value has any rational basis in reality, human experience is explained in terms of the human mind perceiving the rational facts about an object and projecting irrational feelings onto it. This framework is the Power view, where there is a division between qualitative illusions of mind and the quantitative facts of reality. Qualities are denied a rational basis because experience of quality can be reasonable or unreasonable only if that quality has an existence in reality whereby the experience may be measured. If someone experiences a child as loveable, this experience can only be seen as reasonable if it conforms to a reality about that child. A waterfall is sublime because the sublimity is part of reality. Plato can admire a horse because it manifests (however imperfectly) the form of beauty. Galen can even admire a beard for its telos. This is the world of Participation. None of these qualities are *projected*. They are perceived. The Rationality underlying both the person and the child allow for the possibility of the perception of quality commensurate with reality.

Lewis contrasts this view with the world as understood through the Power view in which:

> the very possibility of a sentiment being reasonable—or unreasonable—has been excluded from the outset… [a sentiment] does not rise to the dignity of error. On this view, the world of facts, without one trace of value, and the world of feelings, without one trace of truth or falsehood, justice or injustice, confront one another, and no *rapprochement* is possible.[227]

If the values we experience are denied existence in reality, what is it that we experience? How will we be able to find qualities that are truly there? By denying the possibility that a given sentiment could be rational, by claiming that such-and-such a perception is an irrational illusion, the debunker begins a process that can be used equally well on any sentiment. The debunkers have stepped "outside" the Tao and are trying to pick and choose which mental experiences are real and which ones are illusory, probably because there are certain values they wish to keep. They wish to deny that certain human responses are legitimate by denying that humans respond to extant qualities in the universe. Other responses they wish to remain legitimate; yet, the legitimacy cannot derive from any sort of extant qualities. "If they are logical," Lewis claims, they must, "regard all sentiments as equally non-rational, as mere mists between us and the real objects."[228] The factual objects are out there; the illusory qualities are *all* projections. For, logically, anyone could claim that the debunker's set of values are simply mental projections by using the debunker's own strategy of denying the Tao.

The person who speaks from the New Philosophy, then, must find grounds to defend the truth and rationality of certain qualities, but he cannot rely on a concept of First Principles. Lewis philosophically analyzes the two common "grounds" from which the

[227] Lewis, *The Abolition of Man,* 20.
[228] Ibid, 21.

New Philosopher tries to develop a set of values from that does not imply that qualities reside in objects as a reality.

The first ground Lewis analyzes is Reason. Lewis explains that a debunker may claim that true values and qualities (which are not mists of the mind) lie in the reasonableness of the "true" value. Reason, however, as used within the New Philosophy, involves dealing with the quantitative world, "connecting by inference of propositions, ultimately derived from sense data, with further propositions."[229] Reason here deals with the detection, manipulation, and synthesis of facts and cannot, then, form a *premise* for values. One cannot determine how one ought to respond to a set of facts by the mediation of reason because no one set of facts is inherently more rational than another. Nothing in the factual statement, "The house is burning down," implies that one should or should not put out the fire. Neither choice is reasonable or unreasonable. No manipulation of the fact will produce a value.

That is, no reasonable conclusion can be drawn unless you mediate the claim with *another proposition* about what ought to be done. Lewis explains that to claim that a particular response is reasonable to a given set of facts requires a mediatory proposition about what *ought to be done*.[230] No amount of facts could, by the mediation of reason provide us with knowledge of what ought to be done: "From propositions about fact alone no practical conclusion can ever be drawn."[231] These other propositions, however, are precisely the type of propositions that the debunker has claimed are illusions, for they assert that there are real qualitative realities which people ought to respond to in certain ways.

[229] Lewis, *The Abolition of Man,* 31.
[230] Ibid, 32.
[231] Ibid, 31.

The debunker may wish to extend reason to include "what our ancestors called Practical Reason" and admit that statements that imply that quality is a reality, "are not mere sentiments but are rationality itself."[232] In other words, the debunker will end up accepting the Participation view which holds that the qualities of an object are just as much a rational proposition to be assumed as its quantitative realities. If it is denied that qualities are inherently reasonable realities, no use of reason can conjure a value out of fact.

