QUID'S PANTHEISM: WILLIAM BLAKE AS NATURAL PHILOSOPHER

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ABSTRACT

Joseph Fletcher: Quid's Pantheism: William Blake as Natural Philosopher
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Challenging a prevalent assumption of Romantic literary criticism, this dissertation positions Blake as the earliest of the British Romantics to envision natural philosophy as inextricable from poetry and, in Blake's case, visual art. In addition to establishing the nuanced philosophical and scientific history of which Blake was acutely aware, I argue that his early illuminated works develop a metaphysics of monist pantheism, which contends that every material thing is in its essence God. This contrasts the idealism of his later period, which casts the natural world as degenerate and illusory, an obstruction to human transcendence. This dissertation finds the central ideas of the pantheist tradition present in wide-ranging interdisciplinary discourses of the long eighteenth century, and it recasts our understanding of the intellectual traditions to which Blake belongs. In contrast to the vast body of scholarship that emphasizes his early religious and political commitments, I argue that for Blake such commitments are grounded in one's metaphysics. Pantheism is thus important in that it entails an ethics that respects the interconnected divinity of material objects – not just humans – and that spurns hierarchical power structures. I reveal Blake as a natural philosopher intervening in the metaphysical debates of his age via poetry and design as a means to more forcefully engage – and change – the philosophical assumptions of his readers than do the texts of the philosophers he satirizes and critiques. Through the imaginative forms of his art, Blake also literally animates

the domain of the metaphysical: uniting the scattered fragments of God in a single, striking design, or dramatizing the catastrophic consequences of natural religion through a nightmarish narrative poem. Blake's expanded philosophical practice has resonances to this day, as we continue to explore the relationship of the human to its nonhuman environments.

For my father, James D. Fletcher (1945-2014)

"He who kisses the joy as it flies / Lives in eternity's sun rise"

— William Blake

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INTRODUCTION

"We who are philosophers": Blake's Early Metaphysics

"The world has long since done its worst toward Blake; and he has emerged triumphant, with the twin crowns of Poet and Painter. But this is not enough. The modern Trismegistus must receive his third crown, that of Philosopher, before his permanent place among the great of this earth can be determined."

— S. Foster Damon[1]

"Every thing on earth is the word of God & in its essence is God."

— William Blake[2]

1.

This project attempts to take seriously William Blake's wish to be read as a natural philosopher, particularly in his early works. This wish is implied in a number of ways: Blake's main enemies, both early on and in the later prophecies, were not other poets or visual artists (although he certainly had criticism for them as well), but the natural philosophers Emanuel Swedenborg, Francis Bacon, Isaac Newton, and John Locke, the latter three of whom are redeemed – despite what Blake took to be their devastatingly erroneous philosophies – in the conclusion of *Jerusalem* (E 257); in his earliest manuscript, *An Island in the Moon* (c. 1784-85),

[1] *William Blake: His Philosophy and Symbols*, xi.

[2] Annotations to Johann Casper Lavater's *Aphorisms on Man*, E 599. Here and throughout, references to David Erdman's edition of *The Complete Poetry & Prose of William Blake* will take the form of "E" followed by the page number.

Blake self-identifies as Quid the Cynic (Erdman, *Prophet against Empire* 95, 97), and, as I will discuss below, much of the satire in that work is of a philosophical nature; similarly, Blake's first illuminated works are not poetry, but the philosophical tractates *There is No Natural Religion* and *All Religions are One* (1788) that satirically criticize Lockean empiricism and Newtonian deism; and on the title page of his 1788 edition of Johann Kaspar Lavater's *Aphorisms on Man* Blake drew a heart around his own name and that of the philosopher, and further linked himself to Lavater within the book, writing, "we who are philosophers ought not to call the Staminal Virtues of Humanity by the same name that we call the omissions of intellect springing from poverty" (E 601). Though his work only adopted the typical forms of natural philosophic writings for satirical purposes, Blake's poetry and designs reveal a consistent preoccupation with questions pertinent to eighteenth-century natural philosophy, which, preceding the "sciences" as we currently designate them, concerned the study of nature and the physical universe. For Newton, Locke, as well as for Blake, the nature of man and of God were not exempt from natural-philosophic inquiry.[3] As his annotation to Lavater to implies, Blake took it for granted that he would be recognized as a philosopher.

Today, Blake is of course first recognized as a poet, but my task here is to illuminate the way that poetry was for Blake a way of philosophizing, as it was for later Romantic writers. In his *Defence of Poetry*, Shelley declared that the difference between prose and poetry was overrated, and that Plato and Francis Bacon were essentially poets (514). Drawing from and repeating many of the claims of Wordsworth's Preface, Shelley proclaimed the synthesizing powers of the imagination as fundamental to moral virtue, and he wrote that poets were the "unacknowledged legislators" of the universe (535). For Shelley, as for Wordsworth, poetry was

[3] Gary Hatfield writes that natural philosophy had "a broader extension than our term 'science,' because it included study of souls" (497).

an epistemological tool, and the creative poetic act yielded as much, if not more, insight into human experience as science, philosophy, and religion. Contemporary with Wordsworth and Shelley, the German Romantics, such as Friedrich Schiller and Friedrich Schlegel, called for a unification of poetry and philosophy. Schiller claimed, in a letter of 1795, that "the highest philosophy ends in a poetic idea" (xxv) and Schlegel argued in 1800 that poetry and philosophy had exhausted themselves as separate disciplines: "What can be done as long as philosophy and poetry are separated, has been done and perfected: therefore the time has come to combine the two" (qtd. in Eichner 78). Additionally, Friedrich Schelling awaited the poet who would portray in verse the unification of mind and nature described in his *Naturphilosophie* (Abrams, *Natural Supernaturalism* 31). Coleridge believed that Wordsworth *was* that poet.

Most critical discussions of the intersections of poetry and natural philosophy during the British Romantic period begin with Coleridge, whose extensive readings in natural philosophy are explicitly detailed in the *Biographia Literaria* and elsewhere, and who declared it his task to combat the philosophy of mechanism which he saw dominating the eighteenth century, and which he claimed "strikes death through all things visible and invisible" (qtd. in Abrams 267). Hostility to the Cartesian mechanical philosophy, however, does not imply hostility to natural philosophy altogether, and recent scholarship has done much to overturn the longstanding assumption that the Romantics were hostile to what we now call the sciences. For instance, though not the first study to have done so, Richard Holmes's *The Age of Wonder* (2008) has garnered widespread attention and acclaim for demonstrating the deep connections between Romantic-era poets and natural philosophers, and what Holmes argues is the shared sense of wonder between them (xvi). However, Holmes's work is representative of other recent interdisciplinary fusions of Romantic literary criticism and science studies in that – while

devoting ample attention to Coleridge, Wordsworth, the Shelleys, and their interactions with Herschel, Davy, Erasmus Darwin, and other natural philosophers – it all but ignores William Blake.[4]

This dissertation seeks to position Blake as the earliest of the British Romantics to envision natural philosophy and metaphysics as inextricable from poetry and, in Blake's case, visual art. Blake's works embody the synthetic imagination Shelley celebrated decades later and execute the union of poetry and philosophy called for by Schiller and Schlegel. This is of course not to claim that Blake was the first to conceive of uniting poetry and philosophy; he was aware of the tradition of poet-philosophers dating back to Lucretius (whose Epicurean philosophy as expressed in the verses of *De Rarum Natura* Blake found to have infected Francis Bacon (E 620)) and including, in the eighteenth century, Pope's *Essay on Man*, Edward Young's *Night Thoughts* (which Blake extensively illustrated), and Darwin's *The Botanic Garden* (for which Blake provided engravings). Blake, like Pope, saw himself as a philosopher, but unlike Pope – and Lucretius – Blake's work lacks their philosophical didacticism; nor did Blake feel the need to supplement his poetry with prose "philosophical notes" that serve to legitimize the fanciful verses, as Darwin does.

The neglect among twentieth-century critics for Blake's awareness of trends in contemporary natural philosophy is in part due to T. S. Eliot's supercilious and misinformed declaration that "Blake's occasional marriages of poetry and philosophy are not so felicitous," and that what his genius required, "and what it sadly lacked, was a framework of accepted and traditional ideas which would have prevented him from indulging in a philosophy of his own" (91-92). Blake's metaphysical commitments can be discerned as subtly interwoven into the tractates, narratives, and satires of his early illuminated works and into the epics of his later

[4] Blake is mentioned – in passing – only five times in Holmes's book, one of them in a note.

prophecies. Using both verse and visual design, Blake poetically caricatures what he considers to be erroneous or dangerous ontological and epistemological perspectives, while advocating others. And unlike the major British Romantic poets who followed him, Blake's mature poetry largely dispenses with the lyric form and its preoccupation with the intimate experience of the speaker. Though obviously influenced by political and personal events, as David Erdman and others have shown, Blake's illuminated works are markedly impersonal insofar as they lack the lyric "I" poetically engaging with his own intimate (and autobiographical) experience, which one finds so often in Coleridge, Wordsworth, and Shelley, whose philosophical positions have been given much more critical attention than have Blake's. Rather, Blake's artistic vision, especially as seen in the major works of the 1790s, tends toward epic dramatizations of religious, mythical, political, and – as I will argue – metaphysical themes.

Metaphysics, what Descartes calls "first philosophy" in his *Meditations*, both informs and is inextricable from the aspects – religious, political, aesthetic – of Blake's work about which more has been written. In *The Marriage of Heaven and Hell*, which I take to be the most explicit elaboration of Blake's early philosophy, the satirical Devil tells the Swedenborgian Angel that the frightening vision of the approaching Leviathan that the two of them witness was "owing to your metaphysics" (E 42). It is the only instance of the word in Blake's poetic works, but it is significant in its implication that perception is influenced by metaphysical ideas; the latter are therefore foundational to one's experience in the world. In his introduction to the philosophy writings of Newton, Andrew Janiak gives an account of what the word "metaphysics" meant for seventeenth- and eighteenth-century thinkers, and he identifies three streams of metaphysical inquiry:

> For those with at least a quasi-Aristotelian conception, metaphysics concerns an inquiry into being *qua* being, and not, for instance, an inquiry into natural beings. For others metaphysics concerns especially non-physical beings, such as God, angels, and the soul. And for some seventeenth-century natural philosophers, including some broadly "Cartesian" thinkers, metaphysics involves three principal matters: first, an investigation into the "first principles" that enable our knowledge of natural phenomena; second, an investigation into the basic components of the natural world; and third, an investigation of God's relationship to nature. (14)

In his early works, Blake's metaphysical concerns encompass all but the first of the variations that Janiak identifies; he is not so much interested in "being *qua* being,"[5] but he often returns to questions concerning God and God's relationship to nature, the soul – though Blake does not grant it to be a "non-physical being" – the basic components of the natural world, and the first principles that enable our knowledge of all of this. Insofar as metaphysics on this eclectic definition investigates both what exists and how we come to our knowledge of existing things, it encompasses both ontology and epistemology. In his *Critique of Pure Reason* (1781), Immanuel Kant, Blake's contemporary on the continent, wrote that metaphysics "is older than all other sciences, and would remain even if all the others were swallowed up by an all-consuming barbarism" (Bxiv, 109). Kant was also concerned with both ontology and epistemology, as evidenced by his deep respect for Newton and Hume, and the enterprise of his first Critique suggests a similar understanding of metaphysics as that which I ascribe to Blake: "let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition" (Bxvi, 110). In style, method, and ultimate system, Blake could

[5] This is not to suggest that Blake's thought is not in some sense quasi-Aristotelian. Blake's debt to Aristotle will be discussed in chapter 2.

not be more different than Kant, but as metaphysicians, both attend to questions of natural beings and phenomena and their relation to God, as well as the human capacity to know these matters.

What, then, *are* Blake's metaphysics? This is the question my project seeks to answer, and it is prompted by questions asked within Blake's work: "why fades the lotus of the water?" (*The Book of Thel*, 1789, E 3); "What is Man!" (*For Children: The Gates of Paradise*, 1793, E 32); "With what sense does the bee form cells? … what is a thought & of what substance is it made?" (*Visions of the Daughters of Albion*, 1793, E 47); "what is the material world, and is it dead?" (*Europe*, 1794, plate 3); "What immortal hand or eye. / Could frame thy fearful symmetry?" ("The Tyger," *Songs of Innocence and of Experience*, 1794, plate 42). I find Blake's work to be engaging – just as much if not more than Coleridge and Shelley after him – in the complex metaphysical debates concerning mechanism and vitalism, debates that characterize much of eighteenth-century natural philosophy. A close analysis reveals that the terms mechanism and vitalism vary according to context, but vitalism can be broadly construed – within the context of the long eighteenth century – as a response to Cartesian mechanism, which described the universe as obeying physico-mechanical principles; for mechanists, all activity could be explained in terms of extended and inert matter and motion, the laws of which Newton elaborated. In the work of Descartes, the machine was an apt metaphor for living bodies, man being distinguished from the beasts insofar as he possessed an immaterial soul. In the words of Ann Thomson, "the mechanical philosophy […] saw matter as passive and banished God from his creation" (*Bodies of Thought* 67), even though God remained ultimately responsible for the activity of creation in the work of Newton, for example. For vitalist thinkers of the eighteenth century, however, this mechanical model could not explain the behavior and growth of living organisms, whose constituent matter appeared much less inert than had been described by

Descartes and Newton. According to Peter Hanns Reill, for vitalists, "[l]iving matter was seen as containing an immanent principle of self-movement or self-organization whose sources lay in active powers, which resided in matter itself" (7). In addition to establishing in more detail the nuanced historical context of these debates over the course of the long eighteenth century, I will argue that Blake's metaphysical positions are decidedly on the vitalist end of the natural philosophical spectrum. He believed that matter was immanently active and not transcendentally acted upon.

Though vitalism is important to Blake's philosophy, it does not encompass the breadth of what I take to be Blake's early metaphysical arguments. Most discussions of vitalism in the eighteenth century were confined to discussions of living organisms – humans, animals, and plants – but Blake's conception of vital matter extends into the inorganic realm. Moreover, all material entities are not just self-active, but also sentient, possessed of some degree of mentality, as evidenced for example by the speaking Cloud and Clod of Clay in *The Book of Thel*. I contend that in ascribing sentience to the material universe, Blake's early work can be placed in a panpsychist intellectual tradition, which has ancient origins. David Skrbina defines panpsychism as "the view that all things have mind or a mind-like quality" (2).[6] According to him, panpsychism predominated in pre-Socratic philosophy and "was probably the dominant view for most if not all of the pre-historical era" (3). The definition does not necessarily imply that clods and pebbles can perform all the mental operations that humans can,[7] but rather that there is "a vast range of mental complexities" and "the panpsychist asks us to see the 'mentality' of other

[6] Skrbina later provides the *Routledge Encyclopedia of Philosophy*'s definition: "Physical nature is composed of individuals, each of which is to some degree sentient. … [They may be said to have] sentience, experience, or, in a broad sense, consciousness" (15).

[7] Though in certain works of Blake's, such as "The Clod and the Pebble" and *The Book of Thel*, this appears to be the case.

objects not in terms of human consciousness but as a subset of a certain *universal quality* of physical things" (7, 17). Skrbina also notes that "[i]n order to qualify as a complete theory, a panpsychist outlook must be complemented by a positive theory of mind that explicitly describes how mind is to be conceived and how it is connected to physical objects." Thus, one can be a panpsychist dualist, a panpsychist reductive materialist, etc. (3).

Though Blake's early works demonstrate a panpsychist vision, I argue that he finds more than sentience in materiality. Skrbina writes that the term animism, "the belief that everything in the universe has a soul or a spirit," is a synonym of panpsychism, but it usually implies a dualist ontology or theory of mind, since the inhabiting spirits of things "are not bound to the physical realm" (19). Other synonyms of panpsychism include hylozoism, "(from the Greek *hyle*, matter, and *zoe*, life) the doctrine that all matter is intrinsically alive" (19), and pantheism, the theory that "all (*pan*) is God (*theos*) – that God is identical with everything that exists, i.e. the universe" (20). While noting the ambiguity of such a term, Skrbina claims that it usually "implies that God is a non-personal being, that there is no Creator or Providence, and that there is no transcendent realm of the Divine" (21). In terms of Blake's early work, though I apply all of these synonyms, I find pantheism to be most fitting, since in addition to the sentience of all matter, Blake denies an immaterial transcendent God and instead identifies the divine with the material universe, which is holy at every level. Ultimately, I show how Blake eclectically draws from a long metaphysical tradition to present his poetic version of a pantheistic monism.

The most famous – or infamous – representative of pantheistic monism during Blake's time was Baruch Spinoza, whose *Ethics* (1677) is, according to Michael Levine, the last full-length philosophical work on pantheism (ix). Spinoza was widely read – and dismissed as an atheist – by eighteenth-century natural philosophers for identifying God with the material

universe.[8] As I will elaborate in chapter 2, while I am not claiming that Blake was directly influenced by Spinoza, the latter is clearly an analogue for Blake's early metaphysics. Levine's compelling critical study of pantheism is careful to distinguish the many forms that pantheism can take, Spinoza's monism being just one of them. As Levine defines it, pantheism is not simply an identification of God with the universe, as Skrbina defines it, but rather that pantheism "is the belief in an all-inclusive divine Unity" (359). That Unity need not be understood as God in a theistic, anthropomorphic sense; indeed, pantheism "does not believe God is a person or anything like a person" (3). The divine Unity that is the material universe also need not be seen as one undifferentiated substance: "The totality that is a divine Unity may allow for the existence of ontologically real and separate entities" (2).[9] This, I submit, is crucial for the following analysis of Blake's early works, as is Levine's assertion that "pantheism denies the theistic view that God transcends the world" (94). Like Skrbina, Levine notes the kinship between panpyschism and pantheism, the latter of which, "interpreted as the doctrine that divine consciousness is in everything, could be interpreted as a kind of panpsychism"; however, Levine claims that the pantheism "has implications beyond the scope of panpsychism" (115, 116).

I argue that Blake's early works develop and then relinquish – by the mid 1790s – a pantheistic/panpsychist monism. And while no other book-length study has applied pantheism to Blake, the term has been discussed in conjunction with the more commonly regarded philosopher-poets, Coleridge and Wordsworth, most notably in Thomas McFarland's *Coleridge and the Pantheist Tradition* (1969). McFarland's compendious intellectual history traces

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[8] Spinoza's reception in both England and on the continent throughout the eighteenth century is thoroughly traced by Thomas McFarland (261-66), a discussion I will return to in my chapter 2.

[9] Levine later writes that pantheists "believe, quite plausible, that there are many things and kinds of things and many different kinds of value" (74), and that "pantheism does not generally entail monism any more than monism entails pantheism" (84).

pantheist natural-philosophical currents on the continent from Spinoza through to Schelling, whose pantheism Coleridge called "Plotinized Spinozism" (qtd. in McFarland 147), and whose ideas can be found permeating Coleridge's *Biographia Literaria*.[10] And while noting the close association between poetry and pantheism,[11] McFarland gives a brief mention to Blake as exhibiting pantheistic thought, specifically in the famous line from "Auguries of Innocence" about seeing a "World in a Grain of Sand" (E 490, McFarland 275). But McFarland identifies Emanuel Swendeborg and his theory of correspondences as the precursor to Blake's pantheism (121-22), and as I will argue at length in the coming chapters, my reading of Swedenborg is antithetical to McFarland's; I find Blake rejecting Swedenborg precisely on the grounds of his ontological dualism and his positing of a transcendent, divine realm. Rather, I trace an alternate history of panpyschist/pantheistic with which Blake fully engages in his early works, and in so doing I claim that Blake – and not Coleridge – is the first major philosopher-poet of the Romantic period.

As Blake's work progresses, the distinction between vitalism and pantheism becomes more crucial, since I argue that ultimately, by the Urizen cycle (1794-1795), Blake objects to the vital materialism of eighteenth-century natural and experimental philosophy insofar as it was atheistic. These vitalists held that matter was self-activating, but they denied its divine nature, and thus for Blake their systems were monstrous abominations. Blake's pantheistic – as opposed to merely vitalistic – inclinations are evident in his annotations to Lavater, in which he objects to Lavater's assertion that "A GOD, an ANIMAL, a PLANT, are not companions of man." Blake responds, "It is the God in *all* that is our companion & friend …. God is in the lowest effects as

[10] McFarland's first chapter is devoted to the issue of Coleridge's "plagiarisms" of Schelling.

[11] Levine also notes this association, numbering Walt Whitman and Robinson Jeffers as notable 19th- and 20th-century pantheist thinkers (58).

well as in the highest causes …. Every thing on earth is the word of God & in its essence is God" (E 599). Lavater's claim isolates man on the Great Chain of Being – from God above him and from animals and plants below him. Blake, I argue, develops a flat ontology, in which all material forms share fundamental properties, and man, however complex a form he may be, is not ultimately distinct from other beings. According to Levi Bryant, a flat ontology is one in which "humans are no longer monarchs of being, but are instead *among* beings, *entangled* in beings, and *implicated* in other beings" (44). Blake's stress of "*all*" and "Every thing" implies a flat ontology whose essence he claims is divinity.

In arguing for Blake's pantheistic ontology, I also reopen the question of Neoplatonism in his work. S. Foster Damon's seminal *William Blake: His Philosophy and Symbols* (1924) makes explicit in the first sentence that by Blake's "philosophy" Damon means mystical – as distinct from natural – philosophy: "The key to everything Blake ever wrote or painted lies in his mysticism" (1). On Damon's reading, Blake's philosophy is allied with other mystical thinkers whose personal experience has "exalted [them] above the world as we know it, into a supersensuous state," and he draws parallels between Blake and Plato and the Neoplatonists, Hermes Trismegistus, Paracelsus, Cornelius Agrippa, Jacob Boehme, and others (1), while the work of Locke, Newton, and other non-mystical natural philosophers receives little attention. Similarly, in his groundbreaking 1947 study, Northrop Frye, seeking to establish the intellectual tradition informing Blake's poetry and to destroy "the myth that Blake is a literary freak," nevertheless admits that "[i]t is true that in the study of Blake certain mysterious figures – Agrippa, Paracelsus, Boehme, Swedenborg – begin to loom up on the horizon, a cloudy phalanx whom many lovers of painting and poetry may not care to engage" (151). Other critics, such as Desirée Hirst (*Hidden Riches*, 1964) and Kathleen Raine (*Blake and Tradition*, 1968) followed

Frye's lead, attempting to draw further connections between the "cloudy phalanx" and Blake's poetry, while George Mills Harper (*The Neoplatonism of William Blake*, 1961) sought to establish the Platonic and Neoplatonic roots of thought which were revived by the Renaissance Neoplatonism of Agrippa, Paracelsus, and Boehme. Harper, like Damon before him, found historical support for such a study in Blake's association with Thomas Taylor, whose translation of Plato and Neoplatonists such as Plotinus, Proclus, and Porphyry were well known in Blake's time. Nevertheless, this strain of Blake criticism that emphasized his Neoplatonism has largely dried up due to various factors, including what is now largely recognized as the conjectural and historically sloppy nature of many of the claims made by Hirst and Raine, as well as the historicist wave of Blake criticism ushered in by Erdman (*Blake, Prophet against Empire*, 1954). Cementing Blake's place in the canon involved casting him less as a "literary freak" than as a political and Protestant antinomian radical deeply involved with the revolutionary politics and religious movements of his time.[12]

While I agree that to read Blake only as a Neoplatonic mystic preoccupied with alchemical symbolism is to severely limit one's experience of his work, I nevertheless find several of the issues central to Neoplatonist thought to align with the pantheistic tradition. Like vitalism, Neoplatonism has been loosely applied to many strands of thought, and thus needs clarification in the context of this study. First, I distinguish Neoplatonism from Platonism insofar as the latter term's conventional association with a dualist ontology of transcendent ideal Forms distinct from a degraded universe of sullied matter was anathema to Blake, as he makes clear in *The Song of Los*, in which Plato is named as one of the first thinkers in the West whose "abstract

[12] There have been some exceptions; for instance Kevin Fischer's *Converse in the Spirit* (2004), which focuses on Blake's relationship with Boehme, and Alexander Roob's *Alchemy and Mysticism* (1997), which makes a subtle and compelling visual argument that Blake's designs bear striking similarities to alchemical emblem books and to what Roob calls the "Hermetic tradition," which can be traced back to Neoplatonic thinkers.

Law" led to the religious and political tyranny of Blake's age (E 67). It is to Plato's dualist account of a transcendent soul and a corrupt, material body, from which "the soul suffers much evil" (*Timaeus* 86e), that the dualism of Cartesian mechanism can be traced. Nevertheless, as will be discussed more fully in chapter 2, the *Timaeus* also contains passages in which the soul's distinctness from matter is less clearly evident.

This interfusion of soul and body and the description of a living universe was elaborated centuries later by Plotinus, whose *Enneads* posits a world-soul, or *anima*, the vital principle immanent in the material universe. Plotinus's God emanates downward through the great chain of being, such that all material forms partake of divine essence to some degree, and thus matter is less "evil" than in the Platonic account. In Book 3 he claims that "Nature is a Soul" (3.8.4, 36) and that through that soul (*anima*) this universe *is* a God. Asking the reader to imagine a spring that has no source outside itself, Plotinus articulates what could be employed in an eighteenth-century vitalist response to Cartesian mechanism: nature's "productivity cannot depend upon mechanical operation" (3.8.2, 234). Rather, the soul interfused and inextricable from nature has the power to animate all of nature. In Book 5, Plotinus makes the pantheistic claim that "the beginning must be a really existent One, wholly and truly One, while its sequent, poured down in some way from the One, is all, a total which has participation in unity and whose every member is similarly all and one" (5.3.15, 382).[13] As M. H. Abrams notes, *contra* Plato, Plotinus provides the "basic figure of creation as emanation," a trope which was revived in Renaissance Neoplatonism via figures like Paracelsus and Giordano Bruno (58-59).[14] I find a similar metaphysics in Spinoza's hylozoism, which claims that all things – not just human bodies – are

[13] McFarland discusses this and other passages from the *Enneads* in elaborating the pantheistic aspects of Plotinus (281-82). See also Levine, 176.

[14] Both Levine (33) and McFarland (60) count Bruno, whose work will be discussed in chapter 2, in the tradition of pantheists.

"animate, albeit in different degrees" (*Ethics*, Part 2, prop. 13, first scholium). Thus, my application of the term Neoplatonism to Blake's work points to the pantheistic metaphysical principles – concerning the immanent soul, or *anima*, interfused and often inextricable from the material body – briefly sketched here, and not to a dualist ontology of a strictly immaterial soul descending into and directing degraded and inert matter.

Thus, Blake's question "What is Man?" takes on added significance when considered in the context of eighteenth-century debates over the vitalist or mechanical qualities of life, the nature of the soul, and the properties of matter. I contend that Blake was attentive to these discourses, especially given that two of the leading voices – Erasmus Darwin and Joseph Priestley – were associates of Blake via their mutual friend, Joseph Johnson. More extensive readings of the work of Darwin and Priestley will show these natural philosophers to have absorbed and engaged with many of the pantheistic and Neoplatonic ideas presented above, both from continental and British thinkers. Each chapter of this project aims to demonstrate the degree to which Blake's early work belongs in these debates, analogous as its metaphysical assertions are to many natural-philosophic voices from the long eighteenth century. Blake's eclectically derived pantheistic monism is unique in its artistic formulation, but he was not without his anti-Newtonian and anti-Lockean allies, regardless of whether he was directly aware of their work.

Donald Ault's *Visionary Physics* (1974) was the first book-length study devoted to Blake and natural philosophy, and in it Ault analyses the complex relationship between Blake and Newton. Stuart Peterfreund's *William Blake in a Newtonian World* (1998) explores similar territory, though his work differs in being heavily inflected by the postmodern theory that pervaded literary criticism in the decades after Ault's book was published.[15] Both works,

[15] Peterfreund's chapter titles allude, for instance, to Foucauldian "Power Tropes" and an Althusserian "Ideology of the Natural."

however, are similar in their emphasis on Blake's text at the expense of his designs. Though Blake criticism has begun to emerge from the position that Blake was thoroughly anti-science, represented by William Powell Jones's 1966 claim that "Blake attacked science more vigorously than any other poet of the eighteenth century" (228), aside from Ault's and Peterfreund's, there are relatively few book-length studies concerning Blake and natural philosophy. Wayne Glausser's *Locke and Blake* (1998) focuses mostly on politics and devotes almost no attention to Locke's account of perception and Blake's response to it, which I address in this dissertation, since both the metaphysics and epistemology of perception are crucial to Blake's system. Some recent scholarship has, however, sought to situate Blake's work in the context of eighteenth-century vitalism and physiological debates: namely Tristanne Connolly's *William Blake and the Body* (2002), Stephanie Engelstein's *Anxious Anatomy* (2008), Denise Gigante's *Life* (2009), and Janelle Schwartz's *Worm Work* (2012). While I find all of these works to have made exciting advances in Blake criticism, the latter three only devote a chapter of each of their works to Blake; given the wealth of Blakean text and imagery available for such studies, I crave a more in-depth reading. Connolly, on the other hand, limits her book-length investigation to Blake's depiction of the *human* body. As I hope to show, Blake's metaphysics applies not just to the human anatomy, but to the myriad material forms – organic and inorganic – that proliferate in his text and designs.

Arguing for Blake's poetic elaboration of a metaphysics wherein a living material universe dynamically reciprocates with the human imagination places this dissertation within the critical tradition of Green Romanticism. Initiated by Jonathan Bate's *Romantic Ecology* (1990), which countered new historicist and deconstructivist trends in criticism by claiming that the Romantic (particularly Wordsworthian for Bate) treatment of nature was neither escapist nor

apolitical, but rather an effort to enable readers to more imaginatively dwell in their natural environments, Green Romantic criticism emphasizes the animated or vital characteristics of the earth and its nonhuman forms, which elicited sublime awe and respect from the Romantic poets. Karl Kroeber's *Ecological Literary Criticism* (1994) furthered Bate's argument and articulated the Neoplatonic roots of such a Romantic perspective. For Kroeber, the intellectual precursor to the Romantic proto-ecological thought was Spinoza. Wordsworth and Coleridge's early poems demonstrate an awareness and exploration of the implications of such a hylozoic, interconnected universe (which has its roots in the animistic world-soul of Plotinus and other Neoplatonists). According to this view, God became both man and nature for the British Romantics, who borrowed from Schelling's Neoplatonically-informed *Naturphilosophie*, and man's unimaginative perception of nature as an inanimate and alien other was a sign of man's fall into sin. However, as with literary criticism which emphasized the philosophical inclinations of the Romantic poets, Blake is absent from these two seminal works of Green Romanticism. I hope to demonstrate that Blake's poetry and designs deserve as much discussion in such a critical tradition as Wordsworth and Coleridge's.[16]

Although contemporary Green Romanticism still largely ignores Blake's work, the theoretical and philosophical terrain currently being explored by contemporary Green Romantics like Timothy Morton points to the relevance Blakean metaphysics has for philosophy today.[17] Morton allies himself with other Object-Oriented Ontologists, such as Graham Harman and Levi Bryant, who attempt to deflect philosophy from its anthropocentric preoccupations – which for them were initiated by Kant's critical revolution – and formulate an ontology based on what they

[16] Mark Lussier's chapter on "Blake's Deep Ecology" in his *Romantic Dynamics* (2000) has taken a helpful step in this direction.

[17] Morton's compelling but restless *Ecology without Nature* (2007) offers a brief – but to my mind incomplete – reading of Blake *The Book of Thel* (155-157).

posit are active properties of material objects, objects which can never be exhausted by or reduced to human perception of them: "inanimate objects are not just manipulable clods of matter, not philosophical dead weight best left to 'positive science,'" but rather, beneath the surface, every entity – be it chipmunk or propane tank – "harbors its cryptic dynamism, its *vis viva*" (Harman, *Tool-Being* 19, 39; with the last phrase Harman acknowledges his debt to Leibniz, though he claims to use the term more loosely). A parallel can be drawn here to Blake, who gives dynamic poetic agency to clods and pebbles, as well as to lilies and lions, and for whom a bird harbors infinite powers closed to the five senses. Noting that "we share 98 percent of our DNA with chimps and 35 percent with daffodils," Morton claims that the metaphysics informing his "ecological thought" "eats through the life-nonlife distinction" (*Ecological Thought* 66, 68). Object-Oriented Ontology is one branch of the wider movement of Speculative Realism, whose representatives – from Iain Hamilton Grant to Quentin Meillassoux to Isabelle Stengers – are once again engaged in competing brands of metaphysics, long considered an unpopular practice in philosophy after Kant, and especially after the linguistic turn of the late twentieth century.[18] Though most of these thinkers disavow a spiritual component to their ontology, nor do they proclaim themselves to be vitalists in any strict sense – and certainly not pantheists – I find in their various metaphysical arguments theories of matter and life that resist the mechanical and reductive philosophies that have dominated western thought since Descartes and Newton. Jane Bennett, for instance, explicitly places herself in the Spinozist tradition and in her work attempts "to give voice to a vitality intrinsic to materiality, in the process absolving matter from its long history of attachment to automatism or mechanism" (3). Blake can be seen

[18] Gilles Deleuze can be considered as one of the first continental philosophers to return – together with Felix Guattari – to ontology after the linguistic turn, and speculative realists credit him as such a pioneer. See Bryant et al., 4-5.

to be engaged in a similar project centuries earlier, but using the vehicle of philosophic poetry and art.

In other words, the Neoplatonically-influenced pantheism that I find in Blake's work has not died, despite what historians of science see as the triumph of mechanism in the nineteenth and twentieth centuries.[19] Critiques of reductive mechanism abound in the first two decades of the twenty-first century, and not just from self-proclaimed speculative realists. For instance, Stuart Kauffman (*Reinventing the Sacred*, 2008) draws on contemporary theories of emergence to argue that mechanical laws and traditional notions of causality are insufficient to explain or predict what Henri Bergson would call the "creative evolution" of the biosphere. (Despite the misleading title, Kauffman is an atheist.) In *Mind and Cosmos* (2012), Thomas Nagel seeks a middle way between what he calls reductive naturalism and theism, claiming that "contemporary research in molecular biology leaves open the possibility of legitimate doubts about a fully mechanistic account of the origin and evolution of life" (7). Another philosopher of mind, Galen Strawson, goes further than Nagel in embracing panpsychism as the only solution to the mind-body problem. To be a physicalist, one who asserts only the existence of physical objects and forces in the world, Strawson argues, entails panpsychism: "All physical stuff is energy, in one form or another, and all energy, I trow, is an experience-involving phenomenon" ("Realistic Monism" 25) – and by "experience" here Strawson means "conscious experience" (3). Peter Canning acknowledges the Romantics as crucial to debates in contemporary metaphysics:

> The force of Romanticism, however, is to affirm the *reality* of life and mind and defend it against the bizarre temptation to reduce their powers to 'epiphenomenal' manifestations of 'fundamental laws and initial conditions.' The Romantics were well aware that the real

[19] One can find rare exceptions, such as the early-twentieth-century metaphysics of Alfred North Whitehead, Bergson, and Hans Driesch, whose work has proven influential to Harman, Bennett, and others.

> thing was being methodically overlooked and denied [by mechanistic accounts]. They wondered what demon possessed the scientific mind to claim that life was a machine. (157)

Though Romantic perspectives are called upon in these contemporary debates, Blake's is sorely missing, and this project aims to demonstrate its relevance to contemporary metaphysics.[20]

2.

Blake's early manuscript, *An Island in the Moon*, is foundational for Blake's self-conception as a metaphysician. What little critical attention has been devoted to this work has been focused on establishing its place in the long satirical tradition dating back to Menippus, as well as its debt to eighteenth-century theatrical forms and the literary tradition of moon-voyage narratives. Several of the targets of his satirical barbs are natural philosophic attitudes as represented by characters such as Inflammable Gass, Obtuse Angle, Suction the Epicurean, and Sipsop the Pythagorean. Blake's rowdy sendup of these attitudes is not meant to dismiss natural philosophic practice altogether; rather, beneath Blake's satirical clowning lies a deep awareness of and engagement with several philosophical traditions and contemporary debates in the natural sciences.

As noted above, Blake self-identifies with Quid the Cynic in *Island*, which indicates both his wish to be considered as a philosopher as well as the multiple strands of irony and wordplay that any interpreter must unravel in order to sort out Blake's philosophy. Quid's name – from the Latin meaning "what" or "something" – subtly points to the challenge faced by all ontologies: what *is* this "something," this quiddity and how does a metaphysician define and describe the

[20] In surveying the contemporary thinkers above I do not mean to imply my own wholehearted allegiance to their perspectives (which of course are not in unified agreement themselves); I mean only to indicate that the debates in which Blake was engaging at the end of the eighteenth century are still active today, in modified form.

universe of things? Matter theories from the pre-Socratics to Plato and through the long eighteenth century were deeply invested in defining the "somethings" that constituted the material universe, and Blake's application of the term to a human cleverly suggests the subjective nature of such an endeavor and how "that which is" becomes variously formulated depending on the philosophical tradition.[21] But as with many of the names in Blake's later poems, "Quid" is also a pun, in this case on the term for pound sterling in British currency, ironic since the tradition of Cynicism advocates an ascetic lifestyle and an abdication of worldly material comforts – its most famous representative, Diogenes, begged for a living and slept in public in a large ceramic jar.[22] But the case can be made that Blake also shares certain traits and philosophical attitudes with Diogenes: both were outspoken opponents to authority figures (Diogenes publicly mocked Alexander the Great while Blake's attitude toward George III was far from sympathetic); both had disdain for the abstractions and duality that characterized Plato's philosophy; and Diogenes, who famously carried a lantern in broad daylight in search of an honest man, also apparently had a flair for the theatrical and satirical delivery of his ideas.

Additionally, *Island* reveals several of the philosophical topics – the nature of matter, the existence of the soul, and the relationship between perception and epistemology – which continue to pervade Blake's early illuminated work. In the first chapter, the philosophers (who are "thinking of nothing" (E 449) – a satirical jab to be sure, but also a punning reference to natural philosophical debates about the void, which was rejected by Descartes' assertion of the plenum) discuss the "outré fellow" who inquires about the owner of the swallows he has just observed, and Inflammable Gass (thought by several critics to represent Joseph Priestley and his

[21] That Quid is a person in *Island* punningly prefigures the question on the frontispiece of *For the Sexes*: here, literally, "What" is a man.

[22] In *Island*, Quid is also a publisher, intent on making money.

phlogiston theory[23]) claims, "I do not think the man was a fool for he seems to me to have been desirous of enquiring into the works of nature." The discussion is cryptically explained as a quarrel about Voltaire, and Sipsop claims that the other thinkers are "endeavoring to incorporate their souls with their bodies" (E 450). Thus, the ostensibly foolish anecdote belies serious metaphysical questions and alludes to several competing natural philosophical perspectives: in what sense do the swallows, as organic beings "going on their passage, as Pliny says" (E 450) *belong* to a transcendent creator? This is a forerunner to the better-known questions regarding divine creation asked in "The Tyger." The allusion to Voltaire here and elsewhere in the work touches on several natural philosophical traditions: Voltaire can be seen in one sense as an ally of Blake's insofar as the two used satire to attack the tyranny and hypocrisy of established religion, but he also represents the deist and reductive materialist natural philosophy against which Blake launched a sustained attack throughout his major works. As one of the chief popularizers of Newton's work in the eighteenth century, Voltaire is most often cast by Blake as a proponent of the mechanistic materialism that Blake's pantheistic metaphysics would come to oppose.

Sipsop's allusion to the soul/body dichotomy is a central problem for eighteenth-century natural philosophy, and one that Blake's later work will address from various angles.[24] But Island also introduces issues of perception and epistemology. In the next paragraph of the first chapter, Obtuse Angle describes himself as someone who "always understood better when he shut his eyes" (E 450). Here again, an ironic quip also points to a deeper issue in the history of philosophy: Obtuse Angle's statement alludes both to the rationalist attitude of introspection espoused by Descartes, whose *Meditations* begins with the thought experiment wherein he imagines himself alone in the universe, without a body, and Locke, whose theory of ideas was

[23] See for instance Damon, *Philosophy and Symbols*, 33.

[24] I will explore this topic more fully in chapter 2.

founded on simple ideas of perception, both of the external world and of the mind's own activity. Thus, Obtuse Angle's understanding by shutting his eyes can be read as an ironic allusion to the latter source of simple ideas detailed in Locke's *Essay* – which Blake had read at an early age – in which the gaze of the understanding (compared by Locke to an eye) is directed inward, through "art and pains" to notice itself (1.1.1, 43).

For Blake, as for Descartes, metaphysics, or first philosophy, underlies politics, religion, and aesthetics (in his annotations to Reynolds' *Discourses* Blake claims that Burke's theory of the sublime and the beautiful is "founded on the Opinions of Newton & Locke" (E 660)). Descartes is also an unnamed presence in *Island*, as his *cogito* is parodied in the guise of Aradobo: "whenever I think I must think myself – I think I do – In the first place said he with a grin" (E 453). What is this man who thinks himself in the first place? Is he more than a Cartesian machine, and if so, how does his soul operate? Blake's work is an attempt to explore such questions in imaginative fashion, and this early manuscript reveals his self-fashioning as a philosopher and the questions that would come to guide his artistic practice. These humorous instances in *Island* demonstrate his early awareness of and investment in seriously contested metaphysical debates that were as divisive in the eighteenth century as they are today. Moreover, *Island* reveals the satirical mode as one of Blake's favorite vehicles for indirect philosophizing, a mode that will achieve fuller development in *The Marriage of Heaven and Hell*; not only can Blake attack – with the veil of humor – attitudes and theories with which he disagrees, but he can hint at his own metaphysical stances without being dogmatic.

3.

In the following chapters, I explore how Blake's art served as a vehicle for his philosophy. Why did Blake not simply write a pantheistic philosophical tract? McFarland, in discussing the close historical alliance between pantheism and its expression in poetry, offers some compelling reasons: "both poetry and pantheism," he writes, "tend to make particular awareness involve, or symbolically imply, more extended awarenesses," and it is in support of this claim that he offers Blake's world in a grain of sand line (274-75). McFarland continues with two more reasons for why pantheism lends itself to poetic expression: "both tend to allow a scrambling, as it were, of ordinary reference. If, for pantheism, all things are conceived as really one, there is no reason to prefer one to the other" (275). As I will show, this idea resonates with the flat ontology that Blake advocates, and with his poetic elaboration of the nightmarish consequences of hierarchical ontologies – at the apex of which sits the transcendent God of natural religion – that always lead to oppression. Finally, McFarland writes, "both poetry and pantheism tend to obliterate the boundaries between the realm of thing and the realm of mind" (275). In Blake's monism, there is no distinction between soul and body, and one's mental activity, and especially the metaphysical principles one holds, has a bearing on how the "realm of things" is perceived and interacted with. Moreover, in Blake's panpsychist universe, all things partake of infinite, divine mentality, so the "realm of mind" is not limited to the human. If the poet seeks "'unapprehended relations of things by means of metaphorical language,'" McFarland claims, quoting Shelley's *Defence*, "he finds a natural ally in the pantheist, for whom all things are related in their divinity" (276).

To McFarland's argument, I add that for Blake art – both poetry and visual design – engages the imagination, which constitutes the unbounded potential of mind, while philosophy

engages the reason only. "The Poetic Genius is the true Man," Blake claims in *All Religions are One* (E 1), the Poetic Genius being a term that Blake will soon after equate with the imagination. Thus, true knowledge is contingent on imagination, which is most roused to act when confronted with great works of art. My sense is that Blake felt that the weighty philosophic tomes of his predecessors to be too arid and dull to wholly engage the reader – at least the kind of reader he wanted to cultivate. He conveyed his metaphysics in a vivid, dramatic, and poetic fashion, in order to more vitally influence his audience. The forms of his artistic practice affect us in their bold immediacy and mysterious resistance to rational encapsulation. He could dramatize his philosophical ideas and satirize those of others in a poetic narrative, or visualize them in a single, striking design.

I address Blake's satire of conventional philosophical arguments in the first chapter, which focuses on Blake's earliest illuminated books, *All Religions Are One* and *There Is No Natural Religion* (both c. 1788), with particular emphasis on the latter work, which presents Blake's satire of Lockean empiricism, which he conflates with natural religion or deism. Such a metaphysics, on Blake's view, denies divine infinitude to the material universe and to man, instead treating bodily existence as the degraded and inert byproduct of a transcendent, immaterial first cause. To counter this vision, Blake presents a theory of matter and perception that I argue has a close analogue in the anti-Lockean, anti-Newtonian panpsychism of Leibniz, who, like Blake, argues for the infinitude of corporeal beings, man included, and for a mode of perception that, like Blake's Poetic Genius, is not limited to sensory organs. By allying Blake's satire of Locke with Leibniz rather than with Berkeley – as previous critics have done – my purpose is to place Blake in a panpsychist philosophical tradition rather than an idealist one. The last section of the chapter also compares Blake's criticism of natural religion to Hume's

treatment of the subject in the *Dialogues Concerning Natural Religion*, a comparison I return to in chapter 4.

My second chapter examines how Blake expands on the satirical project of *No Natural Religion* in *The Marriage of Heaven and Hell* to elaborate his metaphysical principles and, again, to critique dualist ontologies, the latter of which is here represented by Swedenborg. The *Marriage* features Blake's monist pantheistic claims that 1) there is no immaterial soul apart from the body and 2) all material creation is alive and holy. I trace how elements of Blake's metaphysics as presented here constitute an eclectic blend of principles found in various traditions dating back to Aristotle, Plato and the Neoplatonists, Epicurus, and the Stoics, and continuing through the early modern period and the eighteenth century. Despite the similarities argued for between the tractates and Leibniz's monadology in the first chapter, Blake is more firmly committed to monist materialism in the *Marriage*, which differs from Leibniz's dualist metaphysics of immaterial monads and organic bodies. Thus, I argue that ultimately the *Marriage* has a close analogue in the pantheism of Spinoza.

While the early tractates and the *Marriage* satirically explicate Blake's early metaphysics, my third chapter is devoted to how his philosophy is indirectly manifested in three narrative illuminated poems of the early period: *The Book of Thel*, *Europe a Prophecy*, and *The Song of Los*. These works all dramatize the tension – on both the personal (*Thel*) and socio-historical (*Europe* and *Song of Los*) – between materialist/pantheistic/monist and dualist/deistic ontologies, and the consequences of embracing one or the other. In the designs to these works, Blake also introduces hybrid human/animal/plant forms to imply the dynamic transformative properties of living matter, a theme that will be found in the works discussed in chapters 4 and 5 as well. The three illuminated books addressed in this chapter are read against the early epic

poems of another poet-philosopher and contemporary of Blake, Erasmus Darwin, whose *The Botanic Garden* (1791) shares many of Blake's metaphysical positions despite radically differing in poetic style. This chapter thus addresses the mode and manner of Blake's early natural philosophy: I contend that Blake believed that natural-philosophical arguments could be more effectively conveyed via dramatic poems and images; thus, in these illuminated works he abandons the numbered propositions and logical arguments he had satirically employed in the tractates. The three narrative poems discussed here – as well as the narrative aspects of the *Marriage* – attempt to impress philosophical points with emotive force. As such, they are stylistic efforts to advance beyond the didactic dialogues between characters found in Plato, Berkeley, and Hume.

Chapter 4 argues that Blake's conflation of cosmology and embryology in the Urizen cycle of poems testifies to his view that Newtonian mechanism and empirical philosophy had infiltrated the discoveries being made in the eighteenth-century life sciences. Ironically, however, emerging vital materialist physiologies, though voicing allegiance to the laws of Newton, ultimately revealed a living world that could not be contained in or explained by his metaphysical system – a state of affairs that I argue Blake dramatizes in the Urizen cycle. What is more, despite their anti-Newtonian consequences, the vitalist natural philosophies were for Blake another form of natural religion, for they too denied divinity to the self-active living matter of the universe. This is also ultimately the case with Darwin's natural philosophy as expressed in the first volume of his *Zoonomia*. Thus, this chapter argues that Blake satirizes *both* Newtonian metaphysics as read by Blake, as well as the vital materialisms that proliferated in response to it. On Blake's reading, both philosophical movements, in positing an immaterial God separate from the universe – or in implying that the divine is altogether unnecessary – corrupt the living,

intelligent, energetic flames that comprise the infinite universe, all of which for him is divine. Yet in these poems Blake's pantheistic, monist counter-vision is not delivered with the force that it is in his earlier works, and thus I argue that these poems of the mid-1790s mark Blake's turn from materialism to the dualist and idealist Christian metaphysics that characterize most of his later work.

The final chapter continues the discussion of Blake's engagement with Newton initiated in chapter 4, but here it is applied to two versions of the color printed drawing, *Newton*, the 1804-05 printing of which offers a startling contrast between the abstract, mathematically governed Newtonian mechanics and the anti-Newtonian vital materialisms discussed in the previous chapter – both of which for Blake belong in the fallen world of natural religion. In the design Newton's angelic body is the point of intersection of two undesirable extremes, the marriage of two hells: unorganized vital proliferation of matter (the marine polyps/sea anemones) and abstract, rational law (the mathematical diagram). The work is a prime example of Blake making a complex philosophical argument through image alone, and his implementation of coralline forms in the design conjures a vast eighteenth-century natural philosophic discourse concerning the vital properties of the marine polyp and its related coralline creatures. The 1804-05 version of the *Newton* print is the lone exception to the specified period of focuses, but the original pull of the design was executed in 1795, and thus the two versions of the work point to – or mark the threshold of – Blake's transition away from panthesitic monism to the Christian metaphysics of his later works.

One cannot find Blake's natural philosophy programmatically articulated in any one specific work, but just as Morris Eaves has argued for Blake's theory of art based on evidence in a number of works, this dissertation attempts to extrapolate the evolution of Blake's

metaphysical system over these illuminated books and separate designs. In focusing on Blake's philosophy in the particular seven-year period from 1788-1795, I am following a similar path taken by Matthew J. A. Green, whose *Visionary Materialism in the Early Works of William Blake* (2005) specifies the same date range and likewise sees Blake as developing a materialist metaphysics. I find much of Green's discussion concerning Blake's philosophy to be insightful, and I engage with it in the following chapters, but our projects ultimately diverge in their focus, as Green is as much concerned with Blake's place in the tradition of religious enthusiasm as as he is with Blake's place in the natural-philosophic tradition. He devotes ample attention to Blake's engagement with Locke and Priestley, and while he briefly identifies some similarities between Spinoza and Blake early in his book, claiming, "a pursuit of the intersections and overlaps between Spinoza's thought and Blake's can be expected to bear much fruit" (34), that fruit is not to be found in the subsequent chapters. I hope here to more fully detail those intersections – not only between Blake and Spinoza, but also between Blake and a wide range of natural philosophers not mentioned in Green's account.

Crucial to this project as well are digital databases, such as Eighteenth Century Collections Online, which have made it possible, as never before, to explore and reframe the complex discourses of eighteenth-century natural philosophy. Additionally, the wealth of high-quality, searchable images made accessible by the William Blake Archive, has opened up new avenues in Blake scholarship. In the case of this project, Blake's designs – displayed accurately and in great detail – in various media suggest startling new possibilities in interpreting Blake's natural philosophy, offering perspectives unavailable to scholars who had previously confined their analysis to textual transcriptions of Blake's work.

I focus on Blake's metaphysics, which historically leaves aside questions of morality or ethics. Metaphysics is often thought to describe the nature of the universe and how we know it, but it does not advise how best to live in such a universe. In his *Treatise of Human Nature* (1739-49), Hume famously declares that one cannot derive an "ought" from an "is," that is, one cannot deduce ethical or moral pronouncements from descriptive propositions: "the distinction of vice and virtue is not founded merely on the relations of objects, nor is [it] perceiv'd by reason" (3: 26). But Levine argues that "[a]ll moral philosophy, whether or not it explicitly acknowledges them, requires metaphysical assumptions" (209). For the pantheist, Levine continues, "The belief in a divine Unity, and some kind of identification with that Unity, is seen as the basis for an ethical framework (and 'way of life') that extends beyond the human to non-human and non-living things" (222).[25] Thus he identifies Spinoza as a philosopher for whom "the natural and the moral are intrinsically connected" (42). Such a view links pantheism – and Blake's modification of it – to the ecocritical traditions (discussed in the previous section) and their insistence on a flat ontology, since, as Levine argues, "The good for humans cannot be explained by reference to humans alone" (244).

In the case of Blake's pantheistic metaphysics, a normative account can be seen to follow. If everything is alive and essentially divine, Blake implies, then everything is worthy of respect and capable of giving and receiving infinite delight. Therefore, one should imaginatively and joyfully immerse oneself in the community of other beings in which one is already enmeshed. Often in the works to be discussed here, Blake offers negative examples to suggest his moral philosophy; he dramatizes the disastrous consequences of humans behaving *as if* God were a transcendent, immaterial, nonhuman demiurge, and *as if* they were separate from and

[25] Levine also writes that for the pantheist, "Living in accordance with the Unity is to live in accordance with one's nature, and with the nature of other things and conditions in the world generally" (239). Such an outlook has parallels to philosophical Taoism, and Levine discusses Lao Tzu as a pantheist (352ff.) – as does McFarland (60).

ontologically superior to the degraded material universe that they see as composed of inert, lifeless atoms.