A second ground Lewis' debunker may turn to is Instinct. Biological impulses built into our species, the debunker claims, are what determine which among the various productions of the mind are worth following. However, Lewis finds this inadequate. He points out that the fact that we have an instinct does not at all imply that we ought to follow it. There is nothing about an instinct that tells us whether it is an instinct we should control or indulge.[233] Moreover, because many of our instincts conflict, how can a person know which to obey, when, and to what extent? "Whence do we derive this rule of precedence [to follow one instinct and not another]?" he asks.[234] One could refer to yet another, deeper instinct, but still, why obey this one? He concludes that an ethic that determines which human responses are reasonable based on instinct cannot explain why one ought to attempt putting out a house-fire to save posterity versus indulging the instinct of self-preservation instead. As in the case of Reason, no fact about instinct existing provides a justification for why we should do anything particular about that fact.

One might conclude that values do not exist in reality as usually conceived; they only exist inasmuch as humans happen to project them for a combination of *natural*

[232] Lewis, *The Abolition of Man,* 32.
[233] Ibid, 35.
[234] Ibid, 36.

reasons. The combination of biology and environment determine what people perceive as value. In this sense, instincts and facts really are the grounds of all qualities. There is nothing inherently fixed about the reality of qualities except the instincts or facts that produce them in the mind. This is the final logical step which Lewis seeks to address.

6.4 The Final Step

The final step consists in the idea that values and qualities have no existence apart from the factual quantitative realities which produce in humans the experience of quality. The method, Lewis states, "which has emptied the world now proceeds to empty ourselves. The masters of the method soon announce that we were just as mistaken…when we attributed 'souls', or 'selves' or 'minds' to human organisms, as when we attributed Dryads to trees."[235] The debunker of nature wishes to explain away human perceptions of quality in nature but, in doing so, has explained away not only the qualities but the human perception of them. It is denied that humans contact anything beyond nature in nature, but the experiences humans have of responding in certain ways to nature is left to explain.

When the methods of the New Philosophy have become completely normalized, the only remaining way to explain what goes on in the human mind is by attributing the mind and its productions to a natural cause. The Power view can only handle material which is susceptible to its analytical methods, and if the assumptions of the Power view frame the way a person looks at mind, it is only possible to view it as a part of nature. Values may be mists between humans and objects, but there must be some explanation for the existence of the mists. There seems very little reason why the projections of mind might not be explained similarly to the way nature is explained—as the product of certain

[235] Lewis, "The Empty Universe," 104.

knowable laws which provide a quantitative explanation for quality, and, once known, can be manipulated as part of Nature. The facts of instinct, biology, and nature are the "grounds" or basis for human perception of value. Projections of quality are caused by chemical firings or some other natural process; thus, human perception of quality and value can be controlled when those natural processes are controlled.

The world susceptible to the methods of the New Philosophy consists of "is" statements of fact, and consequently those facts are restricted to describing the "natural" side of nature, or quantity. Statements about quality, and thus statements which imply what sorts of responses humans *ought* to have to those qualities are no longer factual statements, but projections. Once it becomes clear that no appeal to reason, instinct, or fact—no appeal to any "is"— could produce an "ought" the question arises: what is so bad about all quality being nothing but an "is"? The idea is that, even if no appeal to nature can produce the Tao, what is problematic about being content with nature as the cause of projected feelings?

The consequence, then, of using the New Philosophy to analyze the mind or soul is the belief that the mind or soul is a part of nature. This project is outlined, as I have mentioned, in Bacon's call to use the New Philosophy as an explanation of judgements and mental operations and as a foundation for the perfect society. Hobbes, who attempted to give thought natural, mechanical causes, explicitly takes this step and "was consummated by scientifically-minded philosophes like La Mettrie."[236] Perhaps in its earliest conceptions, the New Philosophy was believed to be unable to study qualities or values simply because those things lay outside its scope. This problem is easily solved, however, not by extending the scope of the New Philosophy but by expanding the range of what lies

[236] Sherrard, *Human Image,* 39, 42.

in its domain. The normalization of the Power view does not mean that it is suddenly applied in new places; it means that more and more of the world is seen as susceptible to Power view methods of analysis.