By the conclusion of the Urizen cycle, the nightmare worlds of oppression (both sexual and political), sorrow, death, and terror – the result of what Blake took to be erroneous metaphysics – come to dominate his artistic vision, eclipsing the positive declarations of his pantheistic monism that we see early on in the *Marriage* and *No Natural Religion*. In the course of the roughly seven-year span I trace here, Blake begins to relinquish his commitment to his early metaphysics, prefiguring a turn to an explicitly dualist and idealist Christian metaphysics that marks his later works. The details of this later metaphysics, and the reasons for such a philosophical transformation are certainly intriguing questions, but they are beyond the scope of this project. My inquiry is thus devoted to what I see as Blake's urgent metaphysical concerns in works from 1788-1795, and consequently my characterizations of his natural philosophy should be read as applying *only* to that specific time period. I do not deny that much evidence from Blake's late works could be brought to bear against my claims for his pantheistic monism. But I am not making the case for a unified philosophical system encompassing Blake's oeuvre – the later philosophy demands a separate treatment. Just as Blake's poetry and art evolved – not in some teleological sense – so did his metaphysical views. This analysis of the early works delineates the pantheistic principles to which Blake was committed, and it ultimately raises awareness of his deep engagement with the natural-philosophical tradition.

CHAPTER 1

A Sense of the Infinite: Leibniz, Hume, and the Panpsychist Tradition in the Early Tractates

"All these ideas, and especially that of God are within us from the outset; that all we do is to come to pay heed to them; and […] the idea of the infinite, above all, is not formed by extending finite ideas."

— Gottfried Wilhelm Leibniz[1]

1.1

In the first sentence of his first letter to Samuel Clarke, which initiated their famous correspondence, Leibniz writes, "*Natural Religion it self*, seems to decay [in England] very much. Many will have Human *Souls* to be material: Others make *God himself* a corporeal Being" (3). The subsequent exchange concerning metaphysics between the two men was published in English in 1717 as *A Collection of Papers, which Passed between the Late Learned Mr. Leibnitz, and Dr. Clarke, in the Years 1715 and 1716*. Although he wrote these letters over seventy years before Blake composed *There is No Natural Religion* (1788), Leibniz here seems to anticipate – and bemoan – Blake's argument against natural religion and, particularly, his ultimate claim that "God becomes as we are [Leibniz's "corporeal Being"], that we may be as he is" (plate b12).[2] Whatever decay of natural religion that Leibniz perceived in the early eighteenth century – and it is worthwhile to the subsequent discussion to note here his metaphoric treatment of natural

[1] *New Essays on Human Understanding*, 226.

[2] Leibniz's second point, regarding the materiality of the soul, is addressed more fully in Blake's *The Marriage of Heaven and Hell*, and thus will be the subject of the next chapter.

religion as an organism susceptible to decay and death – had certainly not run its course by Blake's time, since the latter's title is best understood as a contentious assertion against majority belief, rather than as a pronouncement of a state of affairs (natural religion is no more) that would thus need no explication. Well over one hundred works featuring "natural religion" in their title were published in the eighteenth century, not to mention the hundreds more that address the synonymous term, deism, in their titles and contents,[3] and Leibniz's correspondent is a prime example of the popularity of the topic: Clarke's *Discourse Concerning the Being and Attributes of God, the Obligations of Natural Religion, and the Truth and Certainty of the Christian Revelation* went through thirteen editions between 1705 and 1767, and his *Discourse Concerning the Unchangeable Obligations of Natural Religion, and the Truth and Certainty of the Christian Revelation* went through five.[4]

As one would expect, the term "natural religion" evolved in its connotations over the course of the eighteenth century, but certain core principles are retained throughout various works, namely: God is a supreme, transcendent being, an infinite first cause separate from and superior to the material universe he set in motion. And, as George Cheyne, the famous physician to Alexander Pope and Samuel Richardson, wrote in the his *Philosophical Principles of Natural Religion* (1705),[5] the material universe is inanimate: "[t]hat active principle which animates, as it

[3] Peter Annet's *Deism Fairly Stated* (1746) makes it clear that for eighteenth-century writers, natural religion and deism were interchangeable terms: "So excellent and glorious a Part of the Christian Institution, then is true Deism, or pure natural Religion, as adopted into, and proposed to be incorporated with it" (7). I predominantly use "natural religion" in this chapter, in keeping with Blake's, Hume's, and Leibniz's choice of terminology.

[4] Other notable authors whose titles addressed natural religion include Jonathan Edwards, William Wollaston, Andrew Baxter, and, of course David Hume and Joseph Priestley, whose works will be discussed in section 1.5. Wollaston and Baxter were dualists who also emphasized the passive immobility, the *vis inertiae* of matter, and their writings on the soul will be considered in the context of the next chapter.

[5] Cheyne divided later editions of the work into two parts: the first part contained the "Proofs of Natural Religion," while the second was entitled, "Containing the Nature and Kinds of Infinites, their Arithmetic and Uses; together with the Philosophic Principles of Revealed Religion." The prominent role Cheyne gives to the notion of the infinite is significant in the context of this chapter, but his discussion in part II focuses mostly on mathematics.

were, the dead mass of bodies, and which is the cause of all the beautiful appearances of nature, owes its origin to something different from matter and motion, and therefore this system of things could not arise from thence" (121). This ontology is decidedly distinct from the pantheistic tradition of divinity inhering in matter itself, and Cheyne, who cites Leibniz on planetary motion in his work, is explicit about this: "there is no such thing as an universal created soul animating this vast system according to Plato, nor any substantial forms according to Aristotle" (3). According to Cheyne and other proponents of natural religion, the animating force comes from God alone, who remains separate from man and the material universe; however, the laws governing the inert universe of particulate matter *can* be discovered by man's reason, and are proof of God's supreme design. A key distinction is thus important to maintain, since "nature worship" is often used as a synonym for natural religion: natural religion may be nature worship, but it is not God-as-nature worship; it is nature-as-the-evidence-of-God's-design worship, God who is wholly remote and distinct from nature.

Although Leibniz's quote lamenting the decay of natural religion is decidedly in opposition to Blake, the very essence of whose philosophy, according to S. Foster Damon, "is that God is knowable and human" (*Philosophy and Symbols* 446), one must also take into account that Leibniz's intellectual enemies – Locke and Newton – are also Blake's. Having already sparred with Newton over the calculus, Leibniz again clearly directs his attack against Newtonian metaphysics in the correspondence with Clarke, who serves as Newton's representative in the exchange. The third sentence of Leibniz's first letter objects to Newton's characterization of the universe as God's "Sensorium" in Query 31 of the *Opticks*; Leibniz writes, "if God stands in need of any *Organ* to perceive Things by, it will follow, that they do not depend altogether upon him, and were not produced by him" (3). Leibniz continues, employing

the famous watchmaker analogy for deism, to state how Newton's system is a threat to natural religion, since according to it God's intervention is necessary "to *wind up* his Watch from Time to Time: Otherwise it would cease to move. He had not, it seems, sufficient Foresight to make it a perpetual Motion" (5). In these preliminary objections to Newtonian metaphysics, Leibniz is arguing on behalf of natural religion, and there can be no question that his theory of pre-established harmony, in which God arranged this best of all possible worlds such that his future intervention is unnecessary, is deistic.

Nevertheless, as the correspondence continues, and Leibniz shifts his focus to attack Newton's theory of absolute time and space and to argue for a relational metaphysics, affinities between the former's philosophical position and the ontological claims that Blake makes in the early illuminated works begin to emerge. Leibniz's metaphysics, culled from passages of other works, are translated as an appendix to the 1717 edition of the correspondence, and in them is revealed Leibniz's theory of the monads as underlying his depiction of the material universe.[6] As this chapter will argue, the panpsychist resonances of Leibniz's philosophy are here discernible, and Leibniz, as a rare and relentless opponent to the otherwise celebrated Newton, can best be seen as early-eighteenth-century analogue to Blake's challenge to the Newtonian philosophy mounted at the end of the century.[7]

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[6] I will give a more detailed account of Leibniz's concept of the monads in sections II and III, but for now they can be sufficiently understood as the immaterial substances that constitute – as the motive force or entelechy – every material body.

[7] Leibniz's voluminous writings are still being translated into English, with further editions projected until 2022. Although the correspondence with Clarke is the only eighteenth-century English edition of Leibniz's work, his opposition to Newton gained him infamy and renown in England, and it is likely that Blake would have been aware of the general features of his philosophy, since it is discussed in several other English works, including Cheyne's. Voltaire, for instance, summarizes the opposition between Leibniz and Newton in *The Metaphysics of Sir Isaac Newton: Or, a Comparison between the Opinions of Sir Isaac Newton and Mr. Leibnitz*, published in English in 1747. Voltaire, another enemy of Blake's, makes no secret that his allegiances lie with the opinions of Newton, whom he helped popularize on the continent: "nothing is more presumptuous than the Flight Mr. Leibnitz has taken" (61). Moreover, Leibniz is discussed both in Hume's *Dialogues Concerning Natural Religion* (1779) and Priestley's *Letters to a Philosophical Unbeliever* (1780). Hume's and Priestley's characterizations of Leibniz will be discussed

Moreover, Leibniz devoted ample energy to combat the philosophy of Locke, whom he saw as allied to Newton, as did Blake. Leibniz's second sentence of the first letter to Clarke assigns to "Mr. Locke, and his Followers" the suggestion that the soul is material and "naturally perishable" (3); Leibniz acknowledges that it is only an "uncertain" suggestion for Locke, given the latter's professed agnosticism regarding metaphysical subjects in the *Essay Concerning Human Understanding* (1.1.2-3). But Leibniz was keen both to the power of such a suggestion and to the degree to which Locke smuggled in an atomistic/corpuscular metaphysics under the cover of his declared commitment to solely epistemological concerns. Leibniz's *New Essays on Human Understanding* – nearly competed at the time of Locke's death in 1704, though not published until 1765, since it was intended to elicit responses from Locke – offers Leibniz's counterarguments to what he takes to be Locke's erroneous metaphysical assumptions and epistemological claims.

Thus, although he saw himself as defending natural religion, both Leibniz's criticisms of Locke and the ontology he presents as a corrective to Locke's Newtonian metaphysics bear striking similarities to Blake's critique and corrective of Lockean atomistic empiricism in *There is No Natural Religion*. Specifically, both Leibniz and Blake – in both *No Natural Religion* and its companion tractate *All Religions are One* (1788) – posit a dual-substance anti-atomistic ontology in which a spiritual force – the monad for Leibniz and the Poetic Genius for Blake – immanently inheres in matter, which itself contains infinity. Moreover, for both, the infinite

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in section V. Leibniz's theory of pre-established harmony is disapprovingly summarized in Priestley's *Disquisitions Relating to Matter and Spirit*, which also notes that Leibniz, like Aristotle, "admitted a motive force in matter" (63, 377). Swedenborg's *A Theosophic Lucubration: On the Nature of Influx, As it Respects the Communication and Operations of Soul and Body* (1770) concludes with a dialogue between the author and the disciples of Aristotle, Descartes, and Leibniz "concerning the communication and operations of the soul and body" (40). As might be imagined, all three philosophical schools are persuaded to adopt Swedenborg's influx theory. Christopher Heppner speculates that whether Blake knew anything of Leibniz, he "would certainly have found him interesting, and there are signs of analogous concepts in his writings" ("'A Desire of Being'" 84), though he does not discuss the early tractates in this regard.

nature of the universe cannot be perceived by the finite organs of sensation; rather, perception is a function of the monad/Poetic Genius, which, since it is distributed throughout the material universe, lends a panpsychist quality to both Blake's and Leibniz's metaphysics. Commentators on Blake's early tractate have not discussed Leibniz's affinities with Blakean metaphysics, focusing instead on Blake's kinship with Locke's successor in the British empirical tradition, George Berkeley. The second section of this chapter will contest this traditional alliance of Blake and Berkeley against Locke, and the third and fourth sections will explore the stronger philosophical parallels between Blake and Leibniz, with particular emphasis on the central roles that the concept of the infinite and the argument for spiritual – as opposed to corporeal – perception play for both.

Section 1.5 will turn to Hume's *Dialogues Concerning Natural Religion*, published posthumously in 1779, and the spirited response it elicited from Joseph Priestley, whose work was well known to Blake, and whose 1787 second edition of *Letters to a Philosophical Unbeliever* – the unbeliever being Hume – prompted Blake to "join the debate" over natural religion, according to Andrew Cooper's recent argument (82). As in the case of Leibniz, an obvious difference between Hume and Blake – the former is an unbeliever, the latter is not – belies striking philosophical similarities insofar as Hume's *Dialogues* and Blake's *No Natural Religion* are concerned. Both Hume and Blake attack natural religion, and both demonstrate a penchant for satire: Hume's skepticism is voiced through his character, Philo, who only ostensibly cedes victory to his interlocutor, Cleanthes, while Blake presents a concise, aphoristic account of empirical perception – employing what Karl Kroeber describes as "satirically rigorous logicality" (*Blake in a Post-Secular Era* 44) – in the "a" series of his tractate only to completely refute it in "b" series. And while Hume/Philo's arguments against natural religion differ from

Blake's in several ways, they can be seen to influence the language of *No Natural Religion*; moreover, Philo's depiction of a "world soul" imply a Neoplatonic/panpsychist metaphysics that bears similarities both to aspects of Liebniz's ontology – Philo/Hume pays explicit homage to Leibniz – and to Blake's account of the material universe presented in his early illuminated works.

1.2

Precedent for reading *No Natural Religion* as an embrace of Berkeley and a rejection of Locke's theory of knowledge and perception as presented in the *Essay concerning Human Understanding* was established by Northrop Frye, the first chapter of whose seminal *Fearful Symmetry* is entitled "The Case against Locke." Discussing Locke's famous distinction between real, nonmental primary qualities of objects and merely perceived secondary qualities, Frye links Locke – and Newton – to a corpuscular or atomistic philosophy (17). In setting Blake in opposition to such metaphysics, Frye locates a precursor in Berkeley, whose principle of *esse est percipi* – to be is to be perceived – Frye finds to have "some points in common" with Blake (14). Frye presents the *tabula rasa* version of Locke, for whom sight involves "an involuntary and haphazard image imprinted on the mind through the eye by the object. In this process the mind remains passive and receives impressions automatically" (22). Contrasted to this account is Berkeley's idealism, which denies the reality of objects outside the mind. On Frye's reading, Blake's tractates adopt elements of Berkeley's thought to present a model of active perception and an immanently creative Poetic Genius. Kathleen Raine elaborates on Frye's interpretation, offering a more detailed reading of the "a" series of *No Natural Religion* in conjunction with pertinent passages from Locke's *Essay* (2: 104-106), subsequently opposing the philosophy

depicted therein to lengthy selections from Berkeley's *Treatise Concerning the Principles of Human Knowledge* (1710), *Three Dialogues* (1713), and *Siris* (1744), which she argues are similar to the philosophy evident in Blake's early tractates. Raine claims that Berkeley "is rooted in the Neoplatonic and Hermetic tradition to which Blake also turned," and it is to Berkeley that Blake owes a central tenet of his philosophy, namely the idealist principle that "[m]atter has no independent existence apart from mind" (2: 102, 99).

However, there are significant problems with a reading that sets up a diametrical opposition between Locke and Berkeley and then places Blake on the side of the latter. For one, such interpretations neglect Berkeley's first major work, *Essay Towards a New Theory of Vision* (1709), which would seem to have the most direct relation to *No Natural Religion*. After all, "a new theory of vision" is an apt description of what Blake is presenting in opposition to an empirical account of finite sensory perception, as his claim on plate b10 of copy L attests: "He who sees the Infinite in all things sees God."[8] But Berkeley's philosophy is a far cry from Blake's insofar as the tractates are concerned. As *No Natural Religion* and *All Religions are One* make clear, the ability to see the infinite in the material world is conferred by the Poetic Genius, an innate faculty that allows man to expand beyond the finite organs of sense and to partake in the divinity incarnate in the corporeal universe and in himself. By contrast, Berkeley's theory of vision is as committed as firmly as Locke's to a reliance on the organs of sense.

[8] Copy L of *No Natural Religion*, printed circa 1795, is the only copy that features all eleven of the "b" series plates – though the plate bearing proposition III is missing from all extant copies – and none of the "a" series argument. Although this copy was never bound during Blake's life, it does represent his last printing of the work, and the full, unabridged refutation (minus proposition III) of the "a" series. As such, copy L presents the fullest positive articulation, together with the companion tractate, *All Religions are One* (also not printed until 1795), of Blake's early philosophy, and plate numbers in my citations refer to this copy. Morris Eaves, Robert N. Essick, and Joseph Viscomi write that copy L was not numbered consecutively, nor is there evidence that it was bound before 1853. Also, copy L is the only large-paper copy of the work, and as such its creation "may have been motivated by a desire to create an eleven-plate companion to *All Religions are One*," since both the "b" series and the latter work are "positive statements of Blake's principles" without the ironic "a" series (Morris Eaves, Robert N. Essick, and Joseph Viscomi, eds., *The Early Illuminated Books*, vol. 3 of *William Blake: The Illuminated Books* [Princeton: Princeton University Press / William Blake Trust, 1993], 24).

In his *New Theory*, Berkeley addresses the empirical problem – which had been raised by Locke – of how to identity objects of sight when individual perceptions of such objects vary drastically depending on the viewer's perspective. For instance, how does one determine the size of a tower, which increases in one's sight as one approaches it? Berkeley rejects the explanations offered by Descartes and other "speculative men" (4: 7[9]) who claimed that any object's true size and shape is calculated by measuring the angle formed by the conjunction of the optic axes in the retina.[10] Berkeley argues that one is not consciously aware of making any such calculations, and instead claims, "the estimate we make of the distance of objects considerably remote is rather an act of judgment grounded on experience than of sense" (3: 7). There are not separate towers corresponding to each disparate perception, but rather, "the ideas intromitted by each sense are widely different and distinct from each other, but having been observed constantly to go together, they are spoken of as one and the same thing" (46: 23). Thus, experience and associative capacities based on past sensations are crucial in perception. Berkeley demonstrates this through the example of a man born blind who is suddenly made to see:

> a man born blind and made to see would … make a very different judgment of the magnitude of objects intromitted by them from what others do. [He] would judge his thumb, with which he might hide a tower or hinder its being seen, equal to that tower, or his hand, the interposition whereof might conceal the firmament from his view, equal to the firmament. (79: 37)[11]

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[9] This and subsequent in-text citations of Berkeley's works indicate section number – or dialogue number in the case of *Three Dialogues* – followed by the page number in Desmond Clarke's edition.

[10] It is in virtue of its rejection of Descartes's theory that Berkeley presents his own as "new."

[11] Berkeley is drawing from Locke here, who treats of this same situation in his famous reply to Molyneux in 2.9.8 of the *Essay*. Locke reaches the same conclusion.

In addition to experiential association, Berkeley argues that the sense of touch is more fundamental to vision than is sight. In section 61, he differentiates between visual magnitude and tangible magnitude, establishing the latter as the basis for perceptual judgment. To sight alone, a yardstick will appear to be various lengths depending on how close one is to it, but it will not vary to one's sense of touch. Although one does not need to touch everything one sees, one's experience with the tangible world informs the judgments made from objects of sight. It is thus perhaps no wonder that Frye and Raine overlook Berkeley's *New Theory*, given its empiricist implications and its grounding of vision on yet another organ of sense: touch. However, the work does not make for a compelling analogue with Blake's account of perception in the early tractates.

Berkeley's later works present further problems when considered alongside Blake's metaphysics as presented in the four main points of the "b" series of *No Natural Religion*: 1) man's "perceptions are not bounded by organs of perception" (pl. b3); 2) man's desire, possession, and self are all infinite (pl. b9); 3) God is equated with the infinite that is perceptible in "all things" (pl. b10); 4) in sharing an infinite nature, God and man are the same, having become one another (pl. b12). As for the first point regarding super-sensory perception, we have already seen how Berkeley's *New Theory* differs in that it makes perception contingent on both the organs of sight *and* touch. Blake's subsequent points articulate his position that the adjective "infinite" applies equally to man, the material world, and God, but Berkeley explicitly denies this both in *Principles Concerning Human Knowledge* and in *Three Dialogues*. In the former work, he writes, "the mind of man being finite, when it treats of things which partake of infinity, it is not to be wondered at, if it run into absurdities and contradictions … it being the nature of

infinite not to be comprehended by that which is finite" (2: 69).[12] The same distinction holds in the second of the *Three Dialogues*, in which Berkeley's spokesman, Philonous, differentiates between human "beings of finite powers" and the "infinite spirit" of God (2: 201, 197). Given Berkeley's consistent rejection of Blake's ultimate claim in *No Natural Religion* regarding the unity of God and man, it is difficult to fully accept the contention that Blake brought Berkeley's argument against Locke; for Berkeley, as for Locke, an infinite God is categorically different than finite man.

Another problem with aligning Blake with Berkeley in the "case against Locke" is that, as noted above, in the early illuminated works Blake does not espouse the idealism that Berkeley elaborates in *Principles* and *Three Dialogues*. In this regard, Frye and Raine are not alone in assigning to Blake a Berkeleian idealism with its entailment of an immaterial universe: Mark Lussier sees a kinship between Blake and Berkeley, the "lone voice of philosophical dissent from within the empiricist enterprise," insofar as nature functioned for both as the "'visual language of God'" (49). And Cooper cites Berkeley as a source for Blake's belief "that the body in question is always first and foremost an object in the mind" (83).[13] But the force of Berkeley's argument markedly differs from Lussier's claim that the "interplay of mind and matter, with the subject as nexus … functions as the originary point of the Blakean universe" (54). I agree with this assessment, but it does not describe a Berkleian universe, since for the latter *there is no matter* to interplay with the mind, since the entire universe is mind, as Philonous explicitly states in the third of the *Three Dialogues*: "I have no reason for believing the existence of matter" (3: 214).

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[12] Although Berkeley attempts to resolve some of the absurdities and contradictions in the subsequent work, the fundamental distinction between the "infinite perfection of God" (150: 146) and the "finite and narrow assemblage of ideas [that] denotes a particular human mind" (148: 145) remains.

[13] See also Anne Mellor: "Berkeley's famous 'esse is percipi' … paved the way for Blake's assertion that the corporeal world exists only as objects of consciousness, a system of ideas or spiritual forces" (*Human Form Divine* 42).

Both Cooper and Lussier link the idealism they find in Berkeley and Blake to quantum relativity. Cooper, for instance, writes, "Blake's approach resembles that of a modern relativity scientist who recognizes that no picture of an object can be complete unless it takes into account the presence of the observer and the instruments used to gather and record the data" (83).[14] However, no relativity scientist would deny the existence of an object altogether. It is one thing to claim, as quantum mechanics does, that perception and measurement change the behavior of an object; it is quite another to claim that *no objects exist* apart from the perceiving mind.[15]

Moreover, on Berkeley's account, there is no room for Blake's imaginative human agency, since the only active mind is that of a transcendent God – Berkeley's Philonous emphasizes in the third dialogue that humans are "finite *created* spirits" (3: 212, my italics),[16] who live, move, and have their being in the mind of God, as the passage from Acts 17:28, often quoted by Berkeley, claims.[17] Berkeley is close to occasionalism here, in which all efficient causality, including human action, is a consequence of the will of a transcendent God: on this

[14] Lussier writes that Blake's perspective "has recently received strong support from an unlikely ally, the theoretical physics of our own day" (54).

[15] Both Frye (14) and Raine (2: 132) support their argument for Berkeleian idealism in Blake by appealing to Blake's assertion in *A Vision of the Last Judgment* that "Mental Things are alone Real" (E 565). But this work is from 1809 and thus not representative of Blake's early metaphysics. Like Blake's, Berkeley's philosophy was not consistent, as evidenced by the absence of idealism in *Siris*, published over thirty years after *Principles* and *Three Dialogues*. For instance, in this late work Berkeley implies a dualist ontology with claims such as "[b]ody is the opposite to spirit or mind" (290: 330). Raine acknowledges that, historically speaking, Blake's annotations to *Siris* have no direct bearing on the 1788 composition of *No Natural Religion* (2: 109), but, like Frye, she is more interested in establishing analogues than presenting evidence for Berkeley as a historical source.

[16] Philonous refers again to the "finite created mind" of man four pages later (3: 216).

[17] As stated in Berkeley's *Principles*, it is the existence of God "which continually affect[s] us, on whom we have an absolute and entire dependence" (149:145). Thomas McFarland sees such passages as indicative of a pantheist strain in Berkeley's philosophy (301), and Michael Levine not only finds "that pantheism is intimated" in the biblical passage itself (172 n. 10), but he also reads *Siris*, despite the passage quoted in note 15 above, as "a veritable anthology of Neoplatonic and Stoic pantheistic lore, lovingly and approvingly set forth by the Bishop" (170 n. 6). But as McFarland himself writes, "Paul, in fact, expressly warns, immediately after the passage in Acts, that we must not confuse God with any material manifestation: 'we ought not think that the Godhead is like unto gold, or silver, or stone…' (Acts 17:29)" (269). I don't dispute that one may find pantheistic aspects in certain passages of Berkeley, but I take his repeated insistence on God's separation from nature – and humanity – to be crucial for this discussion.

view, finite minds are as passive as Newtonian inert matter, capable only of being "affected" by God. As Michael Levine writes, "Transcendence is first and foremost an ontological property of God which has significant epistemological consequences. This includes the fact that what we can know of God is limited both by God's nature and by our own limited cognitive capacities" (100). Blake's early works, by contrast, emphasize the *creative* – not *created* – nature of the human mind, in which the divine Poetic Genius of imagination inheres, and which Blake defines in *All Religions are One* as "the true Man" from which "the body or outward form of Man is derived" (E 1). As a creative visual artist, Blake surely believed in the existence of his illuminated plates as objects with power to "interplay" with the imaginations of his audience. In this sense, Lussier, despite articulating a dynamic reciprocity "between cosmos and consciousness" in Blake's work, still tends toward Cartesian dualism and a unidirectional causal flow, wherein "the passivity of materiality requires animation by the activities of consciousness" (49, 54). For true interplay to exist, matter must be allowed more than a "passive" role, and the power of Blake's artistic objects to cause change in the mind of the perceiver – rather than vice versa – is a testament to the immanently energetic infinitude of all material things for which his early philosophy argues. As he declares in the *Marriage*, "Energy is the only life and is from the Body" (E 34).

Insofar as the active infinitude of material reality and the nature of perception are concerned, the metaphysics of Leibniz aligns with the main points of Blake's "b" series of *No Natural Religion* more closely than does the philosophy of Berkeley. Leibniz's monad-based theory claims that perception is *not* limited to the organs of sense, nor is it explained empirically or mechanistically; rather, perception is the fundamental faculty for all monads, which, like Blake's Poetic Genius – which "is every where call'd the *Spirit* of Prophecy" (E 1, my italics) – are spiritual substances that fundamentally constitute matter. So constituted, all material

substances are immanently active and do not require a God to constantly intervene in an atomistic universe in order to "wind up his watch from time to time," as Leibniz famously derided Newton's system (*A Collection of Papers*, 5). Moreover, in Leibniz's metaphysics, as in Blake's, matter, God, and man all have infinite natures. Before discussing parallels between Leibniz's philosophy and that of Blake, however, it will be helpful to develop a more complete picture of the "a" series argument in *No Natural Religion*, and its affinities with Locke's theory. Then Leibniz's critique of Locke can be seen to have more similarities with Blake's work than does Berkeley's idealism. After discussing these similarities, I will conclude by examining the manner in which Blake diverges from Leibnizian metaphysics to develop his version of pantheistic monism.

1.3

The "a" series of *No Natural Religion* presents a satirical summary of Lockean atomistic empiricism, and conveys four main points: 1) man can only perceive through "natural" organs of sense (pl. a4); 2) further senses cannot be deduced beyond those we have (pl. a6); 3) reason can only compare and judge of perceptions already acquired in experience (pl. a5); 4) consequently, man's thoughts, desires, and perceptions are "limited to objects of sense" (pls. a7-a9). Commentators have acknowledged the "a" series' affinities with Locke's *Essay*, in which Locke asserts, "the simple ideas we have are such, as experience teaches them us" (2.4.6, 127) and that the understanding depends on objects of perception in order to perform operations such as comparing and judging (2.1.2-3). Moreover, Blake's "a" series proposition that thoughts, or ideas, are limited to objects of sensation tracks with Locke's conflation of perceptions with ideas in the *Essay*: "having ideas, and perception being the same thing" (2.1.9, 108).

In Book 2 of the *Essay*, Locke elaborates on a compositionalist epistemology, whereby the understanding combines simple ideas of sensation and reflection into complex ideas of substance, mode, and relation. Blake, by describing empirical reason as treating perceived objects or ideas as discrete units to be arranged in a "ratio" (pl. b4), hints at the atomistic or corpuscular ontology lurking behind Locke's epistemology. As the full title of Locke's *An Essay concerning Human Understanding* implies, his subject is the human understanding, and his stated purpose is to "search out the bounds between opinion and knowledge" (1.1.3, 44). Despite these intentions and his repeated declarations of agnosticism concerning the real essences of matter and spirit, Locke often digresses, albeit with apologies, into metaphysical speculation, such that several commentators have identified Locke's commitment to the corpuscular, or atomistic, metaphysics that was being advanced in the natural philosophy of his time. Jonathan Bennett contends that throughout most of the *Essay* "we find Locke writing like a convinced atomist" who modeled his epistemology on the ontology of his friend, Robert Boyle (2: 74).[18] And Locke himself admits as much: "I have here instanced in the corpuscularian hypothesis, as that which is thought to go farthest in an intelligible explication of the qualities of bodies" (4.3.16, 547). Locke's latent atomist aligns him not only with Boyle, but with another friend and a profoundly influential atomist: Newton, who in Query 31 of the *Opticks* writes, "God in the beginning form'd matter in solid, massy, hard, impenetrable, moveable particles" (400).[19]

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[18] Michael Ayers makes the same claim: "Locke enjoyed presenting his doctrine as analogous, in the realm of thought, to Epicurean atomism in physics, in particular as atomism was developed by Robert Boyle" (17). Nicholas Jolley calls Locke a "corpuscularian follower of Boyle" (82), and Catherine Wilson describes Locke's atomism as insisting on "a finite minimum size for corpuscles" and she refers to Locke's epistemological theory as "psychological atomism" (346). Lisa Downing connects Lockean ontology to mechanism: "Locke's characterizations of the real essences of bodies are mechanist. He envisions them as corpuscularian textures – spatial arrangements of particles possessing size, shape, solidity, and motion" (352).

[19] Andrew Janiak argues that a more thorough consideration of the body of Newton's writings – much of it unpublished during Blake's time – leads to the conclusion that "Newton appears to be agnostic on the question [of atomism]" (*Newton as Philosopher* 108), but it's clear that Leibniz for one placed Newton in the atomist camp. In

Locke's metaphysical assumptions influence his account of perception and epistemology, a phenomenon that Blake repeatedly dramatizes and satirizes in his early illuminated works.[20] The physics of how sensory data is first received in perception is given mechanistically. Locke writes:

> I cannot … conceive how bodies without us, can any ways affect our senses, but by the immediate contact of the sensible bodies themselves, as in tasting and feeling, or the impulse of some insensible particles coming from them, as in seeing, hearing, and smelling; by the different impulse of which parts, caused by their different size, figure, and motion, the variety of sensations is produced in us. (4.2.11, 536)

From such an account of atomic/corpuscular sensation – via particles colliding with or providing an "impulse" upon our sensory organs – arises all ideas in the understanding, which themselves are arranged atomically for the purposes of comparing and judging. As Blake declares, from such a theory of sensory perception, "none could deduce" another sense or element.

Locke's naturalized account of perception and knowledge is satirized by Blake's overuse of the adjective "naturally" in the "a" series: "Naturally he is only a natural organ subject to sense" (pl. a3) and "Man cannot naturally Perceive. but through his natural or bodily organs" (pl. a4). As Karl Kroeber writes, Blake exploits the deistic definition of "natural," which assumed that "the natural world functioned entirely according to simple rational principles"; for Blake, on Kroeber's reading, in the "b" series of *No Natural Religion* and in *All Religions are One*, "capacity for spiritual experience, poetic genius, is what is inherent ('natural') in every individual human being" (*Blake in a Post-Secular Era* 43, 44). In Blake's "b" series refutation,

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his correspondence with Clarke, he writes that Newton differed from Democritus and Epicurus "only as to the Quantity of Matter" in the universe (23).

[20] See for instance plate 19 of the *Marriage*, in which the satirical and devilish narrator claims that the Swedenborgian angel's misperception of the approaching Leviathan is "owing to your metaphysics" (E 42).

however, the "infinite" is the key term employed in moving beyond this natural, limited, empirical philosophy. Locke's own account of knowledge of both the infinite and God is similar to Berkeley's, and contrasts with that of Leibniz, which partakes of the philosophical tradition of panpsychism that Blake draws from to counter Locke's empiricism.

1.4

According to Leibniz's critique, a fundamental feature of – and problem with – Locke's account of the infinite is his equation of ideas with images in the mind. This imagism is implied by the metaphor that begins Locke's *Essay*: "The understanding, like the eye, whilst it makes us see, and perceive all other things, takes no notice of it self" (1.1.1, 43), and it is Locke's great task to turn the eye of the understanding inward, with "art and pains," so that its own operations become visible.[21] Indeed, Locke's chapters on space, duration, and infinity provide a strong case for reading him as an imagist; for Locke, the unbounded immensity of space is demonstrated by the absurdity of imagining a man placed by God "at the extremity of corporeal beings" and unable to extend his arm any further (2.13.21, 175).[22] By contrast, the "positive idea" of an infinite space is impossible because of its inability to be imagined. Locke writes: "to have actually in the mind the idea of a space infinite, is to suppose the mind already passed over, and *actually to have a view of* all those repeated ideas of space, which an endless repetition can never totally represent to it, which carries in it a plain contradiction" (2.17.7, 213-214, my italics).

[21] Michael Ayers is the most notable representative of readers who regard Locke as an imagist; see his *Locke: Volume I: Epistemology*, chapter 5.

[22] This idea is repeated in 2.17.4, 211: "we are apt to think, that space in it self is actually boundless, to which *imagination*, the idea of space or expansion of it self naturally leads us" (my italics). See also 2.23.27, 310: "For if matter be considered, as no doubt it is, finite, let any one send his contemplation to the extremities of the universe, and there see what conceivable hoops, what bond he can *imagine* to hold this mass of matter, in so close a pressure together" (my italics).

This inability to see a unified infinite quantity serves as Locke's basis for arguing that our idea of infinity cannot be positive – and thus, for Locke, a "positive idea" is one that can be clearly imagined or "represented." Blake seems to have been well aware of this aspect of Lockean epistemology, as evidenced by Scopprell's punning misnomer, "John Lookye" in *An Island in the Moon* (E 456).

In keeping with his empiricism and atomism, Locke states that one reaches the idea of infinite space via a process of composition: anyone who has a clear idea of a foot – clear to the extent that it can be imagined – can repeat that idea, doubling the imagined length, which can in turn be increased via the same operation, and so on; thus, "the power of enlarging his idea of space by farther additions, remaining still the same, he hence takes the idea of infinite space" (2.17.3, 211). The same process can be applied to imagined lengths of duration, or time, in order to attain an idea of eternity. The additive process can never be completed, however, in some infinite whole, as the passage quoted in the previous paragraph indicates. This infinite enlarging/compounding of discrete units of space and duration cannot be done with other ideas, like whiteness or sweetness, because these ideas "consist not of parts" (2.17.6, 213). And since for Locke we designate parts of time and duration using number, "of all other ideas, it is number, as I have said, which, I think, furnishes us with the clearest and most distinct idea of infinity, we are capable of" (2.17.9, 215).

Just as number provides us with an idea of infinite magnitude through multiplicity, infinity extends in the other direction as well, for the mind can also divide a unit of length (or duration) "*in infinitum*" (2.17.12, 216). This is not to suggest that for Locke, an atomist, matter is infinitely divisible. Rather, as indicated in the second passage quoted in note 32 above, there is

"no doubt" for Locke that matter is finite.[23] In speaking of its infinite divisibility, Locke is referring to the Aristotelian notion of the potential infinite. Locke recognizes that on his atomistic conception of matter, it would be paradoxical to imagine a finite length composed of an infinite number of parts. Thus, borrowing from Aristotle, Locke claims that the infinite is not an actuality, but only a potentiality. As J. E. McGuire writes, on the Aristotelian account, the infinite is not a thing or actual quantity, but "a well-formed potentiality, the complete nature of which is captured by the mind's capacity to formulate rules which generate iterative procedures" (*Tradition and Innovation* 164). But as McGuire notes, Locke's potential infinity differs from Aristotle's in that the former conceives of the infinite imagistically and as a process, both of which are denied by the latter (165). Though he seems to allow for an idea of potential infinity here, Locke wavers on the infinite divisibility of matter in various passages in the *Essay*, however, finally concluding in Book 4, "[w]e are at a loss about the divisibility of matter" (4.17.10, 682).[24] Even in 2.17, Locke's doubts about the potential infinite divisibility of matter are evident, precisely because such an idea is un-imaginable. These doubts notwithstanding, Locke explicitly claims that to have an idea of a body infinitely great or infinitely small is not to have a positive idea, but rather a "growing and fugitive" one (2.17.12, 216).

Locke devotes the latter sections of 2.17 to repeating and elaborating on his assertion that there is no positive idea of infinity, proclaiming in 2.17.18 that "[h]e that thinks he has a positive idea of infinite space, will, when he considers it, find that he can no more have a positive idea of the greatest, than he has of the least space" because he cannot imagine such a quantity (2.17.18, 220). The process of multiplication or division can only generate a "fugitive" notion of the potential infinite, and Locke's purpose in the chapter is to show "how even the idea

[23] See also 2.15.4, 198.

[24] See Bennett, *Learning from Six Philosophers*, 2:75, for a discussion of Locke's ambiguity on this subject.

we have of infinity, how remote soever it may seem to be from any object of sense, or operation of our mind, has nevertheless, as all our other ideas, its original there" (2.17.22, 223). Thus, infinity is not a quantity at all, though Locke defines it as a mode of quantity and claims to have shown its empirical basis.[25] Locke's perceiver, then, is quite unable to see Blake's "Infinite in all things."

Moreover, human finitude as opposed to God's inconceivable infinitude is a distinction Locke seeks to maintain throughout the *Essay*, as he writes: "If you do not understand the operations of your own finite mind, that thinking thing within you, do not deem it strange, that you cannot comprehend the operations of the eternal infinite mind" (4.10.19, 630). As we should expect from Locke, the idea of God, like any other idea, is not innate (1.4.8-11). Rather, as he elaborates in Book 2, it is attained in the same compositionalist manner as are the ideas of infinite space and duration. More explicitly, God is commensurate with – or *fills* – infinite space and time: "God, every one easily allows, fills eternity; and 'tis hard to find a reason, why any one should doubt, that he likewise fills immensity" (2.15.3, 197).[26]

Locke begins the chapter on infinity by making the same distinction he later makes at the conclusion of 4.10: "we cannot but be assured, that the great God, of whom, and from whom are all things, is incomprehensibly infinite; but yet, when we apply to that first and supreme being, our idea of infinite, in our weak and narrow thoughts, we do it primarily in respect of his duration and ubiquity; and … more figuratively to his power, wisdom, and goodness" (2.17.1, 210). God is incomprehensible for the same reasons – as Locke goes on to show in this chapter –

[25] As McGuire states: "If the infinite is a mode of quantity, and if quantity is essentially capable of increase and decrease, there is no actually infinite quantity. This would be a quantity incapable of increase or decrease, and hence contradictory to the notion of quantity itself" (*Tradition and Innovation* 167).

[26] Blake alters Locke's claim in the Proverb of Hell of the *Marriage*; for Blake, it is not God but "one thought" that fills immensity (E 36); this is consistent with his equation of God and man in *No Natural Religion*.

that infinity is: in our "weak and narrow thoughts,"[27] we cannot imagine his positive existence, but can only have a negative and fugitive idea of him. To attain it, we "enlarge those simple ideas" of sensation and reflection by combining them with our negative idea of infinity: "For it is infinity, which, joined to our ideas of existence, power, knowledge, etc. makes that complex idea, whereby we represent to our selves the best we can, the supreme being" (2.23.34-35, 315). This anticipates Berkeley's argument for God in *Three Dialogues*: "all the notion I have of God is obtained by reflecting on my own soul, heightening its powers, and removing its imperfections" (3: 212-13).[28] For Blake, this is the philosophy of the man "who sees himself only" (*No Natural Religion*, pl. b10).[29]

Leibniz's metaphysics, which is alluded to but never fully elaborated within the *New Essays*,[30] is incompatible with the empiricism, atomism, and imagism that both he and Blake find in Locke. For Leibniz, infinity is an innate idea both within the human mind, which can unconsciously perceive it, and a fundamental feature of the material world, which is constituted by an infinite number of spiritual, non-organically perceptive monads, which themselves are infinitely divisible.[31] Thus, in contrast to Berkeley's idealism, Leibnizian matter's phenomenal appearance results from the monads, which are real and outside the human mind, which itself is also a monad. The primary role infinity plays in Leibniz's philosophy is evident in the preface to the *New Essays*, where he writes, regarding the infinite within the human mind: "at every

[27] This is similar to Berkeley's depiction of the human mind as "finite and narrow."

[28] In a note to his edition of Berkeley's works, Desmond Clarke writes that Locke's and Berkeley's construction of the idea of God "by combining ideas derived from the awareness of ourselves as finite spirits" can be traced to Descartes's argument in the *Meditations* (213 n. 20).

[29] Jean Hagstrum argues that Blake's distinction on this plate between the man who sees the infinite and the man who sees himself only "can serve as an epigraph for [Blake's] entire philosophy" (72).

[30] As noted above, it *is* elaborated in the appendix of the English edition of the correspondence with Clarke.

[31] Or, in the words of Bennett: "matter is just the appearance to us of an infinitely numerous aggregate of mind-like monads," though Leibniz often writes of matter in the *New Essays* as if it were not merely appearance (1: 297).

moment there is in us an infinity of perceptions … of which we are unaware because they are either too minute and too numerous, or else too unvarying" (53). These *petites perceptions*, or "impressions" which "involve the infinite" (55), would seem to concern the infinite in a numerical and spatial sense, but Leibniz reveals that the temporal infinite is involved as well: "It can even be said that by virtue of these minute perceptions the present is big with the future and burdened with the past, that all things harmonize … and that eyes as piercing as God's could read in the lowliest substance the universe's whole sequence of events – 'What is, what was, and what will soon be brought in by the future' [Virgil]" (55). Our eyes are not as piercing as God's, and thus we only confusedly know these infinities, but we do know *that* they are within us (58). As for the extra-mental universe, Leibniz continues, "we should think of space as full of matter which is initially fluid, capable of every sort of division and indeed actually divided and subdivided to infinity" (60). Glaring contrasts with Locke's concept of infinity are already evident by the conclusion of Leibniz's Preface: not only does the human mind perceive and contain the infinite, but, *contra* Locke's atomistic proclivities and agnosticism about its essence, matter for Leibniz is fluid and infinitely divisible.[32]

Leibniz brings the ontological claims articulated in his preface to the *New Essays* to bear on his response to Locke's chapters on space, duration, and infinity, and in his critique the affinities with Blake's non-empirical account of spiritual perception become more evident. To Philalethes's – Locke's spokesman in Leibniz's dialogue – account of adding lengths of duration to get eternity (from 2.14.27 of the *Essay*), Theophilus – who represents Leibniz – responds: "But to derive the notion of eternity from this we must also conceive that the same principle applies at every stage. … Thus *the senses unaided cannot enable us to form these notions*" (154-

[32] Blake poetically refigures these Leibnizian ideas regarding the spatial and temporal infinitude of the fundamental monads and the human mind in the famous opening of the later "Auguries of Innocence," which posits the world within a grain of sand, infinity in the palm of a hand, and eternity within an hour (E 490).

155, my italics). This idea is reiterated in response to Locke's/Philalethes's discussion of adding lengths to attain an idea of infinite space; Theophilus rejoins:

> the thought of the infinite comes from the thought of likeness, or of the same principle [applied when adding each length], and it has the same origin as do necessary truths. That shows how our ability to carry through the conception of this idea comes from something within us, and could not come from sense-experience; just as necessary truths could not be proved by induction or through the senses. (158)

Blake's argument for super-sensory perception of the infinite is prefigured here. For Leibniz, the source of our idea of infinity is innate, not empirically derived from addition (or division) of numbered units, but rather from the "thought of likeness," our ability to conceive that the same principle applies at every stage. Recognizing this principle, we do not have to empirically carry out the actual process of addition to arrive at the negative idea of infinity, as Locke implies. For Leibniz we *do* have positive ideas of infinite duration and infinite immensity, provided that each "is conceived not as an infinite whole but rather as an absolute, i.e. as an attribute with no limits" (160); or, as Blake would put it, unbounded.

Noting the "abyss" between Leibniz's and Locke's positions on infinity, Antonio Lamarra reads Leibniz as responding to what he saw as Locke's radical reduction of infinity to a mere quantitative aspect with a "multiplicity of meanings attached to the concept." Specifically, on Lamarra's reading, Leibniz's infinite is threefold: 1) "ontological, by means of which it is possible to speak of an infinity of things in the world," 2) mathematical, "according to which infinity may not be predicated for any quantity in general," and 3) "one may speak of a rigorous metaphysical and logical meaning of the concept thanks to which it is recognized to be deeply rooted in the idea of absolute" (180). Lamarra proceeds to claim that for Leibniz, "the actual

infinite is a principal characteristic of physical and metaphysical reality. This contrasts sharply with a line of thought which from Aristotle onwards had dominated Western philosophy, and according to which nature is averse to the infinite. Leibniz indeed, maintains the presence of the actual infinite in the world" (181). Thus, in addition to the mathematical infinite, there is "an infinity of things in the world" on Leibniz's view, and moreover, each of those things is itself infinite. Leibniz develops this more explicitly in the *Monadology* (1714) and elsewhere,[33] but the ideas developed there emerge in the *New Essays* as well, despite Leibniz's professed attempt to meet Locke on the latter's own terms.

All material bodies are fluid, Leibniz states in the Preface to the *New Essays*, and infinitely divisible because each contains a mind-like entelechy or monad. Though not explicitly defined here, in the correspondence with Clarke, Leibniz addresses the immaterial, immanent force or entelechy within all living and non-living matter – the monad – as a spiritual "simple substance," or "soul" (245); each monad has its own organic body (distinct from the body of which it is the entelechy), which in turn is composed of monads, *ad infinitum*. In the *New Essays*, Leibniz uses an analogy to describe the infinite appearance of, in this case, a single animal:

> it is as if someone tried to strip Harlequin on the stage but could never finish the task because he had on so many costumes, one on top of the other; though the infinity of replications of its organic body which an animal contains are not as alike as suits of clothes, and nor are they arranged one on top of another, since nature's artifice is of an entirely different order of subtlety. (329)

[33] See for instance, section 66: "there is a world of creatures, of living beings, of animals, of entelechies, of souls in the least part of matter"; and 70: "each living body has a dominant entelechy … but the limbs of this living body are full of other living beings, plants, animals, each of which also has its entelechy, or its dominant soul" (*Philosophical Essays* 222). See also *Primary Truths* (1686), in which he writes, "every particle of the universe contains a world of an infinity of creatures" (*Philosophical Essays* 34).

Though he is here describing "animate bodies," Leibniz makes clear in the appendix to the correspondence with Clarke that the infinite regress entailed by his theory of monads holds for all material bodies, living and nonliving: "'tis neither agreeable to the order, nor beauty, nor reason of things, that there should be a vital principle or power of acting immanently, only in a very small part of matter; when it would be an argument of greater perfection, for it to be in all matter" (381).[34] The anti-mechanistic aspects of Leibniz's philosophy are also evident in the appendix, as he writes, "I admit every where in bodies, a principle superior to the [common] notion of matter; a principle active, and (if I may so speak) vital" (379). Such assertions place him in the panpsychist tradition that maintains the presence of spiritual mentality interfused with matter. As Bennett writes, "For various reasons, then, Leibniz espoused a sort of panpyschism – a belief that mentality pervades the universe" (1: 239).[35]

In *All Religions are One*, Blake echoes this panpsychist idea. Like the spiritual monad, the Poetic Genius is the "Spirit" from which man's "body or outward form is derived," but Blake, like Leibniz, does not confine this relationship to humans: "Likewise … the forms of *all things* are derived from their Genius. which by the Ancients was call'd an Angel & Spirit & Demon" (E 1, my italics). Conflating the Genius in all things with an angel, spirit, and demon, Blake suggests that "all things" are not only immanently active, but have perception and mentality as well.

The incommensurability of Locke's and Leibniz's positions on the subject of infinity entails an incommensurability regarding their claims about God. On Leibniz's view, Locke

[34] Voltaire, in his summary of the Leibniz-Clarke correspondence, was scandalized by such metaphysics: "Can you assert that a single drop of urine is made up of an infinite number of monades, each whereof has ideas, altho' obscure ones, of the whole universe?" (*The Metaphysics of Sir Isaac Newton* 64).

[35] See his vol. 1, chapter 12 for a more complete discussion of Leibniz's monads. For further discussion of the panpsychist aspects of Leibniz's theory of monads, see Skrbina, 95-99.

erroneously equates God with space and time, which for Leibniz are mere phenomena. Thus, Leibniz responds to Locke under the name Theophilus, lover of God, as a means of correcting Locke's account. For Leibniz, "all these ideas, and especially that of God are within us from the outset … all we do is to come to pay heed to them; and … the idea of the infinite, above all, is not formed by extending finite ideas" (*New Essays* 226).[36] The idea of God is not one of extension derived from organic perception, and therefore not equated with a numerically derived notion of infinity, as it is for Locke. God is, rather, the *source* of space and time for Leibniz, and divine attributes are internal to us as the positive idea of the absolute, the "true infinite." Here Leibniz's argument for man containing the attributes of God "internal to" himself is closer to Blake's ultimate claim in *No Natural Religion* regarding the union of God and man. The affinity Leibniz sees between man and God is made even more explicit in his earlier *Discourse on Metaphysics* (1686), in which he claims, "our soul expresses God, the universe, and all essences, as well as all existences" (*Philosophical Essays* 58). The *Discourse* also contains a passage that resonates with the conclusion to *No Natural Religion*, as Leibniz maintains that God "humanizes himself … he is willing to allow anthropomorphism, and … he enters into society with us, as a prince with his subjects" (67). The same idea is advanced in a 1702 letter to Queen Sophie Charlotte of Prussia, in which Leibniz claims that we "resemble God in a small way, as much through our knowledge of order as through the order we ourselves can give to things within our grasp, in imitation of the order God gives the universe" (*Philosophical Essays* 192).[37] The "small" resemblance indicates Leibniz's reluctance to fully identify God with man, as Blake

[36] Earlier in the same work, Leibniz writes: "The idea of the absolute is internal to us, as is that of being: these absolutes are nothing but the attributes of God; and they may be said to be as much the source of ideas as God himself is the principle of beings" (158).

[37] See also his *A New System of Nature* (1695): "every mind is like a world apart, self-sufficient, independent of any other creature, containing infinity, and expressing the universe" (*Philosophical Essays* 144).

does, marking one of the differences between the two. However, man is much closer to God in Leibniz's system than he is in Locke's, Berkeley's, and Newton, the latter of whom claims in his *Principia Mathematica* that God perceives, understands, and acts "in a way not at all human, in a way not at all corporeal, in a way utterly unknown to us" (*Philosophical Writings* 91).

Blake's Leibnizian argument for the infinitude of God, man, and all material creation is reiterated in Blake's annotations to Swedenborg's *Divine Love and Divine Wisdom*, the English version of which was published the same year – 1788 – as Blake etched the plates of his tractates. Swedenborg, like Locke and Berkeley, distinguishes between created man and God's infinite omnipotence, to which Blake objects: "that there is but one Infinite [God] I do not [agree]. for if all but God is not Infinite they shall come to an End which God forbid" (E 604). For Blake, as for Leibniz, infinite is not an adjective that is restricted to God. Additionally, Blake's annotations to Lavater give further evidence of his adherence to a Leibnizian conception of matter as self-active. As such, unlike Newtonian matter, there is no need for an external cause, or a creator God to continually "wind the watch" of the material universe. As Blake writes, "Each thing is its own cause & its own effect" (E 601).

Leibniz's spiritual monad is infinite as well as capable of non-organic perception and desire, which parallels Blake's anti-Lockean assertions concerning perception in the early tractates. In the appendix to the Clarke correspondence, Leibniz makes the panpsychist claim, "Naturally, *every simple Substance* has *Perception*" (377), which posits the same non-organic spiritual nature of perception that Blake argues for in the "b" series of *No Natural Religion*. The structure of Leibniz's sentence echoes – while conveying the opposite point – Blake's satirical summary of Lockean perception in the "a" series: "Naturally he is only a natural organ subject to sense." Leibniz also has Locke's account in mind when he writes in his *Discourse on*

Metaphysics (1686), "nothing ever enters into our mind naturally from the outside; and we have a bad habit of thinking of our soul as if it received certain species as messengers and as if it has doors and windows" (*Philosophical Essays* 58).[38] For Leibniz, as for Blake, ideas are innate – they inhere in the Poetic Genius and as Leibniz writes to Queen Sophie Charlotte, "there is *an inborn light within us*" (*Philosophical Essays* 191). And since the Leibnizian simple substances are spiritual, they resemble the Poetic Genius as defined in *All Religions are One*, a spiritual substance from which bodies are derived. The energetic and innate Poetic Genius is not a passive repository of external sense impressions, as in Locke's empirical model.

In plate b6 of *No Natural Religion*, Blake writes that the "same dull round even of a universe would soon become a mill with complicated wheels." In section 17 of the *Monadology* Leibniz also develops an analogy involving a mill to make an argument for non-organic perception that is analogous to Blake's. Leibniz writes, "perception, and what depends upon it cannot possibly be explained by mechanical reasons." He then instructs the reader to

> [s]uppose that there be a machine, the structure of which produces thinking, feeling, and perceiving; imagine this machine enlarged but preserving the same proportions, so that you could enter it as if it were a mill. This being supposed, you might visit its inside; but what would you observe there? Nothing but parts which push and move each other, and never anything that could explain perception. This explanation must therefore be sought in the simple substance, not in the composite, that is, in the machine. (*Philosophical Essays* 215)

The moving parts of the mill resemble the mechanistic and corpuscular account of perception presented in Locke's *Essay*. No matter the ratio of the parts of the mill, Leibniz argues,

[38] Leibniz later claims, unequivocally, "it is always false to say that all our notions come from the external senses" (*Philosophical Essays* 59).

perception cannot emerge. It therefore must be a property of the "simple substance," the spiritual monad, which is infinite and does not obey the laws of mechanism.[39] And as Blake's "even of a universe" implies, the philosophical assumptions informing one's account of individual perception are the same assumptions informing one's account of the cosmos at large.[40] For Leibniz and Blake, the machine of organic perception and empirical knowledge cannot reveal the infinite in all things, which characterizes the panpsychist, non-Newtonian universe in both of their metaphysics.

Despite the analogies concerning matter's infinite and immanently energetic properties, God, and non-organic perception, it would be inaccurate to wholly align Blake's early metaphysics with that of Leibniz and oppose it to the philosophy of Locke, Newton, and Berkeley. As will be seen in the next chapter, Blake ultimately diverges from Leibniz in several significant ways while developing his version of pantheistic monism as presented in the *Marriage*. But even in the tractates, crucial differences from Leibniz's metaphysics are worth noting. In *All Religions are One*, Blake implies a subtle form of dualism by claiming that the Poetic Genius in man – and the Genius in all things – is a "Spirit" from which the "body or outward form is derived." This parallels Leibniz's assertion of a spiritual monad inhering in an organic body, the latter being the appearance of the former. However, Leibniz's famous theory of pre-established harmony does away with causation in his metaphysical system. On his account, the monads do not act upon the bodies that they constitute, although it seems *as if* they

[39] Leibniz makes the same argument in his correspondence with Clarke: "I do not assent to the vulgar notions that the images of things are conveyed by the organs (of sense) to the soul. For it is not conceivable by what passage, or by what means of conveyance, these images can be carried from the organ to the soul. … It cannot be explained how immaterial substance is affected by matter" (237).

[40] Steve Clark makes the same point, though he is not considering Blake's line in relation to Leibniz: "The dizzying expansion of 'even of a universe' allies planetary orbits, the cosmic predictability of the Newtonian universe, to the microcosm of the psyche" ("'Labouring at the Resolute Anvil'" (142-43).

do. Rather, in creating this best of all possible worlds, God fashioned the activity of the monads to correspond exactly with the mechanical activity of corporeal bodies while not causally interacting with them. "The Soul does not *act* on things," Leibniz writes in his fourth letter to Clarke, "in any way other than because the Body adapts itself to the Desires of the Soul, by virtue of the *Harmony*, which God has *pre-established* between them" (107-109).[41] Nowhere in Blake's early tractates does he bracket the spiritual activity of the Poetic Genius from the energetic activity of the body, nor does he imply that a causal relationship between the two is impossible.

A more significant difference between Blake and Leibniz in this regard, however, is the "pre" in Leibniz's pre-established harmony. That such a system is "regulated in advance in each substance of the universe" (*Philosophical Essays* 144), as Leibniz writes in *A New System of the Nature and Communication of Substances, and of the Union of Body and Soul* (1695), implies Leibniz's adherence to the tenets of natural religion, which posits God as a transcendent being, a first cause separate from and superior to the material universe he set in motion. As we have seen, this position is made explicit in the first sentence of his first letter to Clarke, in which Leibniz bemoans the decay of natural religion.

Bloom writes, "'There is No Natural Religion', according to Blake, because no man reasoning from fallen nature can come to see that 'the real man, the imagination' and God are the same." I take this analysis to be colored by Blake's later prophecies, in which nature is clearly "fallen," as evidenced by his address "To the Christians" in *Jerusalem*, wherein he asserts that "this Vegetable Universe is / but a faint shadow" of the "eternal World" one enters when "these Vegetable Mortal Bodies are no more" (E 231). But there is no evidence in the tractates that

[41] Leibniz elaborates in the appendix: "God created the *Soul* in such manner at first, as that it *produces within it self*, and *represents in it self* successively, what passes in the *Body*; and that he has made the *Body also* in such manner, as that it *must of it self* do what the Soul wills" (389).

nature is a fallen shadow; rather, Blake claims the opposite, that "all things" are infinite and inherent with the Poetic Genius, which in his annotations to Lavater he equates with God: "the Poetic Genius which is the Lord" (E 603). Already in the tractates, then, Blake, in rejecting the deism that characterizes Leibniz's and other natural philosophers of the long eighteenth century, is developing his unique version of panpsychist – and pantheist – metaphysics, despite his adoption of Leibniz's substance dualism and his theory of infinite and immanently energetic and psychic matter.[42]

1.5

Blake's provocatively titled *There is No Natural Religion* engaged, upon Blake's first etching the plates in 1788, a long and multi-faceted discourse concerning natural religion. And though he was in the minority in setting himself against proponents of natural religion, the earliest of whom in the eighteenth century were Newton, Locke, and Leibniz, Blake was not the first to do so. David Hume's posthumously published *Dialogues Concerning Natural Religion* (1779) received much attention for its satirical attack of deism, eliciting a vigorous response from Blake's contemporary and associate – via the publisher Joseph Johnson – Joseph Priestley.

Johnson published the second edition of Priestley's *Letters to a Philosophical Unbeliever* – that unbeliever being Hume – in 1787, one year before Blake composed *No Natural Religion*. It would make historical sense, then, that Blake would have Hume's *Dialogues* and Priestley's *Letters* in mind when working on his own tractates, and Cooper's claim that the tractates "set their sights at Locke, but they specifically target Hume's *Dialogues*" is compelling (82), even

[42] Despite Blake's explicit characterization of the Poetic Genius as "Spirit" in *All Religions are One*, Bloom argues that the work is an "attack on dualism" that "anticipates the rejection of dualism in the *Marriage*" (E 894). As the next chapter will elaborate, I see the conversion from dualism to monism to be the major *difference* between the tractates and the *Marriage*.

though Blake critics have not discussed the tractates – particularly *No Natural Religion* – in conjunction with Hume; Cooper's 2013 study is the first to do so. According to Cooper, Blake joined Priestley against Hume, but "[i]n contrast to Priestley, Blake rebuts Hume with a new, merely semi-rational proof of the existence of God" (82). In this section, however, I make the opposite claim: on my reading, Blake joined Hume against Priestley, rebutting the latter with a "merely semi-rational proof of the existence of God" that in fact draws on pantheistic ideas discernible – but satirized – in Hume's *Dialogues*, as well as in Leibniz's philosophy as discussed above.[43]

Surprisingly, Cooper does not discuss the glaring similarity between Hume and Blake – both deny, using satire, the tenets of natural religion. Rather, Cooper focuses on two other parallels between them. The first concerns Blake's anthropomorphizing and use of analogies: "Like Hume, [Blake] accepts the necessary imperfection of all the analogies used to imagine the Infinite. His solution, however, is to try and bring Natural Religion's abstract deity back to his senses – our senses – through new and better images and analogies than those that pass for common sense" (89).[44] Cooper also writes that Blake and Hume agree in their opposition to Locke's "epistemological requirement" that one must establish certainty concerning divine revelation (94); for Blake, the proof of such certainty does not exist, and of course Hume, in much of his writing, is skeptical of anything concerning the divine.

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[43] I do, however, agree with Cooper's qualifying description of Blake's "proof" – via the numbered premises – in the "b" series as "merely semi-rational." Damrosch (129) and Clark (143) have pointed out the logical flaws in Blake's argument, but anyone looking for rigorous logical proofs in Blake's work will be sorely disappointed. The semi-rational nature of Blake's philosophic assertions is, I contend, evidence of his view, *contra* Locke, that God's existence cannot be shown to and by reason/rationality alone; the Poetic Genius is necessary to perceive it. Blake's mode of philosophical argument via poetic aphorism and image will be addressed in the next section.

[44] Cooper carefully distinguishes anthropomorphism, which occurs when man abandons "his self-perceived fallenness and respond[s] to (recreat[es]) things in nature as objects of human thought," from the negative connotations of anthropocentrism, which involves "man's aggressive projection onto nature of his existing, fallen self" (78 note 3). I find this to be a helpful distinction to keep in mind when considering Blake's work, and I will return to it in later chapters, particularly when discussing *The Book of Thel*.

But there are further similarities between Blake and Hume than Cooper acknowledges, similarities that are crucial to the metaphysics Blake develops in his early work. Certainly Blake had obvious reasons to disagree with Hume's philosophy on certain points, but a closer look at the *Dialogues* reveals resonances with the metaphysics and epistemology of *No Natural Religion*, parallels beyond the two works' shared antipathy to deism. I disagree with Cooper's claim that Blake sided with Priestley against Hume, since it is Priestley who *upholds* natural religion in the face of Hume's attack. Though Blake and Priestley share other philosophical and political views, on the topic of natural religion, Priestley's persistent deistic arguments for a transcendent God as first cause, a God whose infinite greatness could be discerned through finite man's reason, diverges significantly from Blake's early philosophy, which finds a surprising ally in Hume's *Dialogues* on this count.

Before discussing their similarities, I first acknowledge the major differences between Hume and Blake. For one, Blake's objection to natural religion does not arise out of the skepticism that Hume's does. As Priestley, points out, Hume was an "unbeliever," while Blake was decidedly a believer; the problem with natural religion on his view is that it made God transcendent and remote from the material world and human experience.[45] Furthermore, Hume's spokesman in the *Dialogues*, Philo, reiterates Locke's and Berkeley's irreconcilable division between the infinitude of God and the finitude of man: "let us beware," Philo warns his interlocutors, Cleanthes and Demea, "lest we think that our ideas anywhere correspond to his perfections, or that his attributes have any resemblance to these qualities among men. He is infinitely superior to our limited view and comprehension" (26-27). Cleanthes, who represents empiricist natural religion, later says: "I have been apt to suspect the frequent repetition of the

[45] Although Hume may have been largely regarded as an unbeliever, his spokesperson in the *Dialogues*, Philo, does not come across as an atheist as will be evident below.

word *infinite*, which we meet with in all theological writers, to savor more of panegyric than of philosophy" (89). Cooper finds Blake to be in agreement with this sentiment (88), but I disagree; while Cleanthes wants to avoid the term, Blake makes the infinite central to the positive philosophical claims made in the "b" series of *No Natural Religion* (in contrast to the satirical claims made in the "a" series). Nevertheless, neither Philo nor Cleanthes entertains the idea that the infinite might be applied to man, while for Blake that is the crucial point. Leibniz thus remains the sole analogue to Blake in this regard.

Despite the above-mentioned differences between Blake and Hume, there are several ways in which Hume's *Dialogues* anticipate philosophical ideas articulated in Blake's early work. First, consider Demea's – Hume's representative of Calvinist theology and *a priori* thought – description of reason and knowledge acquisition:

> What is the soul of man? A composition of various faculties, passions, sentiments, ideas …. When it reasons, the ideas, which are the parts of its discourse, arrange themselves in a certain form or order; which is not preserved entire for a moment, but immediately gives place to another arrangement. New opinions, new passions, new affections, new feelings arise, which continually diversify the mental scene, and produce in it the greatest variety and most rapid succession imaginable. (44)

Demea's account of the arrangement of ideas "in a certain form or order" is what Blake, in *No Natural Religion*, calls the ratio. For Blake, this ratio becomes static and "dull" when reason is unsupplemented by the Poetic Genius.[46] But in premise II of the "b" series, Blake stresses how the ratio can grow and change: "Reason or the ratio of all we have already known. is not the

[46] See note 43 above. This point is made by Matthew J. A. Green: for Blake "the 'Poetic or Prophetic character' functions as the inspiration or driving force that renders the 'Philosophic & Experimental' productive, rather than negating philosophy and experimental science altogether" (*Visionary Materialism* 13-14). See also, Eaves, Essick, and Viscomi's introduction to *No Natural Religion* in their edition of the *Early Illuminated Books* (29).

same that it shall be when we know more" (plate b4). Demea also emphasizes the dynamism of reason with the repetition of "new" – compare to Blake's "not the same" – and with the claim about the continual diversity of mental phenomena. Both Blake's and Demea's language offers an epistemological account that is opposed to the "same dull round" into which rational empiricism falls. For Demea, the continual acquisition of new knowledge can prevent this, while for Blake, the creative activity of the Poetic Genius serves this function. While one could object that these words do not come directly from Hume's spokesperson in the *Dialogues*, they also do not come directly from the spokesperson for natural religion (Cleanthes), so it would be erroneous I think to dismiss them as being unrepresentative of Hume's thought. Moreover, Philo uses similar language to Blake's premise II when describing the "continual advances" that reasoning makes in the practice of philosophy (19).

The diversity of the "mental scene" that Demea speaks of is also what makes each thinker unique. While Locke's *Essay* homogenized and systematized mental activity, Philo asserts, "we never find two persons who think exactly alike" (45). This idea is twice reiterated in Blake's *All Religions are One*: though men are alike in "outward form" and in their possession of Poetic Genius, Blake twice parenthetically qualifies this assertion with the claim that men have "the same infinite variety" (E 1) and thus are "infinitely various" (E 2).[47] If, as Blake writes, outward form is shared among persons, then it is in their thoughts – their mental scene – that they are infinitely varied, which is what Philo contends. And it should not be surprising at this point to see that Leibniz, specifically criticizing the homogeneous atomism he detects in Locke, makes the same claim: "If two individuals were perfectly similar and equal and, in short, indistinguishable in themselves, there would be no principle of individuation. I would even

[47] As Kroeber repeatedly claims in *Blake in a Post-Secular Era*, the absolute uniqueness of human individuals is a consistent theme in Blake's early illuminated works.

venture to say that in such a case there would be no individual distinctness, no separate individuals" (*New Essays* 231). Thus, on the topic of individuality and the irreducible uniqueness of human thought, the philosophy of Leibniz, Hume, and Blake all align.

Blake's claim in premise V of the "b" series in *No Natural Religion*, that "less than all cannot satisfy Man" (plate b7), also has a parallel passage Hume's *Dialogues*. Philo critiques Cleanthes's assertion of the cosmological argument, which posits God as the first cause of the material world. Philo denies that God could be an uncaused cause: "How," he asks,

> shall we *satisfy* ourselves concerning the cause of that Being whom you [Cleanthes] suppose the Author of Nature? … Have we not the same reason to trace that ideal world into another ideal world, or new intelligent principle? … How can we *satisfy* ourselves without going on *in infinitum*? And, after all, what *satisfaction* is there in that infinite progression? (46, my italics)

For Philo, the infinite regress of causation can never *satisfy* – the same word that Blake uses occurs three times in the passage from Hume.[48] The never-ending positing of antecedent causes for Philo is for Blake the cry of the "mistaken soul" who cries for more (plate b7); forever multiplying "new intelligent principles" can only lead to dissatisfaction. Blake elaborates on this point in premise VI, wherein the dissatisfaction becomes despair: "If any could desire what he is incapable of possessing. despair must be his eternal lot" (plate b8). But, as the remainder of the "b" series implies, despair is *not* man's eternal lot, since his desires, possession, and nature are all infinite, allowing him to partake in the creative divinity of the material universe. This is not a philosophy of misery and despair. Philo cites Leibniz as the first philosopher of "great fame" to make the denial of human misery "essential to his philosophical system" (80); Philo himself

[48] Hume's use of "infinite progression" in this passage resembles the Aristotelian/Lockean concept of the "potential infinite" discussed in section IV, and not the positive concept of the infinite put forth by Leibniz and Blake.

claims not to feel the misery that is observable in others around him (83). Once again, Leibniz, Hume, and Blake are in agreement, this time to the extent that they all deny misery as a necessary component of the human condition.

Recognizing that the infinite regression instigated when attempting to arrive at God leads to dissatisfaction, Philo, therefore, suggests an alternative:

> It were better, therefore, never to look beyond the present material world. By supposing it to contain the principle of its order within itself, we really assert it to be God; and the sooner we arrive at that Divine Being, so much the better. When you go one step beyond the mundane system, you only excite an inquisitive humor which it is impossible ever to *satisfy*. (46, my italics)

In equating God with the principle of order immanent in the material world, Philo is making a monist pantheistic argument. It is the same argument implied by Blake's bringing God – who becomes as we are – to the material realm, which is revealed to be infinite. Blake's God, like Philo's in the above passage, does not exist deistically/transcendentally outside the "mundane system,"[49] radically different from mankind; rather, God *is* the principle of organization *in* the material world, and this organization of course includes human beings. Philo could not be more explicit in advancing the Neoplatonic idea of the *anima mundi* than when he says, later in the *Dialogues*, "[t]he world, therefore, I infer, is an animal; and the Deity is the SOUL of the world, actuating it, and actuated by it."[50] Moreover, Philo's pantheism echoes Leibniz's metaphysics as

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[49] Hume's use of "mundane" here should not be confused with the contemporary connotation of dullness, but rather points to the term's etymology, from the Latin *mundi*, meaning world. In Blake's later prophecies, the "Mundane Egg" and "Mundane Shell" carry negative connotations (Damon 287-89), though these should not be read into this context.

[50] Plotinus is earlier explicitly alluded to in the *Dialogues* by Demea, who refers to his notion that intellect or understanding is not to be ascribed to the Deity, worship of whom "consists, not in acts of veneration, reverence, gratitude, or love; but in a certain mysterious self-annihilation" (40-41). For Blake, this is comparable to his denigration of the man who "sees himself only."

well. Although Philo denies that man is infinite, he does not say the same regarding nature: "Nature, we find, even from our limited experience, possesses an infinite number of springs and principles, which incessantly discover themselves on every change of her position and situation" (32). This claim resonates both with Leibniz's monad-based ontology of infinite matter, and with Blake's claim concerning the infinite in all things.

In arguing against natural religion and its positing of a transcendent God as first cause of and distinct from the material world, Hume's Philo argues for a pantheistic metaphysics in which God becomes "infinite" nature, which Philo later describes as being "impregnated by a great vivifying principle" (97). As discussed in the previous section, this Neoplatonic idea is discernible in the philosophy of Leibniz, and it is the ultimate premise of *No Natural Religion*. Blake merely extrapolates on Philo's claim concerning nature's infinitude: if the material world is infinite and divine, so then are human beings. In this crucial regard, Blake's philosophy in the early tractates intersects with that of Hume's in the *Dialogues*.

Despite their aforementioned differences, as well as others to which I will return in chapter 4, Blake is decidedly on Hume's side when it comes to their antipathy toward natural religion, and he is not in accord with Priestley here, as Cooper claims. Although aspects of Priestley's monist materialism can be seen in Blake's *Marriage*, which will be discussed at length in the next chapter, Priestley's unwavering commitment to the deistic premise of God as the extra-mundane uncaused first cause, whose nature is radically incommensurate with that of man, is antithetical to the philosophy Blake sets forth in the early tractates. In the first volume of his *Institutes of Natural and Revealed Religion* (1782), Priestley deduces and describes the being and attributes of God as radically different than those of man. And, as one might expect, a key difference concerns the infinite, an attribute belonging to God but not to man, who, "being finite,

cannot comprehend anything that is infinite" (1: 41). Here Priestley is echoing Locke and Berkeley, and it is precisely this claim that Blake counters in his assertion of man's capacity for perception of the infinite in *No Natural Religion*.

In addition to the *Institutes*, Priestley mounts a similar defense of natural religion in his *Letters to a Philosophical Unbeliever*, wherein the specific targets are Hume and the Baron d'Holbach, whose *System of Nature* (1770[51]) also attacked natural religion and in so doing posited nature as containing within itself the sources and springs of its own order and activity. In the *Letters*, Priestley makes no effort to disguise his contempt for Hume: "Compared with Dr. Hartley, I consider Mr. Hume as not even a child" (126). Moreover, Priestley's defense of deism, which echoes Locke's proof of the existence of God in the *Essay*, reiterates the divide between infinite God and finite man:

> there is in the constitution of man (of whatever materials he may consist) marks of a design and intelligence infinitely superior to any thing that is found in man. He, therefore, *must* have some superior cause, and so must every thing else that, like man, is finite. Proceeding in this manner, we must come at last to a being whose intelligence is properly *infinite*. (165)

As should now be clear, Blake rejects these very arguments in *No Natural Religion* as well as in *All Religions are One*. For him, the Poetic Genius *is* the infinite in man, whose poetic and prophetic character makes him not *created* – or "designed," as Priestley's deism would have it – but *creative*, and thus divine. In dissolving the divide between the infinite God and finite/mundane creation, Blake aligns himself in the Neoplatonic/pantheistic tradition that infuses

[51] Holbach's work was not published in English until 1797, but Priestley was clearly aware of it before then.

all of the infinite material universe with divine *anima*, as do Leibniz and Hume at various points in their philosophy.[52]

1.6

How do Blake's designs in *There is No Natural Religion* contribute to the philosophical claims made in the text? Relatively little attention has been paid to the images in these early plates, perhaps due to their minimalism when compared to the rich illustrations of the later illuminated works. Moreover, as Eaves, Essick, and Viscomi note in their introduction to the tractates, these works are the most minute of Blake's illuminated books, with plate sizes averaging 5.4 x 4 cm. (21). Given that the text – usually numbered premises – dominates on the majority of plates, there simply is not much room for Blake to develop an elaborate design. However, if we are to accept Blake's argument that, to one who perceives with the Poetic Genius, all things contain the infinite, then even the most minute visual detail should not be overlooked. Moreover, there is an irony implicit in the form of Blake's minute tractates, which recalls Leibniz's critique of Locke's imagism. Blake forces the reader to get close to the materiality of his work, to strain her organic perception in order to comprehend the argument, which is precisely that organic perception, the natural eye alone, cannot reveal the infinite.

Despite the philosophical trappings of numbered premises – which are labeled "Principles" in *All Religions are One* – and sub-headings like "Conclusion" (plate b11), "Application" (plate b12), and "The Argument" (plate a3), Blake's sequence of propositions cannot withstand pressure if treated as a logical proof or series of inferences at the end of which

[52] Leopold Damrosch, Jr. also describes Blake's dissolution of the infinite/finite dichotomy, in the process of which "the distinction between subject and object is abolished, so that we are at one with a universal order in which we possess everything that we desire, and desire nothing that we cannot possess" (*Symbol and Truth* 132). Damrosch locates the dichotomy in Locke, but this chapter has shown it to be maintained by Berkeley, Priestley, and – at times – Hume as well.

one arrives at an irrefutable truth claim (see note 43). Damrosch, for instance, notes the lack of logical support for Blake's leap, in *No Natural Religion*, from premise VI, concerning the despair that must be man's eternal lot if he could desire what he is incapable of possessing, to premise VII, which asserts man's desire and possession as both being infinite (129). Clark also focuses on this jump, noting that Blake never proves that despair is *not* man's eternal lot; as Clark writes, "pessimism of an argument is no proof of its falsity" (143). These are fair objections, but it is not my aim here to defend the logical strength of Blake's arguments, nor do I think he had much interest in constructing series of unassailable propositional proofs.[53] Blake's use of numbered premises and philosophical sub-headings is – especially in the "a" series of *No Natural Religion* – for satirical effect. His mode of argument here is, to borrow Cooper's term, merely semi-rational; Blake's aphoristic claims in the tractates have as much of the poetic and prophetic character to them as they do the philosophic and experimental. Nevertheless, they point to a metaphysical system and an intellectual tradition that other philosophers have elaborated in more rational detail. With this in mind, one can view Blake's designs as at times doing the same philosophical work as his aphoristic assertions.[54] They offer concise illustrations, or emblems, of several of the metaphysical ideas raised in the text of the tractates.[55]

Of the two early illuminated works, I focus on the designs in *No Natural Religion*, just as I have given its text the most attention in previous sections, since that is the tractate that most explicitly engages with the philosophical tradition. Of previous Blake scholars, Eaves, Essick, and Viscomi have given the fullest attention to the designs of this work, and they make

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[53] The fact that the plate containing premise III of the "b" series of *No Natural Religion* is missing makes it all the more difficult to follow Blake's inferences.

[54] In their introduction, Eaves, Essick, and Viscomi note Lavater's influence on Blake's use of aphoristic argument (26).

[55] Piloo Nanavutty discusses Blake's relationship to the emblem tradition at greater length in "Blake and Emblem Literature."

compelling claims about how the images function to supplement Blake's argument. For instance, they note that the reclining reading figure depicted in plate a9 (the last of the "a" series plates, illus. 1) is a mirror image of the reclining figure in plate b3 (the first plate of the "b" series, illus. 2). "This visual reversal," the editors write, "complements the sudden change of philosophical perspective in the accompanying text" (23). In copy B of the work, which contains the abridged "b" series – jumping from plate b4 to plate b12 – the editors note another mirror image involving supine figures. The light radiating from the head of the figure on plate b12 suggests that the human figure on the preceding plate in this copy has become Christ (illus. 3): "plate b12 offers Christ's incarnation as the model for how 'we' can transcend sense organs and reason and thus fulfil the prophecy on the preceding plate that the rational mind will be transformed 'when we know more'" (23). The editors also write that the vegetative motifs in this work act as "emblems for materialist conceptions of nature that block spiritual consciousness" (33). I find the plate-by-plate interpretation of the visual elements of *No Natural Religion* offered by Eaves, Essick, and Viscomi to be compelling and nuanced, and there is no need to reiterate all of the arguments they make (36-41). But in light of my discussion of the text in the previous sections, it is worthwhile to emphasize some of the editors' claims and to introduce some new points.

A key claim to stress in light of the pantheistic philosophical tradition informing *No Natural Religion* is the above-cited claim regarding the vegetative motifs as representing materialist conceptions that "block spiritual consciousness." Note that it is not the material world itself – the vegetation that is observable on so many of the plates here and in later works – that blocks spiritual perception. If we accept Blake's assertion that the infinite is in all *things*, then things themselves do not prevent perception of their infinite, animated nature. Rather, as Eaves, Essick, and Viscomi put it, it is one's materialist *conception* of nature that blocks one from

seeing the spirit inherent in it. For Blake, a mechanistic ontology and atomist epistemology, such as are evident in Locke's *Essay*, prevent the awakening of the Poetic Genius to perceive the divine in the material world as also described by Leibniz and Hume's Philo. As attentive to wordplay and puns as Blake was, he could not have missed the "vine" embedded in "divine," and the vines that dynamically twine and proliferate in the illuminated plates of this and other early works are evidence of this visual pun. Rodney M. Baine writes that for Blake the grapevine is "a symbol of universal brotherhood and love, Christ himself established" (156).[56] And Blake's depiction of Christ and vines in the context of *No Natural Religion* recalls Christ's proclamation in John 15:1: "I am the true vine." The biblical line is consistent with the pantheistic tradition that posits divinity as shared not just between God and humans, but among all material creation.

Eaves, Essick, and Viscomi offer similar interpretations regarding the "energetic," "swirling," "lively" vegetation in the "b" series plates, which positively articulate Blake's metaphysics (38, 39). The editors write, in addressing plate b4 (illus. 5), that the vegetative "arabesques above the text also escape the Lockean 'ratio,'" and they make the important distinction that when Blake wants to portray the material world in a negative light, he usually does so using rocky or stony motifs, rather than vegetative ones (39). The flourishing vegetative forms recall Demea's account in Hume's *Dialogues* of the dynamism and diversity of the "mental scene" as new knowledge is acquired by the active intellect. The man who cannot escape the "ratio," trapped as he is within the wheels of Lockean epistemology, is depicted on plate b10, bending to the ground with dividers to measure the base of a triangle (illus. 6). This, as the editors note, is the man who, in Blake's words, "sees himself only," and it is a motif that Blake repeats in the frontispiece to *Europe* and in the large color prints of *Newton* and

[56] Eaves, Essick, and Viscomi, citing Baine's claim, write that the vine spiraling around the tree in plate a4 is an "emblem of education" (38), and they note that this emblem occurs on plate a6 and a9 as well (illus. 4).

Nebuchadnezzar, as well as in the depiction of Nebuchadnezzar in plate 24 of the *Marriage* (40).[57] Regarding this image on plate b10, the editors write, "Blake has contracted into a single 'Application' what he saw as the two fundamental and interconnected limitations of the school of Bacon, Newton, and Locke – abstract reason and bondage to material nature" (40). However, I would amend the last four words, just as the editors had previously done: material nature *itself* is not what binds, but rather, it is the philosophical *conception* of material nature as a dead mechanism separate from natural religion's transcendent God that is limiting.

Blake's designs in *No Natural Religion* depict a dynamic interplay between vegetal, animal, human, and textual forms, suggesting the divinity inherent in all material creation. Again, Eaves, Essick, and Viscomi are attentive to such instances, as on plate b3, where they write how the 'M' beginning the text, which "bursts into vegetative forms," suggests the "energetic perceptions beyond the vision of this 'bounded' reader" (39). But it should be stressed that the "M' in question is part of the word "Mans" [man's], this time recalling the opening of John's gospel, in which the word becomes flesh. In Blake's plate, this is visually depicted as the word man foliates into material creation. The editors point to another such "metaphoric conversion of the word into flesh" on plate b12, and they note how the man in plate b9 sprouts from the ground with arms spread wide like branches (illus. 7): "For the first time in the illustrations, the main human figure expresses the energy of the vegetative motifs on the five preceding plates" (40). If vegetation can escape the Lockean ratio, so can man. In this regard, the design of plate a6, in which the winged putto – personifying "spiritual insights" (*Early Illuminated Books* 39) – attempts to draw the seated man's attention upward by pointing, becomes significant (illus. 8). The angel is not pointing to some abstract or transcendent image

[57] These designs will be discussed in later chapters.

of the deity. Rather, what is above the figures and text are the energetically twining vines that contain divine life, a phenomenon that the unawakened man cannot yet perceive.

There are further instances of text giving rise to form in *No Natural Religion*. In addition to the human forms interacting with the word and the birds soaring above it, the first and final "T" of the heading – "The Argument" – on plate a3 also foliate into dynamic vegetative designs (illus. 9). The implied pun here is that Blake's "argument" – concerning the animated dynamism of the material world – is as much visual as it is textual. On this same plate, the "M" of "Man," the "h" of "has," and the "n" of "Education" all enact conversions into floral form. And significantly, the words "God" and "becomes" in plate b12 also vegetate. Blake visually depicts the divine becoming that characterizes the material world. The same is true for the final word on this plate, "is," which exhibits vigorous growth from both letters in either direction. Though the text of the word alone denotes stasis, Blake's design suggests the divine *becoming* – God to man and man to God – that is explicitly alluded to in the text of the rest of the plate and in the design below. Divine activity in nature, represented by Blake's dynamic designs, constitutes "the argument" against natural religion, which would relegate a transcendent God outside of the inanimate material world. Nature is not static and stony, but becomes divine when seen with the Poetic Genius.

This visual argument is restated in plate b1, the frontispiece of copy L, which depicts Christ raising Lazarus from the dead (illus. 10). For Eaves, Essick, and Viscomi, this design emblematizes a "resurrection from the 'death' of Lockean philosophy and into the life of the spirit" (40-41). Given my argument in the previous sections of this chapter, the motif also serves as an apt illustration of Blake's non-deistic, non-mechanistic philosophy. Christ's raising of Lazarus suggests that, *contra* Locke's and Newton's ontology of inert particles, nothing in the

universe is dead, despite seeming appearances to the contrary – appearances influenced by one's philosophical perspective. According to the panpsychist and pantheistic tradition evident in the work of Leibniz, the material universe is infinite and divine. For Blake, whose philosophy aligns with this tradition – and not with that of Berkeley's idealism, which dismisses the material universe as an illusory ideation – God becomes material, in the infinite becoming of which man's Poetic Genius partakes. As Blake will more fully elaborate in the *Marriage*, the distinction is important, since a panpsychist/pantheistic metaphysics entails a normative set of values: whether one views all material beings as infinite and divine, as degraded and dead, or as mental projections, will consequently influence how one acts, both on a personal and a political level.

CHAPTER 2

Soul Matter: *The Marriage of Heaven and Hell* and Pantheistic Monism

"There seems to be no case in which the soul can act or be acted upon without involving the body ... Thinking seems the most probable exception; but if this too proves to be a form of imagination or to be impossible without imagination, it too requires a body as a condition of its existence."

—Aristotle[1]

"If they say that, on my hypothesis, there is no such thing as matter, and that every thing is spirit, I have no objection, provided they make as great a difference in *spirits*, as they have hitherto made in *substances*. The world has been too long amused with mere names."

—Joseph Priestley[2]

2.1

In *The Marriage of Heaven and Hell* (1790), Blake elaborates on and modifies the metaphysical and epistemological principles set forth in the early tractates. Here, however, Blake's philosophy is conveyed via an abundance of heterogeneous literary forms – from blank verse to Menippean satire to aphoristic proverbs to prose narratives – as well as illuminated designs. In their introduction to the Princeton/Blake Trust facsimile edition of copy F (1794), Eaves, Essick, and Viscomi write that the *Marriage*'s "disjoined structure is largely a function of its oppositional stance" (4), and Martin K. Nurmi claims that, after the tractates, the *Marriage* "is

[1] *De Anima,* I.403a5-10.

[2] *Disquisitions Relating to Matter and Spirit* (1777), 353.

the second statement of [Blake's] philosophical countersystem" ("Polar Being" 59). I wish to show, however, that in addition to countering and opposing, Blake is also eclectically adopting from a varied and complex set of philosophical traditions, just as he eclectically absorbed and refashioned a wide range of literary styles in this work, in order to articulate a radical pantheistic monism that differs even from several premises of his own earlier tractates.

This chapter focuses on three sets of philosophical "contraries" introduced in the *Marriage*: soul/body, God/material world, and imagination (Poetic Genius)/sensory perception. From a distance, these binaries seem tidy and distinct enough, but a closer engagement, not only with Blake's work but also with the philosophical tradition that informs it, reveals an ambiguous interplay, infusion, and interdependence at work in these ostensible oppositions. Such an infusion is already evident in the culmination of *No Natural Religion*, in which God and man become one, without a negation of either entity. The title of Blake's *Marriage* then can be read as heralding a similar dissolution of dualistic metaphysics – a marriage of contraries – and an articulation of a radical monism. Several Blake scholars have declared the work to be doing just that: Raine calls the *Marriage* "a manifesto of the philosophy of Paracelsus and Boehme, of the 'one thing' in which contraries are resolved" (1: 100): Nurmi contends that Blakean monism is idealist – like Berkeley's – and formulated in opposition to materialist monism (*Blake's Doctrine of Contraries* 58); and Leopold Damrosch, Jr. argues for a more extreme version of monism: "[w]hen confronted with polarities Blake always tends to exalt one and repel or even exterminate the other" (177).[3] None of these commentators, however, emphasize the pantheistic nature of this monism. This chapter will explore how, drawing from long and multi-faceted traditions, Blake's monist ontology is not strictly material, or solely spiritual, but a protean composite, a single

[3] Harold Bloom writes that Blake's devil "attacks the dualism of Christian tradition" (*William Blake's* The Marriage of Heaven and Hell 4) and Nicholas M. Williams also claims that dualism is Blake's "main target" in the *Marriage* and other works ("'Sciences of Life'" 45).

spirit/matter entity demonstrating the properties of both. Furthermore, in addition to elaborating his ontology, the *Marriage* develops Blake's epistemology: how we come to know about the world, how that knowledge is mediated by perception and imagination, and, conversely, how one's metaphysical beliefs influence perception. As in *No Natural Religion*, perception of the infinite is central to the *Marriage*, but in the latter work Blake is more demonstrative of the concept, providing richer, poetic examples of what it means to do so.

The central ontological claims in the *Marriage* come early and explicitly, from the voice of the Devil in plate 4. Mirroring the structure of *No Natural Religion*, Blake first presents what he considers the erroneous metaphysics, for which he blames "All Bibles or sacred codes":

> 1. That Man has two real existing princi-
> -ples Viz: a Body & a soul.
>
> 2. That Energy. calld Evil. is alone from the
> Body. & that Reason. calld Good. is alone from
> the Soul.
>
> 3. That God will torment Man in Eternity
> for following his Energies. (E 34)

Blake follows these errors with the equivalent of *No Natural Religion*'s b-series propositions; here the truthful contraries are:

> 1 Man has no Body distinct from his Soul
> for that calld Body is a portion of Soul discernd
> by the five Senses, the chief inlets of Soul in this
> age.
>
> 2. Energy is the only life and is from the Body

and Reason is the bound or outward circumference

of Energy.

3. Energy is Eternal Delight (E 34)

Here the body is indistinguishable from the soul, the latter of which not only constitutes the body – which is a "portion of Soul" – but also serves as a "bound or outward circumference," thus giving form to the energetic body.[4] Blake's formulation here bears a strong resemblance to Aristotle's argument for the soul as substantial form, providing shape and purpose to the matter from which it cannot be abstracted, in contrast to the transcendent intellectual forms in Plato. Although later in the *Marriage* Blake makes a disparaging reference to Aristotle's *Analytics*, which he symbolically equates – via a monkey skeleton – with Swedenborg's writings, Blake does not explicitly acknowledge his debt to Aristotle's conception of the soul as presented in *De Anima* and elsewhere, and no Blake scholar has mentioned the striking parallels. The second section of this chapter will consider in detail both Aristotle and Blake on the nature of the soul.

In the second passage quoted above, while on one hand it seems clear that for Blake there is no body distinct from the soul, there does appear to be soul distinct from the body, evidenced by the claim that the body is only a *portion* of a greater soul for which the senses serve as *inlets*. Thus, there is a soul *out there* in the universe that is perceived by, enters, and infuses the body.[5] In this regard, Blake sounds more like Plato, whose *Timaeus* describes an *anima*, or world-soul, permeating and vitalizing the created universe – not just man. Variations on the theme of a spiritual substance interfused with creation and entering – or descending into – man can also be

[4] According to Leslie Tannenbaum, Blake's ontology is suggested earlier in plate 3, which declares the "dominion of Edom" (E 34): Esau or Edom is "the man of energy who is deprived of his birthright [by Urizen/Jacob] and whose restoration is announced [in the *Marriage*]" ("Blake's Art of Crypsis" 152).

[5] Stephanie Engelstein makes a similar claim: "the familiar image of the senses as 'windows to the soul' is complicated by a shift in directionality: the soul is what is discerned by the senses, what is let in, and only implicitly also the recipient of the sensory data" (77).

detected in Neoplatonists such as Plotinus and Proclus, as well as in the Stoic conception of *pneuma*. Thus, in addition to discussing Aristotle, the second section of the chapter will devote attention to the soul as represented in these competing classical philosophies, and to the subtle ways in which they overlap. The section will also examine how the Epicurean tradition, in which the soul is wholly material, presents a metaphysics that Blake will both draw from and oppose.

The "brief history of the soul" continues in section 2.3, in which Renaissance and early modern thinkers are surveyed and discussed insofar as they adopt and modify concepts of the soul set forth by the classical philosophers discussed in section 2.2. Here the focus will be on the monist panpsychism of Spinoza, the Epicurean materialism of Hobbes, the atomistic Neoplatonism of Bruno, as well as the competing classical traditions evident in Descartes, Locke, and Newton. The latter three figures can be read as the philosophical forbears of a vast and contentious discourse concerning the soul in eighteenth-century England, which will be the subject of section 2.4; with the development of experimental life science and neurophysiology, functions once attributed to Platonic/Neoplatonic *anima* and Stoic *pneuma* become, for some theorists, explained by material yet mysterious vital substances diffused in living organisms in the form of animal spirits or nerve fibers. The rise of various forms of vitalism and materialism in the eighteenth century was consistently met with resistance from dualist thinkers who contended that inert matter could not move, become organized, or give rise to consciousness without an immortal and immaterial soul. Section 2.5 brings the history of thinkers on the soul to Blake's contemporary Joseph Priestley, whose radical theistic materialism acknowledges and defines itself against elements of the philosophical tradition I trace in the opening sections, as well as informs Blake's argument for matter as energy in the *Marriage*. Section 2.6 examines the elements of Priestley's philosophy that Blake came to reject; ultimately, Priestley's attempt to

develop a monism that retains a transcendent deity as both first and efficient cause for all action in the universe covertly reintroduces a dualist and deist ontology in his writings, an ontology that runs contrary to what Blake argues for in the *Marriage*, and that aligns Priestley with Blake's main enemy in this work: Swedenborg.

The final sections of the chapter are devoted to epistemological issues, all of which are encapsulated with poetic concision in the question preceding the Proverbs of Hell: "How do you know but ev'ry Bird that cuts the airy way, / Is an immense world of delight, clos'd by your senses five?" (E 35). Here Blake explicitly foregrounds epistemological concerns – *how* does one *know* – and, using a line co-opted from Chatterton,[6] suggests that empirical perception – the ratio described in *No Natural Religion* – is insufficient to perceive the infinite. Blake's question teasingly implies that one is deceived not by an external demon, a possibility considered by Descartes in the *Meditations*, but by one's own limited senses and rigid metaphysics. Recalling that Blake has equated delight with energy, which is bodily, in plate 4, the reader is prompted (or "raised" as Blake writes) to realize that a seemingly finite bird is just one material thing in the universe that opens to expanded, cleansed, and imaginative perception to reveal an "immense world," i.e., the infinite. Thus, section 2.7 of this chapter considers how Blake traces empirical epistemology back to Aristotle's *Analytics*, and how his rejection of "demonstration by the senses" manifests itself both in the *Marriage* and in his annotations to Swedenborg. This section, revisiting some of the philosophies surveyed in section two and three, also examines Blake's development of the concept of imagination, referred to as Poetic Genius in the tractates, and its role in perception as exemplified in the *Marriage*. Finally, section 2.8 summarizes the degree to

[6] From Chatterton/Rowley's "The Dethe of Syr Charles Bawdin" (ll. 133-36): "Howe dydd I knowe that ev'ry darte, / That cutte the airie waie, / Myghte nott fynde passage toe my harte, / And close myne eyes for aie?" (qtd. in Bloom's commentary, E 898).

which Blake's metaphysics – and artistic manner of conveying it – evolved from the early tractates to the *Marriage*.

2.2 The Soul in Classical Philosophy

A preliminary clarification: panpsychism equates soul with *psyche*. In *De Anima*, Aristotle cites Thales's definition of soul/*psyche* as "a motive force" (405a20), and Skrbina observes, "In the first book of *De Anima* Aristotle takes pains to note that most everyone before him, through and including Plato, did not clearly distinguish between soul and mind (*nous*)" (25). For the sake of this project, I adopt what Skrbina proposes as a more comprehensive definition of *psyche*, which includes *nous*: soul can be understood as "the energy that animates and produces movement in all things, including the movement of thoughts and ideas" (25).

Plato

Plato's dualism is explicit in several works, perhaps most famously in Book VII of *The Republic*, in which the Allegory of the Cave is presented to illustrate the eternal, immutable intellectual Forms, of which the objects in the material world are but "passing shadows," the closest human sense perception can approach to the fundamental reality of the Forms (514a-520a). Elsewhere, in the *Phaedo*, Plato's Socrates distinguishes between the immaterial, invisible, and immortal soul and the transient, contaminating, and visible body; the soul, Socrates tells his interlocutor Cebes, is "tainted," "weighed down," and "imprisoned" in the earthly body (78b-84b). Here and elsewhere in Plato's work, the soul and body, like the transcendent Forms and the material world, have no properties in common.

Yet Plato's late dialogue, the *Timaeus*, which gives a detailed account of the origin and nature of the universe, presents a much more subtle and complex description of the soul and its relation to the material world, one that resonates with Blake's claims in plate 4 and other passages in the *Marriage*.[7] Plato's narrator here, Timaeus, begins in a dualist vein by describing – like Locke and Berkeley – the incommensurable difference between God and man: "the father and maker of all this universe is past finding out, and even if we found him, to tell of him to all men would be impossible" (28c). As in Locke, we can have no knowledge of God, who fashioned the world in imitation of an eternal form: "the world has been framed in the likeness of that which is apprehended by reason and mind and is unchangeable, and must therefore … be a copy of something" (29a). Furthermore, God, in the act of creation, "put intelligence in soul, and soul in body" (30b). So far, Plato appears consistent with the metaphysics presented in the *Republic* and *Phaedo*.

But then, in describing the circular, "perfect" nature of the universe, Plato writes, "in the center [God] put the soul, which he diffused throughout the body, making it also to be the exterior environment of it," and thus "he created the world a blessed god" (34b). The word "diffused" here implies an inextricable intermingling of soul and matter, and the description is analogous to plate 4 of the *Marriage*, in which Blake also writes that the body is a portion of soul and that the soul also serves as circumference, bound, or what Plato here calls "exterior environment." Timaeus then reverts to dualistic implications in describing the soul, which is older than the body, as its "ruler and mistress" (34c), but soon thereafter he articulates another sentence that aligns with the metaphysics of the *Marriage*: "Now when the creator had framed the soul according to his will, he formed within her the corporeal universe, and brought the two

[7] Though my focus is on the *Timaeus*, Skrbina observes a movement in Plato "from an ambiguous standpoint to a more consistent and more universal view of ensoulment" in all four of his late dialogues: *Sophist*, *Philebus*, *Timaeus*, and *Laws* (34-45).

together and united them center to center. The soul [is] interfused everywhere from center to circumference of heaven, of which also she is the external envelopment" (36d-e). Just as Blake's body/portion is located *within* a greater soul, Plato's corporeal universe is formed *within* the soul, and is itself "united" and "interfused everywhere" with soul – not distinctly corporeal, as Socrates describes body in the *Phaedo*. And again, as in Blake's passage in plate 4, Plato's soul is "circumference" and "envelopment" of the body. Despite the persistent dualist phrases in the *Timaeus*, Plato is clearly presenting a competing metaphysical account of the *anima*, or world-soul, a divine substance both inextricably interfused throughout the entire corporeal world and giving it form and bound. As such, the universe itself becomes divine, a "blessed god," while being distinct from the creator god. Here Plato's metaphysics is panentheist, which Skrbina defines as "God in all things … God is said to saturate all things while being transcendent and unchanging. An alternative explanation is that God is the soul of the cosmos, a world-soul, and the physical universe is his body" (21). This strain of Platonic metaphysics is noted by Iain Hamilton Grant, who finds it in other works in addition to the *Timeaus*: "'the prime origin of motion is what moves itself', and this arises not only in the animate creature … (*Tim[aeus]* 30b8), but, by virtue of the world soul (*kosmon pyschon*) (34b4ff), in the world itself and in 'any object made of earth, water or fire' (*Laws* 895c4-6), and indeed in the whole 'autarchic cosmos…' (*Stat[esman]* 274a5-6)." Thus, Grant continues, in Plato's "one-world physics" there is the consequence that "'all things think' (*Parm[enides]* 132c8), or that 'nature itself' is 'intelligent' (*Tim*. 46d9-e1)" (43-44).[8]

[8] Additionally, Skrbina identifies *Philebus* 29a-31b as a passage in which Plato argues for the world-soul on the basis of the individual psyche (39), and *Laws* 899b as a moment in which Plato explicitly extends soul to non-living things; the passage in question cites Thales's claim that "all things are full of gods."

Plato's argument that the created universe is itself a god is reformulated in several passages in the *Marriage*, particularly in the Proverbs of Hell, where corporeal animals *and* humans are described as attributes of God:

> The pride of the peacock is the glory of God.
>
> The lust of the goat is the bounty of God.
>
> The wrath of the lion is the wisdom of God.
>
> The nakedness of woman is the work of God. (E 36)

That which erroneous philosophy would condemn as evil and from the body – pride, lust, wrath, nakedness – is here proclaimed to be divine. On the next plate, reformulating the metaphysics implied by the question that prefaces the Proverbs, Blake instructs the reader: "When thou seest an Eagle, thou seest a portion of Genius. lift up thy head!" (E 37). On plate 11 we learn that "Genius" is synonymous with God (E 38), and thus, like the bird cutting the airy way and the soul-infused body in plate 4, the eagle is a "portion" of the world-soul. It is with Genius/God that the "ancient Poets *animated* all sensible objects" (E 38, my italics). For Blake, all sensible objects – not just living forms – contain *anima*, and the infinite Genius is not just in man, but, as in the early tractates, in all things. If all sensible objects contain *anima*, then the entire material universe is alive, and Blake's closing statement in the *Marriage* reiterates Plato's claim for the universe as a blessed god: "every thing that lives is Holy" (E 45). This idea is made even more explicit on plate 14, where "the *whole* creation" (my italics) is declared to be "infinite. and holy" (E 39).

Blake's Platonically derived pantheism is evident not only in these passages from the *Marriage*, but also in his annotations to Lavater's *Aphorisms on Man* (1788), wherein he

adamantly opposes Lavater's claim that "A GOD, an ANIMAL, a PLANT, are not companions of man." To this categorical separation of beings, Blake counters:

> It is the God in *all* that is our companion & friend …. God is in the lowest effects as well as in the highest causes for he is become a worm that he may nourish the weak For let it be rememberd that creation is. God descending according to the weakness of man for our Lord is the word of God & every thing on earth is the word of God & in its essence is God. (E 599)

Just as God becomes man in *No Natural Religion*, here God becomes *all*, and every material object, from worm to stone, "in its essence is God." Similarly, the corporeal world, coursing with *anima*, *is* God, as depicted in the *Timaeus*. The *Marriage*'s ultimate claim is also reiterated in Blake's annotations to Lavater: "all life is holy" (E 579).

However, in these annotations, and in *No Natural Religion*, there is the hint that although God *became* man and the material universe, he was originally separate from it, like Plato's God in the *Timaeus*. Blake's radical modification of this idea in the *Marriage* is that there is no God separate from the sensible universe – the two are identical. In this sense, Blake's metaphysics shifts from panentheism to pantheism. In the Memorable Fancy related on plate 12, Blake's speaker asks the prophet Isaiah how he dared assert that God spoke to him, and Isaiah responds: "I saw no God, nor heard any, in a finite organical perception; but my senses discover'd the infinite in every thing, and as I was then perswaded, & remain confirm'd; that the voice of honest indignation is the voice of God" (E 38). As is claimed in *No Natural Religion*, finite organical perception alone is insufficient to reveal the infinite God, but the ancient Poet Isaiah's senses, "enlarged & numerous" (E 38), discover the divine infinite in every thing, and he is persuaded that his own indignant, prophetic and human voice *is* the voice of God. This idea is

confirmed in plate 16, where Blake asserts that "God only Acts & Is. in existing beings or Men" (E 40). While in the *Timaeus* a transcendent creator God animates the corporeal universe with soul, in plate 11 of the *Marriage* it is the ancient Poets – who are themselves portions of divine Genius – who animated all things. Plato's creator-God has become Blake's creative-Poet.

Before proceeding to Plato's discussion of the human soul, I note one more parallel between his cosmic ontology and that which Blake presents in the *Marriage*. Plato describes the stars as "living creatures having bodies fastened by vital chains" (38e): these, and all other "heavenly and divine" beings are created "out of fire" (40a). Plato goes on to describe the airy, earthly, and watery elements, but the position he ascribes to fire is of course the inverse of the orthodox Christian symbolism, which locates tormenting flames in hell. Blake sides with Plato's ontology in the *Marriage*, wherein fire is not associated with pain and suffering, but rather with divine inspiration and, for Blake, sexual enjoyment and delight, as evidenced by the nude woman erotically engulfed in flames at the top of plate 3, and the narrator of the Memorable Fancy in plate 6, who begins his account, "I was walking among the fires of hell, delighted with the enjoyments of Genius; which to Angels look like torment and insanity" (E 35). Like the eagle in the Proverbs, the essence of the fiery flames is God/Genius, in which the speaker takes delight.