Every time something is analyzed by the New Philosophy, it is reduced to the level of nature. Or, put another way, things are reduced to Nature so that they can be understood. Lewis calls this process the conquering of nature because, for the New Philosophers, a true understanding of natural causes provides humans with the power to manipulate those causes. Every new power man gains over nature, then, is also an extension of nature itself. The extent to which man controls more and more of his surroundings under the heading of Nature is the extent to which his reality is only Natural. "The wresting of powers *from* Nature is also the surrendering of things *to* Nature…We reduce things to mere nature *in order that* we may 'conquer' them."[237]

Just as Bacon anticipates that a knowledge of Rarity will allow men to "superinduce" a new nature (that of rarity) on an object, or knowledge of the properties of metal will allow men to change silver to gold, a knowledge of the natural causes of quality and value will allow modern man to manipulate and control the causes of quality and value. Everything that was thought to be an untouchable fact of reality beyond nature is construed as a controllable fact of Nature. It is possible, then, by analyzing the natural causes of value to produce in humans a set of responses, or value judgements. "It is in Man's power," Lewis explains, "to treat himself as a mere 'natural object' and his own judgements of value as raw scientific material to alter at will."[238]

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[237] Lewis, *The Abolition of Man,* 71.
[238] Ibid, 72.

Lewis' worry, however, is not that a new set of responses, a self-imposed set of controllable projections, will be a bad set of values. His concern is that there will be no such thing as a bad set of values. For the concept of "bad" implies a value and value itself is simply a controllable fact of nature. It will be possible for man to invent a set of values, but he will have no basis for determining which set of values to use, of deciding which set of responses to produce in man. That is, man will have no basis *except* for the Natural impulses that exist in him. Nature still exists in and through man, and there is no way to "see" through it. All grounds for deciding what values *ought* to be kept have been explained in terms of what *is*. What *is* is Nature, and thus individuals who make decisions are, "subjected to that in themselves which is purely 'natural'—to their irrational impulses. Nature, untrammelled by values, rules…all humanity."[239] Man may treat qualities as natural projection, but the consequence is that he will no longer be master of the nature he has conquered. Nature, through his natural, irrational desires, rules him. This is the Abolition of Man.

Lewis believes that the normalization of the New Philosophy and the debunking of the Participatory view of existence can only be taken so far. Once man treats himself and the Order he once believed he must conform to as a controllable element of nature, he has submitted to being controlled by natural processes. As man conquers nature, he supposedly gains power over it, but when he reduces man to the level of nature, "the whole process is stultified, for this time the being who stood to gain and the being who has been sacrificed are one and the same. This is one of many instances where to carry a principle to its logical

[239] Lewis, *The Abolition of Man,* 67-68.

conclusion produces absurdity."[240] Michael Ward, in his commentary on *The Abolition of Man*, summarizes the idea: "Value is not an external reality that is recognized…but rather a conferral from one's own irrational or nonrational nature."[241] Again, Lewis' concern is not that man will produce for himself a bad set of values, but that there will be no basis for deciding what bad *itself is* other than, "heredity, digestion, the weather, and the association of ideas."[242]

One of Lewis' poems, *Evolutionary Hymn*, illustrates just such a step being taken. In the third stanza he describes the discarding of the idea of "static norms," the qualitative order of the Participation view as "abstract" and thus disconnected with reality:

> Ask not if it's god or devil,
> Brethren lest your words imply
> Static norms of good and evil
> (As in Plato) throned on high
> Such scholastic, inelastic,
> Abstract yardsticks we deny.[243]

The inelastic yardsticks are thrown out, denied, but what replaces them? "Value means survival—Value," Lewis writes later in the poem.[244] The basis for decisions, value, choice, and judgement now lies within nature alone. In this poem he takes aim at the conception that value is equivalent to survival in an evolutionary struggle, but *The Abolition of Man*

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[240] Lewis, *The Abolition of Man,* 71.
[241] Ward, *After Humanity,* 196.
[242] Lewis, *The Abolition of Man,* 67.
[243] C. S. Lewis, *Evolutionary Hymn* (Oxford: 1963), quoted in Poetry, "Evolutionary Hymn." *Poetry: The World's Largest Resource for Poets, Poems, and Poetry*. Last modified May 13, 2011. Accessed April 11, 2022. https://www.poetry.com/poem/6935/evolutionary-hymn
[244] Ibid.

makes it clear that grounding value judgement—and the source of judgement, quality—in Nature in any way, shape, or form subjects Man to being controlled by nature.