Plato's account in the *Timaeus* becomes even more complex, as the discussion turns to the human soul, which is divided into three parts, each located in different areas of the body, and each having different properties. Timaeus states, "I have often remarked that there are three kinds of soul located within us, having each of them motions" (89e). The head, he claims, is "the most divine part of us and the lord of all that is in us" (44d). As the origin of the entire bodily soul, which "is at first without intelligence" (44b), and Plato later develops his description of the divine head using a vegetal metaphor:

> God gave the sovereign part of the human soul to be the divinity of each one, being that part which, as we say, dwells at the top of the body, and inasmuch as *we are a plant* not of an earthly but of a heavenly growth, raises us from earth to our kindred who are in heaven…. the divine power suspends *the head and root of us* from that place where the generation of the soul first began, and thus makes the whole body upright. (90a-b, my italics)

In positing the divine head as the *root* of the soul, Plato presents a metaphorical inversion that prefigures the many inversions that characterize the *Marriage*, the title page of which depicts a dynamic heaven *below* the surface of the earth. Blake's depiction in plate 17 of the devilish – but divine – speaker and his companion Swedenborgian Angel being "held by the roots of trees" above a "nether sky" below them even more strikingly echoes Plato's elevation of divine roots. It is from such a vantage point that the infinite "immensity" can be perceived, as it is in the subsequent episode, to which I will return in section VII in this chapter.

As for Plato's other two kinds of soul, they are mortal and located below the head and do not perform the highest function of reason. Moreover, they are said by Timaeus to be created by God's "offspring," who imitated him but made "within the body a soul of another nature which was mortal, subject to terrible and irresistible affections – first of all pleasure, the greatest incitement to evil." Offering a striking interpretation of human bodily form, Plato writes that the creator gods – offspring of the creator of the world-soul – gave this mortal soul "a separate habitation in another part of the body, placing the neck between them to be the isthmus and boundary, which they constructed between the head and breast, to keep them apart." The neck, then is a mark of the gods' effort to keep the head away from the corrupting body, and the first of the two mortal souls is located in the breast and is the seat of pleasure, pain, and the emotions of

fear and anger, as well as "all-daring love" (69c-e). Below this second soul is another inferior soul, "the third kind of soul, which is said to be seated between the midriff and the navel, having no part in opinion or reason or mind, but only in feelings of pleasure and pain and the desires which accompany them." This soul, incapable of self-motion, is the same as is found in all "the trees and plants and seeds," which Plato also refers to as "animals" (77a-c). In the human body this lowest soul is bound down in "a sort of manger for the food of the body" – the stomach and intestines – "like a wild animal which was chained up with man, and must be nourished if man was to exist" (70e). Thus, the *anima* pervading the universe is classified in a tri-part hierarchy: the divine, immortal, reasoning soul in the head, the passionate, mortal soul in the breast, and the non-motive but desiring and pleasure- and pain-sensitive vegetal soul between the midriff and the navel.

And yet each type of soul for Plato is not independent of the others, as is evident from the passage from 70e, which implies that the nourishment of the lowest soul is necessary for the existence of the entire man. Timaeus later describes how the gods "cut various channels through the body as through a garden" (77c); these channels are the veins, which permeate all parts of the body and by which the different souls can receive nutriment ("irrigation"). And while the most divine portion of the soul is rooted in the human head, Plato, in a stunningly prescient passage, describes the bone marrow as where "the bonds of life which unite the soul with the body are made fast … and [is] the *root* and foundation of the human race" (73b, my italics). Timaeus describes the marrow as:

> a universal seed of every mortal kind, and in this seed he then planted and enclosed the souls, and in the original distribution gave to the marrow as many and various forms as the different kinds of souls were hereafter to receive. That which, like a field, was to

> receive the divine seed, he made round every way, and called that portion of the marrow 'brain,' intending that, when an animal was perfected, the vessel containing this substance should be the head. (73c-d)

Thus it is evident that the "divine seed," the highest portion of the human soul, although ultimately located in the head of the developed body, has its origin as the "brain" portion of the marrow, which is located inside the bones, which of course are not confined to the head. The marrow is the source not only of the divine soul, but is "a universal seed of every mortal kind," or what we would now call a stem cell. When the bonds uniting soul and body within the marrow are loosened, the immortal part of the soul, "obtaining a natural release, flies away with joy" (81d). In these particular instances in the *Timaeus*, one sees how intricately intertwined the soul(s) and body are in Plato's account. As Mary Louise Gill and James G. Lennox write, Plato's earlier claim (in *Phaedo*, for example) that the soul is self-moving and immortal and distinct from the body "seems to be flatly contradicted in the *Timaeus*" (xiii).

But an ambiguous thread of dualism persists even in this late dialogue, since the soul, upon bodily death, "flies away," a metaphysical act that one cannot find in the *Marriage*, where heaven and hell have been united in a monistic, infinite, and animated universe. And although Plato often uses the phrase "natural body" to refer to the two inferior types of soul, it is not difficult to detect his denigration of anything below the head: the neck/isthmus was implemented to separate the divine from the animal souls because the gods were "fearing to pollute the divine any more than was absolutely unavoidable" (69d) – notwithstanding Plato's claim that the divine soul of man has its origin in the inferior regions of the marrow. Indeed, after describing numerous diseases, Timaues concludes that "the soul suffers much evil from the body" (86e), reminiscent of the statements made by Socrates in *Phaedo*. Blake makes the exact opposite

metaphysical claim in the *Marriage*, on plate 4 of which it is declared that energy, which is from the body, is eternal delight – a claim that directly counters Damon's argument that "Blake believed that the material body was an illusion or error – a part of the soul, but not an essential part" (*Philosophy and Symbols* 318). Bodily desire, sexual and otherwise, is associated with evil in the *Timaeus*, wherein Plato writes that pleasure is "the greatest incitement to evil" (69d); Blake inverts this evil to the highest good, or delight, declaring, in the Proverbs of Hell, that the genitals are beautiful and that one should "[s]ooner murder an infant in its cradle than nurse unacted desires" (E 37, 38). These and other passages celebrating the body as the source of delight in the *Marriage* emphatically do *not* support Frye's claim that "while no one could be less of an ascetic than Blake, the premise from which the ascetic starts is also his. The body is 'vile'" (194). Blake's Proverb claiming that "The soul of sweet delight. can never be defil'd" (E 37) contrasts such an assertion, since the soul – the source of delight – has already been identified with the energetic body. Nevertheless, despite his opposition to this aspect of Plato's philosophy, on plate 10 Blake also echoes Plato's distinction between the divine head – "The head Sublime" in Blake – and the seat of the passions in the breast – "the heart Pathos" (E 38).

Given this ambiguity, I summarize the elements of Plato's philosophy, particularly in the *Timaeus*, that Blake embraces in the *Marriage*, followed by the aspects of Plato's thought that the *Marriage* rejects. Platonic metaphysical claims that are consistent with the *Marriage* include:

- A divine *anima* is interfused throughout all of material creation, both filling and giving form to, or bounding, bodies
- As such, the universe itself is divine, a god
- The heavens are fiery

- The human soul (here I refer to Plato's two inferior souls) is mortal and inextricable from bodily form and function

Platonic principles that Blake opposes in the *Marriage* are:

- There is a transcendent creator God separate from the material universe
- The human soul (here I refer to Plato's divine human soul, even though it has its origin in the marrow) is separable from the body, and can function ("fly away") in the latter's absence
- The body is a source of corruption and evil, and bodily desire is thus to be avoided

I focus on the *Timaeus* here because the ideas on the soul presented therein proved influential not only to Aristotle and Neoplatonic writers, as I will show; but, moreover, Blake's close contemporaries, Joseph Priestley and Thomas Taylor – a late eighteenth-century Neoplatonist and translator of Plato, also an acquaintance of Joseph Johnson[9] – demonstrate in their own works a recognition of Plato's ambiguous metaphysics as presented in the *Timaeus*. Neither Priestley nor Taylor treats Plato as a strict dualist. In his history of the theological and philosophical origins concerning the division of matter from spirit, which Priestley presents in his *Disquisitions Relating to Matter and Spirit* (1777), Priestley acknowledges Plato as arguing for the immateriality of the soul, but, he writes: "[Plato] distinguished three sorts of souls, differing in purity and perfection, the universal soul, those of the stars, and those of men … Of those he distinguished two parts, the superior, which was an emanation from the Deity himself, and the inferior, which derived its origin from the more spiritual part of matter" (196).[10] Clearly,

[9] Phillip J. and Joseph R. Cardinale have recently discovered Blake's annotated copy of Taylor's 1787 translation of *The Mystical Initiations; or, Hymns of Orpheus*, the first direct evidence that Blake read Taylor's work. See "A Newly Discovered Blake Book," 84-102.

[10] Priestley is relying here and elsewhere in his classical history on the work of the French historian Isaac de Beausobre, whom he cites at length.

Plato's account of the tripartite soul in the *Timaeus* is being referred to here. Priestley later reiterates the Platonic idea of the soul's materiality: "It has been seen that the Platonists thought there was something corporeal even in the human soul" (235). Priestley also alludes to Plato's notion of *anima* and the evil of the corporeal body, claiming that this was an inheritance from Pythagoras, who "thought matter animated, as well as evil, and was therein followed by Plato and Plutarch" (337). All of these ideas can be found in the *Timaeus*.

Thomas Taylor's translation of Plato's late dialogue was published in 1793.[11] In his introduction, Taylor stresses the aspects of Plato's metaphysics in the *Timaeus* that resonate with Blake's *Marriage*. Taylor writes that Plato "perfectly defines the whole world to be a blessed god, participating of intellect and soul" (371),[12] and that "we are endued with an intellect subsisting in energy, and a rational soul proceeding from the same father and vivific goddess as were the causes of the intellect and soul of the universe" (373). Taylor here explicitly alludes to Platonic *anima* – "soul of the universe" – and his use of the term "energy" to describe intellect bears a similarity to Blake's use of the same term to describe the soul-body entity in plate 4. The body of the universe, Taylor later writes, is "consummately vital" (379), material nature itself demonstrating, in Plato's metaphysics, both divine and corporeal properties, establishing "its essence between soul and corporeal powers" (375). Taylor also emphasizes the "unburning vivific fire" of the heavens, which is "like the natural heat which our bodies contain" (381), another aspect of Platonic philosophy incorporated by Blake. Taylor, like Priestley, is here focusing not on Plato's dualism, but on his universal animism, which is evident in the monistic metaphysics of the *Marriage*. I am not arguing that Blake read the *Timaeus* specifically, but

[11] Blake had completed the *Marriage* by this time, but printed two copies, E and F, in 1794, and a third, D, in 1795.

[12] This is also how Plotinus understood Plato (*Enneads* 4.8.1, 335).

rather that his metaphysics shares principles introduced in that work, principles that Blake's contemporaries and acquaintances were emphasizing in their own writing on Plato.

Aristotle

Given the discussion of Plato's *Timaeus* above, we can now see how it is less easy to establish an absolute opposition between Plato and Aristotle insofar as the soul is concerned. The hierarchical division of the soul as described in Aristotle's *De Anima* and elsewhere in fact owes a debt to the tripartite soul Plato discusses in the *Timaeus*, to which Aristotle alludes several times within *De Anima*;[13] and Aristotle's notion of the soul as immanent substantial form responsible for the movement, growth, and alteration of bodies has parallels to the animated corporeal body of Plato. Aristotle, however, further develops an immanent concept of soul as an interior form-giving energy or entelechy, to which both Leibniz's monads and Blake's early metaphysics owe a debt.

Aristotle's hylomorphism, the notion that most natural things are compounds of matter and form, is evident in *De Anima* and in other works. In his introduction to the Modern Library edition of Aristotle's basic works, C. D. C. Reeve offers the classic analogy of the statue to illustrate the concept of substantial form:

> [Statues'] matter is the stone or metal from which they are made; their form is their shape. Human beings are also examples: Their matter is (roughly speaking) their body; their soul is their form. Thus a person's soul is not something separable from his body,

[13] See for instance I.404b16-19, where Aristotle claims that Plato "fashions the soul out of his elements," and I.406b26-28, where Aristotle refers to Plato's "physical account of how the soul moves its body."

> but is more like the structural organization responsible for his body's being alive and functioning appropriately. (xvi)[14]

Reeve qualifies his equation of matter with body here ("roughly speaking"), since, as can be seen in *De Anima*, Aristotle, like Plato, is ambiguous when it comes to the division of the soul and its relationship to the body. Nevertheless, one can detect Aristotelian hylomorphism in Blake's description of the human body as both a portion of and bound by soul. Certainly the epigraph to this chapter, taken from the first book of *De Anima*, in which Aristotle states that there seems to be no case – including the acts of thinking and imagination – "in which the soul can act or be acted upon without involving the body" (I.403a5-6), sounds like it could be articulated by Blake's Devil.

Aristotle defines the soul in *De Anima* as "the principle of animal life," whose affections "are inseparable from the material substratum" of that very life (I.402a5-6, I.403b17-18). Unlike Plato, who extends *anima* to all corporeal objects, Aristotle claims that such a panpsychist position "presents some difficulties" (I.411a9), and confines the soul to plants, animals, and humans (II.413a10-20).[15] Insofar as these natural bodies are concerned, however, Aristotle's account echoes that given in the *Timaeus*, as he writes:

> in each of the bodily parts there are present all the parts of soul, and the souls so present are homogeneous with one another and with the whole; this means that the several parts of the soul are indisseverable from one another, although the whole soul is divisible. It seems also that the principle found in plants is also a kind of soul; for this is the only principle which is common to both animals and plants; and this exists in isolation from

[14] Reeve cites passages in the *Physics* (192b8ff.) for this discussion.

[15] In the *Physics*, Aristotle argues that all natural – as opposed to artificial – beings contain an "innate impulse" (II.192b18). A cat has this impulse, for instance, while a house does not.

the principle of sensation, though there is nothing which has the latter without the former. (I.411b24-30)

Several key points are worth emphasizing in this passage: the "whole soul" can be divided in theory, but in reality those several parts are "homogeneous" and "indisseverable from one another," as was seen in Plato's interactive and inter-dependent tripartite soul. And Aristotle here claims here that *all* parts of the soul are present in *each* body part – just as Plato's divine soul could be found in the marrow, along with the inferior soul. Moreover, just as Plato defines the lowest mortal soul as being common to trees and seeds, Aristotle also identifies the vegetative soul as being shared by plants and animals. However, unlike his teacher, Aristotle does *not* ascribe sensation to plants.

In Book II of *De Anima*, Aristotle continues to describe and define the soul as the indisseverable form of the body, and yet he is careful to preserve a distinction: "the *body* cannot be soul; the body is the subject or matter, not what is attributed to it. Hence the soul must be a substance in the sense of the form of a natural body having life potentially within it" (II.412a19-21).[16] The question of whether soul and body are one is thus dismissed as irrelevant, since "it is as meaningless as to ask whether the wax and the shape given to it by the stamp are one, or generally the matter of a thing and that of which it is the matter" (II.412b6-8).[17] The analogy here is somewhat misleading, however, since for Aristotle, as for Blake in the *Marriage*, there is no external, transcendent "stamp" forcing matter into purposeful form – the shape is determined from within. The soul does not descend into the body, as it does in the Platonic account; rather, it

[16] The same idea is expressed later in the book: "the soul cannot be without a body, while it cannot be a body; it is not a body but something relative to a body. That is why it is in a body, and a body of a definite kind …. Soul is an actuality or formulable essence of something that possesses a potentiality of being besouled" (II.414a19-27).

[17] S. Foster Damon cites this passage as a possible source for Blake's claim in *All Religions are One* that the body is derived from the Poetic Genius (*Philosophy and Symbols* 317).

is the "essential whatness" of a body, impossible to speak of without matter (II.412b13). Just as in Blake the body is a portion of soul, so in Aristotle the soul is "the essence of the whole living body" and "all natural bodies are organs of the soul" (II.415b11, 17), the difference here being that while for Blake and Plato the soul extends beyond the body and into the material universe, for Aristotle the soul is limited to the body.

Aristotle continues his discussion of soul by introducing another analogy, one which has particular resonance for Blake: "[s]uppose that the eye were an animal – sight would have been its soul, for sight is the substance or essence of the eye which corresponds to the formula, the eye being merely the matter of seeing" (II.412b19-20). It is meaningless to speak of sight without the eye, as it is to speak of soul without a body, and thus "as the pupil *plus* the power of sight constitutes the eye, so the soul *plus* the body constitutes the animal" (II.413a-3-4). Soul and body are inseparable, but must be kept distinct in principle. Aristotle's choice of analogy here opens up questions of perception, to which I will return at the end of this chapter, but for now this passage helps mark a distinction between early and late Blakean philosophy: in plate 12 of the *Marriage* the ancient Poets' senses become "enlarged & numerous" and Isaiah explicitly claims that he "saw no God. nor heard any, in a *finite* organical perception; but *my senses discover'd the infinite* in every thing" (E 38, my italics). Two plates later, Blake writes that man could see the infinite "[i]f the doors of perception were cleansed" (l. 17). Here the bodily eye, Blake's door, needs cleansing, but is nevertheless crucial for true sight – the soul and body are vitally inter-related; sensation could not occur without both. Perception of the infinite does not involve some spiritual vision in which the corporeal eye does not partake. In an oft-quoted later passage from *A Vision of the Last Judgment* (1810), however, Blake's metaphysics has clearly changed: "I question not my Corporeal or Vegetative Eye any more than I would Question a Window

concerning a Sight I look thro it & not with it" (E 566). While in the *Marriage* Blake *does* question the "Vegetative Eye" as crucially instrumental to sight, as is the case in Aristotle's analogy, in the later work Blake dismisses the inter-relation.

Aristotle also elaborates on the hierarchy of souls in Book II of *De Anima*, further subdividing the tripartite soul discussed by Plato; Aristotle identifies a five-part division: "the nutritive, the appetitive, the sensory, the locomotive, and the power of thinking" (414a30), reiterating his earlier point that plants have only the nutritive soul, incapable of perception.[18] Later, discussing human sense perception, however, Aristotle seems to abandon his efforts at division, and concedes that "[i]n a sense there is an infinity of parts [of the soul]" (II.432a24-25). Given the passage quoted above from I.411b, in which all parts of the soul are said to be "homogenous" and "indisseverable" from one another, and in which all parts of the soul are said to be present in each part of the body, Aristotle thus implies a Leibnizian infinite regress of souls (or monads) in each bodily part. Thus, even more so than in Plato, Aristotle's human contains a multitude of souls, each in-*form*ing the matter of the bodily parts with which they are interfused, and yet each also interfused with each other.

And the ambiguity does not end there, since for Aristotle, again following Plato's *Timaeus*, the highest reasoning portion of the soul *is* to some degree separable from the body, despite his claim at the outset of Book I that the body is declared a "condition of existence" for the faculty of thought. Aristotle writes that mind:

> seems to be a widely different kind of soul, differing as what is eternal from what is perishable; it alone is capable of existence in isolation from all other psychic powers. All

[18] In the *Nicomachean Ethics*, Aristotle confines his definition to a tripartite soul: the vegetative, responsible for nutrition and growth, the appetitive, responsible for perception, imagination, and movement, and reason, which belongs solely to humans (1097b33-1098a3).

> the other parts of the soul … are, in spite of certain statements to the contrary, incapable of separate existence though, of course, distinguishable by definition. (II.413b25-27)

As in Plato, the highest portion of soul, what Aristotle calls mind, appears different in kind from the lower, mortal portions, which are inseparable from the body. The mind, he repeats later, "whereby the soul thinks and judges … cannot reasonably be regarded as blended with the body" (II.429a23-24). Thus, any quick historical sketch that features Aristotle opposing Platonic dualism by bringing the eternal, immaterial Forms down to the material plane is problematized by such passages. As G. S. Rousseau and Roy Porter write, "as early as Aristotle, there was dissent from Plato's postulation of Ideas, or ideal forms, as the eternal verities indexed in the empyrean; yet in practice the Aristotelian corpus affirmed the equally comprehensive sovereignty of mind over matter in the natural order of things" (6).[19]

Priestley, in the history of the soul presented in the *Disquisitions*, recognizes such ambiguity in Aristotle's philosophy. He first refers to Aristotle's definition of the soul as an immanent entelechy within matter, and connects this definition to Leibniz's philosophy: "Aristotle, and all the ancients, admitted a motive force in matter, without which they could not complete the idea of a body. This is acknowledged by Malebranche, and especially by Leibnitz, and the Schoolmen" (337). Earlier in the work, though, Priestley recognizes Aristotle's notion of the immaterial mind that exists in isolation from the body:

> It is generally acknowledged that there is great uncertainty with respect to the opinion of Aristotle on this subject. It is probable that he was sometimes inclined to the opinion of man having no soul distinct from the body … But when he speaks of the soul as a

[19] Kenneth Rankin argues that in his "account of the faculty of intellect [Aristotle] introduces a dualistic conception of the relation between mind and body that squanders the theoretical economy of the Modal Identity Principle," which Aristotle has established elsewhere in arguing for an indisseverable soul-body entity (xvi). Aristotle's partitioning of the soul, Rankin also claims, "puts into question the unity of the soul – at least at the higher biological levels" (105). The same claim would of course also apply to Plato's division of the soul in the *Timaeus*.

> substance distinct from the four elements, and makes it to be a *fifth kind of substance*, it should seem that he meant to declare himself to be of the opinion of those who held the soul to be of divine origin, and to be eternal. (198)

Priestley's allusion to a general acknowledgement regarding Aristotle's position indicates that he is not alone among eighteenth-century readers and interpreters of Aristotle who recognize inconsistency in his account of the soul.[20]

Blake, I contend, evinces no such ambiguity in the context of the *Marriage*, which adopts Aristotle's concept of the soul as immanent substantial form, but rejects the faculty of thought as belonging to a transcendent substance that can exist in isolation from the body, just as it rejects the Platonic argument for a transcendent creator God. George Mills Harper is the one Blake critic I have found who recognizes Blake's eclectic adoption of Aristotelian elements in the *Marriage*, which opposes the Aristotelian logic and empiricism of the *Analytics* (which will be discussed in section VII), but which accepts the notion from *De Anima* that soul and body, matter and form, are inseparable. However, Harper writes that the Aristotelian notion of soul is "[i]n opposition to Plato" (92). I argue that the Plato of the *Timaeus* informs the Aristotelian idea of the soul that is evident in the *Marriage*.

The Stoics and Epicureans

Although ostensibly rivals with each other, and ostensibly emerging as alternatives to the predominant teachings of Plato and Aristotle, Stoic and Epicurean philosophies both share – with each other and with their philosophical forbears – similar ideas concerning the soul, and both

[20] Priestley names the Cambridge Platonist Ralph Cudworth as another reader who "says that it must needs to be left doubtful whether he acknowledged any thing immortal in us or not" (198).

schools demonstrate the same ambiguity on the subject. Moreover, aspects of Stoic and Epicurean thought inform the eclectic metaphysics demonstrated in the *Marriage*.

Zeno of Citium is commonly referred to as the founder of the Greek Stoic school that originated in the late fourth century B.C.E., and though other Greek philosophers such as Epictetus and Chrysippus are labeled Stoics, only a few fragments of actual text from the Greek Stoics have survived (Osler 1-3). Notable Latin Stoics include Marcus Aurelius, Seneca, and Cicero, whose Book II of *De Natura Deorum* (*On the Nature of the Gods*) provides a detailed description of Stoic cosmology. Although Blake, in his 1795-1796 illustrations to Edward Young's *Night Thoughts*, places Cicero's book among the volumes containing "Wisdom shallow: pompous Ignorance!" (Night the Fifth, ll. 735-36; E 670),[21] Stoic metaphysics offers a striking analogue to that which Blake presents five years earlier in the *Marriage*.

While Stoic ontology opposes the transcendent dualism that characterizes a work like Plato's *Phaedo*, it has much in common with the metaphysics of the *Timaeus*. Plato's *anima*, the all-pervading and active world-soul, becomes, for the Stoics, *pneuma*, an animating principle diffused within all bodies. Skrbina makes the important observation that the term *pneuma* was actually introduced by Aristotle, demonstrating again the intersection and overlap of the philosophies surveyed here. In "one of [Aristotle's] last works, *Generation of Animals*, [*pneuma*] is the 'faculty of all kinds of soul,' the 'vital heat'; the 'principle of soul' (736b29ff)" (49). The Stoic tradition seems to have adopted a similar definition, since, according to David E. Hahm, "the Stoics regarded the universe as a living creature, whose every motion and activity were due to an innate vital force" (175).[22] Insofar as their concept of *pneuma* pervades matter, "giving it

[21] Plato's explicitly dualistic early dialogue *Phaedo* is also among these volumes.

[22] Skrbina notes a key difference between Aristotelian and Stoic *pneuma*: "Unlike the pre-Socratics, the Stoics had differentiated soul from mind, equating mind with the pneuma (which was in all things)…. And their identification

all its qualities and motions as soul does in a human being, the Stoics approach the position of Plato" (176).[23] And just as Platonic *anima* is interfused with, yet theoretically distinct from, the body it pervades, and just as the Aristotelian hylomorphic soul-body is "indisseverable," so on the "Stoic conception, material substances can mix in such a way that each becomes coextensive with the other, so that there is no region in which one of the constituents subsists in unmixed purity" (Hahm 212). Hahm is here reading the *pneuma* as a material substance distinct from the material bodies it pervades in "total mixture"; he is not alone in this interpretation, and due to the long and multi-faceted Stoic tradition, one can find some writers treating *pneuma* as corporeal, while others discuss it as an immaterial substance.[24] Reid Barbour, however, argues that "the Stoics are prevailingly monists who believe that everything is material, and that the active matter of *pneuma* filling or investing passive matter is substantially one and the same as the reason that governs the human subject" (15).[25] Like Hahm, Barbour also notes the somewhat paradoxical idea for which the Stoics argue: "that two matters can mix through and through, yet maintain their status as discrete and jarring bodies" (204). As discussed above, this same ambiguity can be seen in Plato and Aristotle's notion of the corporeal/inferior soul co-extensive with the body.

At times, Stoic metaphysics approaches the extreme panpsychism of the passage in the *Timaeus* that declares the universe to be a "blessed god." Cicero, for instance, attributes to Chrysippus the argument that "the world, with an universal effusion of its spirit, is God" (*Of the*

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of pneuma with mind was a step Aristotle was unwilling to take" (56). The Stoics were thus "thoroughly panpsychist" (57).

[23] See also Peter Barker, who, like Hahm, links Stoic and Platonic ontology (151).

[24] Betty Jo Teeter Dobbs identifies Philo Judaeus (20 B.C.E.-50 C.E.) and Justus Lipsius (1547-1606) as two thinkers in the Stoic tradition for whom "*pneuma* was made spiritual and incorporeal but still mingled and blended with every body" (236-237).

[25] See also Margaret Osler, who writes that for the Stoics reason is "in, and bound up with, matter" (6). Barbour acknowledges "deep-seated conflicts in the major Stoic texts themselves" (15).

Nature of the Gods 28) and to Zeno the claim that "the law of nature [is] divinity" (26). Thus, in contrast to Aristotle, Stoic ontology, like that presented in the *Timaeus*, extends divinity beyond plants and animals. As Hahm observers, the fact that Aristotle had denied soul to the elements "was either ignored by [the Stoics] or unknown to them" (224).[26] Thus, according to Barker, "the Stoics offer a single, integrated physics of the heavens and the earth, in contrast to the sharp separation of the substance and physics of the heavens from the region below the moon in Aristotle and later Scholastic cosmology" (138).[27] Stoic cosmology thus integrates, or "marries" heaven and earth and this monist metaphysics aligns with *Marriage*.

And yet, as in the *Timaeus*, other passages of Stoic cosmology feature a creator God who, while distinct from the universe, is "immanent and active" within it (Dobbs 224). Despite this immanent activity, Stoic ontology is largely read as deterministic, and thus deism, or natural religion, can be traced back to it.[28] Thus, Leibniz's objection to Newton – via Samuel Clarke – in the exchange of letters discussed at the beginning of chapter one takes on new significance in light of these classical traditions. Leibniz, using the analogy of the watch that needs winding from time to time, objects to Newton's cosmology, which requires God's intervention in the universe. As a defender of natural religion, Leibniz argues for a creator God who remains separate, allowing for the soul-like monads to be immanently responsible for life, sentience, and motion throughout the entire material universe. Leibniz wants God as a first cause, but his determinism deviates from Stoic philosophy in the sense that Leibniz did not need God to be directly immanent and active within the universe. Newton, for whom God is much more

[26] Barbour observes that for English thinkers of the seventeenth century, Stoics are read "as the most insulting to God (because they identify God with nature)" (10).

[27] Stephen Gaukroger reiterates such a claim: "The cosmos of Zeno of Citium the founder of Stoicisim, was essentially that of Aristotle cleansed of its last traces of transcendentalism" (*Emergence of a Scientific Culture* 107).

[28] See Dobbs (224); M. A. Stewart suggests that Hume, in his *Dialogues Concerning Natural Religion*, was aware of deism's "Stoic roots" (288).

inextricable from the creation, is, in this aspect at least, much closer both to Stoic philosophy and to Blake's early metaphysics than Blake was either aware or willing to acknowledge.

Despite its determinism, which Blake rejects both in *No Natural Religion* and the *Marriage*, Stoic philosophy offers another striking parallel to the imagery and symbolism of the latter work, in that *pneuma* is said to be composed of a combination of fire and air.[29] Although Plato claims that the heavenly bodies are fire, the Stoic mixture of fire and air resonates even more strongly with Blake's *Marriage* designs. In the subterranean heaven/hell of the work's title page, the left side of the design features copious flames reaching toward and intermingling with a cloudy sky extending from the right, a cosmology microcosmically reiterated in the erotically embracing nude couples throughout the lower half of the plate (illus. 11). Plate 3 also features a combination of fire – the nude woman enjoying being engulfed in flames at the top of the plate – and air – the nude woman ecstatically giving birth atop clouds at the bottom (illus. 12). And the following plate depicts flames and sunny sky intermingling above water in the design beneath the text that introduces Blake's claims about the soul being a portion of the body (illus. 13). Moreover, the first line of Blake's poem emphasizes *pneuma*'s constituents, as Rintrah "shakes his fires in the burdend air" (E 33). This mixture of fire and air, which constitutes the Stoic *pneuma*, is for Blake also associated with universal energy and bodily desire.

Stoic *pneuma*, then, drawing from Plato's concept of the *anima*, in presenting a corporeal and yet divine substance interfused with creation, is another metaphysical precursor to the ontology presented in the *Marriage*, as wells as to variants of vitalism that also emerged in the decades before Blake was writing. Like Aristotle's conception of the soul as an "innate impulse," *pneuma* provides a model for the soul as an immanent principle of motion, life, and thought

[29] See Hahm (212), Barker (138), Dobbs (224), and Skrbina (54).

applying to all material things. The determinism implied by Stoic cosmology, however, is most antithetical to the eclectic philosophy Blake presents in the *Marriage*.

To avoid the ambiguous accounts of God's interaction with the material universe, as seen in Plato and the Stoics, Blake could have embraced the philosophy of the Epicurean school, which was elaborated in Lucretius's epic poem *De Rerum Natura* (*On the Nature of Things*). No *pneuma* or *anima* appears in Epicurean ontology, which consists solely of particulate atoms of various sizes and void; not only did the gods of Epicurus not create the earth, they are corporeal, remote, and otiose – uninvolved and unconcerned with events in this world. Moreover, the Epicurean version of atomism opposed that of Democritus, for whom atomistic motion was deterministic (Barbour 13). That Blake did *not* embrace Epicurean/Lucretian metaphysics is evident from his claim in his annotations to Reynolds that Bacon is "only Epicurus over again" (E 645), and his equation of Epicurean and Newtonian philosophy in the annotations to the same work (E 660); Blake also expresses consternation in the opening pages of his copy of Bacon's essays, declaring, "Every Body Knows that this is Epi[c]urus and Lucretius & Yet Every Body Says that it is Christian Philosophy how is this Possible" (E 620). Like most eighteenth-century readers, Blake seems in these passages to treat Epicurean/Lucretian philosophy as an atheistic materialism featuring dead atoms blindly swerving in a void.

But, as might be expected at this point, despite Blake's hostility to Epicurus/Lucretius in several places, there are aspects of such a philosophy that were not wholly antithetical to Blake, especially insofar as the *Marriage*'s celebration of bodily pleasures is concerned. Even Blake admitted as much, in his annotation to Lavater's claim that "[t]he purest religion is the most refined Epicurism. He, who in the smallest given time can enjoy most of what he never shall repent, and what furnishes enjoyments … is the most religious and voluptuous of men" – Blake

praises this aphorism as "True Christian philosophy" (E 591). Since for the Epicureans there was no afterlife and hence no need to fear death, the happiest life involved bodily pleasure, the latter equated with virtue (Barbour 14). A similar idea is found in several passages of the *Marriage*, as has already been shown: bodily energy is "eternal delight" and, as the Proverb of Hell proclaims, "The soul of sweet delight, can never be defil'd" (E 37).

Moreover, Lucretius's description of the corporeal soul in *De Rerum Natura* – which, unlike Plato and Aristotle, does not feature any immaterial portion – has resonances with the *Marriage*'s monistic soul-body entity. In the Epicurean system extensively described in Lucretius's didactic poem, not only are the inferior portions of the human soul as described by Plato and Aristotle also identified as corporeal – what Lucretius labels the *anima* – but so is the thinking and reasoning portion, which Plato and Aristotle designate as immaterial. For Lucretius this *animus* is also composed of ultra-fine particles, and is seated in the breast. In book II of the poem, these particles are said to "undiscern'd, and hidden from our Sight" (l. 133).[30] Book III continues at length with a description of the human soul, which, together with the mind, "[m]ake up one single Nature, closely join'd" (l. 135). It is evident that by "soul" here Lucretius is referring to the corporeal soul of Plato and Aristotle, while "mind" is "the ruling part, / call'd reason, and 'tis seated in the heart" (III. ll. 136-37).[31] Reason also predominates in the Epicurean hierarchy, and, as in Plato and Aristotle, it is intimately connected to and mutually affected by the bodily soul (III. ll. 159-60), the latter of which is "thro' all / Our limbs *diffused*" (III. ll. 211-12, my italics). However, unlike in the Platonic and Aristotelian accounts, the mind is "material too," which explains its ability to affect the body via physical contact (III. ll. 162-66). The mind

[30] See also l. 120, in which the atoms are said to be "hid from sense." All quotes from the poem are taken from the fifth edition of Thomas Creech's translation (1722). I have modernized the typography while retaining the spelling.

[31] The soul is later designated "the inferiour part" (III. l. 140).

is composed of "small and subtile" bodies (III. l. 180), and upon death, because it is "earth-born," it does *not* – as it does in Plato – "take its flight" (III. ll. 174-75). Thus far, Lucretius expounds a monistic soul-body system that resonates with Blake's account in the *Marriage*.

And yet, even the Epicurean system cannot avoid ambiguity. Although mind and soul, together with the grosser bodily atoms, "comprise / three things," this is still insufficient for sense and thought to emerge (III. 229-231). Thus Lucretius introduces a nameless "fourth thing to this frame," an even more refined corporeal "something" whose "parts are smooth, small, subtile" (III. 232-34), and which serves as the first cause within the human form, setting the mind, soul, and body in motion. Lucretius insists on the materiality of this "nameless force within the soul" (III. l. 268), yet he is helpless to describe its interaction with the less refined mind, soul, and body. Here Lucretius blames language for his mystery-mongering: "now my flowing verse / The poorness of the Latin tongue does check" (III. ll. 251-52). Nevertheless, despite helping himself to a mysterious and inexplicable fourth "something" as the ultimate cause of thought and sense in the mind and soul of man, Lucretius repeatedly emphasizes the inseparability of material soul and material body: "Nor can the soul and body, separate / Perceive or think in their divided state" (III. ll. 317-18). The mind and soul – and the fourth element – all die with the bodily frame, and towards the end of Book III Lucretius admits of the possibility that "the scatter'd ashes" that composed us could "be join'd again, and life and sense return," though the memory of any former life would be absent (ll. 824-47). In articulating the possibility of eternal recurrence Lucretius approaches an idea shared by his ostensible rival – the Stoics – as well as prefigures the materialist manner in which Priestley interprets Christian resurrection.[32]

[32] The idea of eternal recurrence is an ancient one, but was popularized by Nietzsche in the nineteenth century; see *The Gay Science*, sections 285 and 341.

Like Aristotle, Lucretius then uses the eye to elaborate on the inter-dependence of soul and body, and the language here is even more strikingly close to the "doors of perception" passage in the *Marriage*. Lucretius dismisses the idea, expressed in Blake's *A Vision of the Last Judgment*, that the soul looks through but not with the eye: "That eyes no objects see, to sight expos'd; / But that the soul, as through wide doors unclos'd, / Looks thro' them, is plain nonsense" (III. ll. 341-43). If this were the case, "[o]ur sight would stronger, quicker, better prove, / If, th' eyes plucked out, we all the bars remove" (III. ll. 353-54). On the contrary, because our vision is impaired when the eyes are dazzled by too much brightness, the soul clearly looks *with* the eye, and, as in the *Marriage*, the eyes need cleansing, not removing, if true sight is to occur. The perceiving mind, for Lucretius and Blake in his early work, is indisseverable from the body, and "can't live, divided from the whole, / the limbs …. Nor can the soul, without the limbs, dispense / her vital pow'rs; nor limbs, without the soul, have sense" (III. ll. 528-535). The soul, "spread o'er all" sustains the life of the body via "vital union with the nerves" (III. ll. 539-540), which serve as intermediary between the two types of material entities. The soul, Lucretius concludes, cannot "rise without the blood, / and nerves, and veins, and bones" (V. ll. 143-44).

Other Epicurean parallels with the metaphysics in the *Marriage* include Lucretius's claim that there is no transcendent creator God animating the atoms of the Epicurean universe: nature, this "mass of matter," is "free / From the proud care of any meddling deity." Through matter's own "private strength," it can move "without the trouble of the pow'rs above" (II. 1045-48). Moreover, Lucretius declares that man, possessed of as much wisdom and skill as the pagans imputed to their deities, is thus "more a god" than Bacchus and Ceres (V. l. 21), just as Blake claims in the *Marriage* that God only acts and is in existing men. And since there is no all-

powerful creator guiding earthly events, Lucretius preserves individual free will in his system as well, opposing the determinism of Democritus's version of atomism. In his famous passage concerning the swerve – or *clinamen* – of atomic descent, Lucretius writes that the "seeds," or atoms, "decline / tho' very little from th'exactest line" (II. ll. 234-35) as they descend through the void. If all particles moved only in straight lines downward, he asks, "whence comes this perfect freedom of the mind?" (II. l. 245). In human bodies, the "declination," or subtle movements of the ultra-refined soul particles, works to counter nature's "necessity" and "fate's rigid laws" (II. ll. 278-80). This anti-determinism is an analogue to Blake's philosophy in the *Marriage*, where it is a sin is not to freely act upon desire.

However, there are striking dissimilarities between the Epicurean universe and that depicted in Blake's early work. As atoms, Lucretius's particles, though constituting the soul, are non-sentient; even those things perceived to be sensible are composed of insensible elements. The sensibility of living organisms depends then on the size and shape of the particles (II. ll. 390-410), which are finite ('tis downright folly to admit, / That this variety is infinite" (II. ll. 471-72)[33]) as well as their motions, order, and positions (II. l. 549). Indeed, in direct contrast to the Platonic and Stoic characterization of the universe as a "blessed god," Lucretius writes, "the earth wants sense" (II. ll. 715-16) and even the heavenly bodies are "so unlike the Gods," being as they are without life and sentience (V. ll. 134-37). It is only in virtue of particular combinations of lifeless atoms that the properties of sensation and life emerge: "those composures that perceive, / Ennobled all with various sense, derive / their beings from insensibles, and live" (II. ll. 815-17).[34] The rearrangement of such insensibles is responsible for

[33] Though the variety of atoms is finite, their total number is infinite (II. ll. 535-36).

[34] This theory of emergence – whereby larger systems exhibit properties not found in the simpler, component elements that comprise those systems – remains popular among contemporary philosophers. See, for instance,

spontaneous generation, evidenced by worms and flies springing from "putrid and fermenting clods" (II. l. 821).

Lucretius's emergent position contrasts that of the panpsychism of passages in Plato and Stoic philosophy; the Latin poet argues that since the hand separated from the body can no longer feel, so individual atoms do not have sentient properties (II. 867-870). Such blows to the "vital pow'rs" operating in organized systems of matter serve as evidence that life only inheres in particular aggregations of particles – when the system is disrupted, the ultra-fine soul is driven "out [of the dying body] at ev'ry pore" (II. ll. 905-910). In Book III Lucretius claims that such vital powers are material, since it is "chiefly heat and air" that "make life within us" (ll. 121-23), thus prefiguring the materialism that will proliferate in mid- and late eighteenth-century natural philosophy. Stephen Gaukroger encapsulates this major difference between Stoic and Epicurean ontology: "the Epicureans conceived of the fundamental constituents of the world as being inert corpuscles, whereas Stoic holism and the tendency to model the cosmos on analogy with a living organism precludes any constituents being called inert" (*Emergence of a Scientific Culture* 108). In this sense, Epicurean metaphysics is opposed to Blake's concluding claim that every thing living – which in the *Marriage* and other early works includes *all* material objects – is holy.

Lucretius thus presents a truly monist ontology wherein the soul and body are indisseverable and corporeal entities. As such, the Epicurean system does not have to address the troubling issue that plagues even Aristotle's metaphysics – how exactly does an immaterial entity interact with a material one? As in Blake, all body is infused with soul. Additionally, Lucretius preserves human free will, and dismisses the idea of a transcendent god interfering in the material creation. These aspects of Epicurean philosophy find favorable reception in the

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Terence Deacon's *Incomplete Nature* for a recent account of emergence among biological forms. Discussing Lucretius, Skrbina distinguishes between perception, which is an emergent phenomenon, and will, which is not, since individual atoms possess it (53).

Marriage. But, as with all traditions surveyed thus far, there are aspects that Blake's philosophy rejects: in the *Marriage*, for one, the soul extends beyond the living human body and, though perhaps corporeal, is also divinity infusing the universe. In this regard, Blake is closer to the Stoics and Platonists than to Epicurus/Lucretius. What is more, Blake's material forms – including the human soul-body entity – are reducible to energy, not to insensible, solid, and lifeless atoms (refined thought they may be) and void, as they are described in *De Rarum Natura*.

The Neoplatonists

The final classical tradition that informs the natural philosophy of the eighteenth century and the eclectic metaphysics of Blake's *Marriage* is that of the Neoplatonists. As might be expected, Neoplatonist writers – such as Plotinus, Proclus, and Porphyry – adopted aspects of Platonic, Aristotelian, Stoic, and even Epicurean philosophy while also trying to distinguish their own metaphysics. I focus here on aspects of Neoplatonic thought that resonate most strongly with Blake's philosophy. Just as most scholars who have discussed Plato in connection with Blake have treated Plato as a strict dualist, so have most critics who have discussed Blake's Neoplatonic aspects. For instance, Harper's *The Neoplatonism of William Blake*, in addition to largely treating Blake's entire corpus as philosophically unified, also aligns dualist Platonic and Neoplatonic thought in strict opposition to Aristotle's philosophy.[35] If anything, I hope this section has shown that such rigid lines cannot be drawn between these ostensible rivals. The Neoplatonism I wish to emphasize, as articulated in Plotinus's theory of divine emanation, is

[35] Other critics who take a similar position include Raine, who states, "a theme Blake learned from Neoplatonic sources: the myth of the soul which 'descends' from an eternal world or state, undergoes experience and suffering in the world of generation, and returns at last to her native purity" (1: 67). See also Désirée Hirst, who contents that Swedenborg's profoundly dualistic system is Neoplatonic in origin (226).

decidedly more panpsychic than strictly dualist, and has clear parallels to Plato's notion of the all-pervading *anima* in the *Timaeus*.

Plotinus's (204-270 B.C.E) first tractate of the first *Ennead* is expressly concerned with "the animate and the man," as its title indicates, and not only does Plotinus frequently cite the *Timaeus* here and throughout the *Enneads*, he bases his inquiry into the soul on Aristotle's *De Anima*. And as in the *Timaeus*, Plotinus's initial and subsequent dualistic claims are problematized by a notion of soul that is inextricably interfused with material creation, also similar to Stoic *pneuma*.[36] He writes, for instance, "We may treat of the Soul as in the body – whether it be set above it or actually within it – since the association of the two constitutes the one thing called the living organism, the Animate" (1.1.3, 5). And although he asserts a "philosophical separation" between the soul as agent and body as instrument, just as Aristotle had maintained a theoretical distinction between the two, Plotinus confesses that "[c]learly there is a combination" (1.1.3, 5). After considering the possible modes by which soul and body might be combined, Plotinus opts for the immaterial/material hierarchy featured in both the *Timaeus* and *De Anima*:

> There is no reason why the entire compound entity should not be described as the Animate or Living-Being – mingled in a lower phase, but above that point the beginning of the veritable man, distinct from all that is kin to the lion, all that is of the order of the multiple brute. And since The Man, so understood, is essentially the associate of the reasoning Soul, in our reasoning it is this "We" that reasons, in that the use and act of reason is a characteristic Act of the Soul. (1.1.7, 9)

The reasoning part of man is united to what Plotinus calls the "Intellectual-Principle" or the "Divine-Mind" that emanates through all of creation and as such is separable from the individual

[36] Barker argues that Stoic ideas were assimilated into Neoplatonism (140).

body, into which it "shines" (1.1.8, 10). The "true man" (1.1.10, 11, called the "veritable man" in the long passage quoted above) for Plotinus is equated with reason, and is "kept apart" and "pure of" the body (1.1.10, 11), descended as it is from "the One" transcendent God. Blake also uses the phrase "true man," but for him, as described in *All Religions are One*, the true man is not reason, but the divinely immanent Poetic Genius, or imagination, in man (pls. 4 and 10). Blake's imagination, unlike Plotinus's reason, is not a transcendent, immaterial faculty. This distinction, which is developed in the *Marriage*, will be discussed at greater length in section VII, but for now it is enough to note that though Blake and Plotinus use the identical phrase to differentiate man from other living organisms, their meanings are radically different.

Like Aristotle and Plato before him, Plotinus reserves the reasoning portion of the human soul as a separate, pure element, which emanates from "the One" down through "the Intellect" and into the world-soul, where it is divided among individual humans. This transcendent hierarchy has little in common with Blake's metaphysics in the *Marriage*, but in characterizing the soul-body "mingling" in the "lower phases" of creation, Plotinus demonstrates a panpsychism that does overlap with Blake. Man's twofold character – as soul-body composite and transcendent reasoning soul – is later articulated by Plotinus to be a microcosm:

> every human Being is of twofold character; there is that compromise-total and there is the Authentic Man: and it is so with the Cosmos as a whole; it is in the one phase a conjunction of body with a certain form of the Soul bound up in body; in the other phase it is the Universal Soul, that which is not itself embodied but flashes down its rays into the embodied Soul. (2.3.9, 83)

Although, like Plato, Plotinus often writes disparagingly of the lower forms of life, stating that "[a]ll that is graceless is admixture," he contends, citing the *Timaeus*, that "the Universe is in

truth a thing of blend" (2.3.9, 83), and that "[a]ll things must be enchained" (2.3.7, 81) insofar as they partake of the divinity emanating down through the universe. Plotinus's panpsychism and panentheism are made even more explicit in the later *Enneads*, wherein he argues that all things are capable of contemplation, that "Nature is a Soul, offspring of a yet earlier Soul of more powerful life" (3.8.4, 236), and that "through soul this universe is a God: and the sun is a God because it is ensouled; so too the stars: and whatsoever we ourselves may be, it is all in virtue of soul" (5.1.2, 349). The great chain of creation is at all points divinely suffused, though to varying degrees. Man's task is to ascend on such a chain toward "the One," in whose nature his reason shares. Accordingly, Leopold Damrosch writes, "When Blake says that body is a portion of soul, he means as Plotinus does that the soul is not lodged in a container but on the contrary 'as the superior reality contains the sensible universe.' … 'Plotinus does not have two worlds, but only one'" (*Symbol and Truth* 167).[37] McFarland concurs with Damrosch in seeing Plotinus as a pantheist; despite the divided realms of the latter's system, McFarland claims that they are "the inner elaboration of a monistic One" (285).[38]

Plotinus's claim that the universe is a God bears repeating in light of Blake's claim both in the *Marriage* and *No Natural Religion* that man is God. Despite their differences, all of the classical philosophies surveyed thus far argue that man – at least some *part* of man – is god-like. Even Epicurean ontology, which has little room for gods, implies that man's reasoning soul is self-sufficient and equally capable of the wisdom purportedly conveyed by Bacchus and Ceres.

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[37] Damrosch is quoting from John N. Deck, *Nature, Contemplation, and the One: A Study in the Philosophy of Plotinus*. Damrosch proceeds to argue that "in both Plotinus and Blake that matter is a falling away from reality" and "The natural world, whether illusory or real, remains to be transcended" (168, 170), claims that apply more accurately to Blake's later work and not to the *Marriage*, as evidenced by Damrosch appeals to quotes from *Jerusalem* and *A Vision of the Last Judgment* to support his argument.

[38] See also Michael Levine, who cites Plotinus for his assertion that "If pantheism requires a creation doctrine, some type of emanationism seems most plausible" (176). And Hilary Armstrong writes that Plotinus "may help us … to do something towards closing the gap between man and non-human nature which has been widening through the Christian and rationalist centuries with, as we are now beginning to seem disastrous results" (188).

This is a far cry from the empiricism of Locke and Berkeley discussed in the first chapter, both of whom posit an un-traversable gulf between God and man, marked on one end by the infinitude of the former and on the other by the finitude of the latter.

Plotinus takes this point further than any of the traditions discussed above. Since it is divine, the human soul isn't just a passive receptacle – it too, like God, can emanate, and, in the Blakean sense, create. In a passage that sounds remarkably anti-Lockean, Plotinus writes: "For certainly we cannot think of the Soul as a thing whose nature is just a sum of impressions from outside – as if it, alone, of all that exists, had no native character" (2.3.15, 88). The emanation in the universe is not simply a downward flow from the One, since the human soul can desire and act, often in contrast to the larger emanation. Plotinus writes, "Perhaps there is no need that everything be good. Contraries may co-operate; and without opposites there could be no ordered Universe: all living-beings of the partial realm include contraries" (2.3.16, 89). This statement strikingly prefigures Blake's famous claim in the *Marriage* that "Without Contraries is no progression" (pl. 3, l. 8). Plotinus, like Plato before him, also offers an emanative theory of perception, to which I will return in section VII. For Plotinus, as for Blake, man projects divinity, and is not merely a passive vessel to be activated by a transcendent God.[39]

Thomas Taylor's introduction to his 1793 translation of the *Timaeus* emphasizes the connection between Neoplatonism and Platonism insofar as the panpsychist universe is concerned. In addition to citing the third *Ennead*, wherein Plotinus argues – *contra* the atomists – that matter "has no solidity" (qtd. in Taylor 431), Taylor quotes at length from another Neoplatonist, Proclus, whose panentheism is equally explicit:

[39] In his magisterial work, *The Mirror and the Lamp*, M. H. Abrams traces the eighteenth-century aesthetic shift from mimesis (mirror) to emanation (lamp) to its classical origins: Aristotle provides the aesthetic model for mimesis, while the emanative poetics developed by Wordsworth and Coleridge have their roots in Plotinus's philosophy (58-59). Abrams does not discuss Blake in this regard, however.

> The true earth, therefore, is not this corporeal and gross bulk, but an animal endued with a divine soul and a divine body. For it contains an immaterial and separate intellect, and a divine soul energizing about this intellect, and an ethereal body proximately depending on this soul; and lastly, this visible bulk, which is on all sides animated and filled with life from its inspiring soul, and through which it generates and nourishes lives of all-various kinds. (qtd. in Taylor 416)[40]

Whether one calls the interfused and immanent divinity in all of material creation *anima*, or *pneuma*, or an emanation from the One, Blake's ultimate claim in the *Marriage* that every thing living is holy can be traced back to these overlapping classical ontologies.

2.3 The Soul in Early Modern Philosophy

Before moving into the eighteenth-century natural philosophical context from which Blake's *Marriage* emerges, this section first surveys how the classical philosophies discussed in the previous section become adopted, combined, and refashioned in the metaphysics of several early modern thinkers. As above, this brief discussion is not meant to provide exhaustive summaries of the complex entireties of any of the figures, but rather to focus on the crucial ontological issues that predominate in Blake's early work: the ambiguous/divine materiality of the soul, both microcosmically as it relates to the human body and macrocosmically as it pertains to God's interaction with the material universe.

[40] Proclus is quoted at length a page later, expressing the same idea: "it would be ridiculous that man should participate of a rational soul and of intellect, but that earth and air should be deprived of a soul, sublimely carried in these elements as in a chariot … Hence, there must necessarily be a soul and intellect in the earth, the former causing her to be prolific, and the latter connectedly containing her in the middle of the universe. So that earth is a divine animal, full of intellectual and animastic essences, and of immaterial powers" (Taylor 417).