Lewis' final conclusion in *The Abolition of Man* is that Man as we conceive of him will become subject to Nature. In order to help show the practical result of man's abolition, Lewis also guides the reader to consider how exactly man could produce for himself a set of responses to "quality." Lewis brings the reader out of the abstract and points out that "man" is an abstraction. In reality, he says, all men cannot have shared or equal power over any part nature. When "man" claims power over nature, it is really a claim of the power of *some men,* namely, those who wield the technologies used to manipulate nature, over *other men* and the rest of nature which does not have access to such powers. Man, as a whole, not only wields the power to manipulate nature but is also operated on by those same powers. "What we call Man's power over Nature," Lewis explains, "turns out to be a power exercised by some men over other men with Nature as its instrument."[245] The idea is that some men have the power to withhold or allow others to use certain powers or may subject others to the use of power. Lewis gives a few examples, one of which is the airplane.[246] The average person is only allowed to use the 'power' of the airplane granted that they consent to a power structure of usage which they have little control over. Moreover, a person who is the target of bombs is not wielding any power over the bomber at all. Someone else is.

Another example Lewis gives is that of birth control. He finds this technology especially important because birth control allows one generation to modify its posterity by

[245] Lewis, *The Abolition of Man,* 55.
[246] Ibid, 54.

controlling what types of people are or are not born, thus extending its powers beyond its own time.[247] Some men may exercise power not only over existing men, but over all future generations by manipulating or shaping them in ways that are beyond those generations' control.[248] Thus, there may not be just a dominant set of men controlling other men, but a dominant set of men in a dominant age controlling other men yet to exist.[249] "If any one age really attains, by eugenics and scientific education, the power to make its descendants what it pleases, all men who live after it are the patients of that power," Lewis points out.[250]

Lewis' point in bringing up the idea that man's Power Over Nature means that some men have power over other men through nature becomes clearer with the example of Man himself. If responses are to be produced in Man through conditioning, who exactly is going to wield the power that controls responses in humans? It must be, in the end, some people, controlled by *their* natural impulses, who are controlling other people. Lewis grants that:

> The picture could be modified by public ownership of raw material and factories and public control of scientific research. But unless we have a world state this will still mean the power of one nation over others. And even within the world state or the nation it will mean (in principle) the power of majorities over minorities, and (in the concrete) of a government over the people.[251]

The end result is that most people's responses will be controlled by a set of people who are ruled only by their desires, not in the sense of being corrupted (for corruption is now a thing to be produced) but in the simple sense of any natural being obeying its impulses. Lewis explains that it is not more rational or irrational for a "Conditioner," as he calls them, to behave cruelly rather than benevolently. It will literally depend on the chances of Nature,

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[247] Lewis, *The Abolition of Man,* 55.
[248] Ibid, 56.
[249] Ibid.
[250] Ibid, 57.
[251] Ibid, 56.

though he suspects that the "illusion of meaning for our lives which compares favourably with the futility of their [the Conditioner's] own" will produce envy.[252] Nevertheless, whatever the chosen response of the Conditioners, no response they make can ever be rational in the old sense, as all responses are driven by natural impulse.

6.5 Conclusions

This is Lewis' greatest concern: that man, in conquering himself, will come to be nothing but Nature. Once man controls his motives, he will have no motive to do anything other than the promptings of his animal desires. At this point, Lewis believes that man is no longer himself. He has been abolished, because what distinguished him from the rest of Nature rested in a reality *beyond* Nature:

> In the Tao itself, as long as we remain within it, we find the concrete reality in which to participate is to be truly human…While we speak from within the Tao we can speak of Man having power over himself in a sense truly analogous to an individual's self-control. What is common to all men is a mere abstract universal, an H.C.F., and Man's conquest of himself means simply the rule of the Conditioners over the conditioned human material, the world of posthumanity which, some knowingly and some unknowingly, nearly all men in all nations are at present labouring to produce.[253]

Lewis' conclusions have been shared by many others. The philosopher Sergei Levitzky (1908-1983) pointed out that, "The denial of the Absolute" results in the "absolutization of the relative."[254] G. K. Chesterton (1874-1936), with his usual wit, claims that, "It is not natural to see man as a natural product."[255] Hans Jonas (1903-1993), another philosopher and emigrant from Nazi Germany similarly remarks: "For a scientific theory of [man] to

[252] Lewis, *The Abolition of Man,* 66.
[253] Ibid, 75.
[254] Aeschliman, *The Restoration of Man,* 111.
[255] Ibid, 71.

be possible, man, including his habits of valuation, has to be taken as determined by casual laws, as an instance and part of nature."[256] All these philosophers saw the impending conclusions of attempting to understand and control man using New Philosophy techniques. Few, however, gave the issue such a succinct, accessible, and thoroughgoing treatment as Lewis, who saw that the step of treating all of existence as natural, including man, abolishes man as we know him. It is not just a new or radical step; it is a step that allows man to be remade by Nature. If man debunks himself, he steps into the void. "It is no use trying to 'see through' first principles," Lewis says, because, "to 'see through' all things is the same as not to see."[257]

[256] Aeschliman, *The Restoration of Man,* 87.
[257] Lewis, *The Abolition of Man,* 81.

CHAPTER 7

CONCLUSIONS

unsignificantly
off the coast
there was

a splash quite unnoticed
this was
Icarus drowning

William Carlos Williams, *Landscape with the Fall of Icarus*

7.1 A Brief Summary of Lewis' Argument as Outlined in the Preceding Chapters

The thrust of Lewis' argument in *The Abolition of Man*, as outlined in the preceding chapter, is made clearer in light of two contextualizing elements: first, the historical-philosophical narrative of the seventeenth century scientific revolution (which primarily gave rise to the type of thinking he analyzes) and, second, a broader synthesis of his own ideas based on his other writings. Only by first putting the shift from a Participatory to Power view in historical perspective and understanding Lewis' general concerns about the dangers of shifting towards the Power view can Lewis' central argument about the consequences of extending New Philosophy principles *ad absurdum* be properly understood.

Within the Participation view of the cosmos, the Tao, or First Principles, or cosmic Ordering is a reality that permeates every existing object and is the ultimate source of being. As such, knowledge of appearances cannot provide full knowledge of an object or person

and cannot provide the basis for a comprehensive study *even of the material world*. Thus, Galen the physician finds it necessary for a doctor of the body to have a synthesized understanding of physics (the material appearances), ethics, and logic. Similarly, he attacks the idea that the body (or any material part of the cosmos) could be understood apart from its *telos* or rational purpose which humans can respond to by recognizing value, beauty, or rationality.

The New Philosophy, headed by Bacon, attacks this view with regard to its understanding of nature, asserting the duality of the universe, the separation between nature and supernature. Attacking the Galenic school of thought (and with it the consensus of humanity, Lewis argues), the New Philosophers propose that nature can be understood as independent material bodies moving through profane time and space and subject to mathematical laws. The methods for studying such matter tailor to the assumptions made about nature (just as methods for saving appearances tailor to Participation assumptions). Thus, the scientific disciplines (and, originally, alchemy and some magic) were developed to only be able to analyze the quantitative side of reality and inherently exclude quality in their analysis of reality.

Understanding the basic outline of this shift sets one up to understand the basis for Lewis' concerns with the shortcomings of science *when used as an absolute means for studying nature.* First, he is concerned with the fact that science cannot but help excluding ideas of quality when looking at nature and claims that if such a reality as quality exists in nature, science *must* exclude it. Further, Lewis thinks that when science is perceived to provide an absolute and factual explanation of nature, if only in principle, it is implied that factual explanations of nature are those which exclude quality. This line of reasoning is

supported by his arguments about the issue of using theory as fact and explanation of the role models play in science as a framework for forming and interpreting research. Third, Lewis points out a trend within science, shared with the now-dead (at least in reputation) practices of alchemy and magic, to view knowledge of nature as tied up with power over it. This tendency follows from a belief that knowledge of appearances provides knowledge of the full reality of an object. If the quantitative side is all there is to nature, knowledge of its operations would provide control over those operations. Finally, Lewis' larger body of work brings up the issue of "scientism" or the tendency to use science to answer non-scientific questions. Although many philosophers and critics are willing to stick to criticisms of science for "over-reach," Lewis' more sophisticated argument in *The Abolition of Man* describes what happens when New Philosophy methods are no longer an over-reach because the world itself is now viewed as entirely susceptible to such methods.

Explaining this final argument is the culminating purpose of this thesis' background information, both historical and philosophical. The background information situates Lewis' conclusion that turning the Tao into controllable mental projections produced by natural causes (like heredity and diet) simply makes Man a slave to Nature. Once situated, his argument stands out as relevant to our historical and philosophical situation in the present day.