Paracelsus, Bruno, and Spinoza

The panentheism implied in the *Timaeus*, as well as in Stoic and Neoplatonist texts, finds a direct early modern descendant in the writings of Paracelsus, Giordano Bruno, and Baruch Spinoza, the latter of whom makes the radical modification of panentheism to pantheism that we see in Blake. Paracelsus is specifically named in the *Marriage*, and while Blake does not reference a particular work, Walter Pagel argues that "[i]n the ideas of Paracelsus elementary matter is at the same time soul, force and power, just as much as soul is approximate to matter and 'materialized'" (89), a claim that could be applied to the *Marriage*. Paracelsus's depiction of the natural world, Pagel claims, follows upon that of Plotinus, since for the former nature "is the total of the acting Invisible, the spiritual forces that create form and are active in matter … Matter itself is seen as an emanation" (224). Chapter two of a 1656 translation of *Of the Supreme Mysteries of Nature* would seem to bear this out; Paracelsus writes, "now we come to speake of a manifold spirit or fire, which is the cause of variety and diversity of creatures, so that there cannot one be found right like another, and the same in every part; as it may be seen in Metals, of which there is none which hath another like it self" (3). Not only is the spirit/fire present in non-living creatures, it is distinct in each one, and the cause of the diversity of material forms. S. Foster Damon contends that while in Blake "[t]he influence of Plato … was very deep; less fundamental, but more direct, was the influence of Paracelsus" (*Philosophy and Symbols* 166). He draws an intriguing connection between the Proverb of Hell, "He whose face gives no light, shall never become a star" (E 35) and the preface to Paracelsus's *Hermetic Astronomy*: "Now, those who give light on earth as torches in the light of Nature shall shine, through Christ, as stars forever" (319).

The ontology of Bruno's Renaissance Neoplatonism shares the panentheism of Paracelsus's metaphysics. His ideas are explicitly introduced in his early work, *De la Causa, Principio, e Uno* (*Cause, Principle, and Unity*, 1584). In the second dialogue, Bruno's spokesman Teofilo responds to Polinnio's skeptical question about the possibility of a dead person having a soul with the following assertion:

> All things, no matter how small and miniscule, have in them part of that spiritual substance which … disposes itself to be plant, or to be animal, and receives the members of such or such a body, commonly qualified as animated, for in all things there is spirit, and there is not the least corpuscle that does not contain within itself some portion that may animate it. (44)

And though Teofilo is here discussing plants and animals, he clearly extends his panpsychist atomism to all material objects: "spirit is found in all things which, even if they are not living creatures, are animate" (44). Bruno's debt to Plato's late concept of *anima* is signaled a page later, as Teofilo argues, "The world soul, therefore, is the formal constitutive principle of the universe and all it contains" (45).

In his later essay *De Magia* (*On Magic*, 1588), Bruno reiterates these ideas: "all things are full of spirits, souls, divine power, and God or divinity, and … the whole of intelligence and the whole soul is everywhere" (129). This "whole soul," which is adopted from Platonic *anima* and Stoic *pneuma*, "is reflected by all particles of matter" (129), similar to the infinite regress of Leibnizian monads within all material bodies.[41] Each individual soul, on this account, "is in contact with the universal soul" (113). Bruno also contends elsewhere, in his *De Immenso* (*The Boundless*) that there is no divinity distinct from its manifestation as the natural, corporeal

[41] Skrbina also notes the panpsychist similarities between Bruno and Leibniz (96), the latter of whom I don't include in this history only because I discuss his philosophy in chapter 1.

universe (Ingegno xx). Another work, *Eroici Furori* (*The Heroic Frenzies*), similarly argues for divine immanence and the conflation of man with God (Couliano 68). It is no surprise then that contemporary philosopher Graham Harman calls Bruno a "Neo-platonist" for whom "[t]he universal intellect is really the sole efficient cause of all that occurs, and the world soul is the only genuine formal cause" ("On the Undermining of Objects" 32).[42]

Bruno's reference to the "particles" of matter in the quote from *De Magia* above signals his debt to Epicurean atomism, which he combined with the Neoplatonic and Stoic tradition. Bruno's atoms are animated, as Barbour explains, citing passages from *Cause, Principle, and Unity*:

> [the atoms are] the media through which God's spirit is diffused into an infinite universe. But Bruno goes further than this. The atoms are not just vessels to be tossed away once the spirit has entered and reclaimed the world; rather, the minima have a close correspondence to the maximum, to divinity itself. The analogy between the atoms and God verges at times on identification, although Bruno sometimes withdraws from such a position. (61)[43]

Bruno's ontology is thus a prime example of how seemingly opposing traditions – in this case the atomism of Epicurus/Lucretius and the panentheism of Plato, the Stoics, and Neoplatonists – can be co-opted in a single metaphysical system. In Bruno's system, God is only manifest via the material world, as Gaukroger writes: for Bruno, "matter is simply absolute possibility or potency,

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[42] Harman continues, "[g]iven that the formal cause of the world is the world soul, everything that exists has soul. It would be easy to call this 'panpsychism', but 'pan-' implies a multiplicity of souls that simply does not exist in Bruno's standpoint" (32). I contend, however, that Bruno's use of the plural in "spirits" and "souls" in the quotes from *On Magic* at the beginning of this paragraph challenge such an assertion.

[43] Barbour earlier quotes from Bruno's *Lo Spaccio de la Bestia Trionfante* (*The Expulsion of the Triumphant Beast*) for an example of his "vitalistic atomism": "[e]verything, then, no matter how minimal, is under infinitely great Providence; all minutiae, no matter how very lowly, in the order of the whole and of the universe, are most important; for great things are composed of little ones, and little things of the smallest, and the latter, of individuals and of minima" (35).

and is coeternal with God, who has to realize himself through his action in the world" (*Emergence of a Scientific Culture* 114). This resonates with Blake's claim in the *Marriage* that "God only Acts & Is. in existing beings or Men" (E 40), and is therefore, according to Thomas McFarland, good reason for including Bruno in the pantheist tradition (60). Similarly, Paul Henri Michel writes that for Bruno "God penetrates nature, and matter itself 'is divine'" (60).

For Plato, the Stoics, and the Neoplatonists, although the universe is a god, the ultimate creator god is reserved a place outside of divinely infused creation – hence their panenetheism. This is not the case for Spinoza, who writes, in a 1662 letter, "I do not separate God from nature, as everyone known to me has done" (qtd. in Curley xvii). This pantheism approaches more closely that presented in Blake's *Marriage*. In the first book of his *Ethics* (1677), Spinoza defines God as the sole substance in the universe: "By God I understand a being absolutely infinite, that is, a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence" (I.D6).[44] Spinoza elaborates further, echoing Aristotle's idea of immanence: "God is the immanent, not the transitive, cause of all things" (I.P18) and since "[w]hatever is, is in God, and nothing can be or be conceived without God" (I.P15), then "I do not know why [matter] would be unworthy of the divine nature" (I.P15S).[45] The repetition of "infinite" in the quote from I.D6 aligns Spinoza with the panpsychist aspects of Leibniz's ontology as discussed in chapter one; since, for Spinoza, humans and all material creation are

[44] Spinoza later writes, "Except God, no substance can be or be conceived" (I.P14) and "in Nature (by P14C1) there is only one substance, namely, God" (I.P30D). In my citations of Spinoza's geometric structuring of the *Ethics* by way of demonstration from definitions and axioms, D refers to Definition, P to Proposition, and S to Scholium, and C to Corollary.

[45] Spinoza repeats this claim in Book II: "the things we have shown so far are completely general and do not pertain more to man than to other individuals, all of which, though in different degrees, are nevertheless animate" (II.P13S).

attributes of God, everything partakes of the infinite.[46] Gilles Deleuze admires in Spinoza's philosophy "the total absence of hierarchical powers and the freedom from vertical axes of descending grace. Being is univocal, equal to itself, and offers itself equally to all beings" (*The Deleuze Reader* 6).

Spinoza's God is thus identified with what he calls the *natura naturans*, earlier defined as "the first elements of the whole of nature" (Curley xvii), and whatever follows from this fundamental nature is designated *natura naturata* (I.P29S).[47] All of these particular things, including humans, are not substances in their own right – since God is the only substance – but rather "are nothing but affections of God's attributes, *or* modes by which God's attributes are expressed in a certain and determinate way" (I.P25C). Everything is thus alive and holy in Spinoza's universe, and his ontology resembles Blake's insofar as God is not a transcendent being distinct from the world, but rather a fundamental principle of explanation within it. As Ann Thomson observes, Spinoza's extreme form of pantheism was "generally understood as a sort of atheism positing the existence of only the material world which was God" (*Bodies of Thought* 51).[48] Indeed, although they fundamentally disagreed on most ontological matters, Leibniz and

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[46] Leibniz however disagrees with Spinoza that there is only one universal substance – as discussed in chapter one, he claims that there are an infinite number of immaterial souls, always accompanying a material body. See his "Consideration on the Doctrine of a Universal Spirit" (1702), where he calls Spinoza's one-substance theory "not very far removed from the doctrine of a single, universal spirit" and then states that when such thinkers "go so far as to say that this universal spirit is the only spirit and that there are no souls or individual spirits … I believe that they pass the limits of reason, and advance, without grounds, a doctrine of which they have not even a distinct notion" (*Philosophical Works of Leibnitz* 139, 140-41).

[47] For Michael Levine, this distinction indicates that Spinoza did not simply identify God with the natural world, of which he was commonly accused (28).

[48] Thomson continues, "Spinozism was thought to be a system of thinking matter that undermined Christian teaching on the soul and needed to be refuted" and "was often interpreted as a type of pantheism, in particular by the Newtonian mathematician Joseph Raphson, who seems to have been the first to use the word, in Latin in *De spatio reali* (1697), where he distinguishes it from materialism and atheism" (53, 54).

Clarke agreed with the assessment that Spinoza was an atheist, as McFarland notes (72).[49] Michael Levine contends that the reason pantheism and atheism were conflated is that pantheism posited an impersonal, non-anthropomorphic deity (3). Spinoza's is a prime example of what Levine calls a "non-theistic concept of divinity," and his one-substance ontology finds an analogue in Blake's annotations to Swedenborg's *Divine Love and Divine Wisdom*: "Essence is not Identity but from Essence proceeds Identity & from one Essence may proceed many Identities as from one Affection may proceed. many thoughts" (E 604). Blake's "many Identities" proceeding from "one Essence" parallel Spinoza's many affections/attributes/modes proceeding from one God.

Furthermore, Spinoza avoids the dualist difficulties of other systems by treating mind and body as simply different attributes of the same single substance in the universe: God. In Book II he claims, "the thinking substance and the extended substance are one and the same substance, which is now comprehended under this attribute, now under that" (II.P7S). According to Levine, this "psycho-physical parallelism is a form of panpsychism" (141 n. 22).[50] The idea of an immortal and immaterial soul, fundamentally distinct from the extended body is not evident in Spinoza's system, and his early biographer Jean Lucas quotes him as saying, "wherever Scripture speaks of it, the word 'soul' is used simply to express life, or anything that is living. It would be useless to search for any passage in support of its immortality" (qtd. in Curley xiv).

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[49] However, McFarland continues, most Romantics considered Leibniz a Spinozist (89). McFarland lists a great number of anti-Spinozist tracts published throughout the eighteenth century, which he sees as evidence that "very few people before the late eighteenth century were emotionally prepared for Spinoza's vision of reality" (265). According to McFarland, Spinoza's revival occurred in Germany, beginning with figures like Gotthold Lessing and Johann Herder (77-79). Levine also claims, "Like 'atheism' the term 'pantheism' was used in the 18c as a term of 'theological abuse'" during this period (17 n. 2).

[50] Skrbina thus refers to Spinoza's "dual-aspect monism" and links Spinoza to Bruno in this regard, since the latter also "saw matter as one substance that exhibited two modes: *potenza* (power), and *suggetto* (subjectivity)." Power connotes the materiality of a body, while subjectivity refers to its soul-like capacities (75). But, according to Skrbina, "God for Bruno still had aspects of a transcendent being: Spinoza is very clear in his total and complete identification of God with Nature" (88).

Since human bodies and minds are both attributes of God's infinite substance, "the human mind is part of the infinite intellect of God" (II.P11C) and thus "has an adequate knowledge of God's eternal and infinite essence" (II.P47). This equivalence of the human mind and God is of course in keeping with the classical traditions discussed above.[51]

Thus far, Spinoza, radically modifying the panentheism of his Platonic and Stoic predecessors, prefigures the ontology in Blake's *Marriage*. And though there is much in Spinoza's system that is foreign to Blake's philosophy – his elevation of the intellect above the imagination and his claim that "[i]n the mind there is no absolute, or free, will, but the mind is determined" (II.P48)[52] to name but two – I stress here the ontological aspects of Spinozan thought that match the metaphysics found in several of Blake's writings discussed thus far: *No Natural Religion*, the *Marriage*, and even the annotations to Lavater and Swedenborg. Thus, Jonathan Israel's assessment of Spinoza's contribution to the intellectual tradition highlights his similarity with Blake: "Spinoza's was the system most wholly opposed to physico-theology, and the 'argument from design', indeed all teleology, and, hence, the system most contrary to Newtonianism, the principal intellectual prop of natural religion, Deism" (766).

Another important aspect of Spinoza's system as it relates to Blake's early metaphysics is the close connection between the former's pantheism and his moral philosophy. I have been outlining Spinoza's ontology, but the work in which it is elaborated is entitled *Ethics*, which is his ultimate concern. The structure of the work implies that ethics must be grounded in ontology, and as Michael Levine argues, Spinoza "can non-fallaciously argue from matters of fact to those

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[51] And just as Leibniz's Theophilus admonishes his Lockean interlocutor for his imagism, Spinoza also warns his readers "to distinguish accurately between an idea, *or* concept, of the mind, and the images of things which we imagine" (II.P49S).

[52] According to Levine, "Although strict determinism may be intrinsic to Spinoza's system it is no way intrinsic to pantheism *per se*" (214).

of value" (40). And the problem of evil, Levine claims, is Spinoza's central concern in the *Ethics*, an evil action for a pantheist being "one that works against the Unity" (209). In the *Marriage* Blake makes plain that true evil is not what priestcraft dictates as being from the body, but rather it is the very structured hierarchies – the result of an ontological dualism – that enable the priests to seize power. A monist ontology that treats all particulars as divine does not lend itself to the evils of oppression and control, which Levine points out are not concerns for pantheism, since "[e]verything that is part of the divine Unity (as everything is) is also part of the moral community" (233).[53]

In the philosophical history of the soul given in the *Disquisitions*, Priestley clearly identifies both Spinoza and Bruno as pantheists from whom his own ontology differs. In setting himself in opposition to Andrew Baxter's *Enquiry into the Nature of the Human Soul* (1733), Priestley accuses Baxter – unfairly, as I will explain in section V – of identifying God with the action and essence of all of material creation, acknowledging that Baxter was not the first to have done so: "The opinion that all the powers of matter are nothing but the immediate agency of the Deity, is not peculiar to Mr. Baxter, though it is that which chiefly distinguishes his writings. It was held by the famous Jordano Bruno" (9). Priestley then proceeds to quote from a French edition of Bruno's works (which Priestley had translated):

> All the motions which strike our senses, the resistance which we find in matter, are the effect of the immediate action of God. The smallest parts of matter are united by a force; and as there is no active force in nature but that of God; this being is the infinite force

[53] Levine makes a particularly Blakean statement in this regard: "Organised religions are seen as divisive and exclusivist, and churches perhaps are seen as essentially anthropocentric. It is for these kinds of reasons that there never has been a pantheistic church and probably never will be" (358). However, he cautions against fully embracing Spinoza as a model for pantheist environmental ethics, since the latter rejected animal rights and argued that animals could be exploited for human ends (226). This is not a sentiment we see in Blake's early works.

which unites all the parts of matter, an immense spring which is in continual action. (9-10)

In this passage at least, God is not quite identified with particulate matter, but rather with the force responsible for matter's cohesion and action in the universe. Since, for Priestley, however, matter *only is* those forces of action and cohesion, the passage from Bruno is equivalent to pantheism. Spinoza is also named in the *Disquisitions* as the atheistic philosopher "who, making the *universe itself* to be God, did, in fact, deny that there was any God" (149).[54]

Thus, Spinoza and Bruno were recognized by Blake's contemporary, Priestley, as adapting the pantheist ontology that can be traced to the panentheism found in Plotinus, the Stoics, and Plato's *Timaeus*, wherein matter is not dead, but divinely animated. M. H. Abrams, in *Natural Supernaturalism*, argues that the pantheist *Naturphilosophie* (1797) of Schelling was brought to England by Coleridge and Wordsworth. Schelling, Abrams notes, was a Neoplatonist and paid explicit homage to his "teacher," Spinoza (170-173). It is also significant that Schelling entitled one of his works *Bruno, or On the Natural and the Divine Principle of Things* (1802), to signal his debt to his other teacher in the pantheist tradition. Of course, Schelling, Wordsworth, and Coleridge were all writing *after* Blake's *Marriage*. I am insisting that the pantheist strain that Abrams credits as being introduced to British Romanticism by Coleridge and Wordsworth in the late 1790s can already be found in Blake's early work, to which Abrams gives no attention in this regard.

[54] As Thomson points out, this was a common eighteenth-century refrain concerning Spinoza. In a work published a year after the first edition of *Disquisitions*, *A Free Discussion of the Doctrines of Materialism, and Philosophical Necessity* (1778), Priestley, upon the accusation by his correspondent Richard Price that his ontology was pantheistic, again took pains to argue that his metaphysics is not "any thing like the opinion of Spinoza" (253). The degree to which he was successful in distinguishing his philosophy will be discussed in sections V and VI.

Hobbes and Bacon

While the metaphysics of Spinoza and Bruno draws heavily from panentheist aspects found in the Neoplatonists, the Stoics, and in the *Timaeus*, the materialism of Thomas Hobbes belongs in the Epicurean tradition.[55] As in Lucretius's poem, the human for Hobbes contains nothing immaterial or spiritual, but consists of matter and motion of various degrees; the same principle holds for the universe, as he writes in *Leviathan* (1651): "the universe, being the aggregate of all bodies, there is no reall part thereof that is not also body" (207). Even the phrase "incorporeall substance" is meaningless for Hobbes, since there can be no substance without body; thus, the two words together "destroy one another" (207). That which is commonly called spirit, Hobbes, claimed, is merely a designation for that which cannot be seen (208), just as Epicurean soul-particles are imperceptible. As Thomson writes, "The aspect of Hobbes's philosophy that shocked his contemporaries was his denial of incorporeal substance, as it entailed great problems for the nature of the deity and the explanation of thought in humans" (47).

Hobbes also makes the same claim attributed to Spinoza, that "[t]he soule, in Scripture, signifieth always, either the life, or the living creature; and the body and soule jointly, the body alive" (339-340).[56] But like Lucretius, Hobbes radically differed from Spinoza's brand of monism by asserting that there was nothing inherently divine about corporeal substance, nor was there anything incorporeal about God. Hobbes writes, alluding to the pantheist tradition, "those philosophers, who sayd the world, or the soule of the world was God, spake unworthily of him; and denyed his existence" (190). Hobbesian metaphysics thus adopts and modifies Epicurean

[55] Thomson calls Hobbes an Epicurean mechanist (63).

[56] Hobbes repeats this claim earlier, in chapter 38: "soule and life in the Scripture, do usually signifie the same thing" (241).

atomism to present what Gaukroger calls "a fully reductionist corpuscularianism" (*Emergence of a Scientific Culture* 109) which has no divine attributes.[57] Hobbes' resistance to spiritualist dualism was due in part to what he took to be its propagation by priests in order to wield power and subvert the social order (Shapin and Schaffer 94-99). The same charge is made by Spinoza, in his preface to the *Theological-Political Treatise*: "In despotic statecraft, the supreme and essential mystery is to hoodwink the subjects, and to mask the fear, which keeps them down, with the specious garb of religion" (qtd. in Deleuze, *Spinoza* 25). This characterization of priestly usurpation of power via an appeal to the mysterious action of incorporeal substances resonates with the narrative Blake offers on plate 11 of the *Marriage*, in which the system of "Priesthood" is initiated when mental deities are "abstracted" from their corporeal objects in order to enslave "the vulgar," who came to forget that "[a]ll deities reside in the human breast" (ll. 8-16). Hobbes differs from Blake and Spinoza, however, in that on the former's account, deities were never in inert corpuscles to begin with. Since Hobbes denied incorporeality even to God, he invited charges of atheism, which he consistently denied throughout his life (Shapin and Schaffer 93 n. 28, 205).

Thus, while Hobbes is never mentioned by name in the *Marriage*, his presence is felt on plate 11's narrative of priestly usurpation, and it is significant that the creature that the terrified Swedenborgian angel sees approaching in the "Memorable Fancy" on plate 18 is called Leviathan, since its serpentine depiction in the design on plate 20 bears no resemblance to the

[57] Gaukroger also places Hobbes in the Epicurean tradition, even though Hobbes proposed a plenum, wherein the universe is all substance and no void, as opposed to the atoms and void of Epicurus (*Emergence of a Scientific Culture* 357). Nevertheless, both Hobbesian and Epicurean matter is inert, massy, and dead; see also Shapin and Schaffer, who elaborate on the debate between Hobbes – who denied a void in the air-pump – and Boyle – who believed his experiments revealed such a void; see esp. 19, 98, 205. Hobbes's epicurean debt is discussed on 83 and 253.

Leviathan described in chapter 41 of the Book of Job, which has limbs (41:12, illus. 14).[58] That it should allude to Hobbes's work – as Damon has claimed (*Philosophy and Symbols* 95 n. 1) – makes more sense in this regard, given *Leviathan*'s monist ontological threat to dualist metaphysics and the positing of "angels" and spiritual substances by priestcraft in order to enslave the vulgar. The angel is evidently witnessing a monist world, since the "terrific" animals are "sprung from corruption" (E 41), or spontaneously generated, life-forms emerged from decaying, inert matter, just as Lucretius had described in *De Rerum Natura*. Blake's devilish narrator in the "Memorable Fancy" does not share the angel's vision after the latter flees, since such a threatening vision was "owing to" the angel's dualist "metaphysics" (E 42). For the lone devil, whose metaphysics is monist, the "appearance was no more" (E 41), and Leviathan is replaced by the peaceful image of a riverside harper illuminated by the moon. Crucially, the Hobbesian Leviathan does not remain for the devil, since Blake's panpsychic monism differs from Hobbes's version, which casts the material world as inert and dead.

The harper's song, about the "man who never alters his opinion" and is thus "like standing water, & breeds reptiles of the mind" (E 42), articulates a key aspect of the *Marriage*'s metaphysics: as a free, divine, and creative agent, man *has* the power to alter his mind, and should thus act on this ability. The reductive materialism of Lucretius, in which all is inert matter and motion, runs into difficulties when faced with the question of how such motion is initiated. Though Lucretius/Epicurus wanted to preserve some form of free will and human agency, it was necessary to posit an ambiguous "fifth substance" – more refined than the soul – as a causal agent within man. Nevertheless, most early modern readers viewed the Epicurean system, with

[58] Blake's depiction of Leviathan in his illustrations to the Book of Job (1823-26), however, does resemble the serpentine water dragon on plate 20 of the *Marriage* (illus. 15).

its fortuitous atomic swerve, as having little room for the human ability to alter it.[59] Thus, the Epicurean Hobbes "has no hesitation in drawing out [his philosophy's] materialist and deterministic consequences" (Gaukroger, *Emergence of a Scientific Culture* 282).[60] If, on the other hand, human materiality is divine, there is no difficulty in ascribing to it action, will, and desire – the ability to alter itself. Otherwise, man will be caught up in reductive materialism's ontology of spontaneous generation, in which lizards emerge from dead matter – Blake's "standing water."

Blake also saw Epicurean and Lucretian metaphysics lurking in the writing of Francis Bacon, as evidenced in the annotations to both Reynolds' and Bacon's works, discussed in the previous section. Whether or not Blake treats Bacon fairly – in these annotations and in the multiple passages wherein he is demonized alongside Newton and Locke[61] – is beyond the scope of this chapter; I focus on Bacon in this brief survey of early modern philosophers merely to note how his description of the soul aligns with the classical traditions outlined in the previous section. Insofar as this aspect of his philosophy is concerned, Blake was wrong to align Bacon with Epicureanism.

In the *Advancement of Learning* (1605) – which Blake admitted to having read, along with Locke's *Essay*, when he was "very Young", though his "Contempt & Abhorrence" of them remained unchanged (E 660) – Bacon's dualist (anti-Epicurean) metaphysics are evident, as he

[59] As Gaukroger writes: "There were just no resources within Epicureanism that enabled it to raise the requisite questions of intention and responsibility for action, with the result that it had great difficulty conceiving of anything other than complete determinism and complete randomness" (*Emergence of a Scientific Culture* 274). Gaukroger discusses Pierre Gassendi as distinguished in the seventeenth century for Christianizing Epicurean atomism and adding free will as an aspect of it, such that "what remains of Epicureanism in Gassendi's revival is something that the ancient Epicureans would have taken to have missed the whole point of the exercise" (273).

[60] Shapin and Schaffer discuss the bind in which Hobbes found himself insofar as the origin of motion in his ontology of inert materialism is concerned (204-205).

[61] This philosophical triumvirate appears mostly in the late prophecies; in plate 54 of *Jerusalem*, for instance, all three are named – with Rousseau and Voltaire – as those in the empirical tradition who "teach Doubt & Experiment" (E 203).

writes that immortality involves "not onely the spirite, but the bodie changed" (I.45) and that there is in the "spirit of man, a more ample greatnesse, a more exact goodnesse; and a more absolute varietie then can bee found in the nature of things" (II.17). As Fernando Vidal writes, as early as the *Advancement*, Bacon proposed to distinguish between two souls: the rational, which belongs to the human, and the irrational, which humans share with animals (30). Thus, while the "bodie of man … is of the most compounded masse … [t]he soule *on the other side* is the simplest of substances" (II.39, my italics), yet it is responsible for the "gouernment" and motion of the body (II.106).

Bacon's dualism is even more pronounced in his later works. In the *Sylva Syvlarum: Or a Naturall Historie* (1626), he adamantly rejects the classical notion that the world itself is a living being:

> The philosophie of Pythagoras, (which was full of superstition,) did first plant a monstrous imagination, which afterwards was, by the schoole of Plato, and others, warmed, and nourished. It was that the world was one, entire, perfect, living creature …. They went on, and inferred; that if the world were a living creature, it had a soule, and spirit … calling it *spiritus mundi*; the spirit or soule of the world. (241)

In citing Plato "and others" for perpetuating the "monstrous" idea of the *anima* infusing the material world, Bacon evidently has works such as the *Timaeus* and Plotinus's *Enneads* in mind. Here Bacon clearly distinguishes himself from the tradition in which Blake shares, which imparts life and spirit to the corporeal world.

In his *Historie of Life and Death* (1638), Bacon borrows from Plato and Aristotle's hierarchical division of the soul: "the reasonable soule proceeding not from generation, needs no reparation, beeing not subject to death, as the animall and vegative soule, differing both in

essence and forme from the reasonable soule" (263). Most often in this text, the "animall and vegative soule" is designated as *spirit*, equivalent to the inferior and mortal soul in Plato's and Aristotle's accounts, which serves the will of the reasoning, immaterial soul: "the fabricke of the [bodily] parts is the organ of the spirit, as the spirit is of the reasonable soule, being immortall and divine" (321). In describing the action of the spirit, however, Bacon repeats Lucretius's association of the mortal soul with the nerves – the "vital spirit," he writes, has its "seate" in the "ventricles of the braine" and is distributed throughout the body via "certaine channels" (290). And he further demonstrates his eclecticism in reiterating the Stoic claim that the vital spirit, like the *pneuma*, is "compounded of flame and ayre" (291).[62] Nevertheless, he is closer to Plato and Aristotle's dualist passages when it comes to the division of the human soul.[63]

In arguing for the immaterial and immortal nature of the rational soul, Bacon's metaphysics differs from that presented in the *Marriage*, and so does Bacon's attitude toward sensual delight. *The Historie of Life and Death* goes to great length in offering strategies – medicinal and otherwise – by which man can prevent the bodily vital spirit from stagnation and degradation, which result in the metaphorical opening of the "doores of death" (256). According to Bacon, "[b]y exceeding great joy the spirits are made thinne, loose, and weake," and "[j]oy arising from sensuall pleasure is bad" (171-72). Longevity is achieved when joy is "sparingly vented," while life is shortened by joy's "vulgar immoderate expression" (172). This is clearly at odds with Blake's claim that bodily energy is the source of *eternal* delight, as well as his declarations that "Exuberance is Beauty" (E 38) and that "The road of excess leads to the palace

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[62] See also the quasi-panpsychist opening claim of section IX of *Sylva Sylvarum* (1626): "It is certaine, that all bodies whatsoever, though they have no sense, yet they have perception" (211).

[63] Bacon predominantly attacks Aristotle and Scholastic philosophy throughout his works, but in this aspect he overlapped with the Peripatetic tradition; see Gaukroger, *Emergence of a Scientific Culture*, 159, 167, 204, 246, and, for their overlap, 362: "Like Aristotle, Bacon thinks that natural philosophy relies at the most fundamental level on a theory of matter."

of wisdom" (E 35). For Blake, in contrast to Bacon's caution, the body – that portion of soul – and its desires are to be celebrated and acted upon without reservation, and it is only through "an improvement of sensual enjoyment" that the holy and infinite nature of "the whole creation" can be perceived (E 39).

Descartes

The metaphysics of René Descartes, more so than that of Bacon, represents the most pronounced strain of dualism in the early modern period. The subtitle of his *Meditations on First Philosophy* (1641) marks his ontological commitment: "in which the Existence of God and the Distinction in Man of Soul and Body are Demonstrated." Whereas Spinoza had claimed that mind and body are merely different attributes of the same substance, God, Descartes in the Second Meditation defines the mind as the "thinking thing" (*res cogitans*) that constitutes his identity, and in the Sixth Meditation the immaterial mind is sharply differentiated from the extended, solid body (*res extensa*) that his mind freely directs (VI.78, 109[64]). The thinking, immaterial thing is isolatable from the corporeal body, and radically different from it: "It is certain that I am really distinct from my body, and can exist without it" (VI.78, 109).

For Descartes, there is no hierarchy of souls, aside from the immaterial human mind, but in his description of bodily function he uses the term "spirits" and describes vital principles as the cause of motion and sentience, although God is declared to be the efficient cause of all motion (*Philosophical Writings* 202(28)). Descartes broke with the Aristotelian tradition in claiming that animals are soulless and function like machines, and so would human bodies, even

[64] Citations of the *Meditations* include the meditation number followed by its page number in volume VII of the standard Charles Adam and Paul Tannery edition, and finally by the page number in John Cottingham's 2013 Latin-English edition, which I use. An English edition of the *Meditations* was first published in 1680.

if one were to remove the mind: "I … consider the body of a man as a kind of machine equipped with and made up of bones, nerves, muscles, veins, blood and skin in such a way that, even if there were no mind in it, it would still perform all the same movements as it now does in those cases where movement is not under the control of the will, or, consequently, of the mind" (VI.84, 117).[65] Bodily motion and sensation results from the work of corporeal but rarefied "animal spirits," as Descartes explains in his later work, *The Passions of the Soul* (1648): "all these motions of the muscles, as also all the senses depend on the sinews, which are as little strings, or like small tonnells coming all from the braine, and containing as that does a certain aire, or exceeding subtle wind, which is tearmed the Animall spirits" (7[66]). Despite his use of the term, Descartes makes clear that these animal spirits "are but bodyes, and have no other property, unlesse that they are bodies exceeding small" (9). As bodies, then, these spirits depend on a "principle that makes them act," which Descartes claims "is a kind of fire that the blood of the veines feeds, and this fire is the corporeall principle of all the motions of our members" (7). Thus, though the bodily machine is complex and constituted of rarefied corporeal parts, it should not be considered – as was done by Aristotle and Plato – as interfused with some inferior soul. Descartes explicitly breaks with such a tradition, which he claims gave rise to "consternations": "there is in us but one soul only and this soul hath no diversity of parts in it" (38).

The Cartesian bodily machine is composed of corporeal spirits, and like Lucretius's fifth element, the principle of motion for the machine is an ambiguous "kind of fire" for Descartes. Unlike the atomism of Lucretius, however, the Cartesian system describes the material universe – and the human body – as a plenum, full of extended, solid, corpuscles, but containing no void

[65] Vidal writes that when Descartes "banished the soul from nonhuman living beings, he performed one of the most radical acts to emerge from the mechanistic reform of natural philosophy in general, and physiology in particular" (75).

[66] Citations of this work are of the 1650 English edition, *The Passions of the Soule in Three Books*.

(Dobbs 227). The activity of all this densely packed matter, from the vital fire to the animal spirits to the muscles and limbs, obeyed mathematical laws for Descartes, and in stripping the universe of an immanent God and stripping the body of an immaterial soul, Descartes formulated the definitive mechanistic natural philosophy (Gaukroger, *Emergence of a Scientific Culture* 290).

The difficulty plaguing Cartesian mechanism here is how an immaterial mind – or soul – interacts with the complex plenistic machine of the material body, with which it shares no common properties. In his *Meditations*, Descartes occasionally veers from his rigid dualism to describe a soul-body interfusion that had been described in several of the classical traditions discussed above. In the Sixth Meditation, he writes, "I am not merely present in my body as a sailor is present in a ship, but … I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit" (VI.81, 113). Taken in isolation, such a proposition sounds Aristotelian and resonates with Blake's claims about the soul-body entity in the *Marriage*. But in *The Passions of the Soul*, Descartes qualifies such an assertion, as he writes" "the soul is really joyned to all the body, but it cannot properly bee said to bee in any of the parts" (25). This is because the soul "is of a nature that hath no reference to extension, dimensions, or other properties of matter, whereof the body is composed" (25).

And yet, Descartes famously declares to have "plainly found out" the "kernell" of the brain wherein the immaterial soul and corporeal body do interact, since clearly they must, for the immaterial will to have any power over the body: this interaction occurs in the pineal gland:

> the most interiour part of [the brain] … situated in the middle of the substance of it, and so hung on the top of the conduit, by which the spirits of its anteriour cavities have communication with those of the posteriour, whose least motions in it cause the course of

> the spirits very much to change, and reciprocally, the least alterations befalling the course of the spirits, cause the motions of the kernell very much to alter. (*Passions* 26)

From this seat, the soul "diffuses her beames into all the rest of the body," and receives sensory impressions from the body by way of the animal spirits conveyed to the brain through the nerves (28-29). Thus, while Plato locates the immaterial-material union of souls in the marrow, Descartes posits it in the pineal gland. However, despite his specificity regarding the location of such reciprocal activity, Descartes's mechanistic account offers no further details as to exactly how such "communication" occurs between soul and body, since it is evident that the laws of mechanism apply only to extended bodies and not to immaterial substances like the mind.

Priestley's history in the *Disquisitions* cites Descartes's work as marking the re-emergence of a dualism that "has been generally adopted" over the course of the eighteenth century (218).[67] Priestley credits Descartes with decidedly rejecting the Aristotelian notion of the soul as the substantial form of the body, and he recognizes the significance of Descartes's denial of souls to animals (235). But he also clearly understands the problems facing Cartesian dualism, as he writes:

> in consequence of separating from the idea of the soul every thing that he was not obliged to admit, Descartes, defined the essence of the soul to consist in thinking, the evident consequence of which is, that the soul is, in fact, nothing but a property, and no substance at all; and, therefore, notwithstanding his boasting of improving the doctrine of immateriality, he has been considered by some only as a more acute materialist. (216)

Like Hobbes before him, Priestley here touches upon the paradox of an "immaterial substance" that on his view demonstrates nothing substantial whatsoever; rather, the soul is "nothing but a

[67] Contemporary materialist philosophers still derogatively cite Descartes for positing the erroneous idea that there is a persistent, immaterial self, or soul, distinct from the physical body or brain. See for instance Alex Rosenberg's section, "It's All Descartes's Fault" in *The Atheist's Guide to Reality* (225-236), and Owen Flanagan (21).

property," and Descartes could then be considered an acute materialist insofar as that thinking property must belong to some solid, extended, material substance – the brain. Priestley sees evidence for this conclusion in Descartes's passage about the pineal gland: "I do not see that his idea of the soul could be wholly abstracted from matter, when he supposed that the seat of it was the pineal gland" (217). On Priestley's reading, though he strove to maintain a rigid dualism, Descartes could not describe bodily movement, sentience, and even thought, as completely abstracted from the corporeal body. Thus, Descartes advanced the most dualistic aspects of Platonic – and, as we have seen, Aristotelian – philosophy, but like his predecessors who argued for an immaterial rational soul, he could not convincingly explain how an immaterial substance interacts with a material body.

Cartesian dualism nevertheless clearly contrasts with the pantheist metaphysics of the *Marriage*, since, for one, Descartes radically foreclosed the possibility of anything divine immanent in the material world. As Gaukroger writes, "Descartes' God is completely transcendent and is not present in his creation" (*Emergence of a Scientific Culture* 150) – a far cry from Spinozan ontology. Given the separation of God from creation, Descartes also stresses the infinite separation between finite humanity and its infinite creator, as will Locke and Berkeley after him. *Contra* the metaphysics of Leibniz and Spinoza, the Cartesian mind does not partake of the infinite nature of God, as is claimed in the in the Third Meditation's cosmological argument for God's existence. Here Descartes claims that his awareness of God as an infinite being must be prior to his awareness of himself as a finite one: "For how could I understand that I doubted and desired – that is, lacked something – and that I was not wholly perfect, unless there were in me some idea of a more perfect being which enabled me to recognize my own defects by comparison?" (III.46, 65). But that awareness of God does not entail comprehension by

Descartes's limited human mind, since "it is in the nature of the infinite not to be grasped by a finite being like myself" (III.46, 65).[68] While for Blake God is in the human breast and nowhere else, for Descartes infinite God is remote from finite humanity and all creation.

The discrepancy between Cartesian dualism and the monism of Blake's *Marriage* is evident from a passage in Descartes's *Optics* (1637) that touches on the relationship between the soul and the eye, as had Lucretius and Aristotle. Descartes writes, "it is the soul which sees, and not the eye; and it does not see directly, but only by means of the brain" (141, 172[69]). As evidence, he offers the example of madmen and sleepers who "see, or think they see, various objects which are nevertheless not before their eyes" (141, 172). And yet the latent materialism that Priestley detected in Descartes is apparent here, since while the soul might not need the eye, it *does* need the brain. Descartes nevertheless moves away from grounding sensation in the body by locating *all* sensory powers in the immaterial soul: "We know for certain that it is the soul which has sensory perceptions, and not the body" (109, 164). This is radically distinct from the *Marriage*, in which the body *is* soul, and true perception depends on the cleansing of its material organs. Descartes's account is also opposed to Aristotle's, for whom sight is the soul of the eye – together with its matter, the eye is a hylomorphic entity whose essence is sight. Although Descartes's claim certainly resonates with Blake's 1810 assertion that he looks through "& not

[68] Descartes elaborates on this distinction a couple pages later: "even if my knowledge always increases more and more, I recognize that it will never actually be infinite, since it will never reach the point where it is not capable of a further increase; God, on the other hand, I take to be actually infinite, so that nothing can be added to his perfection" (III.47, 67).

[69] Citations of this work are taken from volume I of Cottingham, Stoothoff, and Murdoch's 1985 edition; the first number refers to the page number in volume VI of the Adam and Tannery edition.

with" his eye (E 566), in the early 1790s Blakean vision is inextricably bound up with the organ of sight, just as the soul is indisseverable from the body.[70]

Newton and Locke

Although Locke's philosophy was discussed at length in chapter one, and Newton's will be in chapter five, a few words are necessary concerning both men's place in the intellectual tradition being traced here concerning the role of the soul in the material world. Newton's major works devote scant attention to individual human souls, but one significant passage – Query 31 of the *Opticks* (1704) – echoes Descartes's separation of the immaterial soul from bodily organs. Here Newton famously describes the material universe as God's "Sensorium," and further claims that God is "every where present to the things themselves" (403). But clearly for Newton, though God may be present *to* things, he is not present *in* things, as he is interfused with material objects in the metaphysics of the Stoics, Neoplatonists, and in Plato's world-soul. Newton explicitly distinguishes himself from this tradition:

> [W]e are not to consider the world as the body of God, or the several parts thereof, as the parts of God. He is an uniform being, void of organs, members or parts, and they are his creatures subordinate to him, and subservient to his will; and he is no more the soul of them, than the soul of man is the soul of the species of things carried through the organs of sense into the place of its sensation, where it perceives them by means of its immediate presence, without the intervention of any third thing. (403)

For Newton, though God is everywhere "present," his relationship to the world is one of hierarchical subordination, as in the dualist passages of Plato, Aristotle, and Descartes. The

[70] Blake's 1820 addition of the couplet to the frontispiece of *For the Sexes: The Gates of Paradise* suggests the persistence of such a metaphysics to some degree in Blake's later work: "The Suns Light when he unfolds it / Depends on the Organ that beholds it" (E 259).

material world is markedly *not* the body of God, as is the case in the pantheist tradition. Newton describes God negatively here – as a being without organs or parts, evidently immaterial and certainly not a body of any kind. And God's relationship to the universe is again analogous to the soul's relationship to the body for Newton, who here also specifies that the soul of man is not the organs or the "species of things carried through" them. Rather, as for Descartes, the soul perceives the "things" of sensation without the need of bodily organs, "by means of its immediate presence." Thus, on the level of the human body Newton's "sensorium" is akin to Descartes's "seat of sensation," where the various faculties converge with their data to be immediately perceived by the immaterial soul, which is fundamentally distinct from the bodily organs. But on the macrocosmic level, Newton's analogic use of "sensorium" is much more ambiguous, since it is difficult to discern how a sensorium would function for a being without sensory organs or even corporeality.[71] The universe is not God's body, but for Newton it is at every point the site where God non-organically perceives and acts upon his material creation.

As for that material creation, in the same Query Newton puts forth his deistic argument for God as first cause, and his definition of matter resonates with the classical atomistic account: "it seems probable to me, that God in the beginning form'd matter in solid, massy, hard, impenetrable, moveable particles, of such sizes and figures, and with such other properties, and in such proportion to space, as most conduced to the end for which he form'd them" (400). Newton's description of matter as solid corpuscles of various sizes certainly matches that of Lucretius and Epicurus, and it is clear at least in his annotations to Reynolds that Blake placed Newton in such a tradition, since here Epicurean and Newtonian philosophy are synonymous

[71] Yolton writes, regarding Newton's usage: "While God's creation and knowledge take place, as it were, in the space of the world (His space), man's awareness takes place in the space of his brain… God is in space in a way very different from the way in which planets are in space" (87).

with each other and with atheism (E 660).[72] But the passage from Query 31 just quoted significantly deviates from Epicurean metaphysics in that for Newton, God *created* the matter in the universe, whereas there is no creator-God for the Epicureans, for whom matter is eternal and the gods are corporeal, remote, and uninvolved in the affairs of this world.

In labeling Newtonian metaphysics as atheistic and Epicurean, Blake – whether willfully or ignorantly – discounted the formidable role Newton assigned to God in his philosophy. Dobbs makes a compelling case that Newton did not just modify Epicurean atomism, but drew equally if not more significantly from the Stoic concept of *pneuma* in developing his concept of the space-pervading medium of the *aether* as a means to convey gravitational forces. Dobbs writes: "Newton chose to modify Epicureanism by adding to the atoms and the void certain 'forces' or 'active principles' that served, in the microcosmic part of his system, to account for cohesion and life. Newton thus drew upon certain aspects of Stoic thought to create a new and better atomism" (225). On Dobbs's reading, the version of Stoicism from which Newton borrowed to fill his "Epicurean void" (238) declared the universe-pervading *pneuma* to be incorporeal, thus avoiding the problem faced by many Stoics of how divine corporeality could occupy the same space as material creation. Newton thus developed a "Platonizing Stoicism in which the corporeal (but active and divine) Stoic *pneuma* was made spiritual and incorporeal but still mingled and blended with every body" (236-37).[73] By incorporating such forces into his ontological system,

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[72] The full annotation expresses a dualist sentiment; Blake chides Reynolds's claim that his definition of "nature" encompasses the human mind and imagination: "Here is a Plain Confession that he Thinks Mind & Imagination not to be above the Mortal & Perishing Nature. Such is the End of Epicurean or Newtonian Philosophy it is Atheism." This is clearly an articulation of the later philosophy of Blake, since the edition of Reynolds that he annotated was first published in 1798. I treat Blake's response to Newtonian metaphysics more fully in chapters 4 and 5.

[73] J. E. McGuire, in his "Natural Motion and Its Causes: Newton on the 'Vis Insita' of Bodies," also claims that Newton owes a debt to Stoic philosophy – particularly that of Chrysippus – for his use of the term *vis insita*, which is defined as the inherent source of a body's persistence in a state, and which Newton distinguishes, as an "agency" or "inner force," from the *vis inertiae* described in the *Principia* (309-311, 327). Bryce J. Christensen quotes from an unpublished manuscript of Newton's that suggests his Stoic leanings: "Gravity, and all other 'active Principles,'

Newton's philosophy diverges from Cartesian mechanism, which denied such spiritual forces acting on or in material bodies. As Donald Ault writes, "Newton placed himself squarely in opposition to the Cartesian 'mechanists,' who assumed that the world was sufficiently stable not to require the constant intervention of God" (*Visionary Physics* 8).[74]

Dobbs's use of the terms "mingled and blended" to describe God's relation to material objects is somewhat misleading, however, since for Newton God's action in the universe is clearly via forces and principles – as she indicates in her quote from page 225 above. God is not "blended" with material bodies themselves, which remain – as in the Epicurean tradition – solid, massy, and inert, as is indicated in a 1693 letter of Newton's to Richard Bentley: "Tis inconceivable that inanimate brute matter should (without ye mediation of something else wch is not material) operate upon & affect other matter without mutual contact" (qtd. in Dobbs 232). Here matter is explicitly designated "inanimate" and "brute," as it is in Lucretius. God's activity is the immaterial "something else" operating upon – but not within – material objects. As Dobbs earlier points out, Epicurean atoms are unanimated and lacking divine guidance; Newtonian atoms are also unanimated, but guided by God (223). And as John Yolton writes, Newton "emphatically rejected" the idea that such divinely caused forces could inhere in matter (92).[75]

Blake was not alone in reading Newton as an Epicurean materialist, however. Yolton traces the process by which, over the course of the eighteenth century, "[s]ubsequent Newtonians

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Newton believed, were effects deriving from 'a certain infinite spirit [which] pervades all space … and vivifies the entire world'" (151).

[74] Ault finds Newton to be drawing from Neoplatonic ideas (*Visionary Physics* 11-12) rather than from the Stoic tradition, which demonstrates the overlap between the classical schools. Andrew Janiak states, "Newton's concept of matter expresses a fundamental rejection of the prevailing mechanist conception of his day" (*Newton as Philosopher* 129).

[75] Yolton's reading obviously differs from that of McGuire, discussed in note 67. See also Ault, who writes, "Newton's commitment to basic aspects of the corpuscular philosophy qualifies his neo-Platonism in radical ways" (10).

were inclined to view attraction and repulsion as natural to matter, part of God's creation, rather than imposed from without" (202). Thus, gravitational forces, once attributed to the activity of God, become both naturalized and an internal to matter itself, and as a result the matter and motion of the universe needs no divine intervention. Mary Lynn Johnson, who also claims that Blake read Newton as an atomist – though she focuses on Democritus and not Epicurus/Lucretius – writes that Voltaire, the great popularizer of Newton on the continent, "was probably the main source of Blake's inaccurate equation of Newtonian science with mechanism and atheism" (113). Bryce J. Christensen, writing before Johnson, makes the same claim, adding that "though Voltaire titled Newton the 'destroyer of the Cartesian System' [in *Letters Concerning the English Nation* 111] … the de facto result of Voltaire's popularization … was the absorption of Newton's physics and name into a worldview more like Descartes's than his own" (153). Christensen notes that as early as 1704, the mechanistic materialist John Toland, in his *Letters to Serena*, was arguing that motion was an inherent property of matter, and consequently, "By simultaneously accepting Newton's physics and rejecting, wittingly or unwittingly, his religious and philosophical thought, mechanists like Toland twisted Newton's natural philosophy into a thoroughly mechanistic system" (152).[76] Ultimately, despite his Stoic/Neoplatonic affinities, for his interpreters in the eighteenth century, Newton, as Alexander Koyré writes, "enriched mechanism instead of supplanting it" (274).[77] Seen in this light, Blake

[76] Christensen adds Jean-Baptiste le Rond d'Alembert and Immanuel Kant – whose 1755 *General History of Nature and Theory of the Heavens* drew on Newtonian physics – to the list of those who mechanized and de-spiritualized Newtonian metaphysics (154-55).

[77] This phenomenon can be seen in eighteenth-century botany as well. Susannah Gibson notes that naturalists "tended towards one of two theories of plant life: plants were most likely to be either called 'Newtonian' and so described as hydraulic systems that followed mechanical laws; or they were living, feeling, perceptive beings that were capable of a certain degree of voluntary action" (154). Stephen Hales is credited with formulating the term "Newtonian vegetable" in his *Vegetable Staticks* (1727).

was certainly not anomalous in misreading Newton as an atheistic mechanist, but he was right to see Newtonian metaphysics as dualist concerning the soul and body.

John Locke follows Newton and, in turn, Descartes in conveying a dualist soul-body ontology, though, unlike his predecessors, Locke's professed refusal to delve too deeply into metaphysical speculation on the specific nature of the soul and body as discrete substances prevents the *Essay* from presenting an explicit ontology. Furthermore, whereas Descartes characterized the soul as a "thinking thing" (*res cogitans*), Locke writes that he cannot "conceive it any more necessary for the soul always to think, than for the body always to move; the perception of ideas being (as I conceive) to the soul, what motion is to the body, not its essence, but one of its operations" (2.1.10, 108). Nevertheless, while he asserts that he knows nothing of the essence of the substance he calls "spirit" and the substance he calls body, he treats them as occupying opposite poles of a metaphysical spectrum: "the idea of corporeal substance in matter is as remote from our conceptions, and apprehensions, as that of spiritual substance, or spirit; and therefore from our not having any notion of the substance of spirit, we can no more conclude its non-existence, than we can, for the same reason, deny the existence of body" (2.23.5, 298). Locke suggests that spirit is immaterial based on the acts of the mind: "by the simple ideas we have taken from those operations of our own minds, which we experiment daily in our selves, as thinking, understanding, willing, knowing, and power of beginning of motion, etc. co-existing in some substance, we are able to frame the complex idea of an immaterial spirit" (2.23.15, 305). For Locke here the mind is *not* the brain, but as in Descartes, an incorporeal substance that "co-exists" with body, the primary qualities of which are solidity, extension, and motion (2.23.2,

295). Locke thus writes *as though* mind and body are separate substances, though he holds that none of this can be known.[78]

Locke's agnosticism regarding the true nature of spirit and matter led, however, to one particularly ambiguous passage that had profound effects on the course of eighteenth-century natural philosophy. In chapter 23 of Book II, Locke elaborates on "our own blindness and ignorance" regarding spirit and matter, conceding: "I know not, why we may not as well allow a thinking thing without solidity, i.e. immaterial, to exist; as a solid thing without thinking, i.e. matter, to exist; especially since it is no harder to conceive how thinking should exist without matter, than how matter should think" (2.23.32, 314). Locke makes the same suggestion more explicitly in Book IV, chapter 3, noting that it is not outside the power of an infinite God to invest matter with the capacity of thought: "I see no contradiction in it, that the first eternal thinking being should, if he pleased, give to certain systems of created sensless [*sic*] matter, put together as he sees fit, some degrees of sense, perception, and thought" (4.3.6, 541).[79] Though Locke had no intention of committing himself to this monist ontology, many interpreters read him as advancing a materialist, panpsychic metaphysics, as Yolton writes, "Locke's suggestion that matter might be made to think revived and reinforced the fears many held of Spinoza" (4). As has been discussed above, Spinoza's radical pantheist monism led most eighteenth-century readers to associate his material philosophy with atheism, and in such a passage as that concerning the possibility of thinking matter, Locke could be read as veering close to Spinoza (Yolton 40, 45).

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[78] Locke elaborates on this uncertainty in Book IV: "he who will give himself leave to consider freely … will scarce find his reason able to determine him fixedly for, or against the soul's materiality. Since on which side soever he views it, either as an unextended substance, or as a thinking extended matter; the difficulty to conceive either, will, whilst either alone is in his thoughts, still drive him to the contrary side" (4.3.6, 542).

[79] Locke repeats himself a page later, arguing that we cannot have the confidence to conclude that "Omnipotency it self, cannot give perception and thought to a substance, which has the modification of solidity" (4.3.6, 542).

One distinction between Locke and Spinoza should be noted, however, insofar as the passage from 4.3.6 quoted above is concerned: Locke specifies that it is not "sensless" matter taken in isolation, but rather "certain systems" of such solid particles that might be invested with the power of thought. In this instance at least, Locke echoes the emergent materialism set forth in Lucretius's poem – atoms alone cannot think, but when mobilized in particular organizations, sentience and other acts of thought *emerge*. Thus, the system – not the fundamental unit – is alive and can think, unlike Spinoza's divine matter or Leibniz's spiritual monad.[80] This strain of materialism, wherein soul-like properties emerge from organized systems of inert corpuscles, is influential to French materialist metaphysics of the mid- and late eighteenth century, as well as to Priestley's ontology, as will be seen in the following two sections.

In an essay tracing the ontological implications of Locke's *Essay*, Lisa Downing interprets the controversial passages involving the superaddition of thought to matter as leading "not to the view that an omnipotent God could bestow thought even on mere solid, extended stuff, but rather to the view that there may be something in material substances, that is, in things that manifest solidity and extension, that we do not know" (374). Once Newton had shown that gravitation could not be accounted for by mechanical forces, Downing argues, the door was opened for the possibility of thinking matter: "Locke saw Newton as having established that *matter* is not mere matter, that its nature is not captured by our idea of matter, that is, by mechanism" (377). Thus, on her reading of Locke, "[t]he hypothesis that cannot be ruled out is not that *matter* – understood as something whose *nature* is exhausted by extension and solidity – might think, but that something *material* – something that *exhibits* extension and solidity – might think" (376-77). In other words, for Downing, Locke's suggestion of the possibility of thinking

[80] Locke does not always differentiate a system from a discrete particle when discussing the possibility of thinking matter, however, as evidenced by the quote in note 72.

matter is one of many re-conceptualizations of matter undertaken by subsequent eighteenth-century natural philosophers.[81] As Mark C. Baker and Stewart Goetz write, referring to the many "quirky materialisms" to emerge in post-Newtonian philosophy, "it does not seem clear (to us) that there is truly a unified research program here, under the name of materialism" (12, 7).

Now that the persistence, combination, and modification of classical ideas regarding the ontological status of soul and body, as well as of God and the material world, have been identified in several key early modern philosophers, the next section examines the several competing "quirky materialisms" that emerged in the course of the eighteenth century, without ever vanquishing various strains of dualism. Ultimately, I focus on Priestley and Swedenborg as representatives of the two competing ontologies of, respectively, monism and dualism, and the challenges faced by both of their accounts. I choose these two writers because of their strong presence in the *Marriage*, which work can then more clearly be seen to engage in the complex metaphysical traditions I have been tracing.

2.4 The Soul in Eighteenth-Century Philosophy

Over the course of the long eighteenth century, the rapid development of neurophysiology and discoveries in the life sciences gave rise to a multitude of theories regarding the properties of matter – both living and non-living – as well as the nature of the soul. In this section, while I cannot exhaustively cover the many complex strands of thought on these topics, I hope to touch on several key eighteenth-century figures and ideas contributing to the major metaphysical questions Blake takes up in the *Marriage*.

[81] In arguing that for Locke the nature of matter is not exhausted by extension and solidity, Downing echoes claims made by contemporary object-oriented philosophers, such as Graham Harman, who similarly writes that all objects – living and non-living – are irreducible to their perceptible properties; they withdraw, coyly, mysteriously into a "reality absolutely distinct from its conditions of being perceived" (*Tool-Being* 120).

In addition to Locke's speculation that matter itself might think, the writings of late seventeenth-century neurophysiologist Thomas Willis brought more pressure against dualist ontologies that posited – as had Plato and Aristotle – an immaterial, rational soul, or *animus*. Willis's work on the brain and nervous system, first published in Latin in *Cerebri Anatome* (1664), was soon translated into English, and the opening chapter of his *Two Discourses Concerning the Soul of Brutes* (1683) surveys classical theories of the soul, especially those of Aristotle and Epicurus. Willis distinguishes himself from the latter in maintaining "the mind or rational soul," as he claims in his preface: "it is more probable, and to the humane government more agreeable, to affirm that one must subtilly corporal soul, is joyned immediately to the body, and is intimately united, and that by the intervention of this soul, another immaterial, residing in its bosom, inhabits the body, and is the supream and principal form of the whole man" (n. p.). Just as in Aristotle and Plato, the soul of animals (brutes) is for Willis equivalent to the vital and sensitive – "corporal" – soul in humans, which itself is twofold, as he describes it in the preface, comprised of "one vital portion living in the blood, to be a certain inkindling of it, and another sensitive, to be only an heap of animal spirits every where diffused thorow the brain and nervous stock" (n. p.). Willis thus perpetuates the tripartite division of the human soul, with the immaterial rational soul at the pinnacle, subservient to which are the vital (what earlier writers had called vegetative) and sensitive souls, linked to the blood and brain/nerves respectively. But, as a physician, Willis's work is solely devoted to the corporeal soul; he maps its functionality in far greater detail than his classical predecessors, and he discusses its pathology and methods of treatment. While the rational soul remains in his theory, its role in sensitivity, motion, and even aspects of cognition seems minimized. John P. Wright notes that, for Willis, "[t]he material soul must remain a substantial, independent being" (252), and G. S.

Rousseau and Roy Porter claim, "What was new and challenging about Willis's 'neurologia' and 'psyche-ologia' was that it pinned down the mind remarkably – even uncomfortably – close to the brain" (24).

Moreover, Willis's study of the human body leads him to a decidedly anti-Newtonian, anti-Cartesian, and anti-Epicurean conclusion regarding the nature of matter: "what is vulgarly delivered, that matter, out of which natural things are made, is meerly passive, and cannot be moved, unless it be moved by another thing, is not true; but rather on the contrary, atoms, which are the matter of sublunary things, are … active and self-moving" (33). Unlike the dead atoms of Lucretius, Willis's self-motive atoms require no transcendent first cause, which places him in line with the monist, panpsychist tradition. As he confesses, when he considers the soul and body distinct from one another, he "cannot readily detect" the various faculties evident in man; rather, such properties arise "from the soul and body mixed together" (33). And, strikingly, in his preface, Willis anticipates Locke's speculation regarding God's superaddition of thought to matter: "I profess the great God, as the only work-man, so also as the first mover, and auspiciously present, every where, was he not able to impress strength, powers, and faculties to matter, fitted to the offices of a sensitive life? … why should we not believe that greater things than any of these may be done, when the skill of the Deity is present?" (n. p.). Like Locke after him, Willis reminds the reader of God's omnipotence and capacity to invest matter with more powers than mechanistic metaphysics would allow. In so doing, both men, though nominally dualist, make profoundly suggestive monist claims.

Two British neurophysiologists of the mid-eighteenth century followed Willis in elaborating on the functionality of the brain and nervous system – the sensitive soul – while nevertheless professing dualism. Scottish physician Robert Whytt likewise advocated an anti-

Cartesian theory of the nervous system, denying the presence of animal spirits in the nerves and brain, arguing instead for a "sentient principle" diffused throughout the body and responsible for movement. Unlike Descartes, who restricted the immaterial soul to the pineal gland, Whytt, in such works as *Physiological Essays* (1751) and *Of the Share Which the Mind has in Producing the Vital and Other Involuntary Motions of Animals* (1751), de-centered the soul as a principle circulating in the nerves as well as the muscles.[82] Catherine Packham thus identifies Whytt as "a leading figure in the development of vitalism," and argues, "Although Whytt at times referred to the sentient principle as the soul, it is clear that his theory understood the body to be an autonomous and self-regulating system, capable of pursuing self-government and self-preservation, independently of any control from an overseeing, rational mind" (6, 105). Like Willis before him, Whytt preserved the *animus* in his taxonomy of the soul, but in his description of human behavior, the role of such an immaterial substance was difficult to ascertain. One suspects that Whytt was exercising theological caution, given the charges of atheism leveled at monists such as Hobbes and Spinoza.

A similarly ambiguous dualist account can be found in David Hartley's *Observations on Man* (1749), which walks a difficult line in drawing from Newton and Locke to present a material account of sensation and perception while retaining the notion of an immaterial soul and a transcendent God. In Hartley's detailed neurophysiological account, sensation and perception are fundamentally attributable to vibrations in the medullary substance (what Hartley calls the "infinitesimal elementary body" (1: 34)) within the brain, which result, after repeated stimuli, in immaterial, intellectual "vibratiuncles." Thus, Hartley argues that "sensations arise in the soul from motions excited in the medullary substance of the brain" (1: 511); external stimuli cause

[82] Whytt also advocated his circulating "sentient principle" in contrast to the animism of Georg Stahl, which was explicitly dualist and downplayed the role of the nerves and brain in animal movement (Packham 6).

vibrations in this substance, and repeated vibrations of which lead to intellectual (i.e., immaterial) vibratiuncles, which Hartley equates with Locke's simple ideas of sensation. For Hartley, the most abstract ideas, and even religious beliefs, can be traced back to a physical cause in the vibrations occurring in nerve fibers and in the brain. Changes in ideas correspond to "changes made in the elementary body" (1: 34). Hartley's materialist account of thought, however, runs up against theological caution at the end of the first volume of his work. He adamantly maintains the existence of an immaterial soul, stressing that his account in no way should be perceived as a challenge to traditional dualism, since matter and motion can only yield matter and motion (1: 511-12). Despite his neurophysiology, Hartley writes that he is more a "near relation" to Descartes than to a materialist like Hobbes (1: 110). In an attempt to wriggle out of the seeming contradiction implied by his reduction of thought to vibrations of matter and his insistence on an immaterial soul, Hartley posits the intermediary medullary substance as a link between the immaterial soul and its correspondence to the gross body, just as Cambridge Platonist Ralph Cudworth had earlier posited a life-giving "plastick nature" between an immaterial God and the inert, material universe.[83]

As in Descartes, such forms of dualism, in positing ever more minute and mysterious intermediaries between the corporeal body and the immaterial soul, could not shake the difficulty

[83] In his *The True Intellectual System of the Universe* (1678), Cudworth argues against the atheistic atomists – Epicurus and Hobbes fall under this label – as well as the "hylozoick" or "corporeal cosmozoism" (132), which he finds to be most represented in the Stoics, who identified God with nature, and thus presented a system of "theism disguized in a paganick dress" (132). In positing a "plastick nature" as an intellectual principle subservient to God in the third chapter of his work, Cudworth sought to salvage a dualist system that maintained inanimate matter whose motion and organization was not dependent on God's direct action in the universe: "to those who are considerative, it will plainly appear, that there is a mixture of life or plastick nature together with mechanism, which runs through the whole corporeal universe" (148). Cudworth's fellow Cambridge Platonist, Henry More, posited a "Spirit of Nature" to perform the identical task of animating nature on behalf of God (Skrbina 85).

of explaining with precision how such interaction was possible.[84] Consequently, several eighteenth-century natural philosophers – both in Britain and on the continent – abandoned any attempts to salvage an immaterial soul in their metaphysical systems. Hume's skeptical attack on religion and super-empirical reason in his *A Treatise of Human Nature* (1739-40) and *Philosophical Essays Concerning Human Understanding* (1748)[85] dispenses with the Lockean and Berkelean notion of an immaterial self/soul over and above the individual acts of perception. In the first volume of the *Treatise*, Hume wishes to "abandon utterly" the question concerning the materiality or immateriality of the soul, since we can have no notion of substance (either corporeal or incorporeal) (I.4.5, 407). Thus, for Hume, Spinoza's "hideous hypothesis is almost the same with that of the immateriality of the soul, which has become so popular" (I.4.5, 419), and "the question concerning the substance of the soul is absolutely unintelligible" (I.4.5, 434). The self, on Hume's account, then, is nothing but a "bundle or collection of different perceptions" linked by custom, association, and imagination (I.4.6, 439).[86] In his attack on religious belief and abstract reason, such as that concerning *a priori* knowledge of causation, in the *Philosophical Essays*, Hume argues that what is taken for reason – the distinguishing faculty of the immaterial soul for the Cartesians – is nothing but the product of empirical experience and memory: "In a word, if we proceed not upon some fact, present to our memory or senses, our reasonings would be merely hypothetical" (74).[87] Hume's brand of sceptical empiricism left no

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[84] In the sixth chapter of his *Biographia Literaria*, Coleridge condemns Hartley's positing of his "infinitesimal elementary bodies" as intermediaries, dismissing them as "hypothetical vibrations in his hypothetical oscillating ether of the nerves" (1: 106).

[85] Now known as *An Enquiry concerning Human Understanding*.

[86] Hume earlier claims that "what we call the mind, is nothing but a heap or collection of different perceptions" (I.4.2, 361-62).

[87] Hume later writes, "All our reasonings concerning matter of fact are founded on a species of analogy, which leads us to expect from any cause the same events, which we have observ'd to result from similar causes" (165). Toward

room for an immaterial soul either directing the body or being impressed upon during acts of corporeal sensation.

On the continent, the materialism developed by Julien Offray de la Mettrie casts similar doubts on the existence of an immaterial soul as argued for by Descartes and other dualists. In his *Treatise on the Soul* (1745),[88] La Mettrie surveys the tripartite soul of "the Ancients" (52), demonstrating familiarity not only with Plato's and Aristotle's doctrines, but with those of the Epicureans and Stoics, as well as the more contemporary neurophysiogical accounts of Willis and Giovanni Lancisi (55). After devoting successive chapters to the vegetative and sensitive souls, La Mettrie's subsequent chapter, which one would expect to be devoted to the rational soul, is entitled "On the faculties of the body which can be attributed to the sensitive soul." As it turns out, for La Mettrie, there are no faculties that cannot be attributed to the sensitive soul. He begins the chapter with a critique of the tripartite and, particularly, Cartesian theories that posit an immaterial *animus*: "in [Descartes's] system the soul could not act on the body and it would be impossible to explain the union and the reciprocal action of the two substances" (63). Thus, the soul must be extended: "However small and imperceptible we suppose the extent of the soul to be … it must always have an extent" (64). La Mettrie continues, citing *De Anima*:

> The soul's extent constitutes thus, as it were, the body of this sensitive active being, and because of the closeness of the connection, which is such that one would think the two substances to be individually attached and joined together and to form a single whole, Aristotle says "that there is no soul without body and that the soul is not a body" …. the

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the end of the *Essays* he acknowledges the paradox of the sceptical strategy of using reasoned arguments to deny the existence of reason: "It may seem a very extravagant attempt of the Sceptics to destroy reason by argument and ratiocination; yet this is the grad scope of all their enquiries and disputes" (241). To avoid such extravagance, Hume advocates a "mitigated scepticism," which grounds abstract ideas in empirical perceptions (250ff.).

[88] Originally published as *L'histoire naturelle de l'âme*.

> soul depends so much on the temperament and the disposition of the organs that it is perfected and embellished with them. (64)

Having extension, the soul, on La Mettrie's account, is material, though not quite the same substance as the grosser body. This closely resembles the Epicurean description of the material soul constituted of ultra-fine particles as found in *De Rarum Natura*, and it is thus not surprising that La Mettrie published his own *Système d'Epicure* five years later.

In his *Treatise*, however La Mettrie is as helpless to explain how thought and sensation can arise from his materialist ontology as Descartes is helpless to explain the interaction of soul and body. In justifying his theory, La Mettrie echoes Locke and Willis:

> But could it therefore be the medullary fibres which form the soul? And how can we conceive that matter can feel and think? I admit that I cannot conceive it; but … it is irreligious to limit the Creator's supreme power by claiming that he cannot have made matter think …. If I confuse the soul with the bodily organs, it is because all phenomena force me to do so. (65-66)

This eschewing of explanation via an appeal to God's omnipotence in this passage is largely abandoned, however, in La Mettrie's *L'homme machine* (1748), an English translation (*Man a Machine*) of which was published in 1749. Here La Mettrie immediately refers to Locke's thinking matter hypothesis as simply an instance of "impropriety" of expression; Locke failed to consider matter "otherwise than in itself" (1). As La Mettrie will seek to demonstrate in his work, thought is a property of organized, living matter.

La Mettrie follows his swipe at the infelicity of Locke's expression concerning thinking matter with a criticism of the "Leibnitzians" who have "spiritualized matter" (2) and claims instead that "all the parts of the soul may be justly reduced to the imagination only, which forms

them all; and thus the judgment, reason, and memory are not absolute faculties of the soul, but real modifications of this kind of *medullary substance*" (28). That which was speculated in the form of a question in the *Treatise* – can "medullary fibres" form the soul? – is here asserted to be the case: the imagination is "the sensitive principle, which thinks in man" (28). La Mettrie then elaborates on the corporeal nature of the soul/imagination's "medullary substance": the imagination, he claims, "alone perceives," as well as "reasons, judges, penetrates, compares and dives into all things" (29). Therefore, "he that has most imagination ought to be regarded as endowed with most wit, and genius" (32).[89] Although I will return to more fully discuss the topic of imagination in section VIII, it is important to note here the close relationship between La Mettrie and Blake's *Marriage* in this regard: for both, the imagination is an immanent, corporeal entity that distinguishes the human from other animals – and confers upon it "genius" – and that is ultimately responsible for perception. For La Mettrie, the imagination, or soul, "is only the first principle of motion, or a sensible material part of the brain, which we may certainly look upon as the original spring of the whole machine" (66). The mind is the brain, and the body the soul, and therefore, he asks, "Need we be surpriz'd then that philosophers [Plato and Pythagoras] have always principally regarded the health of the body, as the only way to preserve that of the soul?" (65). There is no need to posit any *animus* operating in or on the human body: "The excellency of reason does not depend on that great unmeaning word (immateriality)" (3).[90]

La Mettrie's monism contrasts with that of Spinoza's and Blake's in that while he claims that "there is only one substance, differently modified in the whole universe" (85), that substance

[89] La Mettrie continues, "The finest, the greatest, and the strongest imagination, is therefore the properest for the sciences as well as arts" (33).

[90] At times, however, the specter of dualism haunts La Mettrie's metaphor-laden phrasing, as when he describes how the imagination uses its "muscles" to maintain itself "poised as it were in an equilibrium upon the strings of the brain" (34). Although the imagination is described as a physical being (having muscles), here it is *separate from* the strings of the brain with which it is earlier identified.

is not God, but matter itself, which is inherently capable of motion at least insofar as living organisms are concerned: "the minutest parts of organized bodies, are put into motion by a principle inherent in themselves" (59).[91] This "moving principle" in organized life forms is alone responsible for the distinction of living organisms "from all other matters" (72).[92] And though La Mettrie denies himself to be calling into question "the existence of a supreme being; on the contrary I am of the opinion that the greatest degree we can have of probability makes for this truth" (47), it is clear in *Man a Machine* that God is not responsible for the creation or sustenance of the material soul or the entire machine that is man. Nevertheless, the self-active and corporeal organism is capable of experiencing sexual delight, which La Mettrie, like Blake, sees as inherent to man's nature and therefore not to be discouraged or repressed: "who at first could have imagined, that one drop of the seminal liquor which is discharg'd in copulation, should be the occasion of such extatic pleasure, and afterwards spring up into a little creature, which in time, certain conditions being suppos'd, should itself feel the same transports?" (76-77). Despite their differences, La Mettrie (following Epicurus) and Blake both celebrate the body's material capacity for ecstatic delight. Moreover, both conveyed their radical philosophies in a satirical style. Lionel Honoré places La Mettrie's work – most of which was originally published under pseudonyms – in the tradition of satirical, clandestine, libertine, and anonymous writings concerning the nature of the soul (192). The *Marriage*, which is the only unsigned illuminated work of Blake's, belongs in this tradition as well.

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[91] Here La Mettrie draws on the experiments involving muscular irritability and the regenerative properties of the fresh water polyp as conducted by Albrecht von Haller and Abraham Trembley. I treat these subjects, as well as La Mettrie's employment of them, more fully in chapters four and five.

[92] Five pages later La Mettrie reiterates his earlier claim that thought inheres in organized matter: "So far then am I from thinking that thought is inconsistent with organized matter, that I look upon it to be a property as much belonging thereto, as electricity, impenetrability, extension, &c" (77).

La Mettrie's materialism influenced more explicitly atheistic versions of monist metaphysics that arose in France later in the century, such as those of Diderot and Baron d'Holbach. Rousseau and Porter trace these developments again back to Locke's speculation about thinking matter, which suggestion, they write, "is bandied about as a shocking commonplace by Diderot – that mind might be fully and entirely comprehended by the activities of the brain, nerves, and juices" (32). Just as did La Mettrie's, Diderot's monism, in such works as *Letter on the Blind* (1749), posited the mind as an epiphenomenal by-product of the body, whose matter was more than passive, but inherently motile (Bowler 82-83). While, according to J. Peter Bowler, Diderot was troubled by the atheist implication of his ideas, Holbach embraced them in his *System of Nature* (1770, with notes by Diderot), the "Bible of Atheism" (Bowler 83), which proved influential to radical writers in England, such as William Godwin and his circle, and which elicited an attack from Priestley, who targeted Holbach, along with Hume, in his *Letters to a Philosophical Unbeliever*, discussed in chapter one.

Man, Holbach declares in the first volume of his *System of Nature*, "is a being purely physical" (1: 19), and, likewise, the universe "offers every where, but matter and motion. The whole presents to us, but an immense and uninterrupted succession of causes and effects" (1: 30-31). Holbach follows Epicurus in emphasizing the emergent nature of sentience and thought from particular organizations of matter: man is "the result of the combination of certain matter, endowed with peculiar properties, of which the arrangement is called organization, and of which the essence is to feel, to think, to act, and in short, to move after a manner distinguished from other beings" (1: 32). As in Lucretius's poem, the molecules or particles comprising such a system are "insensible" and "inanimate" (1: 38, 51), yet this matter "acts by its own peculiar force, and has no need of any exterior impulse to put it in motion" (1: 50). Life, then, is "only an

assemblage of motion" (1: 51), and since all matter is in motion from eternity, Holbach makes the hylozoic claim that "Nature is an active, or living whole" (1: 99).[93] It is man's ignorance of the complete and necessarily determined chain of cause and effects that has led him to posit transcendent or spiritual, immaterial causes in the universe (1: 162ff.). There is no room for free will in Holbach's system, as there is in Epicurean and Blakean monism.

Holbach expends much energy denouncing the errors of dualism, committed most recently by Descartes. If the soul is immaterial and capable of acting on matter, Holbach asks, how come it can move my arm when unopposed but "can no longer move this arm if it is charged with a weight greater than it is capable of moving" (1: 158). The soul, Holbach reiterates in an argument that should now be familiar, is material and indistinguishable from the body, and in scripture "the word spirit presents to us no other idea than that – of breathing – of respiration – of wind; – thus when they tell us that the soul is a spirit, this only signifies that its mode of action is like that of breathing" (1: 164).[94] The Cartesian notion of an immaterial spirit, Holbach claims, is "quite new," since even Plato considered the soul to designate "a matter extremely subtle" (1: 165).[95] The soul, Holbach concludes, "is only the body itself" (1: 172),[96] and in his notes, Diderot mocks the theological paradox of an immaterial spirit suffering pain from the material flames of hell (1: 168), recalling Blake's devilish narrator deriving bodily pleasure from the flames in the *Marriage*. And because there is no transcendent creator God in Holbach's system,

[93] Holbach does not fundamentally distinguish between life and death: "those powers, which [are called] *dead*, and those forces which [are called] *live*, or *moving*, are powers of the same species, which display themselves after a different manner" (1: 44).

[94] Holbach is touching upon the Stoic etymology of the word, as Skrbina writes, "In both the original Greek of the New Testament and the original Greek translation (from Hebrew) of the Old Testament, the word for Spirit is 'pneuma'…. This suggests a connection to Stoic/Aristotelian philosophy, and also to panpsychism" (58).

[95] According to Diderot's notes to this passage, Descartes "is the first that has established that, *that which thinks ought to be distinguished from matter*" (1: 167).

[96] Holbach locates the brain as the "common centre" where "are performed all the operations that are attributed to the soul" (1: 173).

in his third volume his argument is similar to Blake's *No Natural Religion* in dismissing deism, including that presented in the works of Clarke and Newton, the latter of whom Holbach claims wrote unintelligibly when it came to God: "the sublime Newton is no more than an infant, when he quits physics and demonstration, to lose himself in the imaginary regions of theology" (1: 239). An obvious difference, however, between Holbach's attack on natural religion and Blake's is that for the former, there is no divinity whatsoever, either transcendent or immanent in the material universe.

In his second and third volumes of the *System of Nature*, Holbach presents a narrative that resonates with Blake's – and Hobbes's and Spinoza's – account of the "system" of "Priesthood" by which mental deities were abstracted from their objects on plate 11. In an earlier note Diderot had argued that a dualist ontology proved advantageous to priests, who could fabricate a mysterious system of rewards and punishments after death to "intimidate," "govern," and "despoil the ignorant" (1: 168). Holbach elaborates on this, claiming that as a result of the doctrine of an immaterial soul surviving death, "the priest became the rival and the master of kings" (2: 485). In the systems of Plato and Pythagoras, man "believed himself a portion of the Divinity" (2: 449), but as a consequence of religions, men "pretended that the sovereign of nature, or its contriver, was not the soul of man, but that, in virtue of his omnipotence he created human souls" (2: 449-50). Thus, as Blake claims, man forgot that all deities reside in his breast.

In the third volume, however, Holbach explains that Plato and Pythagoras were wrong to believe themselves a part of God. It was due to ignorance that pagan religions deified nature, separating it from its inherent powers and worshipping the latter as a personified, immaterial being:

> Natural philosophers and poets, transformed by leisure and vain researches into metaphysicians or into theologians, believed they had made an important discovery in subtily distinguishing nature from herself, from its own peculiar energy, from its faculty of acting. They made by degrees of this energy an incomprehensible being which they personified, which they called the mover of nature, which they designated under the name of God … This abstract and metaphysical being or rather this word, was the object of their perpetual contemplation. (3: 68)

Like Blake, Holbach dismisses the notion that God is a transcendent, immaterial being, but unlike Blake, for Holbach the natural world *never was* animated with gods or geniuses, as Blake's Ancient Poets describe. For Holbach, such gods are posited out of ignorance. Thus, as John Howard points out, "Blake forms an inversional transformation of Holbach's assumptions, while he agrees with his conclusions about priestcraft" (82).[97] Blake thus articulates a narrative concisely summarized by Skrbina: "The pre-Christian era acknowledged the presence of spirit and mind in nature. The Christian worldview took spirit out of nature and placed it largely, but ambiguously, within the monotheistic figure of God" (58).

The materialism presented in Priestley's *Disquisitions* – which contains a lengthy scriptural exegesis to make the same point as Holbach (and Hobbes before him) that the word "spirit" in the bible connotes nothing immaterial – garnered a controversial reception upon its first publication in 1777, but it was by no means novel in arguing for a corporeal soul, even if one ignores the classical tradition of Epicurus and Lucretius. Well before Holbach (whose work Priestley had read in French) and La Mettrie, William Coward's 1702 work contains the core of his argument in its lengthy title: *Second Thoughts Concerning the Human Soul, Demonstrating*

[97] T. A. Hoagwood also notes this connection between Holbach and Blake's devil (181).

the Notion of Human Soul, as Believ'd to Be a Spiritual Immortal Substance, United to a Human Body, to Be a Plain Heathenish Invention, and Not Consonant to the Principles of Philosophy, Reason, or Religion. In it, Coward makes the monist claim that in the bible the "human soul and life are the same thing" (156).[98] Freethinker John Toland's *Letters to Serena* (1704) expresses his sympathy with monism and in the preface Toland asserts that "motion is essential to matter no less than extension, and that matter neither ever was nor ever can be a sluggish, dead, and inactive lump" (n. p.). In his second letter, Toland attributes the "invention" of the idea of an immortal soul to the Egyptians, Chaldeans, and Indians (21), and contrary to the philosophy of Aristotle and the pre-Socratics such as Thales and Anaximander, all of whom "did not dream of any principle or actuating spirit in the universe it self … but explain'd all the phaenomena of nature by matter and local motion … and rejected all that the poets said of the gods, demons, souls … as fables invented at pleasure, and fictions to divert their readers" (22).[99] Toland advances his brand of monist materialism in contrast to the pantheism of Spinoza, whose system Toland declares "is not only false, but also precarious and without any sort of foundation" (135). God for Toland is neither identified with the universe, nor a first or constant cause of its motion, which, as in the system later developed by Holbach, is inherent to matter itself. God's role in the universe is outside the scope of Toland's concerns, as he refuses "to meddle in the disputes" concerning matter's origin – whether or not it was created by God (161).[100]

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[98] Thomson discusses Coward's controversial monism at greater length (*Bodies of Thought* 105-114).

[99] Toland cites Anaxagoras as distinct among the pre-Socratics insofar as he "added the moving and ordering mind" to account for the activity of nature (24).

[100] Though Toland and Holbach held similar views regarding matter's motile properties, Toland was not as explicit about denying God's existence; his ambiguity in this regard, however, allows for interpretations of him as an atheist. See David Berman, "Disclaimers in Blount and Toland." The ideas of Coward and Toland were reiterated in an anonymous pamphlet of 1729, *The Materiality or Mortality of the Soul of Man, and Its Sameness with the Body, Asserted and Prov'd from the Holy Scriptures*.

Despite his rejection of Spinoza's pantheistic system, Toland nevertheless served to transmit such a metaphysics in his *Pantheisticon*, published in Latin in 1720 and in English in 1751. Toland frames the work as a description of a new "Socratic society," whose central tenet is "All things are from the whole, and the whole is from all things" (15). The society holds that "the force and energy of the whole, the creator and ruler of all, and always tending to the best end, is God, whom you may call Mind, if you please, and Soul of the universe" (17). Toland continues, "this Force, according to them, being not separated from the universe itself, but by a distinction of reason alone" (18), thus drawing not only on the pantheistic monism of Spinoza, but on panpsychism and the Platonic *anima* as well. Stoic *pneuma* is alluded to as well, as Toland writes of the society's belief in the "ethereal fire environing all things, and therefore supreme; permeating all things, and therefore intimate" (22). While not advocating such an ontology himself, Toland presents a work that is a compendium of pantheistic principles drawn from multiple traditions, and these can be found operating in the *Marriage*'s monistic universe permeated by energetic flames.

Other eighteenth-century writers, while not completely reducing the soul to the body, demonstrated the same ambiguity found in Willis's and Hartley's neurophysiology, arguing that soul is inextricable from the action of the nerves and other corporeal operations. These ideas can be seen in Samuel Colliber's *Free Thoughts concerning Souls* (1734) and John Jackson's *A Dissertation on Matter and Spirit* (1735), the title of which anticipates Priestley's.[101] In both works, the capacity for thought is declared to be impossible without the aid of the body and animal spirits (Yolton 170). Jean-Paul Marat's *A Philosophical Essay on Man: Being an Attempt to Investigate the Principles and Laws of the Reciprocal Influence of the Soul on the Body* (1773)

[101] See also the anonymous pamphlet published after Priestley's *Disquisitions*, entitled *A Dissertation upon the Nervous System to Show Its Influence upon the Soul* (1780).

argued for the nerve as a link between the soul and body, an instance of what Vidal describes as Enlightenment psychology's abandonment of any attempt to discuss the union of soul and body; instead, it "concentrated on the interaction between them; its frequent neuropsychological orientation reflected the belief that the nerve was the intermediary between the two substances" (11).[102]

None of these radically monist or ambiguously materialist works went unchallenged by dualist ripostes, whose arguments for a strict divide between the corporeal body and the immaterial soul were clearly in the Cartesian vein. Coward's 1702 work was immediately countered that same year by the pseudonymous Alethius Phylopsyches's *Psychelogia; or Serious Thoughts on Second Thoughts: Being a Discourse Fully Proving from Scripture, the Writings of the Learned Ethnicks, Fathers of the Church, Philosophy, and the Dictates of Right Reason, the Separate Existence of the Soul*.[103] John Broughton joined the attack on Coward with his *Psychologia: Or, an Account of the Nature of the Rational Soul* (1703), which, like many eighteenth-century works on the soul, cited Locke's passage on the possibility of thinking matter; Broughton dismissed such an idea as a contradiction in terms, since for him, as for Descartes, thought belongs to an immaterial substance alone (28-29). The Newtonian Samuel Clarke voiced his dualist ontology five years later in *A Defense of an Argument Made Use of in a Letter to Mr Dodwel, To Prove the Immateriality and Natural Immortality of the Soul* (1707), and followed this with a second, third, and fourth defense, published in subsequent editions through 1731, all of which attests to the contested nature of the topic. Similarly, La Mettrie's monism met with a

[102] Vidal quotes the opening of Charles Bonnet's *Essay on Psychology* (1754) to this effect: "We know the soul only through its faculties; we know these faculties only through their effects. These effects manifest themselves through the intermediary of the body" (11). For an application of this idea to Blake's later prophecies, see Hisao Ishizuka, "Enlightening the Fibre-Woven Body: William Blake and Eighteenth-Century Fibre Medicine." Ishizuka makes a similar claim to Vidal in arguing that the nerve fibre "ontologically mediated between mind and body" (71) and can be seen in Blake's *Jerusalem* and *The Four Zoas* as both materializing the divine and connecting man to it.

[103] The author's Latinate surname might have been better rendered as *Philo*psyches, "lover of souls."

rejoinder from Élie Luzac's *Man More than a Machine*, which was translated into English in 1752.[104] By the time of Priestley's *Disquisitions* and even of Blake's *Marriage*, it was far from obvious that – despite the development of various forms of materialisms – dualism had been vanquished from eighteenth-century natural philosophy.[105]

In addition to the dualist works just mentioned, three in particular stand out as being typical representatives of dualism for Priestley, who quotes from each of them at length in *Disquisitions*: William Wollaston's *The Religion of Nature Delineated* (1722), Andrew Baxter's *An Enquiry into the Nature of the Human Soul; wherein the Immateriality of the Soul is Evinced from the Principles of Reason and Philosophy* (1733), and Joseph Berington's *Letters on Materialism and Hartley's Theory of the Human Mind* (1776). Wollaston echoes Newton's characterization of matter as "incapable of acting, passive only, and stupid: which are defects, that can never be ascribed to him who is the First cause or Prime agent, the Supreme intellect, and altogether perfect" (132[106]). This transcendent God imparts forces to matter, and is the direct cause, *contra* La Mettrie's and Holbach's systems, for all the motion – as well as the matter – in the universe (136, 140). Like Epicurus, Wollaston preserves free will within his divinely animated atomism (129-130), and he also predictably follows Toland in disparaging Spinoza's pantheist monism: "The system of Spinoza is so apparently false, and full of impieties and contradictions, that more needs not be said against it: tho much might be" (135). Wollaston argues that "since we cannot find among [non-living objects] any that are cogitative, or such a

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[104] See also Henry Grove's *An Essay towards a Demonstration of the Soul's Immateriality* (1718) and the anonymous pamphlet, *An Essay Towards Demonstrating the Immateriality, and Free-Agency of the Soul* (1760).

[105] Other works on the topic include John Towne's *A Critical Inquiry into the Opinions and Practice of the Ancient Philosophers, Concerning the Nature of the Soul and a Future State* (1747), Robert Clayton's *An Essay on Spirit* (1750), John Flavel's *A Treatise on the Soul of Man* (1789), and the anonymous pamphlets *An Essay on the Soul of Man* (1744) and *An Enquiry into the Nature of the Human Soul* (1750).

[106] Citations are from the eighth edition of Wollaston's work, published in 1759.

thing as life, but several things inconsistent with them, we are under a necessity of confessing that there is some other species of substance beside that which is corporeal, and that our souls are of that kind" (163).

Baxter, whom Priestley considered "the ablest defender of the strict immaterial system" (8), makes many of the same claims as Wollaston, including the foundational metaphysical statement that matter is a "dead, inactive substance" (2: 343[107]) characterized by solidity and extension (1: 10). By contrast, the soul is "that which is active and percipient in us," properties of which matter is incapable (1: 1) – in this regard Baxter recalls the ancient association of soul with the power of movement, though what it means for an immaterial substance to *move* is left unexplained. The Epicureans were mistaken, Baxter continues, in "giving matter motion of itself" (1: 15), and, like Wollaston and Newton before him, he makes the argument that "gravity is not the action of matter upon matter, but the vertue and power of an immaterial cause, or being, constantly impressed upon it" (1: 34). And, in keeping with Cartesianism, the body is described as "a machine, and that extremely complicated" (1: 148-49). This is *not* the machine of La Mettrie, for whom matter is inherently active; rather, Baxter's corporeal machine is "pervious to our will" and immaterial reasoning soul (1: 149), which works in cooperation with God's will to act on the body (1: 162). In keeping with his deistic dualism, Baxter dismisses Locke's passage regarding thinking matter (1: 192ff.), as well as labeling as "absurd" the panpsychist/pantheist ontologies of Leibniz and Spinoza (1: 56, 80).

Berington's *Letters on Materialism* is a direct response to Priestley's publication, one year earlier, of an abridged version of Hartley's *Observations on Man* with accompanying essays by Priestley, entitled *Hartley's Theory of the Human Mind, on the Principle of the Association of Ideas* (1775). In presenting Hartley's reduction of ideas to vibrational nerve fibers, by which he

[107] Citations are from Baxter's 1745 third edition.

had been deeply influenced, Priestley downplayed Hartley's expressed dualism and emphasized the neurophysiological aspects of his theory. Thus, Berington accused him of advancing materialism, that "dangerous tendency" that "overturns the whole fabric of natural religion" (23). Mixed metaphors notwithstanding, Berington goes on to characterize Priestley's empiricism as expressed in his presentation of Hartley, and in so doing Berington makes a claim that sounds strikingly like Blake's description in the *Marriage* of the senses as the chief inlets of soul in this age. Berington writes, addressing Priestley, "The senses you conceive as so many inlets" (80). Priestley uses this term in *Disquisitions* to describe the similarity between animal and human sensation: "In fact, however, as brutes have the same external senses that we have, they have, of course, all the same inlets to ideas that we have" (238).

The problem, though, for Berington, is how Hartley's vibrations – via those inlets – lead to perceptions: "The question now is; why the latter species of tremulous motion should be essentially different from that, which is produced in the common class of bodies; that is, why the first motion should be barely motion, and why the second, besides its tremulous affection, should moreover be something so strangely wonderful, as is perception in your hypothesis?" (59). In other words, how can the subjective experience of a perception be reduced to the mere vibrations of matter in the nerves and brain?[108] Priestley/Hartley's account suffers on Berington's reading for its suggestion that perception and thought *emerge* mysteriously from a system whose parts do not exhibit perception and thought, which is what the Epicurean system also proposed. Berington makes the non-emergent argument that "what gives but a new extrinsic relation of parts to parts,

[108] Contemporary philosopher of mind Daniel Dennett would describe the objection expressed here by Berington as participating in the "Myth of Double Transduction: first, the nervous system transduces light, sound, temperature, and so forth into neural signals (trains of impulses in nerve fibers) and second, in some special central place, it transduces these trains of impulses into some *other* medium, the medium of consciousness" (72). For the materialist Dennett such a theory is untenable, as his labeling of it as a myth implies.

can never give capacities, which did not before exist" (61). Furthermore, the materialist system of vibrating nerves cannot explain the unity of consciousness: "where can be placed that *something*, which unites these thousand feelings, and calls them *mine*?" (63). Thus, Berington concludes, "in man must exist a substance superior to, and essentially distinct from the brain" (68), and "thought hath a greater relation to immateriality, than to materiality; because, in the material system, there can possible be no such thing as thought" (71).[109]

Unlike his predecessors Baxter and the "great and good" Wollaston (Berington 191), Berington does not explicitly state that matter is solid, inert, and dead. Rather, he ventures into murky territory in attempting to explain how the immaterial soul and the material body interact. Matter is not wholly inanimate for Berington, but "active in various degrees" (74); similarly there are baser parts of spirit, "inferior qualities," that can more easily interact with the higher degrees of matter (75-77). Thus, while not positing a third infinitesimal intermediary substance as had Hartley's original work (not the materialist Hartley presented by Priestley), Berington also effectively blurs the line between matter and spirit and posits a kind of spiritualized material interacting with a materialized spirit at the mysterious intersection within his dualist ontological system. In *Disquisitions*, Priestley takes Berington to task for this smuggling of corporeal nature into his immaterial substance, declaring, "A soul, capable of this mutual action with body, must have something gross in itself, and therefore must be degraded from holding that very high and distinguished rank in the scale of being, which has been assigned to it by those who consider it as infinitely superior to matter" (71). Nevertheless, Berington maintains that Priestley's and Hartley's materialism can never explain higher-order operations of mind, and he concludes by imploring the former "to rise above this visible world of matter, where you may discover the

[109] Berington's Cartesianism is on display as he later exclaims, "To what a low state is man indeed reduced, if all his affections, and all his strongest efforts of reason be nothing more than a long series of mechanical effects! He is no otherwise superior to the brute animal, and perhaps to the plant, than as one machine is superior to another" (159).

existence and reality of other beings, whose ethereal forms cannot be confined in a tub of water, or a bason of quick-silver; nor be extracted by friction from a globe or glass; nor in fine be analysed by all the powers of chymistry?" (221).[110]

2.5 Priestley's "Immaterial Materialism"

Now that the contested eighteenth-century discourse on the soul – with its adoption of the early modern and classical traditions – has been sketched in greater detail, we can turn more fully to the materialism of Priestley's *Disquisitions*, taking into account what it incorporates from previous philosophies as well as what is novel in his theory. Moreover, a close look at Priestley's work affords the opportunity to compare his professed monism with that which I argue to be present in the *Marriage*. In the following section, Blake's metaphysics can further be elucidated by comparing his and Priestley's critical responses to another eighteenth-century dualist: Swedenborg.

Priestley's *Disquisitions* were first published in 1777, with a revised and expanded second edition appearing in 1782. To both editions Priestley appended *The History of the Philosophical Doctrine concerning the Origin of the Soul, and the Nature of Matter; with its Influence on Christianity, especially with Respect to the Doctrine of the Pre-existence of Christ*. In the introduction to the earlier edition, Priestley's argument is concisely summarized: he defines the conventional dualist hypothesis, which posits matter in the Newtonian/Cartesian/Epicurean tradition as having extension, solidity, and impenetrability,

[110] See Thomson for a more detailed discussion of the soul/body debate in both eighteenth-century Britain and France. Concerning the controversy in Britain, she writes, "expressing doubts about the immateriality of the soul attracted accusations of irreligion, deism, or even atheism, and had profound political overtones. High Church pamphleteers used these works to show the danger of toleration of any unorthodox opinions, which undermined the very bases of society and government, while the embarrassed Whigs and latitudinarians were keen to dissociate themselves from such opinions" (*Bodies of Thought* 133).

while spirit/mind is conceived as "a substance intirely destitute of all extension, or relation to space, so as to have no property in common with matter" (xxxvii). While admitting that he was once an adherent of this philosophy,[111] it will no longer do, as Priestley argues:

> neither matter nor spirit (meaning by the latter the subject of sense and thought) correspond to the definitions above mentioned. For that matter is not that inert substance that it has been supposed to be; that powers of attraction or repulsion are necessary to its very being, and that no part of it appears to be impenetrable to other parts…. It is likewise maintained in this treatise that the notion of two substances that have no common property, and yet are capable of intimate connection and mutual action is both absurd and modern; a substance without extension or relation to place being unknown both in the scriptures, and to all antiquity (xxxviii).

Despite his praising of Newton and avowal to follow his rules of philosophizing, Priestley here already deviates from his nominal forbear in claiming that attraction and repulsion are "necessary to [matter's] very being," whereas Newton had claimed these forces to be applied to matter externally by God. Priestley claims a kinship with Hobbes, predicting that the dynamic monism argued for in *Disquisitions* would be met with accusations of atheism (xvi).[112]

Priestley claims that the dualist/mechanist assumption of matter as an impenetrable solid is due to false appearances. To illustrate this, he uses two common scenarios, which seem to indicate matter's passivity, solidity, and impenetrability: trying to press one's hand through a table's surface and billiard balls colliding. Observing this phenomena, writes Priestley, the

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[111] Priestley confesses, "Like the generality of Christians in the present age, I had always taken it for granted, that man had a soul distinct from his body … and I believed this soul to be a substance so intirely distinct from matter, as to have no property in common with it" (xi). This metaphysics characterized his earlier *Institutes of Natural and Revealed Religion* (1772-1774, discussed in chapter 1, as Simon Schaffer notes (173).

[112] He was right; see Yolton, 115ff. for contemporary responses to *Disquisitions*.

dualist concludes that "whatever is true of larger bodies with respect to each other, must be equally true of the smallest component parts of the same body." According to Priestley, such an observer does not realize that the hand's inability to penetrate a table surface and the collision of billiard balls "are no more than superficial appearances, and therefore have led to superficial and false judgements; judgements which the real appearances will not authorize" (4). Thus, although such properties of passivitiy, solidity, and extension would seem to explain the appearance, as Newton would have it, one must first distinguish between superficial and real – or, in Newtonian terms, relative and true – appearances.[113] Priestley thus raises the same doubts about conclusion from perception that Blake does: how does one *know* – based just on sight – that a bird is not a world of delight, or that a threatening Leviathan is not a moonlit harper? The true nature of matter for Priestley, like Blake's infinite, is hidden beneath "superficial appearances."

Priestley goes on to detail "recent observations" that have revealed the true appearance of matter: these observations were made by himself, in experiments described in his *History and Present State of Electricity* (1767), Melville, who "has shewn … that a drop of water rolls upon a cabbage leaf without ever coming into actual contact with it," and Newton, who demonstrated "that the rays of light are always reflected by a *power of repulsion*, acting at some distance from the body" (12-14). Therefore, "Since matter has, in fact, no properties but those of attraction and repulsion, it ought to rise in our esteem, as making a nearer approach to the nature of spiritual and immaterial beings" (17).[114] Priestley argues that once matter is seen as immaterial, with the

[113] I am grateful for Andrew Janiak's talk on Newton and theology during "The Emergence of Scientific Values from the Late Middle Ages to Early Modernity" (Duke University, April 20, 2012) for discussing Newton's use of these terms.

[114] As Skrbina observes, Priestley's celebration of matter's dynamic powers is similar to La Mettrie and Diderot (112).

help of experimental science and Roger Boscovich's modified point atomism theory,[115] the Cartesian dualism, which never could account for how spirit and matter interact, cannot hold. Matter is much like spirit, or vice versa, as Priestley ultimately admits: "If they say that, on my hypothesis, there is no such thing as matter, and that every thing is spirit, I have no objection, provided they make as great a difference in *spirits*, as they have hitherto made in *substances*. The world has been too long amused with mere names" (353). Again, like Blake, who condemns the misguided notion that anything from the body is evil, Priestley here reveals a consequence of his dynamic monist materialism: matter is no longer dead, but instead is nothing but lively forces – Blake's "energy" – and unworthy of the scorn directed at it by dualist Christian accounts, which in turn can be traced back to the repugnance directed at the sluggish body in Plato's *Phaedo*.

If the Cartesian notion of spirit is unnecessary, there remains the problem of explaining thought and perception. Here Priestley calls on Hartley's theory of association and vibration to argue for a materialist version of such higher-order operations; however, he does not explain the mechanism by which vibrations actually become conscious thoughts; perhaps sensing this difficulty, he defensively states that the vibrational theory is no more absurd than the traditional Cartesian explanation: "we have no more conception how the powers of sensation and thought can inhere in an immaterial, than in a material substance" (82). Preistley then turns to Locke's famous superaddition of thought to "systems of organized matter" passage, but unlike Baxter and other dualists, Priestley reprimands Locke for not embracing such a conclusion: Locke "ought to have concluded that this is really the case; since, according to the rules of philosophizing, we ought not to multiply causes without necessity" (73). Because Priestley invests organized matter

[115] Boscovich's *Theoria philosophiae naturalis* (1758) argues that matter is nothing but forces of attraction and repulsion organized around extension-less mathematical points. As an avowed dualist, however, Boscovich was incensed that Priestley had co-opted his theory for what Boscovich saw as an atheistic monism, and the two exchanged contentious letters concerning Priestley's (mis)appropriation. See Karis Muller's "Point Atomism, Space and God, 1760-80" for a fuller discussion.

with the capacity for thought and sensation, Skrbina calls him an "implicit panpsychist" (112), though it is important to note that Priestley argued for the emergence of thought and perception, which are not present in the "parts" of matter, as they are for Leibniz and Spinoza: "there is no more reason in nature why perception may not belong to a system of matter, as such, and not to the component parts of it, than that life should be the property of an intire animal system, and not of the separate parts of it" (88).[116]

Priestley continues to emphasize the importance of appearance in making his argument for emergence and the reduction of mind to matter. Since no one has ever *seen* thought occur outside the brain, and if thought stops when the brain is disabled, one must conclude that the brain – and not some disembodied spirit – thinks: "judging from appearances, which alone ought to determine the judgment of philosophers, an organized system, which requires a considerable mass of matter, is requisite for [perception and thought]" (89).[117] Unlike earlier in his work, Priestley here does not acknowledge the distinction between false and true appearances, or how philosophers might distinguish between them in this case. Nevertheless failure to recognize appearances warrants a rejection of Baxter's dualism: Baxter's theory of an active, immaterial soul "is destitute of any one fact or observation to support it" (98-99).

Like Toland before him, Priestley claims that a close and literal reading of scripture yields no reference to an immaterial soul: the translation of soul may originally refer to body, or breath, but it is clear that Adam went from dust to breathing dust, then back to dust; there was no

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[116] Alan Beretta credits Priestley's radical reconceptualization of the physical with rendering "null and void" the Cartesian mind-body problem and claims that his work can inform contemporary discussions of the "relation between cognition and brain" (75).

[117] Two other passages convey this idea: "Now that matter has been stripped of solidity, it is compatible with sensation and thought" (18); and, "the mind, it is evident, has no ideas but what result from the state of the brain…. unless the mind could have sensations and ideas independent of the state of the brain, which every observation proves to be impossible" (91). It is perhaps with these passages in mind that contemporary panpsychist philosopher Galen Strawson writes, "Joseph Priestley made the point that we know nothing about the physical that gives us reason to think that the experiential is not physical with its full force in 1777" (67 n. 35).

immaterial, non-dusty part.[118] In the case of Lazarus, "there was no such thing as a separate soul to be recalled; but that on the contrary, the case was simply this, viz. that the life, which is no more than a property, had been lost, and was restored again" (122). On this account, Christ was a corporeal man like any other, without a pre-existent soul; here Priestley's monism intersects with his Unitarianism. He extends his argument to claim that nothing in scripture warrants a conception of an immaterial God, though he is circumspect in avoiding a conclusion for God's materiality – analogic speculation must stop at the divine essence, even though Priestley discusses biblical passages that suggest the physical materiality of God (126, 144-47). Following Toland – whose work he cites – Priestley argues that the notion of an immaterial soul infiltrated Christianity from Egypt and other eastern regions, and that this idea was picked up by Plato and his followers, as well as by the early church fathers.[119] The notion that matter is evil and spirit is good is a corruption that has its origins in Egypt, Persia, India, and Chaldea, *not* in the bible. Thus, Priestley sees his monism as consistent not only with natural philosophical authority, but, and perhaps more importantly, with a literal and rational interpretation of scripture, which corresponds with the metaphysics of the *Marriage*, in which the energetic body is a source of eternal delight, and God only exists in corporeal beings.

Along with discussing how the dualist fallacy infiltrated the Church, Priestley also gives a detailed history of how it corrupted philosophy, culminating for him in Descartes, the apotheosis of the dualist delusion (192). On Priestley's telling, Descartes did not adhere to the true and original sense of scripture, but was seduced by eastern ideas of immaterialism, and he

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[118] As Matthew J. A. Green points out, Priestley's seamless transition from a discussion of natural philosophical experimentation to scriptural exegesis is evidence that he, like Blake, considered "natural philosophy and theology to be intricately intertwined" (36). Maurice Crosland notes this characteristic in the case of Priestley: "Nor should we, from our twentieth-century perspective, assume that Priestley kept science separate form theology and politics" (*Visionary Materialism* 282).

[119] See Schofield (66-68) for a more thorough discussion of Priestley's argument here and the sources from which he drew.

thus should be an "instructive warning to us, of the consequence of departing from the dictates of revelation; which are indeed those of the soundest philosophy" (193). Strikingly, for Priestley, the dualist ontology infects the witnesses of experiments, as "ignorant people … on seeing a remarkable experiment in philosophy, especially if air, or any invisible fluid, be concerned in it, [are] perfectly satisfied with saying that is the spirit of it" (171). An ignorant dualist will project his metaphysics – like Blake's Swedenborgian angel – onto the experiment being witnessed, vulgarly and erroneously ascribing spirit to air or any other "invisible fluid." It would seem here that first establishing a proper ontology – materialist monism – based on scriptural authority is necessary before explaining experimental matters of fact; but as we have seen, elsewhere in the text, matters of fact and observed appearances (experimentally produced or otherwise) are appealed to in order to establish a material monist ontology. Priestley's argument thus becomes circular in this regard.

Knowing that he would be accused of atheism, Priestley nevertheless insists on God's existence and action in the world, even if one must abandon the vulgar conception of God's immateriality. Arguing by analogy and distinguishing himself from Spinoza's heretical pantheism, Priestley writes:

> for the same reason that the maker of the table, or of the watch, must be different from the table or the watch, it is equally manifest that the maker of myself, of the world, and of the universe … must be a being different from myself, the world, or the universe; which is a sufficient answer to the reasoning of Spinoza, who, making the universe itself to be God, did, in fact, deny that there was any God. (149)[120]

[120] This passage is evidence against Yannis Plangesis's claim that "Priestley subscribes unconditionally, in his interpretation of nature and human nature, to the radical philosophical materialist monism of Spinoza and Toland" (302).