7.2 *The Abolition of Man* in Contemporary Contexts

If it is not self-evident that the philosophical situation outlined by Lewis is still being actively played out in modern times, a few examples will suffice to make it clear. To begin with general experience, it is not uncommon to hear sociologists or political scientists explain that humans (especially people of the past) believe certain things because the belief

is determined by some natural factor. Statements such as, "Oh, you only think we should act *that* way because it's part of your cultural heritage, or circumstances, or environment, or heredity," imply that the values people hold and judgements people make are not a response to a reality but could be altered should influencing factors be altered.

Although some scientists try to acknowledge the limitations of modern science in their work, others decide, knowingly or unknowingly, to dabble in philosophy of mind *as if they were doing science.* Once again, it would be wonderful if scientists were required to know philosophy, history, and science, but, regardless of training, it is deceptive for a scientist to present philosophy as if it were science. In my own experience with published journal articles presented in upper-level genomics courses, I have found scientists making statements such as: "Among traits associated with cognitive functions such as language or theory of mind, the timing of myelination appears to be a good predictor of computational abilities," or "Only future experimental work will determine which of the changes highlighted here [all strictly natural] contributed significantly to making us 'fully human,'" or "It seems reasonable that the 'human condition' is rooted, at least in part, in the properties of our brain, and these can be traced to the genome."[258] This particular article was essentially explaining the genomic basis of the uniqueness of man, and thus, by some apparently trivial extension, the human mind and condition. There is no realization of either the fact that science could not find any explanation of the human condition *other* than myelination or nucleic acids, or that their philosophy of mind is not self-evident and indeed has serious consequences.

[258] Martin Kuhlwim and Boeckx, Cedric, "A catalog of single nucleotide changes distinguishing modern humans from archaic hominins." *Scientific Reports (Nature)* 9, no. 8463 (2019): 1-9. https://doi.org/10.1038/s41598-019-44877-x.

Even more significant are men such as B. F. Skinner, who not only proposed a theory of operant conditioning through which human response could be controlled and value produced but knew perfectly well the philosophical consequences of his theory. Skinner is far more honest and well-rounded in education than most. Upon reading *The Abolition of Man*, he claimed that he agreed with its conclusions completely and advocated pursuing exactly what Lewis was describing. In his book, aptly titled *Beyond Freedom and Dignity* (a parallel to Nietzsche's *Beyond Good and Evil*) he asserts:

> His abolition is long overdue. Autonomous man is a device used to explain what we cannot explain in any other way…To man qua man we readily say good riddance. Only by dispossessing him can we turn to the real causes of human behavior. Only then can we turn from the inferred to the observed, from the miraculous to the natural, from the inaccessible to the manipulable.[259]

Both Lewis and Skinner saw with clarity the consequences of the same argument—and came to widely different conclusions. One saw the Abolition of Man as the destruction of all that makes life worth living, and the other saw it as an opportunity for Man to control himself via manipulation of nature. In the introduction to the second printing of his book, *Walden Two*, Skinner points out the possible use for behavioral modification to induce people to behave in the ways we want: "What is needed is not a new political leader or a new kind of government but further knowledge about human behavior and new ways of applying that knowledge to the *design of cultural practices.*"[260]

What we find, then, is that we are left with two options. Lewis' argument is pertinent, whichever path one choses to follow. Whether one takes the stance that man has

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[259] B. F. Skinner, *Beyond Freedom and Dignity* (Harmondsworth: Penguin, 1971), quoted in Michael Ward, *After Humanity* (Illinois: Word on Fire Academic, 2021), 162.

[260] B. F. Skinner, *Walden Two Revisited.* Library of Congress Cataloging in Publication Data (Hackett Publishing, 1976), 12. eISBN 978-1-60384-036-1 (emphasis added).

become dehumanized and that, when controlled through behavioral manipulation (or eugenics, or some unknown but powerful technology) he loses what made him Man or comes to agree with Skinner and calls for the acceptance of the idea of remaking man and his world by grasping the powers of Nature through subjection to her, Lewis' argument shines a light of clarity on the exact meaning of either position. He eliminates vagueness and confusion.