Here and in the following few pages, Priestley declines to speculate in detail concerning God's essence, claiming, "[b]y a God, I mean an intelligent first cause" (148). Here Priestley sharply deviates from Blakean metaphysics, and the entire tradition that includes Holbach, La Mettrie, and that dates back to the Stoic concept of corporeal *pneuma* as the cause of matter's immanent activity. God is not identical with matter, as Blake asserts, nor is matter inherently active, since for Priestley a transcendent God is necessary as a "first cause."[121] To Priestley's analogy arguing for the necessity of a table-maker to be different from a table, Levine simply responds: "Why?" This does not adhere to pantheist ontology, since, as Levine continues, pantheism "denies that the divine Unity is 'separate' from the universe, or that creation demands it, where such separation is seen to conflict with the all-inclusive nature of Unity" (195).

Karis Muller compellingly identifies the problem in Priestley's account: "It is not clear whether [Priestley] is re-introducing a surreptitious dualism here: eternally active divine energy directing eternally created, passive matter-energy, or is simply positing a Cause while emptying it of any ontological content" (286-87). Priestley's theistic monism puts him in a bind: since, in order to avoid Spinozan pantheism, he maintains a distinct divine first cause of the motion of matter and struggles to maintain a non-dualist account of that causation. As Matthew J. A. Green writes, "Priestley, like Locke, needs obscurity in order to preserve God's philosophical usefulness" (*Visionary Materialism* 56). Although in arguing that matter consists solely of forces, Priestley prefigured force theories of matter that would be developed in the nineteenth

[121] His adamant objections notwithstanding, Priestley was unable to escape charges of Spinozan panpsychism. Richard Price, responding to *Disquisitions* in *A Free Discussion of the Doctrines of Materialism, and Philosophical Necessity, in a Correspondence between Dr. Price and Dr. Priestley* (1778) accuses him of it: "Is it a power of attraction and repulsion only that perceives, thinks, reasons, &c [?] … If the effects of such action as that of ideas and motives on conscious and thinking beings, then since all matter attracts and repels, all matter must be conscious and intelligent" (15). Price is unable to accommodate Priestley's argument for emergence: "It is inconceivable to me how any person can think that many substances united can be one substance or that all the parts of a system can perceive, and yet no single part be a percipient being" (65-66). Priestley responds that though he advocates for emergence, he has no idea how it happens: "As to the manner in which the power of perception results from organization and life, I own I have no idea at all" (257).

century and broadened the conception of "materialism," his philosophy could not do without a deistic dualism. And like Berkeley and Locke before him, Priestley posits an incommensurable gap between the infinite God and finite man: "the powers and properties of the Divine mind … are not only so infinitely superior to those of the human mind … but so essentially different from them in other respects, that whatever term we make us of to denote the one, it must be improperly applied to the other" (105-06). In contrast to Blake's work, Priestley's God is fundamentally incapable of existing in corporeal beings.[122]

Thus, while Blake's *Marriage* shares some similarities with Priestley's account – a description of matter as energy, a distinction between true and false perceptions, and an anti-mechanistic corporealization of soul – a key difference involves Priestley's deistic separation of God from the universe as transcendent first cause.[123] As Peter A. Schock notes, Blake draws from Priestley's and Holbach's "virtually monistic continuum," but "[t]he Devil's metaphysics evinces neither Blake's rejection nor passive assimilation of Priestley's Christian materialism, but his appropriation and transformation of it" (457, 458).[124] In locating God solely in material beings, Blake is much closer to the Spinozan pantheism that Priestley, with his transcendent God

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[122] Priestley makes a similar claim that directly contrasts Blake's claim about man's ability to perceive the infinite God in all things: "the Divine essence cannot be the object of any of our senses, as every thing that we call matter is" (107).

[123] Morton Paley was the first Blake critic to note the similarity between Priestley's dynamic matter theory and Blake's description of matter as energy (*Energy and the Imagination* 8-9). Other critics to note similarities between Blake and Priestley's *Disquisitions* include Johnson (117), Mee (138), and Beer ("Influence and Independence in Blake" 223).

[124] Given the passages of Priestley discussed above, as well as further evidence presented in the next section, it is difficult to accept Stuart Peterfreund's claim that "Priestley's belief in God as an immanent principle … received perhaps its fullest articulation … in *Disquisitions*" (98). Likewise, Green's claim that "Priestley interweaves the experimental with the exegetical to produce a conceptualisation of the deity as an entity infused throughout and supporting existence" (*Visionary Materialism* 36) should be qualified: God as first cause does support existence, but is not "infused" throughout it. Green seems to reverse this claim later, however, in an assessment I find accurate: Priestley "ends up reinvoking the same sort of obscurity as Locke, not only in his description of an abstracted and mysterious deity but also in his discussion of empirical reality" (*Visionary Materialism* 55).

as first cause, rejects. In Priestley's response to Swedenborg's dualist influx theory, discussed in the next section, the distinction between Blake and Priestley can be even more clearly seen.

2.6 Priestley and Swedenborg

In light of the previous discussion, Blake's famous attack on Swedenborg in the *Marriage*, for having written nothing but "all the old falshoods" (E 43), takes on an additional dimension.[125] Not only does Blake's condemn Swedenborg on grounds that he lacked aesthetic originality, as Joseph Viscomi has convincingly shown,[126] but also because of his dualist and mechanistic metaphysics, to which Blake's devil opposes his divine monism. Thus, Blake's choice of adjective in his assertion that "[a]ny man of mechanical talents may from the writings of Paracelsus or Jacob Behmen, produce ten thousand volumes of equal value with Swedenborg's" (E 43) has aesthetic and philosophical implications: Swedenborg not only mechanically copied Paracelsus and Boehme, but in so doing he presented a dualist and *mechanistic* metaphysics.

Swedenborg's elaborates on his dualist theory of influx in *A Theosophic Lucubration on the Nature of Influx, as it Respects the Communication and Operations of Soul and Body* (1770), a work that was read in translation at the Swedenborgian meetings Blake attended (Viscomi, "Lessons of Swedenborg" 175-6). Swedenborg's argument stems from his theory of correspondences: everything in the material and natural world corresponds to an analogous essence in a transcendent spiritual realm, and the material realm would be dead were it not for

[125] In "The Evolution of William Blake's *The Marriage of Heaven and Hell*," Viscomi argues that plates 21-24, which contain Blake's most sustained satirical critique of Swedenborg, were the origin of the *Marriage*.

[126] Viscomi writes, "Swedenborg's work is unoriginal because it does not originate – grow or sprout – from the origin, does not manifest the 'Poetic Genius,' or 'the Lord' Christ. It lacks, in other words, Imagination, the source of perception and vision." Thus, as Viscomi notes, in lacking the imagination possessed by the Ancient Poets, Swedenborg's writings are "not old enough" ("Lessons of Swedenborg" 186).

God's emanation – influx – down into corporeality. The material sun we see corresponds to the spiritual sun we do not see, where God abides and emanates his love and wisdom in the corresponding forms of heat and light "into the soul of man, and through it into his mind, affections and thoughts … whatever proceeds from [the] material sun, considered in itself, must be void of life" (3-4). The corporeal body is merely "a covering to the soul, dead in itself, but organized and fitted to receive the influxes of life through the soul from God" (20).

These ideas are radically different from Blake's description of divine, living nature and the soul-body entity in the *Marriage*, and where Swedenborg's repeats this account in *The Wisdom of Angels, concerning Divine Love and Divine Wisdom* (English edition published in 1788), Blake's opposition in the annotations of his copy is clear. When Swedenborg discusses the human understanding dwelling in "Spiritual Light," Blake counters, "this Man can do while in the body" (E 604). And when Swedenborg claims that the living sun of God created the "dead Sun," Blake responds, "how could Life create death," dismissing such an ontology as a "phantasy of evil Man" (E 605).[127] Swedenborg's argument entails occasionalism, since for him God's influx must be continuous in order to maintain life and motion as we experience it in the material realm. Like Priestley and Blake, Swedenborg makes a distinction between true and false appearances, writing that although it *looks* as if matter is living, "upon the ceasing of thought, the tongue is immediately silent, and that upon the will's refraining to exert its active power, the limbs are motionless in an infant" (22). Swedenborg thus proclaims the very dualism that for Priestley has corrupted theology and natural philosophy, one which denigrates matter as inert and dead (including the material sun), and which posits an invisible, immaterial God as the continual cause of all motion and life.

[127] See also Blake's contention that "Thought without affection makes a distinction between Love & Wisdom as it does between body & Spirit" (E 603).

Swedenborg's confers authority on himself in these matters due to his own visionary conversations with angels: "as I am gifted with the privilege of being conversant in both worlds, and of beholding the suns of both, I am obliged in conscience to make this discovery to mankind" (39). Toward the end of the work, he conveys a detailed account of one of his visions, in which he is granted a spiritual interview with the disciples of Aristotle, Descartes, and Leibniz, who argue their respective theories of matter. Although they appear to agree upon the influx theory after reasoned debate, Swedenborg sees that an angel has deceived the disciples into believing that they had discovered the true theory on their own, as the angel declares: "'you … could not discover the truth because of the confusion of your minds'" (42). Swedenborg concludes with a dismissal of the scientific community and its reverence for empirical observation, experiment, and careful inference: "I am a fellow, by invitation, of the Royal Academy of Sciences at Stockholm, but have never desired to be of any other community, as I belong to the society of angels" (47).

In his *Letters to the Members of the New Jerusalem Church* (1791), addressed to the followers who viewed Swedenborg as a prophet and who had founded a church based on his tenets, Priestley takes issue with Swedenborg's appeal to his own inner experience as authority. And, as in *Disquisitions*, it is precisely in terms of true and false appearances that Swedenborg is discredited in Priestley's account: Swedenborg's religion is "destitute of all rational evidence" since it is based on his word only (xii), and "seeing an angel in a dream is nothing more than his dreaming he saw an angel" (11). Swedenborg's voluminous testimony, for Priestley, is founded on repeated false appearances, vision in dreams, which he and his followers took to be true. Without the authority of miracles or any other facts, experimentally produced or otherwise,

Swedenborg's account should not be given credibility. Blake directs the same criticism at Swedenborg via his depiction of the angel submitting to the false appearance of the Leviathan.

Later in the *Letters* Priestley gives a brief but accurate summary of Swedenborg's dualist influx theory, which he dismisses as "unphilosophical" (45), but in light of the dualist tendencies in *Disquisitions*, Swedenborg's occasionalist influx theory is not as remote from Priestley's system as the latter would have it. In *Disquisitions*, Priestley declares, echoing Hobbes, that one must not speculate concerning God's unknowable nature, but elsewhere in the text, perhaps in order to defend against charges that God is superfluous in his material monist account, Priestley does venture claims as to the role of the "divine material essence." Two contradictory passages at the beginning of the work indicate Priestley's lack of clarity concerning God's role via matter. The *cause* of attraction and repulsion –what matter consists of in his account – is not inherent in matter itself, since that would smack of Spinoza's pantheism. The first cause of the powers of attraction and repulsion, as Priestley will later declare, is God (48). But at this early point in the text, Priestley is more circumspect: "All that my argument amounts to, is, that from whatever source these powers are communicated, matter cannot exist without them; and if that superior power, or being, withdraw its influence, the substance itself necessarily ceases to exist, or is annihilated" (7). Priestley will not name God, but what other "superior" source might "communicate" these powers? This differs little from Swedenborg's influx, since here as well, if the source of power withdraws its "influence," matter cannot function, as in Swedenborg's account. The difference of course is that for Priestley, nothing solid will remain when the source of that force is withdrawn (since matter is only forces without solid extension), whereas for Swedenborg, inert matter still remains without the divine influx – it is just dead. Priestley effectively inverts Newtonian metaphysics: instead of matter being inert, massy corpuscles acted

upon by external forces, as it is in Swedenborg's dualist account, Priestley posits matter as nothing *but* those forces, activated by a superior source.[128]

Perhaps sensing the difficulty regarding matter's dependence upon a "superior" God's constant animation of it, Priestley alters his claim two pages later, attempting to differentiate between the action of God and the being of God:

> But it is certainly more agreeable to the rules of philosophizing, to consider all the constant effects of any substance as produced by powers properly belonging to that substance, whether they be necessarily inherent in it, or communicated to it; so that the action of the Deity in preserving such a substance in being, will be a different thing from the Deity himself, by his immediate agency, performing all that we ascribe to that substance; which is in effect to annihilate the substance, and to make the Deity himself to do, and to be every thing. (9)

Here, Priestley retreats from his previous claim, ambiguously allowing the possibility that the powers might be inherent in the substance, rather than communicated from a superior source. But the later claim in the passage more radically contradicts the argument made two pages earlier: on page seven, if God (unnamed but clearly inferred) withdraws his powers, the substance is annihilated; here, on page nine, if God does *not* withdraw his powers and performs "all that we ascribe to that substance," the substance is annihilated. This complete reversal shows how similar the problems raised by Spinozan pantheism – since God *is* material substance, removing his powers destroys that substance – are to those evinced by dualist occasionalism – if the action

[128] See Yolton for a more detailed account of the modification of Newton's matter theory in the eighteenth century.

seen in matter is really the action of God, Priestley suggests, the substance is annihilated, since for Priestley substance is *only* action.[129]

Priestley here attempts to separate God's being from God's action, just as Cudworth had posited the intermediate divine agency of a "plastick nature" to keep God separate from the universe, but this is no different from what Swedenborg claims in his dualist account: for Swedenborg, God's love and wisdom, as mediators, emanate from his being. Moreover, Priestley implies that the action of the "superior source" of power must be continual for matter to remain active. This closely aligns with Swedenborg's occasionalist theory of continual supernatural influx in the material realm. Swedenborgian matter is not God himself, but rather a passive receptacle for divine influx. Priestley also maintains that matter is not God, but since for him matter is only attraction and repulsion, he does not have Swedenborg's luxury of using metaphors of passive receptacles to describe this power. Both theories argue for a divine animation – from a transcendent source – of two different conceptions of matter.

When Priestley later defines God as a first cause, one might suspect that he is avoiding the dualist/occasionalist danger by removing the necessity of God's constant intervention in the universe. As first cause, God initiated the initial powers, and all subsequent action followed therefrom, in a determined causal chain. But as the passages quoted above are elaborated in the 1782 edition of *Disquisitions*, the continual influence of God is even more apparent in Priestley's system:

[129] In addition to condemning Spinoza's pantheism, Priestley finds fault with what he sees as Baxter's occasionalism: "But asserting, as [Baxter] does, that these powers are the immediate agency of the Deity himself, it necessarily follows that there is not in nature any such thing as matter, distinct from the Deity, and his operations. A strange opinion, but that in which Mr. Baxter's hypothesis necessarily terminates" (8). He later writes, "Pity that so mischievous a thing as [Baxter] every where represents matter to be, should have been introduced at all, when, without the aid of superior power, it could not do even that mischief" (66).

> Exclude the idea of deity on my hypothesis, and every thing except space, necessarily vanishes with it, so that the Divine Being, and his energy are absolutely necessary to that of every other being. His power is the very life and soul of every thing that exists; and strictly speaking, without him, we are, as well as, can do nothing…. My sphere, and degree of influence on other beings, and other things, is [God's] influence. I am but an instrument in his hands for effecting a certain part of the greatest and most glorious purposes. (42-43)

What was obscure in the 1777 edition is here boldly stated: God is "the very *life and soul* of every thing that exists" – after working so strenuously to do away with the vulgar immaterial notion of the soul, here it creeps back into a phrase that could not be more dualist. God's energy – like Swedenborg's light and heat – is necessary for the continual maintenance of all life; without divine influence (one could easily substitute "influx" here), Priestley is merely an inanimate "instrument," incapable of agency, just like all matter in Swedenborg's theory. In both accounts, God's influence is continuously and comprehensively creating all life and action in the universe, as well as preventing its annihilation. The idea of man as a passive instrument in the "hands" of a transcendent God – and its implications concerning the denial of human free will – could not be more contrary to the metaphysics of Blake's *Marriage*.

Priestley's problematically ambiguous *Disquisitions* demonstrate the complex nature of the long philosophical tradition concerning the soul's relation to the body – and, by extension, God's relationship to the material world. Priestley is aware of the early modern and classical metaphysicians who addressed the topic, as the philosophical history he presents demonstrates. Given the multi-faceted immensity of the discourse that precedes him, however, Priestley struggles to wholly differentiate his "immaterial materialism" from the dualist mechanism of

Descartes and Swedenborg. And as one might expect, Priestley's intervention into the monist/dualist debate triggered further responses. In addition to his subsequent correspondence with Price (see notes 47 and 112 above), *Disquisitions* gave rise to Caulfield's dualist *An Essay on the Immateriality and Immortality of the Soul* (1778), which contains an appendix, "In answer to Priestley's *Disquisitions on Matter and Spirit*," as well as Edward Holmes's materialist *An Attempt to Prove the Materiality of the Soul, by Reason and Scripture* (1789), which was dedicated to Priestley. But the dualist response overwhelmed efforts by the likes of Holmes, as evidenced by John Whitehead's *Materialism Philosophically Examined, or, The Immateriality of the Soul Asserted and Proved, on Philosophical Principles; in Answer to Dr. Priestley's* Disquisitions on Matter and Spirit (1778), John Rotheram's *An Essay on the Distinction between the Soul and Body of Man* (1781), and John Walters's *An Ode on the Immortality of the Soul: Occasioned by the Opinions of Dr. Priestley* (1786).

The choice of the third John in the above list to respond to Priestley in the form of a poem marks but one eighteenth-century occasion of *literary* interventions in the natural philosophical topic.[130] Blake's *Marriage* is another, which, with its disjointed, non-linear assemblage of multiple literary genres, parallels his eclectic adoption and refashioning of the natural philosophical tradition that precedes him. Although one can detect in the work aspects of each of the several classical schools of thought surveyed above, as well as of the early modern and eighteenth-century developments upon classical metaphysics, I contend that within the *Marriage* itself, Blake's metaphysics remains consistent. In it we find a monist material universe

[130] See, for instance, Alexander Pope's *Essay on Man* (1733-34), which gives lyric voice to Leibniz's system of pre-established harmony, Shaftesbury's deistic moral philosophy, Newton's corpuscular metaphysics, as well as a Neoplatonic animism in such memorable phrases as "All are but parts of one stupendous whole, / Whose body nature is, and God the soul" (ll. 259-60, 19). Later in the century, Edward Young's *Night Thoughts* (1742-45) and William Cowper's *The Task* (1785) repeat Pope's attempts to present a philosophic system that did not shun God's central role. Works of fiction also explicitly referenced the soul-body debate in natural philosophy, as is evident in Samuel Johnson's *Rasselas* (1759) and Laurence Sterne's *Tristram Shandy* (1759).

of motile, energized bodies that, as hylomorphic entities, are themselves – humans, animals, plants, and all corporeal forms – inextricably infused with soul, or divinity. There is no immaterial soul apart from the body, which, as an "inlet" of soul, implies that in the *Marriage* soul is also co-extensive with all material beings. As in Spinoza – and in *No Natural Religion* – God is no transcendent entity, but is rather completely identical with the energetic, corporeal universe. *The Marriage*'s closing line concisely summarizes Blake's hylozoic, panpsychic, and pantheistic monism: since all things *are* God, they have – or rather *embody* – (corporeal) soul, and thus "every thing that lives is Holy."[131]

2.7 Imagination over Empiricism

In plate 19 of the *Marriage*, the speaker, after pronouncing the Swedenborgian angel's misperception of the Leviathan to be owing to his metaphysics, flings himself "directly into the body of the sun," where he takes into his hand "Swedenborgs volumes" (E 42). What follows is a vertiginous descent, accompanied by the angel, from that "glorious clime" through "all the planets," stopping for a rest at Saturn. From there they leap into an Epicurean "void," which the devil claims is the angel's "lot." In that space, "if space it may be calld," they come to a church, on the altar of which an open bible reveals "a deep pit," prompting a second descent to "seven houses of brick." The pair enter one of the houses to discover chained monkeys and baboons savagely cannibalizing each other. "[T]erribly annoyd" by the stench, the angel and devil enter a mill, "& I in my hand brought the skeleton of a body, which in the mill was Aristotles Analytics." There the devil declares that the angel's works "are only Anayltics" (E 42). Thus, Swedenborg's volumes become – via a rapid imagistic metamorphosis – a monkey (or baboon) skeleton, and finally Aristotle's *Analytics*. What do the two works have to do with each other? In

[131] Levine, though not referring to Blake's work, uses the terms "holiness" and "divinity" interchangeably (47).

light of the metaphysics discussed in previous sections of this chapter, Blake's dizzying narrative takes on significant philosophical implications.

The devil's plunge into the "body" of the sun makes explicit reference to Swedenborg's dualist influx theory, which posits a living/spiritual and dead/bodily sun. Blake's opposition to this metaphysics in his annotations to the "dead sun" passages in *Divine Love and Divine Wisdom* attest to his awareness of this specific image, and because the devil finds Swedenborg's works in the *bodily* sun, the implication is that they – like the sun itself – are dead. This would certainly be consistent with the aesthetic dimension of Blake's critique of Swedenborg, whose works are "mechanical" copies lacking originality and the imagination of the Ancient Poets; they are, in short, dead writings. That they literally become a monkey skeleton drives the point home with poetic force. Moreover, in assigning the angel's "lot" to be the void, Blake links Swedenborg's ontology of a dead material world to the soulless atoms and void described by Lucretius.[132] In effect, the entire universe that the devil presents to the angel in this Memorable Fancy – from the sun to the skeletons in the pit – is dead and godless. The church is of course no exception, when one recalls the "system" described on plate 11, wherein "Priesthood" contributes to the Swedenborgian dualist ontology by abstracting deities from their objects, thus rendering the material universe lifeless.

Blake's designs on plate 11 signals the contrast between such a metaphysics and that which his devilish narrators proclaim (illus. 16). The bottom of the plate depicts Swedenborg's dualist mechanism: a diminutive naked human figure flees a bearded, transcendent sky god, whose arms are extended. Here the separation between man and divine creator is clearly represented; the human form appears to be energetically repulsed by the god, flying headfirst away from him. The larger design at the top of the plate does not portray any transcendent

[132] Epicurean atoms *constitute* the soul, but they themselves lack life and sentience.

creator. Rather, the elements are personified in postures of delight, just as they were animated by the Ancient Poets. The naked childlike form is here raising its arms to embrace the matronly mermaid representing water, who leans protectively over the babe. On the left, the element of fire rises from the earth in the form of a female nude, arms also raised ecstatically, her head surrounded by sun-like rays. This is also the body of the sun, but unlike the one containing Swedenborg's dead volumes, she is alive and holy, an emblem of Blake's pantheistic metaphysics.

Although one can find dualist passages in Aristotle's *De Anima*, such as his retention of the Platonic immaterial rational soul, his predominant theory of the hylomorphic soul-body entity has much in common with the corporeal soul described in the *Marriage*. It is significant, then, that Blake compares Swedenborgian dualist philosophy not with *De Anima*, but with another Aristotelian work, the *Analytics*, which treats at length of the syllogistic process by which knowledge is acquired via external demonstration and logical induction based on limited sensory experience. In this regard, the *Analytics* is one of the earliest works in the Western empirical tradition, and though sensory perception and reason are crucial to it, like Swedenborg's works, Arisotle's also lack imagination on Blake's view.[133] Thus, the *Marriage* continues the critique of empirical epistemology begun in *No Natural Religion*, but in the later work Aristotle is cited as the representative empiricist, rather than Locke. The appearance of the *Analytics* within the mill in the Memorable Fancy strengthens the connection, since the mill appears in *No Natural Religion* – and in Leibniz's *Monadology* – as the symbol of empirical and mechanistic

[133] Another reason that Aristotle belongs in Swedenborg's company could be found in the *Poetics*, in which Aristotle declares imitation, and not expressive, imaginative creation, as the function of poetry. See Abrams, 9-10, 78, 90.

epistemology.[134] Just as for Leibniz the non-sentient parts of the mill can never give rise to perception, so the *Marriage*'s dead mill (containing the skeleton) emblematizes dualist ontology and the "same dull round" of limited Aristotelian epistemology, wherein perception is unsupplemented by divine Poetic Genius, or imagination.

Aristotle's *Prior* and *Posterior Analytics* prefigure Lockean empiricism insofar as they stress sensory experience as the foundation of knowledge. In Book II of the *Prior Analytics*, Aristotle writes that "it is the business of experience to give the principles which belong to each subject" and that "every belief comes either through syllogism or from induction" from such principles (46a17-18, 68b14).[135] These ideas are reiterated in the *Posterior Analytics*: "induction is impossible for those who have not sense-perception" (I, 81b6), and "out of sense-perception comes to be what we call memory, and out of frequently repeated memories of the same thing develops experience; for a number of memories constitute a single experience" (II, 100a4-6). This direct relationship between knowledge and received sensory perceptions combined in memory constitutes what Blake described as the "Ratio" in *No Natural Religion*; since for Aristotle sensory experience is finite, so is man's knowledge. And like Locke, Aristotle concludes that there can be no innate knowledge: "We conclude that these states of knowledge are neither innate in a determinate form, nor developed from other higher states of knowledge, but from sense-perception" (II, 100a9-10). Evidently, then, Blake finds Aristotle to be the foundation for the "same dull round" of the empirical epistemology that Blake had earlier critiqued in Locke.[136] In his annotations to *Divine Love and Divine Wisdom*, Blake refers to such

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[134] Green claims that the mill here "emblematises the circularity of both the philosophy of the schoolmen and the empirical method that sought to replace it" (*Visionary Materialism* 118).

[135] In the same book Aristotle also makes the hylomorphic claim that "body and soul are affected together" (70b17).

[136] Locke did not see his own epistemology as repeating that of Aristotle. In fact, his own critique of Aristotelian syllogism in *Essay* 4.14 sounds uncannily Blakean: "The rules of syllogism serve not to furnish the mind with those

empiricism as "[w]orldly wisdom or demonstration by the senses," and cites such philosophy as the cause of the erroneous belief that God is invisible (E 603).[137]

Moreover, in Aristotelian epistemology, "sensations are always true, imaginations are for the most part false" (*De Anima* 428a11). Representations that enter sensibility are unfailingly accurate, since the sensible "species" that enter from the outside are formal copies of the object being perceived, as Michael Ayers writes: on Aristotle's account, "when I see the sun, one and the same thing, the sun, exists both in reality and in my mind, both formally and objectively" (27).[138] In the *Marriage*, however, the reverse is true: perception is conflated with imagination, and what is perceived – or in the Angel's case misperceived (an impossibility for Aristotle) – is "owing to" the perceiver's metaphysics. This is succinctly articulated in the Proverb of Hell, "A fool sees not the same tree that a wise man sees" (E 35). As in chapter one, I wish to clarify that I am not claiming Berkleyan idealism for Blake here. *Contra* Nurmi's claim that "Blake often rejected external nature as non-existent" ("Polar Being" 67), he is not stating that there is no tree "out there," but rather that one's metaphysics and imagination influence *how* that tree, which *is* out there, is perceived. Here Blake poetically depicts an emanative model of epistemology that elevates imagination as a corporeal faculty crucial to perceiving the infinite.[139]

In the Memorable Fancy on plate 12, Isaiah represents Blakean epistemology by claiming that all poets hold that a "firm perswasion" that a thing is so makes it so (E 38). And "in ages of

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intermediate ideas, that may shew the connexion of remote ones. This way of reasoning discovers no new proofs, but is the art of marshalling, and ranging the old ones we have already" (4.14.6, 679).

[137] Paley notes that Aristotle "is described sympathetically" in *Divine Love and Divine Wisdom*, "and Swedenborg says, 'Afterwards I discoursed with him, concerning the analytic science'" ("'A New Heaven is Begun'" 75).

[138] Rankin reiterates this claim: "Aristotle insists that the special senses are not open to error" (83).

[139] Bloom sees this proverb as linking epistemology to ontology: "the wise man, as a creative Devil, sees the tree in a context more exuberant than any an unvitalized nature could sustain. The fool is self-condemned to a status of minimum vitality in nature" (14).

imagination" such firm persuasions, or metaphysical beliefs held by the Ancient Poets, "removed mountains" (E 39). Unlike in Lockean/Aristotlean empiricism, wherein the external world impresses upon the passive sensibility, for Blake the imaginative sensibility interacts with and transforms the material universe, which is infinite. Isaiah implies that the current age, dominated as it is by Lockean epistemology, is not one of imagination, but the *Marriage* clearly expresses a desire to change such a state of affairs. Ezekiel then further elaborates on Blakean epistemology, saying that Israelite prophet/poets like himself taught that imagination, or Poetic Genius "as you now call it," is "the first principle" of "human perception." Here, through Ezekiel, Blake echoes his claim from plate 11 about all deities residing in the human breast: Ezekiel states that "all Gods" and all religions are "tributaries of the Poetic Genius," i.e., the human imagination, effectively summarizing the argument made in *All Religions are One*.

Adopting Blake's monist, pantheist metaphysics as a "firm perswasion" is the first step in achieving the imagination-driven perception of the infinite described by Isaiah and Ezekiel. As the later Memorable Fancy narratively demonstrates, the Swedenborgian angel's dualist beliefs about the dead material world caused his misperception of the harper as a menacing Leviathan. Accordingly, plate 14 makes explicit that the "improvement of sensual enjoyment" and the cleansing of the "doors of perception" to reveal the holy infinitude of the material world must be preceded by an embrace of what Blake takes to be proper metaphysical attitudes: "But *first* the notion that man has a body distinct from his soul, is to be expunged" (E 39, my italics). Blake promises to effect this rejection of dualism and improvement of sensation "by printing in the infernal method" – an imaginative artistic act aimed at "raising other men into a perception of the infinite," as Ezekiel had done before him and, significantly, as the "North American tribes practice" (E 39). Blake here signals an awareness of the pantheistic practice of North American

Indians, as Levine notes: "the religion among various American Indian tribes is largely pantheistic" (67). It is through art – and in Blake's case illuminated printing – that metaphysics can be conveyed and perception improved.[140] As it currently stands, in this age of worldly reason and demonstration from the senses, "man has closed himself up, till he sees all things thro' the narrow chinks of his cavern" (E 39). The hope is that active engagement with Blake's art can usher in another age of imagination.

Aristotle's denigration of the "false" imagination – *phantasia* – is echoed by many early modern philosophers, including Bacon and Descartes, who both describe the imagination as a deviant corporeal faculty capable of misleading immaterial reason. In *The Advancement of Learning*, which Blake read at an early age, Bacon claims that the poetic imagination makes "unlawful matches & divorses of things," and he names astrology, natural magic, and alchemy as three sciences "which have had better intelligence and confederacy with the imagination of man than with his reason" (17, 22). Bacon later quotes Aristotle approvingly on imagination's deviant subservience to reason: "For it was well sayd by Aristotle: that the minde hath over the bodie that commaundement which the Lord hath over a bond-man; but, that reason hath over the imagination that commandement, which a magistrate hoth over a free citizen*;* who may come also to rule in his turne" (47).[141] Similarly, in *Passions of the Soul*, Descartes describes bodily imagination as a "haphazard" agitation of animal spirits in the brain, the actions of which do not obey the will or reason and thus "cannot be numbred among the actions of the soul" (18-19). For

[140] Viscomi's "In the Caves of Heaven and Hell: Swedenborg and Printmaking in Blake's *Marriage*" offers a compelling reading of the *Marriage*'s Printing House in Hell passage as an allegory for the imaginative relief etching process. Viscomi argues that for Blake "[t]he open, visionary mind … is realizable in body and, as visionary art, materially realizable. ... In this sense, art is vision's physical form, the marriage of heaven and hell" (38).

[141] Blake later quotes from this same page in Bacon's work in his 1799 letter to Dr. Trusler: "Consider what Lord Bacon says 'Sense sends over to Imagination before Reason have judged & Reason sends over to Imagination before the Decree can be acted'" (E 703).

both writers, the imagination is dangerous insofar as it is capable of "unlawfully" representing that which is not there.[142]

The functioning of the corporeal imagination was more extensively mapped by neurophysiologists over the course of the long eighteenth century, and as Katherine E. Kickel argues, Thomas Willis was among the first to undertake this task, locating the imagination in the cerebellum (33). Willis and other contemporary medical writers reiterated what was implied by Descartes and Bacon: the imagination can *act*, it is a material force capable of physically altering the body. But this action was largely construed as unnatural, deviant, working against reason and the divinely sanctioned order of things.[143] Kickel observes that for Willis, like Bacon before him, imagination "was capable of not only misleading the senses, but of actually fooling them to the extent that an individual would never know whether a perceptual event resulted from an internal stimuli or an external environmental one" (34). By mid-century, La Mettrie reduced the soul completely to the operations of the corporeal imagination, which he equated with genius, as discussed above. Nevertheless, even he echoes Bacon in arguing that the imagination must be trained to "bridle itself; not to give way to its own impetuosity, which forms nothing but splendid enthusiasts" (*Machine Man* 34).[144] Likewise, for La Mettrie's materialist successor, Holbach, the

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[142] Similarly, in his *Leviathan* Hobbes calls the imagination "nothing but decaying sense" (5). Paley also gives a brief history of imagination in relation to Blake, claiming that Plato also distrusted it and Augustine denied its creative potential; he also finds skepticism about the imagination in the works of Milton and Dryden (*Energy and the Imagination* 207ff.).

[143] Dennis Todd develops this argument in *Imagining Monsters.*

[144] Like his French contemporary, David Hume also describes the imagination as by nature at "liberty" and "not restrained," yet the ideas associated with it are more "faint" than the "lively" ideas conveyed by the memory (*Treatise* 1.1.3). As Stephen Priest points out, for Hume, the imagination is also deceptive in that it "fills the perceptual gaps between our perceptions by 'feigning a continued being'. As he puts it, 'We have a propensity to feign the continued existence of all sensible objects' and this 'makes us believe in the continued existence of body' ([*Treatise*] 1.4.2.)" (152). In his later *Enquiry*, Hume elaborates on the unbridled deviancy of the imagination: "The imagination of man is naturally sublime, delighted with whatever is remote and extraordinary, and *running, without controul*, into the most distant parts of space and time, to avoid the objects, which custom has render'd too familiar to it. A *correct* judgment observes a contrary method" (251, my italics). Despite such unfavorable depictions in

imagination is a "suspicious guide" (*System of Nature* 1:82), which, "when it wanders, produces fanaticism – religious terrors – inconsiderate zeal – phrenzy – enormous crimes," but when "well regulated produces enthusiasm for useful objects … [and] gives energy and vivacity to all our sentiments" (1:221).[145] Blake shares with these writers the conviction that the imagination is a bodily faculty, but nowhere in the *Marriage* does he intimate that it needs to be restrained.

In opposing empirical perception and the negative characterization of the imagination that predominated much eighteenth-century natural philosophy, Blake draws from a contrasting intellectual tradition that depicts perception as a partially emanative, creative process and that unreservedly celebrates the creative powers of the imagination. It is no coincidence then that Blake's opposition to the likes of Aristotle, Bacon, and Descartes, who dismiss imagination as erroneous and deviant, is explicitly articulated in his annotations to the title page of Swedenborg's *Heaven and Hell*. Responding angrily to an unknown hand that had inscribed Theseus's description of imagination as fantastically bodying forth an "airy Nothing," Blake makes the corrective distinction that the quote is "Theseus's opinion not Shakespeares" and that only fools would not notice the difference (E 601). The implication is that Blake finds Shakespeare to be of a contrary opinion to Theseus: that imagination has a much more substantial power than Aristotle's false *phantasia*. This belief Blake demonstrates in his imaginative corrective to Swedenborg's *Heaven and Hell*, wherein Blake states that an infinite number of Swedenborgian works could be produced from the works of Shakespeare (E 43). Dante is also named in this passage as another literary figure possessed of the infinite

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Hume's work, James Engell argues that the British empiricists salvaged imagination from the likes of rationalists like Descartes by viewing the imagination "as a power that might replace or complement 'reason'" (20).

[145] Hisao Ishizuka quotes the entry on imagination in Abraham Rees's *Cyclopaedia* (1781-89), "in which the power of the imagination is equalized with the soul's forming images of objects 'by [animal spirits] impressing them [as strokes] in the fibres of the brain'" (80).

imaginative power of the Ancient Poets. Below Shakespeare and Dante, Blake also ranks two non-literary writers as demonstrating original imagination such that "ten thousand volumes of equal value with Swedenborg's" could be produced from their writings: Paracelsus and Jacob Boehme (E 43). Much has been written about the affinities between Boehme and Blake, but Blake scholars have devoted less attention to Paracelsus.[146] Since Blake has already been shown above to share Paracelsian metaphysics, I now emphasize a few more connections in terms of how both writers treated the imagination with similar esteem.

In the *Advancement*, Bacon disparages the "Schoole of Paracelsus," who "exalted the power of the imagination, to be much one with the power of miracle-working faith" (46).[147] Bacon's dismissal signals the presence of a natural-philosophical tradition – as distinct from the literary one featuring Shakespeare and Dante – that did not treat imagination as a wayward faculty in need of restraint by reason, but rather "exalted" it as having power to act on the material world, as Blake does in the *Marriage*. Even the earliest commentators on Blake have noted the parallels between the "Schoole of Paracelsus" and Blake's work. In the prefatory memoir of his 1890 edition of Blake's poetry, William Michael Rossetti writes: "Blake had in all probability read in his youth some of the mystical or cabalistic writers – Paracelsus, Jacob Bohme, Cornelius Agrippa; and there is a good deal in his speculations, in substance and tone, and sometimes in detail, which can be traced back to authors of this class" (lxxx). And in the

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[146] Raine, for instance, reads the *Marriage* against Boehme's work, both of which she claims argue that God "is not separate from nature" (1: 364); thus, she finds Blake's work to represent "the strongest influence of Boehme on Blake" (2: 49). Green also discusses similarities between Boehme and Blake, particularly focusing on Boehme's use of contraries (*Visionary Materialism* 93-98). For a book-length study of the relationship between Blake and Boehme, see Kevin Fischer's *Converse in the Spirit: William Blake, Jacob Boehme, and the Creative Spirit*.

[147] Bacon repeats this claim in Century X of his *Sylva Syvlarum* (1626): "Paracelsus, and some darksome authors of magicke, doe ascribe to imagination exalted, the power of miracle-working faith" (242). In this section Bacon sets out to explode the superstitions surrounding natural magic, but he does concede that imagination does have a certain power to act at a distance, "[b]ut that the distance must be competent; the medium not adverse; and the body apt and proportionate" (255).

twentieth century, Frye admits that "[i]t is true that in the study of Blake certain mysterious figures – Agrippa, Paracelsus, Boehme, Swedenborg – begin to loom up on the horizon, a cloudy phalanx whom many lovers of painting and poetry may not care to engage" (151). Much ink has been spilled debating the degree to which this "cloudy phalanx" is influential to Blake's work, and I do not wish to enter into that fray, or to try to establish Paracelsus as a direct historical source.[148] But, Blake was certainly aware of Paracelsus, as he was of Boehme, and my point here is that the *Marriage* demonstrates a natural-philosophical kinship with Paracelsus's writings on metaphysics and the imagination.

In the *Marriage*'s last Memorable Fancy, the devil again reiterates the Spinozan metaphysical claim that God is other men, and that one should love "the greatest men best … for there is no other God" (E 43). The devil then declares that Christ is "the greatest man" in that he acted from an immanent "impulse" and did not obey the transcendently imposed rules of the ten commandments. As Blake has earlier made clear, the immanent source of action in man derives from the Poetic Genius, or imagination, and Christ, being the greatest man, evidently is possessed of the greatest imagination. Paracelsus, in *Of the Supreme Mysteries of Nature*, also hails Christ as the greatest man – the work begins with an invocation to him – and employs diction uncannily similar to Ezekiel's comments on the "firm perswasion" that can "remove mountains" in the *Marriage*. Magic, according to Paracelsus, is not achieved through conjurations or necromancy, but by "faith alone whereof Christ speaks, saying, that by it we shall be able to *remove mountains* and cast them into the sea" (82, my italics). What for Blake is a

[148] Harold Bloom is foremost among Blake critics to reject Blake's kinship with writers like Paracelsus, Agrippa, and Boehme; in his commentary on *Jerusalem* in Erdman's edition of Blake's works, Bloom proclaims, "Blake rejects all occultism, a point his myriads of esoteric interpreters have chosen not to understand" (E 945). And, ironically, Fischer admits, at the beginning of a book on Blake and Boehme, that "[i]t is quite possible to read widely in Blake's esoteric sources, in the works of figures such as Cornelius Agrippa, Paracelsus, Roger Bacon, Robert Fludd, Thomas Taylor, Thomas Vaughan, or the mythical Hermes Trismegistus, and nonetheless achieve little truly valuable insight into either Blake or such kindred writers" (25).

metaphysical conviction is for Paracelsus a "faith" that likewise reflects the infusion of divine power in the material world; both convictions enable transformations in the living world of which man is a part.

In the *Supreme Mysteries* Paracelsus describes the imagination as a fiery emanative power capable of good and evil action on the material world: "the imagination is as it were pitch, which easily cleaveth and sticketh, and soone taketh fire, which being kindled, is not so easily extinguished" (61). Additionally, in his *Archidoxis* (English edition 1660), Paracelsus hails the imagination as "the mover of my course" and that which "kindleth the vegetative virtue, as fire kindles wood" (8). Indeed, according to Pagel, the imagination for Paracelsus is associated with *semina*, a Neoplatonic magnetic force permeating the universe (like the *anima*) and "capable of lifting man up and joining him to cosmic matter" (122-23) – just as Blake's prophet/poets desire to *raise* men into a perception of the infinite. Pagel writes, "All action is visualized by Paracelsus as flowing from an act of imagination – a process not connected with formal logical reasoning, but with the spirit-conscious or subconscious and in a broad sense embracing all strata of personality" (111).[149] As in the *Marriage*, Paracelsus's imagination is a fiery force emanating from man and connecting him to the material world, which is transformed according to the degree of the imagination's "greatness."[150] As was noted above, Blake equated the Poetic Genius/imagination with the "true man" in *All Religions are One* – as opposed to Plotinus's designation of the true man as being the immaterial rational soul – and this equation resonates

[149] Pagel quotes from Paracelsus: "what else is imagination but a sun in man which acts throughout his circle?" (121).

[150] Another member of Paracelsus's "Schoole," Agrippa makes similar claims regarding the fiery nature of the imagination and its connection with the soul in his *Three Books of Occult Philosophy* (English edition 1651), wherein he writes, "So the soul being strongly elevated, and inflamed with a strong imagination, sends forth health or sickness, not only in its proper body, but also in other bodies" (1: 145), and "a strong and exalted imagination … is in every man & it is in the soul of man from the root of his creation" (3: 493).

with Paracelsus's argument that imagination is the guiding force of action in men.[151] In the *Marriage*, then, Blake's monism conflates imagination – which is not an immaterial entity – and sensory perception in what Robert Gleckner describes as a "union of the five senses (or, as Blake more often has it, four senses) into one imaginative eye [that] precludes any distinction … between the senses and imagination" ("Blake and the Senses" 13).

Just as Paracelsian imagination is fiery and emanative, so is vision itself, as described in Plato's *Timaeus*. Sight, in Timaeus's account, is the first created sense, and the gods "contrived the eyes to *give* light" (45b, my italics) as opposed to receive it, as in the empirical model of perception. Plato continues in the same passage, "[s]o much of fire as would not burn, but gave a gentle light, [the gods] formed into a substance akin to the light of everyday life, and the pure fire which is within us and related thereto they made to flow through the eyes in a stream smooth and dense." This stream of light emanating from the eye "diffuses the motions of what it touches or what touches it over the whole body, until they reach the soul, causing that perception which we call sight" (45d).[152] For Blake, as for Plato, the eyes are "inlets" of the soul, but for the man of creative imagination who can remove mountains, they are also outlets of fiery perceptive force. Indeed, Blake's debt to such a Platonic model of emanative vision is given as a Proverb of Hell, directly following his claim that the fool and wise man perceive different trees: "He whose face *gives* no light, shall never become a star" (E 35, my italics) – which, as noted earlier,

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[151] Both Blake's and Paracelsus's attitude toward the imagination contrasts Priestley's lament in the *Disquisitions*, "How unintelligibly are persons reduced to talk, when they quit the road of common sense, forming their systems not from facts and appearances, but from imagination" (58).

[152] According to David C. Lindberg, the Stoics also shared this emanative theory of visual perception. See his *Theories of Vision from al-Kindi to Kepler* for a discussion of competing post-Platonic approaches to vision. Abrams writes that the metaphor of the creative mind as a lamp – as opposed to an Aristotelian mirror – has its origin in Plotinus, whereas Plato is the source of the reflector archetype (59). The above quote from the *Timaeus*, however, contradicts such a claim.

Damon connects to a passage in Paracelsus. The *Marriage* argues that such emanation can be achieved if the doors of perception are "cleansed" in the corrosive fires of imaginative art.

The living, divine world of the *Marriage* is one of fiery flux. Metaphysics alters perceptions, but such sensations can be "improved" when a man "alters his opinions" to embrace the metaphysics conveyed by Blake's devilish narrators and Ancient Poets (E 42). The culminating Memorable Fancy of the work depicts such a transformation, as the Swedenborgian angel "stretched out his arms embracing the flame of fire" in which the devil appeared and "was consumed and arose as Elijah" (E 43). As we have seen, throughout the *Marriage* fire has been associated with *anima*, *pneuma*, bodily energy, divine desire, imagination, art, vision, and life. The angel's embrace of it signals his abandonment of a dualist metaphysics that makes even the sun a dead object. As a result, the angel "is now become a Devil" and the narrator's "particular friend" (E 44). To embrace the fire is to accept Blake's brand of pantheist monism and his exaltation of imagination and emanative theory of perception.

2.8 From the Early Tractates to the *Marriage*

The form and style of the *Marriage* clearly differs from *No Natural Religion* and *All Religions are One*, but has Blake altered his own philosophical opinions between the two tractates and the *Marriage*? I contend that Blake moves from a panpsychist/panentheist to a more radical pantheist ontology in the *Marriage*, which is more explicitly monist than the earlier works. In *All Religions are One*, Blake implies a subtle form of dualism by claiming that the Poetic Genius in man – and the Genius in all things – is a "Spirit" from which the "body or outward form is derived." This parallels Leibniz's assertion of a spiritual monad inhering in an organic body, the latter being the appearance of the former. And in *No Natural Religion*, the

panentheist claim that God "becomes" man suggests that God was separate from man to begin with, though of course the fusion between God and man culminates the work. The *Marriage* is more explicitly pantheist in arguing that "there is no other God" apart from existing beings or men. Here the Spinozan equation of God with the living material world parallels the annotations to Lavater, wherein every thing on earth "in its essence is God."

The *Marriage* also marks Blake's transition of denoting the Poetic Genius as the imagination and, more significantly, Blake here says nothing about its spiritual nature, as he had in *All Religions are One*. If in the tractates perception of the infinite is contingent upon the Poetic Genius and not upon sensory organs as theorized in Locke's epistemology, in the *Marriage* the organs of perception play a more crucial role. Leibniz's rejection of what Ezekiel calls "finite organical perception" still applies in the *Marriage*, but his *dualist* panpsychism, which features an infinite number of *immaterial* monads inhering in matter, does not provide as strong a metaphysical analogue to Blake's later work, which nowhere posits anything immaterial in the universe. Leibniz makes his dualism clear in his 1702 letter to Queen Sophie Charlotte of Prussia, in which he writes that "there is some substance separate from matter," which he designates as perceptive souls and reasoning minds, both of which are monads (191). The *Marriage* differs in insisting that soul/mind are inseparable from matter. Thus, in this work, the monist pantheism of Spinoza – informed as it is by the various classical traditions I have discussed above – serves as a more compelling analogue to the metaphysics of the *Marriage*, since in both works soul and body are merely modes of the one divine substance that is inseparable from the world.

The *Marriage* also elaborates on *No Natural Religion*'s emphasis on the divine ability to perceive the infinite divinity in all things. In the early work, this idea is expressed as a

philosophical proposition, but it leaves unexplored and unexplained readers' doubts: *how* does one perceive the infinite? The *Marriage* offers a more artistic – both poetic and visual – attempt to answer such a question. The word "infinite" occurs nine times in the work: Ezekiel discovers it in every thing and attempts to raise other men into a perception of it (E 38, 39), the whole creation will appear infinite when the cherub leaves "guard at the tree of life" (E 39), the narrator's corrosive "printing in the infernal method" will display the hidden infinite, which will also appear after cleansing the doors of perception (E 39), the inside of the cave in the Printing House in hell is infinite (E 40), as is the Abyss above which the angel and narrator hang suspended (E 41), an infinite number of Swedenborgian works can be produced from the works of Dante and Shakespeare (E 43), and the concluding Song of Liberty describes "infinite mountains of light now barr'd out by the atlantic sea" (E 44). Every instance features a transition or concealment – the infinite emerges out of concealment or is revealed to be contained in something finite, such as the inside of a cave or the works of two authors. Blake's repeated point is that dualist ontology and empirical epistemology limit and confine man within the "narrow chinks of his cavern," closing him from a divine world of eternal delight. But the infinite is always springing into perceptual awareness for the man who, transformed by imagination, can alter his opinion. If the cavern is a metaphor for the mind of man – as Eaves, Essick, and Viscomi suggest (137) – then Blake's claim that the inside of the cavern *is* infinite if man could be raised to see it is consistent with his assertion in *No Natural Religion* that man himself is infinite (E 3).[153]

Blake expends more poetic effort in the *Marriage* than in the early tractates to challenge dualist and atomistic ontologies that fix the material universe under what he views as oppressive

[153] Raine makes an argument to this effect: "It is clear that 'the perception of the infinite' means, quite specifically, the realization that the infinite lies within man himself as the indwelling mind of God" (2: 113).

laws. The dizzying suddenness of transformation from Leviathan to harper, from Swedenborgian volume to monkey skeleton to *Analytics*, from angel to devil are Blake's attempts to trigger in the reader the apocalypse that a change in perspective yields. The *Marriage* unsettles any fixed assumptions one might have of Euclidean/Newtonian space time by constantly shunting re-readers forward and back, between image and text, challenging them to make connections and perceive patterns across multiple plates, and by creating impossibly vertiginous landscapes: underground skies, a breathless descent through the cosmos from a dead sun, down further through a pit that opens in a bible, winding through beast-prowling cavernous chambers that one suddenly realizes are Blake's illuminated plates in the act of being created. How is it possible to imagine – to form an image of, in the Lockean sense discussed in chapter one – coming home "on the abyss of the five senses" (E 35)? I for one cannot, perhaps because the infinite cannot be directly conveyed in a representational sense via text or image. But it can be suggested, which is what Blake's satire attempts through its hybrid compression of literary genres and eclectic refashioning of philosophical traditions.

The *Marriage*'s own infinite nature is evidenced by its enduring popularity and the vast amount of critical attention it has received. Nevertheless, like all lasting art, it resists reduction to any finite critical interpretation or analysis, forever slipping out of the chinks in the cavern of limiting comprehension.[154] As Graham Harman has recently implored, such inexhaustible works of art should be lessons to certain philosophers' attempts to provide an ultimate *explanans*, or to fix the universe under a single system or law (*The Third Table*). Despite its longwindedness, this chapter never entertained the hope of encompassing the *Marriage* under any kind of unified analysis. I have left undiscussed the introduction, the Song of Liberty, the passages concerning

[154] Eaves, Essick, and Viscomi concur with Michael Ferber in their introduction to the work, "Even in the face of insightful criticism, however, it has proven impossible to shake the impression of the *Marriage* as 'about as heterogeneous as one could imagine', a 'structureless structure' (Ferber, *Poetry of Blake* 89-90)" (4).

the Prolific and the Devourers, and other important images and elements of the work. My aim has been merely to emphasize Blake's key philosophical ideas here, and the traditions that inform them. The *Marriage*, in transforming under the reader's gaze, has proven transformative to this reader at least. In Blake's natural philosophy, only a monist material universe that is living, divine, and permeated by the fire of imaginative perception can render such apocalyptic transformations possible. To those who would resist Blake's artistic suggestion and maintain the divorce between an inert material universe and its transcendent immaterial God/soul, Blake offers the troubling philosophical question – troubling to his own position as well – how do you know?

CHAPTER 3

Breathing Dust: Erasmus Darwin and Blake's Regenerative Materialism in *The Book of Thel*, *Europe*, and *The Song of Los*

"And conscious Nature owns the present God."