One may, like Edward Caird of Oxford, claim that:

> It is the peculiar strength of modern times that it has reached a clear perception of the finite world as finite…that in practice it is unembarrassed by superstition, i.e. by the tendency to treat things and persons as mysteriously sacred. The first immediate awe and reverse rose which rose out of a confusion of the absolute and universal with relative and particular…has passed away from the world.[261]

Or, one might, like the ex-communist spy Whittaker Chambers pronounce: "Science and technology, whose traditional method, the rigorous exclusion of all supernatural factors in solving problems has contributed to the intellectual climate in which the vision [of man's mind displacing God as the creative intelligence of the world] flourishes, just as they contributed to the crisis in which Communism thrives."[262] Whittaker explains that Communism, in his view, is the ultimate attempt for man to control the natural world (including himself) and instill a purpose in that which is purposeless; he also believes that this aim or vision of Communism is "shared by millions who are not Communists."[263]

One may, like educational theorist John Dewey, discard normative values altogether, denying the validity of questions that ask what is beyond the particulars of

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[261] Sherrard, *Human Image,* 45.
[262] Whittaker Chambers, *Witness* (New York: Random House, 1952), 9-10.
[263] Ibid, 10.

nature, where qualities are to be found. In one of his educational essays, Dewey champions the fact that:

> Once admit that the sole verifiable or fruitful object of knowledge is the particular set of changes that generate the object of study together with the consequences that then flow from it, and no intelligible question can be asked about what, by assumption, lies outside. To assert—as is often asserted—that specific values of particular truth, social bonds and forms of beauty, if they can be shown to be generated by concretely knowable conditions, are meaningless and in vain; to assert that they are justified only when they and their particular causes and effects have all at once been gathered up into some inclusive first cause and some exhaustive final goal, is intellectual atavism.[264]

Or one may, like Philip Sherrard, speak of the attempts to control nature and man as part of nature, worrying that, "There is, however, a price to be paid for fabricating around us a society which is as artificial and as mechanized as our own, and this is that we can exist in it only on condition that we adapt ourselves to it. This is our punishment."[265]

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Yet, the modern situation can be seen neither as a great punishment nor as a great good unless one first understands exactly what is at stake. This fact shows the best use of philosophy, which is to elucidate the assumptions that may be hidden from us and their consequences. For, although a philosophy may be dangerous, any philosophy, once exposed and understood is less likely to be blindly accepted than one that is hidden unseen in cultural practices and assumptions. Since the New Philosophy makes up a good deal of modern background assumptions, its philosophical consequences are often accepted unnoticed. In my own training to become a certified teacher, I have been explicitly taught to use Skinner's behavioral modification theory and operant conditioning to manage

[264] John Dewey, "The Influence of Darwinism on Philosophy." In *The Influence of Darwinism on Philosophy and Other Essays in Contemporary Thought,* 1-20 (Bloomington: Indiana University Press, 1965), 14.

[265] Sherrard, *The Rape of Man and Nature,* 72.

children. It was even claimed that conditioning worked especially well on "mentally retarded" people.

Thus, although Lewis' argument plays out before our eyes, many, if not most, do not see that a new philosophy is effecting a drastic change in our understanding of humanity. Education, especially scientific education, does not follow the Galenic Participatory model of conforming scientific understanding and methods to higher ideals and purposes or even teach logic and ethics alongside special subjects. Meanwhile, philosophy itself is seen not as a way of life but as a twisted heap of mental abstractions. Lewis' *The Abolition of Man* shows the possible use of philosophy as a means by which to shed light on practical issues; even more, it shows the necessity of understanding how philosophical assumptions imply a Way of life in day-to-day living. Everyone, in this sense, must be a philosopher. The question is whether our society will allow a philosophy to completely normalize without noticing it. The question is whether society will turn a blind eye to Icarus drowning nearby, having turned Nature against her natural purposes.

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BIOGRAPHICAL INFORMATION

Anna Tarpley will graduate from the University of Texas at Arlington (UTA) May of 2022, having studied Classics, Biology, and History as concentrations within the Honors Interdisciplinary major. During her time at university, she has tried to expand her knowledge of how the greatest thinkers in history have addressed issues touching the nature of the human condition, particularly as it relates to modern man's spiritual condition. Her academic interests have culminated in her senior thesis, which explores the philosophical presuppositions of modern scientific methodologies.

Among the subjects that she has studied at UTA, she has particularly enjoyed Ancient Greek, Platonic philosophy, genetics, and Russian history. Outside of school, she enjoys gardening, painting, playing violin, and reading—especially Dostoyevsky. She also loves to visit and pray at the two Orthodox monasteries in South Texas.