—Erasmus Darwin[1]

3.1

Blake's early tractates and the satirical prose of the *Marriage* together convey the development of his metaphysics from panpsychist panentheism to monist pantheism. In this and the following chapters I examine how these principles are manifest in several of his narrative, illuminated poems created between 1788 and the end of 1795. We have already seen how the Memorable Fancies of the *Marriage* afford Blake an opportunity to anecdotally, dialogically, and visually expand on his metaphysical principles; here he moves beyond simply stating propositions – as he does in *No Natural Religion* – to creatively depicting how ontology and epistemology affect one's lived interactions with the beings in this world. As this chapter will show, the illustrated narrative poems that predominate Blake's output during this early period are deeply concerned with the same philosophical questions that drove the works already discussed, and in each poem Blake re-imagines and re-casts the metaphysical issues that are central to his art. Although a monist materialism can be discerned in each of the illuminated books examined here, Blake poetically dramatizes what he sees as the negative consequences of his age's

[1] *The Botanic Garden*, part I, II.264.

embrace of its dualist competitor – the "Philosophy of the Five Senses" as it is called in *The Song of Los*. In essence, this philosophy is no different than the empirical deism attacked in the early tractates, and in the dystopian continental prophecies and Urizen books one can perceive the difference Blake draws between natural religion – as elaborated by Bacon, Locke, and Newton – and a pantheist metaphysics that celebrates the divine world of infinite sensory delight, which Blake introduces in the *Marriage* and – as I will argue here – *The Book of Thel*.

This chapter focuses on Blake's first illuminated narrative poem, *Thel* (1789), and two of the three continental prophecies, *Europe A Prophecy* (1794) and *The Song of Los* (1795), discussing them in relation both to the philosophical principles set forth in the works examined in the first two chapters, as well as to the work of a popular contemporary of Blake's who was also working through natural-philosophical ideas via the medium of narrative poetry: Erasmus Darwin. In his best-selling *The Loves of the Plants* (1789) and *The Economy of Vegetation* (1792) – published together as *The Botanic Garden* – one finds an eclectic materialism verging at times on panpsychism and pantheism, a natural philosophy that is similar to Blake's work of the same period in many respects. Much insightful criticism has been written on the relationship between Blake and Darwin, though most of it focuses on specific motifs or subjects adopted from Darwin and transformed by Blake, as well as on the drastically different styles of each writer. I hope to here elucidate the underlying natural-philosophical affinities between the two writers. And though there is little doubt that Blake read and was influenced by Darwin (and not vice versa), I am not making the historical claim that Blake's panpsychism and pantheism were drawn exclusively from Darwin, since *No Natural Religion* was printed a year before *The Loves of the Plants*, and Darwin's materialist philosophy does not become explicitly articulated until *The Economy of Vegetation* – which appeared after Blake wrote not only *No Natural Religion*,

but *Thel* and the *Marriage* as well. Rather, I draw parallels between these works to indicate that Blake was not alone during this period in choosing to philosophize via poetry, nor was he the only one drawn to a monist metaphysics that synthesized ancient intellectual traditions and contemporary developments in natural philosophy. In Darwin, Blake had an exemplar of the monist materialism he was already drawn to, as well as a negative example of how that philosophy might be poetically executed.

This chapter first explores the metaphysics discernible in Darwin's *The Botanic Garden*, and the parallels between the philosophy presented here and that found in *No Natural Religion* and the *Marriage*. Sections 3.3, 3.4, and 3.5 address *Thel*, *Europe*, and *The Song of Los* respectively, discussing the connection between each work and Darwin's didactic poem, as well as the degree to which Blake's monist philosophy shifts in the course of the three illuminated works. Ultimately, I claim that while Darwin presents a positive materialist teleology, the three Blakean works depict with much more symbolic concision the negative consequences – on the personal and historical levels – of embracing dualism and rejecting the monist metaphysics called for by Blake first in *No Natural Religion*. Blake wants to move his readers into rejecting the prevailing natural religion of his age, and unlike Darwin, who stylistically echoes the didacticism of Pope in his account of the evolution of organic life, Blake opts to present a nightmare vision of a universe premised on dualist metaphysics in order to engage readers on more than just an intellectual level.

3.2 *The Botanic Garden* and the "transmigrating Ens"

Darwin's *The Loves of the Plants* appeared as Part II of *The Botanic Garden* even though it was written and published as a separate work before *The Economy of Vegetation* (Part I); in the

former work Darwin popularized the Linnaean system of plant taxonomy by poetically casting plant reproduction in vivid, anthropomorphic detail. Although Linnaeus – whose work Darwin had translated between 1783 and 1785 – had already drawn parallels between plant and human sexuality, Darwin's poetic popularization of Linnaean botany was far more explicit,[2] cavalier, and hence scandalous. In making such analogies between the human and vegetable realm, *The Loves of the Plants* establishes a materialist metaphysics that grants no absolute distinction between human, animal, and plant kingdoms, thus presenting an alternative to the more orthodox Great Chain of Being model: Darwin describes a materialist web of life in which all beings exhibit sentience, vitality, and the dynamic potential for transformation and regeneration.

As the Proem *to The Loves of the Plants* indicates, Darwin envisioned his project as operating against Ovid; while in the *Metamorphoses* Ovid "did by poetic art transmute Men, Women, and even Gods and Goddesses, into Trees and Flowers," Darwin has here proceeded "by similar art to restore some of them to their original animality, after having remained prisoners so long in their respective vegetable mansions" (vi). His use of "original" as an adjective suggests that inherent to all plant life is an animal nature, which his liberating poetic art reveals. And as readers of the poem soon realize, Darwin should have written "original humanity," since that is the transmutation his poem enacts. The Advertisement then explains Darwin's deferment of part I of the work, *The Economy of Vegetation*, "to another year, for the purpose of repeating some experiments on vegetation," and here Darwin also states his oft-quoted design of the work: "to inlist Imagination under the banner of Science, and to lead her

[2] According to Susannah Gibson, "Linnaeus' flowers could love, court, marry, and even engage in clandestine affairs" (82). Peter Ayres notes that in addition to the writings of Linnaeus, Stephen Hales's *Vegetable Staticks* (1727) was another eighteenth-century botanical work whose "starting point was that animal and plant systems were analogous" (38-39). And Martin Priestman writes that "Darwin's amorous plants had poetic precedents in the post-Augustan Roman poet Claudian (who is quoted in the epigraph [of Darwin's *Botanic Garden*]) and in two English neo-Latin poems: Abraham Cowley's *Plantarum* (1662) and Demetrius de la Croix's *Connubia Florum* (1723)" (71).

votaries from the looser analogies, which dress out the imagery of poetry, to the stricter ones, which form the ratiocination of philosophy" (n. p.). Darwin's philosophical priorities are made explicit with such a statement; analogy and poetry are the means by which he will lead the reader to philosophical truths, which themselves still employ analogy, although poetry allows for "looser" use of the rhetorical device that owes its efficacy to human imagination. Both Darwin and Blake then acknowledge the imagination's role in art as well as philosophy, and both choose poetry as a means to convey their philosophical principles.

In the case of *The Loves of the Plants*, these principles are concerned primarily with Linnaean taxonomy, the twenty-four classes of which Darwin enumerates in the Preface, and the poem thus confines itself to exhaustively illustrating the system of Linnaeus by anthropomorphizing the male and female sexual organs of various plant classes and dramatizing their amorous interplay in human terms. Thus, the poem presents in four cantos composed of heroic couplets – a style that, according to M. M. Mahood "out-Popes Pope" (55) – a botanic world teeming with humanized sexual encounters, where "the young Rose in beauty's damask pride / Drinks the warm blushes of his bashful bride; / With honey'd lips enamour'd Woodbines meet, / Clasp with fond arms, and mix their kisses sweet" (I, ll. 17-20[3]). Moreover, the polyamorous behavior of stamens and pistils depicted in the poem implies a model of sexuality that does not reflect the orthodox monogamous human model; the Chondrilla, to choose one example among many, is described as a charming female reigning "O'er the soft hearts of *five* fraternal swains" (I, l. 98) who all "with rival raptures burn" (l. 100), since the plant contains five male stamens surrounding each female pistil in each floret. As Donald Hassler writes, Darwin is in this work suggesting that "nature's vitality transcends the conservative mores of men" (54).

[3] Citations of poetic text of *The Loves of the Plants* refer to canto and line numbers of the 1789 edition. Citations of Darwin's notes in this edition are of the page number on which they appear.

And while there is certainly a satirical poking fun at prudent sexual attitudes, Darwin's larger point is, in the words of Michael Page, "that sexual reproduction is the driving force of nature and that humankind as sexual beings are part of that nature, not something wholly apart from it" (23-24). This is the same celebration of desire and bodily delight – the "loves" of the plants are explicitly corporeal – that Blake presents in the *Marriage*, and both works can be traced back to Lucretius's poem that similarly celebrates a material world of sensual enjoyment.[4]

Darwin's poetic equating of plant and human sexual behavior in *The Loves of the Plants* is an early instance of the concept of flat ontology in his work, and I use this term here and later in this project to denote the idea that, in contrast to the Great Chain of Being model that placed man halfway on a spectrum between base matter and divine, immaterial beings, all material forms share fundamental properties, and man, however complex a form he may be, is not ultimately distinct from other beings.[5] Moreover, as becomes evident in Darwin's later works, the immaterial beings – from spirits to angels to God – that constituted a considerable portion of the Great Chain do not have a place in Darwin's materialist flat ontology. As Janelle Schwartz writes, "What Darwin did was to reimagine the linearity of this chain as a nonhierarchical mesh, making the capacity to continually evolve contingent on interconnection and cooperation" (50).[6]

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[4] According to Noel Jackson, "Darwin's poem indicates, via the example of *De rerum natura*, a vitally political role for poetry through its endorsement of pleasure as both the ground of knowledge and the end of human action" (176). Janelle Schwartz also claims that Lucretius/Epicurus was "a significant classical influence on Darwin's systemized thinking" (43).

[5] This concept of flat ontology is used today by the object-oriented philosophy of Graham Harman, Levi Bryant, Ian Bogost, and others. Harman, for instance, writes, "Whether we speak of humans, amphibians, insects, or birds […] [n]o genuine *ontological* distinctions between the species have emerged so far, whatever our preconceptions on this question may be" (*Tool-Being* 220). See also Timothy Morton, who notes, "we share 98 percent of our DNA with chimps and 35 percent with daffodils. […] That's the disturbing thing about 'animals'—at bottom they are vegetables" (66, 68). The same idea was also expressed by Gilles Deleuze, who, in his book on the vital characteristics of Henri Bergson's philosophy, noted the persistent "hint of the animate in plants, and of the vegetable in animals" (96).

[6] In the words of Stuart Harris, Darwin "is replacing [the hierarchies of the Chain of Being] with his own lineated, equivalent model" (22).

This resonates with Blake's early ideas concerning the infinite divinity in all things and, as the *Marriage* asserts, the denial of a transcendent, immaterial deity. While Blake later holds a special reverence for the "human form divine," it is crucial to note that in his early works, divinity belongs to *all* forms, and his poems and images testify to what Schwartz calls "the interconnection and cooperation" between all material beings.

Darwin and Blake were not alone in suggesting that the hierarchical divisions between the Linnaean kingdoms were not as clear as previously believed. The title of Thomas Percival's *Speculations on the Perceptive Power of Vegetables* (1785) implies a panpsychist metaphysics, which he elaborates in the text, which explicitly attacks Linnaeus's taxonomic system and insists that there is no clear divide between plants and animals, the former of which demonstrate not only mental attributes but the ability to experience happiness as well. "[T]he idea of life naturally implies some degree of perceptivity," Percival writes, "And wherever perception resides, a greater or less capacity for enjoyment seems to be its necessary adjunct" (4-5). Even more strikingly, Percival's panpsychist speculation extends to non-organic forms: "in some future period, perceptivity may be discovered to extend, even beyond the limits now assigned to vegetable life" (5-6). As Susannah Gibson observes, although Percival's works were objected to by other botanists espousing a worldview that characterized plants as mechanistic, hydraulic machines, operating according to Newtonian laws, works by men such as Percival and Darwin disrupted attempts to rigidly order different forms of life and raised questions that "were discussed at every level of society" (41).

While the central conceit of Darwin's poem involves the "looser analogies" between plants and humans, the "Philosophical Notes" that supplement the poetic text elaborate on this flat ontology by discussing plant behavior's similarity to animal behavior in more prosaic,

empirical detail. In his note to the above-quoted line 97 of Canto I, Darwin cites Giovambatista dal Covolo's *A Discourse concerning the Irritability of Some Flowers: a new Discovery*, in claiming "that if one filament [of the Chondrilla] be touched after it is separated from the floret […] it will contract like the muscular fibres of animal bodies" (11). As the next chapter will discuss in greater detail,[7] the subject of muscular irritability, introduced by Albrecht Haller – whose work is cited at length in Darwin's *Zoonomia* (1794) – was groundbreaking in the study of animal and human physiology. Here Darwin (and Covolo) locates the same property in plants. In addition to irritability, Darwin in a later note asserts that some plants, like the Chunda, exhibit spontaneous voluntary motion:

> this spontaneous movement of the leaves, when the air is quite still, and very warm, seems to be necessary to the plant, as perpetual respiration is to animal life. There are many other instances of spontaneous movements of the parts of vegetables. […] there is reason to conclude, that the various actions of opening and closing their petals and foliage may be justly ascribed to a voluntary power: for without the faculty of volition, sleep would not have been necessary to them. (152-153)

Darwin's ascription of volition to vegetable life endows plants with a form of consciousness that a philosopher like Descartes – who denied consciousness even to animals – would never have dreamed of.

Darwin furthers the plant-animal analogy at various other points in *The Loves of the Plants*. In the first canto he pays particular attention to the Silene, or Catchfly, a carnivorous plant that also demonstrates irritability, as explained in a note – to a passage in which the female plant spreads a "viscous snare" (l. 132) for her ten male suitors – which claims that the leaves of this plant resemble "the antennae of insects" and "are so irritable that when an insect creeps upon

[7] See also chapter 2, note 91.

them, they fold up, and crush or pierce it to death" (14). On the same page, Darwin also explains that "[m]any plants, like many animals, are furnished with arms for their protection" (14). And the Tartanian Lamb also resembles the animal it is named after, since it "seems to bleat, a vegetable lamb" (24).[8] Although he is using analogies in the notes, Darwin makes explicit that they indicate what he takes to be a philosophic truth: that there is no impassable gulf between the animal and vegetable kingdoms. His note on fungi is clear in this regard: "they approach towards the animals, or make a kind of isthmus connecting the two mighty kingdoms of animal and of vegetable nature" (37). Such isthmuses constitute the web of life that Darwin describes in contrast to a hierarchical chain.

Nor is this web fixed. The poetic text depicts a dynamic scene of vegetative transformation in Canto II, tinged with alchemical imagery, as "[h]igh raised the Chemists their Hermetic wands, / (And changing forms obey'd their waving hands,)" (II, ll. 145-46). An early note hints at evolutionary ideas that will become more fully developed in Darwin's later work, and anticipate the theories of his grandson: "Perhaps all the products of nature are in their progress to greater perfection? an idea countenanced by the modern discoveries and deductions concerning the progressive formation of the solid parts of the terraqueous globe" (7). While Charles Darwin would deny any teleological striving for "perfection" in biological life, his grandfather's suggestion that material beings are in continual, dynamic evolution resonates with more contemporary understandings of living beings. But, crucially, Darwin avoids limiting this evolutionary claim to plants and animals (and humans). His choice of the terms "products of nature" and "solid parts of the terraqueous globe" indicate that he has the entirety of material

[8] See also the note to line 211: "In the Columbine, Aquilegia, the nectary is imagined to be like the neck and body of a bird, and the two petals standing upon each side to represent wings" (21).

forms in mind, thus drawing him close to the panpsychism – or at least in this instance, the hylozoism – that characterizes Blake's early philosophy.

Darwin's vitalist materialism in *The Loves of the Plants* also bears traces of Platonic and Stoic ideas concerning the material ether. Near the conclusion of the poem, as Darwin celebrates the amorous fecundity of the vegetable world in Canto IV, he writes, "So with quick impulse through all nature's frame / Shoots the electric air its subtle flame" (IV, ll. 345-46). As *The Economy of Vegetation* will amply demonstrate, with its hyperbolic homages to Benjamin Franklin and Priestley, Darwin was abreast of recent developments in the study of electricity, which is described as a "subtle flame" whose impulse infuses *all* of nature, just as the *anima* and *pneuma* infuse all material bodies to a greater or lesser extent and contributes to their organization and the faculties ascribed to the vegetative soul. This is exactly what La Mettrie – who had also compared humans and plants in his *l'Homme plante* (1748)[9] – claimed concerning the vegetative soul in his *Traité de l'âme* (1750): it was composed, as it was for the "Ancients," of a "very fine matter," a "pure celestial flame" (53). For Darwin, this energetic subtle flame, which drives the plants' amorous delight, comes – as it does for Blake in the *Marriage* – from the body. As will be seen, this subtle flame infusing the material world and driving its transformation and organization will be crucial to Darwin's next epic poem, which serves as Part I of *The Botanic Garden*.[10]

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[9] Priestman identifies the connection between these two works, summarizing La Mettrie's argument that "human beings are really 'plants of the class Ciaciae', meaning that their male and female sexual organs are separated on to different flowers" (69). In the Preface to his work, La Mettrie, like Darwin, signals his anti-Ovidian mission: "Man is here metamorphosed into a plant, but do not think this is a fiction in the style of Ovid" (77).

[10] Janet Browne, discussing the concept of "transformism" in Darwin, argues that *The Loves of the Plants*, in introducing such ideas, was "preliminary to, and closely intermeshed with, Darwin's later views on transformism and on the existence of an evolutionary chain of organisms stretching from molecules to man" (620).

As early as *The Loves of the Plants*, Darwin has demonstrated a similar eclectic adoption of Platonic, Epicurean, and Stoic ideas in imaginatively poeticizing his materialist system. And given the aforementioned similarity of Darwin's ideas to those of La Mettrie, the former is often discussed as a British continuation of French mid-century vital materialism, which in its own turn adopted classical ideas, and which likewise has resonances with Blake's metaphysics as presented in the *Marriage*. According to Hassler, a survey of the footnotes in the Darwinian works discussed here reveals his indebtedness to the French *philosophes*, and Hassler places him in an intellectual tradition containing Le Comte du Buffon, Denis Diderot, La Mettrie, and Holbach insofar as in *The Botanic Garden* he developed a theory "of material forces moving inexorably over vast distances of time and space, with no supernatural or anthropomorphic agency, to produce nearly infinite configurations of organic and inorganic matter. In short, Darwin was a materialist with a profound sense of chance and flux" (17). Allison Dushane also links Darwin to La Mettrie and Holbach, since they all set themselves against dualist metaphysics; on her reading, Darwin's "theory of development poses a more fundamental challenge to conceptions of subjectivity that begin with Cartesian conception of human agency dependent upon the separation of matter and an immaterial human spirit" (3).[11] The materialist monism of the *Marriage*, with its antagonistic stance toward the separation of body and soul, can also be placed in such a tradition, and C. U. M. Smith also points out that Darwin's materialism draws from a British tradition as well, since he studied under Robert Whytt, whose physiological ideas put pressure on the notion of an immaterial soul.[12] But the parallels between Darwin's

[11] According to C. U. M. Smith, La Mettrie was "Darwin's counterpart across the channel" (134). See also Harris (20) and Schwartz (43) for other claims connecting Darwin's work to mid-century French materialism.

[12] Smith claims that Whytt "rejected Boerhaave's reductionist dualism, and developed the idea of a sentient non-material agent acting through the medium of the nervous system" (134).

monism and that of Blake's become much more evident upon consideration of the former's *The Economy of Vegetation*.

The philosophic themes introduced in *The Loves of the Plants* are elaborated upon at great length in the four-canto poem that became Part I of *The Botanic Garden*. The scope of *The Economy of Vegetation* is belied by the title, since the poem encompasses not just the vegetable economy, but also the cosmic evolution of the earth from astral bodies and the subsequent development of the biosphere. Darwin's debt to Epicurean materialism is signaled on the 1791 title page of *The Economy of Vegetation*, which contains a Latin epigram from Book V of Lucretius's *De Rarum Natura*, describing the coming of spring, led by Venus, Cupid, Zephyr, and "Mother Flora," who is in turn depicted on the poem's frontispiece – designed by Fuseli – being attired by the personified elements (illus. 17). That Venus is first in the procession in Lucretius's poem and oversees the proliferation of life on earth is crucial for Darwin's system as well: the *love* that drives plant reproduction and growth in Part II is in Part I personified as the force that guides earthly evolution. Both poets invoke Venus without professing belief in her as a distinct deity – as Browne claims, Darwin "believed only in nature" (621) – but for both, physical love, eros, and pleasure are fundamental to life processes. According to Maurizio Valsania, this love in Darwin's poetry "vivified all things, producing life and joy" (351). And Priestman makes a similar claim, arguing that despite Darwin's "loudly capitalized references to God," the only deity at work in the *Economy* is "Love Divine" (107), who – in the allegorized myth of Eros in Canto I – "[c]all'd from the rude abyss the living world" (l. 102).[13] Sensual love, then, is instrumental to the hylozoism proclaimed in this line; such a proposition is also central to

[13] The first note of Darwin's poem also pays tribute to Epicurean philosophy: "It seems to have been the original design of the philosophy of Epicurus to render the mind exquisitely sensible to agreeable sensations, and equally insensible to disagreeable ones" (2).

Blake's *Marriage*, with its insistence on the divinity of the material world and energetic sensual delight, which comes from the body alone.

In the *Economy*'s Apology, Darwin announces his intention to convey his "extravagant theories" in natural philosophy via poetic analogy and personification, using the "Rosicrucian doctrine of Gnomes, Sylphs, and Salamanders," which, as representations of the elements, "afford proper machinery for a Botanic poem" (vii). In the *Economy*, all of the elements will be anthropomorphized, not just plants. The reason for this, Darwin explains, is that these personified forms "were originally the names of hieroglyphic figures representing the elements." The Egyptians, he continues, "were possessed of many discoveries in philosophy and chemistry before the invention of letters; these were then expressed in hieroglyphic paintings of men and animals; which after the discovery of the alphabet were described and animated by the poets, and became first the deities of Egypt, and afterwards of Greece and Rome" (vii-viii). This compressed historical narrative resonates with that given on plate 11 of the *Marriage*: in both instances, the "ancient Poets" as Blake calls them *animated* the sensible world with language, but as Darwin notes, the Egyptians had already done so with hieroglyphic paintings.[14] Additionally, Darwin qualifies his explanation in an early note: "it is probable that [Gnomes, Sylphs, Nymphs, Salamanders] were originally names of hieroglyphic figures of the Elements, or of Genii presiding over their operations" (6). These "Genii" correspond to what Blake describes in plate 11 as the "Gods or Geniuses" immanent in "sensible objects." Moreover, for both Darwin and Blake, it is only later that the divine properties of the sensible elements themselves – animated either by hieroglyphs or by poetry – become abstracted into deities that were in turn worshipped

[14] Matthew J. A. Green also notes the connection between Darwin and Blake in this regard, writing that "[t]o the extent that his poetry succeeds in restoring the trees and flowers to 'their original animality', Darwin can be considered akin to the 'ancient Poets', who 'animated all sensible objects with Gods or Geniuses'" (*Visionary Materialism* 151).

as separate, immaterial entities, creating a system, which, in Blake's version, "some took advantage of" for oppressive purposes. Darwin and Blake are both intent to restore divinity to the material world. And one can apply Darwin's ideas about Egyptian hieroglyphs to the designs in Blake's illuminated works: they are hieroglyphic depictions of the natural world, meant to symbolically illustrate philosophical premises.

The structure of the *Economy* follows upon Darwin's stated intention to personify the elements using Rosicrucian machinery; each of the four cantos is addressed to and poetically depicts a procession of these elementals – the fiery nymphs, earthly gnomes, aquatic nymphs, and airy sylphs, respectively – in a fecundation of earth modeled on Lucretius's lines from the epigram. Significantly, the first canto is devoted to the nymphs "of primeval fire," and Darwin picks up on the Stoic idea of the fiery *pneuma* permeating material creation that he had introduced in *The Loves of the Plants*. In his cosmological account in the *Economy*, Darwin cites William Herschel's astronomical discoveries in his description of planets – including Earth – being projected from their respective suns with "quick explosions" (l. 107). It is thus no wonder that the fiery ether permeates all of material creation, or in Darwin's words: "Through all his realms the kindling Ether runs" (l. 105),[15] since earth has its origin in the sun. In a lengthy note to his description of the fiery sylphs, Darwin writes, "[t]he fluid matter of heat is perhaps the most extensive element in nature; all other bodies are immersed in it" (7). This heat operates like the material *pneuma* or *anima* permeating the universe and "kindling" certain forms to develop more complex faculties. Darwin expands upon this ancient idea in an Additional Note discussing contemporary chemical debates – at the center of which was Priestley – concerning phlogiston, which was a material believed to be responsible for the combustibility of certain bodies:

[15] Darwin's choice of "Ether" to describe the fiery material force permeating bodies echoes La Mettrie's use of the same term to describe the Stoic "celestial fire" of which the vegetative soul is composed in his *Histoirc naturelle de l'âme*.

> Some modern philosophers are of the opinion that the sun is the great fountain from which the earth and other planets derive all the phlogiston which they possess; and that this is formed by the combination of the solar rays with all opake bodies, but particularly with the leaves of vegetables, which they suppose to be organs adapted to absorb them. And that as animals receive their nourishment from vegetables they also obtain in a secondary manner their phlogiston from the sun. And lastly as great masses of the mineral kingdom, which have been found in the thin crust of the earth which human labour has penetrated, have evidently been formed from the recrements of animal and vegetable bodies, these also are supposed thus to have derived their phlosgiston from the sun. (Additional Note V, 10[16])

Thus, the entire earth, itself hurled as a projectile from the sun, contains phlogiston on multiple levels; the vital celestial fire constitutes the plant, animal, and mineral kingdoms. The following Additional Note, on "Central Fires" describes a "second sun" of lava at the center of the earth, which affects vegetation and the formation of minerals (Additional Note VI, 11).[17] The abundance of fiery imagery in the *Marriage* takes on additional signification when read alongside Darwin's theory of the permeation of the sun's fire as a vital principle inherent in all of matter: both poets draw on ancient ideas concerning this material celestial flame to make their claims. Both theories also present a sun that is remote from the "dead" material sun of dualist metaphysics, which as Blake argues in his annotations to Swedenborg is incapable of generating life.

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[16] Darwin's Additional Notes are included after the poem in a separately paginated section and are additional to the notes that already squeeze out the poetic text on most of the pages of the poem itself. I thus cite them according to their roman numeral and the page number on which they appear in the separately paginated section.

[17] The following Additional Note (VII) on "Elementary Heat" relates further chemical and electrical experiments – including those by Darwin himself – on the heat that "seems to be combined with *all* bodies" (13, my italics).

Darwin returns later in the first canto to his description of the Ether, and here its role in more complex animal bodies is made clear: "Starts the quick Ether through the fibre-trains / Of dancing arteries, and of tingling veins, / Goads each fine nerve, with new sensation thrill'd, / Bends the reluctant limbs with power unwill'd" (I, ll. 363-66). Not only is Ether crucial to vegetative growth, it is here depicted as a material vital presence in animal – and human – neurophysiology: it is the impetus for the sensitive faculty. In the note to this passage Darwin draws on contemporary experiments in electricity to strengthen the analogy he seeks to establish between electrical and nervous "fluids": "The temporary motion of a paralytic limb is likewise caused by passing an electric shock through it; which would seem to indicate some analogy between the electric fluid, and the nervous fluid, which is separated from the blood by the brain, and thence diffused along the nerves for the purposes of motion and sensation" (36). The faculties of motion and sensation are thus attributable not to an immaterial *animus* or soul distributed throughout the nervous system, as in the dualist physiology of Stahl, but rather to the activity of the material electrical/nervous fluid itself.[18]

Darwin advances his theory of electricity's role in animal physiology by suggesting that the electric/nervous fluid combines with an even more rarefied element in the atmosphere, which is also diffused with celestial ether. In a note to the same passage he speculates, "Perhaps the spirit of animation itself is thus acquired from the atmosphere, which if it be supposed to be finer or more subtle than the electric matter, could not long be retained in our bodies, and must therefore require perpetual renovation" (39). Thus the electric fluid combines with the sun-born

[18] Given the assertion of electricity's crucial role in life processes, it is no wonder that the poem then turns to hyperbolic praise of Franklin, the "young sage" who could "seize the tiptoe lightings" and whose head is "wreath'd [with] the crown electric" (I, ll. 386-388), while a lengthy note describes his experiments with lightning rods. Darwin also makes clear that electricity, which pours "in torrents" from "Earth's deep wastes" (I, l. 463) is involved in plant growth as well, as discussed in a note: "The influence of electricity in forwarding the germination of plants and their growth seems to be pretty well established" (46).

ether in living organisms, and the ensuing renovative process is described in Additional Note X as a type of combustion that occurs during breath: "animal respiration seems to be a kind of slow combustion," since the air itself contains flammable phlogiston – which Darwin later recognizes as oxygen, thanks to the work of Antoine Lavoisier[19] – and is thus "vital" (19).[20] In this way, electricity serves, according to Raffaella Simili, as a bridge between organic and inorganic realms in Darwin's natural philosophy; together with Luigi Galvani, his ideas led to nineteenth-century theories in which, "through Ritter's galvanism, Muller's vitalism, and the revival of Brownism and mesmerism, a revised version of the 'world spirit' gained ground, a view that increasingly took on the forms of a radical alternative to Newtonian mechanics" (158).[21]

Within Darwin's poetic text and the prose notes, ancient Stoic and Platonic ideas concerning material *pneuma*/*anima* merge with contemporary findings in electricity, physiology, and chemistry. Hybridizing these sources, Darwin presents a complex, speculative natural-philosophical account of a living universe composed of matter only; but this matter is far more multi-faceted than Newton's metaphysical depiction in the Queries of the *Opticks* of bodies as massy particles characterized by extension, shape, and motion. Darwin's material flame – whether diffused in the vital air or in the electrical fluid of animal nerves – exhibits the capability to drive and organize the diversity of life on earth. He and Blake both celebrate the fiery energy that comes from the body. According to Priestman, "Darwin was a materialist, who believed matter and its inherent energies explain all the phenomena of the universe, including human life

[19] See the note to line 551 (54).

[20] Priestman recognizes this vitality to be omnipresent in Darwin's picture of the universe: "For Darwin […] 'vitality' is an 'ethereal flame' we cannot fully explain, though it does belong equally to humans and oysters, and completely to the world of matter which we after all know to be governed by other material 'ethers' such as gravity" (133).

[21] Roy Porter similarly writes that for Darwin, "Living beings […] were those entities that did not simply react to environmental interference according to the Newtonian laws of mechanics" (46).

and thought. (The inclusion of energy in the package is vital: without it matter becomes passive machinery requiring some other force to animate it: the 'ghost in the machine' of Cartesian dualism.)" (103).[22] Such a "hylozoist" – as Roy Porter identifies Darwin's work (58) – idea is behind the following passage: "Life's holy lamp with fires successive feed, / From the crown'd forehead to the prostrate weed, / From Earth's proud realms to all that swim or sweep / The yielding ether or tumultuous deep" (I, ll. 403-06). The fires of life infuse all earthly kingdoms, from the "crown'd forehead" of a man like Franklin to the vegetable weed, to the very "deep" itself. Moreover, this living fire is described as "holy," consistent with the *Marriage*'s central claim about the holiness of every thing that lives – and in both works life extends beyond the animal and vegetable "realms." As Hassler writes, Darwin's work "pays lip service to what he calls 'spirit,' as well as to an original divine creator of 'Parent of Parents.' But the weight of his interest seems to be on the self-sufficiency of the material world to create life and to create it abundantly" (17). Blake's early work makes no such empty gestures. The above passage suggests that for Darwin, as for Blake, God only acts and is in living beings, of which man is one kind.[23]

The Economy of Vegetation is a dynamic account of the evolution of earthly life from its cosmic origins, and as such Darwin's theories on the transformative properties of material bodies are prominent. These transformations are possible because even in its most fundamental forms, matter is infused with celestial ether and is thus alive, without the need for an immaterial spirit or first cause to set it in motion. As Dushane writes, "Darwin rejects [the] antinomy between

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[22] Sharon Ruston makes a similar observation; on her reading, Darwin denied that "the principle of life can move and [a]ffect matter without being, in some part, matter itself" (31). This is consistent with Lucretius's Epicurean monism.

[23] Page sees Darwin as anticipating James Lovelock's Gaia hypothesis, in which "all living matter, the biosphere, is tied together by an infinitely complex web that functions together to make the earth a livable environment" (37).

materialism and idealism by positing an organicism based on a conception of matter that does not need spirit to grant it life – by collapsing the distinction between matter and spirit, [Darwin begins] with the radical conception that matter is *already living*" (6, her italics). Canto II, addressed to the earthly Gnomes, depicts the living "new-born Earth" (l. 12), thrown from the sun, as having three divisions, which Darwin explains in a note: the first is "the original nucleus of the earth, or lava projected from the sun; 2. over this lie the recrements of animal and vegetable matter produced in the ocean; and, 3. over these the recrements of animal and vegetable matter produced upon the land" (62). The Additional Note XVI expands on these evolutionary suppositions, arguing that these three strata are composed "of the accumulated exuviae of shell-fish"; the limestone and the "calcareous earth" are composed of animal remains: "It is probable that animal mucus is a previous process towards the formation of calcareous earth; and that all the calcareous earth in the world which is seen in lime-stones, marbles, spars […] have been formed originally by animal and vegetable bodies" (32). So central was this idea to Darwin that he had the phrase "Everything from shells" printed in Latin on his carriage (King-Hele 8).

Nor does Darwin imply that the mineral kingdom occupies some lowest rung on a tripartite hierarchy, since mineral beings too demonstrate sentience and the potential for transformation. Additional Note XIX, for instance, in discussing Scots-pebbles, describes them as possessing "some vestiges of the cylindrical organization of vegetables" (44). In a note to a passage describing the subterranean course of lava, Darwin suggests that metals have the ability to transmute with the aid of the celestial fire: "The transmutation of one metal into another, though hitherto undiscovered by the alchymists, does not appear impossible; such transmutations have been supposed to exist in nature" (94). Canto II contains a lengthy hymn to the powers of

magnetism, addressed in part to "adamantine Steel! magnetic Lord!" (II, l. 201). Such a force inherent in metals signifies for Darwin a dynamic life, and his poetic depiction of it has explicit panpsychist overtones, as when he describes how "[t]he obedient Steel with living instinct moves, / And veers for ever to the pole it loves" (II, ll. 199-200). In passages such as these Darwin implies that the "living world" (II, l. 391) is not a restrictive designation meant to apply only to the animal and vegetable kingdoms, but that the material world is alive and sentient throughout.

In the evolutionary flux that blurs taxonomic boundaries, Darwin's living bodies are continually coming into and passing out of being, to be re-absorbed by other emerging forms. The gnomes are described as stretching and strengthening the "fibre-threads" of the cells of organic beings, and "when the mass obeys its changeful doom, / And sinks to earth, its cradle and its tomb," the gnomes are instructed to "[j]oin in new forms, combine with life and sense, / And guide and guard the transmigrating Ens" (II, 578-80, 583-84). Earth, itself alive, is both cradle and tomb for the interconnected web of life – here called a single being, or Ens – that emerges from and sinks back into it. In a note to this passage Darwin explains how the allegory of Venus and Adonis is "a story explaining some hieroglyphic figures representing the decomposition and resuscitation of animal matter" (108). Darwin furthers the evolutionary speculations introduced in *The Loves of the Plants* in a later note, as he asks, "Were all the ammoniae [a type of shellfish] destroyed when the continents were raised? Or do some genera of animals perish by the increasing power of their enemies? Or do they still reside at inaccessible depths in the sea? Or do some animals change their forms gradually and become new genera?" (120). Although some species might disappear in the process, Canto IV portrays the regenerative powers of the material ether to rekindle the mass of decayed organisms into new beings, as

"[w]ith Life's first spark inspires the organic frame, / And, as it wastes, renews the subtile flame" (l. 45), and hence, "plastic Nature, as Oblivion whelms / Her fading forms, repeoples all her realms" (ll. 59-60), creating a panorama wherein "all the chequer'd landscape seems alive" (II, l. 620).

Nature's "repeopling" happens on a macrocosmic scale as well. Darwin again cites Herschel's writing to argue for a succession of nebular "big bangs" and "big crunches": even though "[s]uns sink on suns, and systems systems crush" (IV, l. 374), in time "o'er the wreck, emerging from the storm, / Immortal Nature lifts her changeful form, / Mounts from her funeral pyre on wings of flame, / And soars and shines, another and the same" (IV, ll. 376-80). This is far from the "same dull round" described in *No Natural Religion*, since there are "new genera" constantly being created in these transformations, and for Darwin, as for Blake, sensual love, or Eros, infuses delight – and not dullness – in these material processes. Darwin's hylozoic/panpsychist system is one of fiery dynamism, where the earth itself is likened to a Great Seed which "evolves, disclosing All; / Life buds or breathes from Indus to the Poles, / And the vast surface kindles, as it rolls!" (IV, ll. 406-08). Mamood sees Darwin's exuberant style here and throughout as signaling his ability to empathically "delight in life in all its fecund complexity" (71).

Moreover, Darwin reads the evolutionary flux of material beings as prompting the idea of metempsychosis. In a note in Canto II he claims, "The perpetual circulation of matter in the growth and dissolution of vegetables and animal bodies seems to have given Pythagoras his idea of the metempsychosis or transmigration of spirit; which was afterwards dressed out or ridiculed in variety of amusing fables" (107). It is clear here and in the rest of his work, however, that – as in Blake's narrative of abstracted deities in the *Marriage* – the notion of some immaterial spirit

transmigrating through matter across time is a "fable." It is only matter itself, the living Ens of earthly forms, which perpetually transforms through countless dissolutions and growths. There is no spirit apart from the body.

Given such a dynamically flat ontology or proliferating web of life,[24] as might be expected, the plant-animal analogies depicted in *The Loves of the Plants* are also elaborated upon within the interconnected, dynamic material "economy" of Part I of *The Botanic Garden*. Since these poetic analogies are discussed at length in Part II, Darwin supports his theory in this regard mostly in the copious Additional Notes, which take up a large portion of the *Economy*. In Note XXXIV, on "Vegetable Respiration," Darwin asserts that "in respect to the circumstance in which plants and animals seemed the furthest removed from each other, I mean in their supposed mode of respiration, by which one was believed to purify the air which the other had injured, seem to differ only in degree, and the analogy between them remains unbroken" (95). In the same note, Darwin claims that plants also "resemble animal bodies" in that both sleep, and in another, later, Additional Note on the same subject, he claims, "The analogy between the leaves of plants and the lungs or gills of animals seems to embrace so many circumstances, that we can scarcely withhold our assent to their performing similar offices" (Additional Note XXXVII, 101).[25] His Additional Note on "Vegetable Circulation" lists the six "parts which we may expect to find in the anatomy of vegetables correspondent to those in the animal economy": 1) "A system of absorbent vessels" similar to the lacteal, lymphatic, and placental systems of animals; 2) "A pulmonary system correspondent to the lungs or gills of quadrupeds and fish"; 3) "Arterial

[24] Page is one of several critics to use the term "web of life" in discussing Darwin, stating that for him it "extends into all matter [which] is not static but is constantly in motion, dynamic, so the universe itself is bursting with life, motion, energy" (156).

[25] Green also sees a parallel between this note and Blake's claim for the holiness of living things in the *Marriage* (*Visionary Materialism* 204).

systems to convey the fluids"; 4) "various glands which separate from the vegetable blood the honey, wax…"; 5) "organs adapted for their propagation or reproduction"; 6) "Muscles to perform several motions of their parts" (98).[26]

In addition to their similar modes of respiration and the circulation of "vegetable blood" (Additional Note XXXVII, 104), Darwin cites further parallels in the next Additional Note, on "Vegetable Impregnation," which argues that "[t]he analogy between seeds and eggs has long been observed, and is confirmed by the mode of their production" (Additional Note XXXVIII, 106). He then cites a letter from Charles Bonnet to Lazzaro Spallanzani as support for a radical speculation that, aside from the long-observed analogies, plants and animals might *actually* intermingle during reproductive processes: "who knows but the powder of the stamina of certain plants may not make some impression on certain germs belonging to the animal kingdom!" (106). Another unorthodox idea is advanced in the next Additional Note via a relation of the ideas of another unnamed natural philosopher:

> I am acquainted with a philosopher, who […] thinks it not impossible, that the first insects were the anthers or stigmas of flowers; which had by some means loosed themselves from their parent plant […] and that many other insects have gradually in long process of time been formed from these; some acquiring wings, others fins, and others claws, from their ceaseless efforts to procure their food, or to secure themselves from injury. He contends, that none of these changes are more incomprehensible than the transformation of tadpoles into frogs, and caterpillars into butterflies. (Additional Note XXXIX, 107)

[26] Darwin later adds a further similarity in plant and animal "digestive powers" (Additional Note XXXIX, 111). Mahood claims that Darwin's belief in vegetable circulation kept him from a full understanding of photosynthesis (70).

Since these anonymous speculations – that insects and other animals (since insects don't have fins or claws) might have evolved from the anthers or stigmas of flowers – go unchallenged by Darwin, one can only conclude that he accepts them in his system, and they are certainly in keeping with the "transmigrating Ens" portrayed in the *Economy*. As Porter states, for Darwin "[n]ature's products and processes insensibly shaded into each other, defying the fine metaphysical distinctions erected by proud system builders" (45).

Darwin adds perhaps his boldest plant-animal analogy in a note to the poetic text in Canto III describing how the "timorous floret" closes "her" petals (l. 448), an action that goes beyond the irritability of tissue that he had already claimed both plants and animals possess in the *Loves*: "This action of opening and closing the leaves or flowers does not appear to be produced simply by irritation on the muscles themselves, but by the connection of those muscles with a *sensitive* sensorium or brain existing in each individual bud or flower [….] each bud has a common sensorium, and is furnished with a brain or a central place where its nerves were connected" (148-49). Darwin thus further justifies the parallels between plants, animals, and humans he has been establishing in both parts of *The Botanic Garden* by here explicitly arguing for a brain – replete with a nervous system – in every vegetable bud. Again, such a speculation in another instance of the panpsychist aspects of his natural philosophy, and lends support to Maureen McNeil's contention that Darwin is implying a "monistic account of a common origin for nature and mind" ("Scientific Muse" 194).

The Botanic Garden presents a monist materialist metaphysics, in which the earth itself is characterized as a living being of interconnected mineral, vegetable, and animal kingdoms, itself giving rise to organisms containing an immanent subtle fire that motivates their evolutionary transformations. As Valsania writes, "Matter' was not for [Darwin] synonymous with 'dead

stuff'" (342). Rather, Darwin's is a natural philosophy that exhibits both the vitalism and panpsychism of the natural world as depicted in Blake's early works. In indicating that the continually changing forms are holy, Darwin verges on the pantheism claimed in the *Marriage* as well. In such a system there is no room for a transcendent creator god or an immaterial spirit to which mental faculties might be ascribed. In the words of Hassler, "When Darwin argues that matter is indestructible, the corollary is that it was not created, and the first cause has disappeared altogether" (19).[27] Just as in the *Marriage*, Darwin's teeming garden does not contain disembodied souls – mind is contained in nature in what McNeill describes as "an organic unity" (*Under the Banner of Science* 55).[28] McNeill also sees in Darwin's monist system a flat ontology that is itself holy: "If there was a general movement in eighteenth-century English poetry towards the merging of the categories of the human, the natural, and the divine, Erasmus Darwin's poetry represents the culmination of this movement" ("Scientific Muse" 200).[29] Alan Richardson's concise summary of Darwin's philosophy can be equally applied to Blake's early work: "[Darwin's] theory seemed to deny creationist accounts of the earth, to erode the crucial line between human beings and other animals, and to expend with the human soul in equating mind with the brain and nervous system" ("Erasmus Darwin and the Fungus School" 113). For both poets, divinity is infused in the dynamic web of material beings, life's holy lamp that needs no transcendent God to illuminate it.

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[27] Ayres also writes that Darwin's work has no transcendent God, despite the gestures toward one (37). See also Valsania, who argues that in Darwin's system "[i]ndividuals and natural species create themselves, and transform themselves thanks to a reproductive or, we could also say, imaginative process without any supernatural intervention" (338).

[28] Porter makes a similar assertion: Darwin did not "interpret life in 'animistic' terms as a separate transcendental force, not integrally associated with the body. Rather, for Darwin, the starting point for understanding the economy of life lay in the inherent motility possessed by all organized and animated entities, lodged fundamentally in their fibrous matter" (45).

[29] McNeill, however, stresses the differences between Blake and Darwin: "Blake's explorations of the visual stood in direct opposition to Darwin's project" (191). I am arguing here for more philosophical similarities.

3.3 *The Book of Thel* and the "land unknown"

The Book of Thel is Blake's first illuminated poem, written in the fourteen-syllable lines that are characteristic of his subsequent books, and the textual and visual world that Blake portrays therein conveys natural-philosophic ideas consistent with the two works written immediately before and after *Thel*: *No Natural Religion* and the *Marriage*, respectively.[30] *Thel* presents the account of the eponymous virgin shepherdess from the "vales of Har" who interrogates nonhuman forms – a lily, cloud, and clod of clay – about her mortality, which is the cause of her grief and sorrow. She ultimately arrives at her own grave plot, and the voice that she hears emanating therefrom, cryptically re-articulating her own questions, sends her shrieking back whence she came. In terms of plot summary, the book appears straightforward, compared to Blake's other works. But as many Blake scholars have pointed out, the relatively short work is uneven and elusive, mysterious and riddled with lacunae, rendering any definitive interpretation impossible, all of which should not be surprising considering its creator. Read alongside *The Botanic Garden*, one recognizes in *Thel* an abundance of parallels to Darwin's work, and I am by no means the first to position *Thel* as the first instance of Blake's "Darwinizing," to borrow a term from David Worrall. Many critics elucidate shared motifs between the two poets, while others stress the differences – both in style and content – between Blake and Darwin.[31] There is little doubt that Blake read Darwin's work, especially considering the fact that he engraved

[30] The chronology is not so clear, however. According to Eaves, Essick, and Viscomi, Blake likely etched plates 1 and 8 of *Thel* later than the 1789 etching of plates 2-7, since the lettering on the first and last plates of *Thel* matches that of the *Marriage* but not plates 2-7. The editors of the Blake Archive propose that the later date of etching is late 1789 or early 1790. See also Erdman, "Dating Blake's Script: the 'g' Hypothesis," and Viscomi, *Blake and the Idea of the Book* 234-47, 252-58. This difference in dates certainly lends support to what several critics see as the poem's ambiguity and unevenness.

[31] McNeill, cited in the previous note, is but one example. See also: Albert S. Roe ("The Thunder of Egypt"), Erdman (*The Illuminated Blake*), D. C. Leonard ("Erasmus Darwin and William Blake"), Rodney Baine (*The Scattered Portions*), David Worrall ("William Blake and Erasmus Darwin's Botanic Garden"), Nelson Hilton ("The Spectre of Darwin"). Desmond King-Hele draws from all of these studies in his Blake chapter in *Erasmus Darwin and the Romantic Poets*. Others include Priestman, Green ("Promiscuity of Knowing"), and Hutchings.

several of the illustrative plates included in *The Botanic Garden*. And while I am indebted to the insightful connections and contrasts that previous interpreters have drawn, my goal in this section is to emphasize the *philosophical* affinities between the two, which has not been so often remarked upon. I argue that the panpsychist/pantheist materialist monism that characterizes Darwin's natural philosophy informs Blake's vision of *Thel*, and that this shared metaphysics underlies the other similarities that can be found between *The Botanic Garden* and *Thel*.

Historically, Blake and Darwin were connected through Blake's friend Joseph Johnson, who published both the 1789 edition of *The Loves of the Plants* and its inclusion – with *The Economy of Vegetation* – in the *Botanic Garden* (1791). Blake was commissioned by Johnson to engrave four plates of the famous Portland Vase for the *Economy*; the designs on the vase depict the Eleusinian Mysteries, which Darwin discusses at length in the notes for the poem – and which I will address in the following section. Additionally, Darwin's and Blake's mutual friend Henry Fuseli contributed several drawings for Darwin's work, including the frontispiece discussed above, as well as "The Fertilization of Egypt" and "Tornado," both of which Blake engraved and may have contributed to the original design.[32] Blake of course could not have read the *Economy* before composing *Thel*, but as I have argued, many of the ideas in Darwin's latter work are evident in the *Loves*. Furthermore, I am not here attempting to make a historical argument concerning Darwin's influence on Blake, but rather to show the shared natural philosophies of two late eighteenth-century poets, despite the marked difference in their artistic styles, in the success of their works, and in the degree to which each was directly involved in the natural sciences. The parallels I draw are meant to illustrate the fact that Blake's was not a lone voice at the end of the eighteenth century, and that other natural philosophers and poets were

[32] For a further discussion of the historical context, see King-Hele, 39-40, and Hilton, "The Spectre of Darwin."

expressing natural-philosophic visions that ran counter to the natural religion of Newton and his heirs. Blake may have been the first Romantic to articulate pantheist ideas in his work, but as such he was part of a web of contemporary thinkers who were also exploring non-dualistic metaphysical ideas.

The most glaring parallel between *Thel* and *The Loves of the Plants* is the personification of flora that distinguishes both works. Erdman was the first commentator to note the explicit Darwinian overtones evident even on Blake's title page (illus. 18), which features Thel observing two small figures – a nude male and robed female – emerging from separate bowl-shaped flowers and engaged in a rapturous embrace, imagistically "performing Darwin's script" (*Illuminated Blake* 34).[33] On the design of plate 3, Blake also depicts a nude male reclining on a tassel of grain (illus. 19), but the most obvious instance of Blake's personification of plants occurs in the case of the Lilly, who is portrayed on plate 4 as a gowned female emerging from leaves and humbly bowing before Thel (illus. 20). Desmond King-Hele notes that the lily is among the first group of flowers mentioned in the *Loves* (36), and as with Darwin's amorous plants, Blake's Lilly is also given a voice, and she is the first to answer Thel's questioning complaint concerning the transience of mortal beings, herself most notable among them. I will return to the content of their dialogue below, but here I wish to emphasize what Blake visually and textually depicts with such personifications: the female Lilly, though smaller, is no different in kind than Thel. Both have the capacity to feel, think, reflect, and articulate themselves in poetic discourse. And, as in the *Economy*, Blake's use of personification extends into the animal and mineral kingdoms, as the male Cloud, infant Worm, and "matron" Clod of Clay all appear in human form and – with the exception of the Worm – speak to Thel in the course of the poem.

[33] Erdman also speculates that in this design Thel herself might be taken for Darwin's "sad Anemone" who pines for the wind's "cherub lips" (34). Erdman also reads the later account of the dew and cloud's courtship in *Thel* as reminiscent of the description of pollination in the *Loves* (34).

Personification is of course a common poetic device, but I argue that for Blake and Darwin it has a particular philosophic purpose: to convey the panpsychism that is characteristic of their philosophy in these works. Both Darwin's and Blake's poems testify that the entire world is alive and sentient, holy even at the most "lowly" level. In discussing Darwin's work, Catherine Packham makes the helpful distinction that – unlike previous eighteenth-century poets like Thomas Gray and William Collins, who personified abstractions like Care and Contemplation – Darwin "personifies not abstractions but natural objects, which are already living things" ("Science and Poetry of Animation" 197). The same is true in *Thel*, as Blake's rendering of natural objects in human form emphasizes their aliveness. Nor do I believe the anthropomorphism in both works to be a poetic projection that necessarily obfuscates the distinct, unique qualities of other living beings; rather I read it as an attempt to prevent humankind from conceptually separating itself from the web of life with which it is interconnected in what Donna Haraway calls a "multi-species knot" (165). Here we can apply Cooper's distinction between anthropomorphism, which occurs when man abandons "his self-perceived fallenness and respond[s] to (recreat[es]) things in nature as objects of human thought," and the negative connotations of anthropocentrism, which involves "man's aggressive projection onto nature of his existing, fallen self" (78 n. 3).[34] But I would avoid the suggestion of idealism in Cooper's characterization of "things in nature as objects of human thought." While it is true that they are objects of thought, they are also objects in their own right, material beings also capable of transformation, and of educating man concerning his own place in the universe. As Packham writes, "If objects of sense are 'essentially fixed and dead', the poet's imaginative projection, like personification, produces an animated external world, interfusing subject and

[34] See my chapter 1, note 44.

object, and signaling the restorative powers of poetry in an alienated and divided world" ("Science and Poetry of Animation" 193). Moreover, Blake and Darwin's contemporary, Joseph Priestley, had similar thoughts concerning the powers of personification, which he claimed was "of prodigious advantage, in treating of inanimate things, or merely of brute animals, to introduce frequent allusions to human actions and sentiments, where any resemblance will make it natural. This converts everything we treat of into thinking and acting beings. We see *life*, *sense*, and *intelligence* everywhere" (qtd. in McNeill, *Under the Banner of Science* 41). This is the very metaphysical point that Blake and Darwin repeatedly make: life, sense, and intelligence *are* everywhere in their panpsychist systems.[35]

In considering *Thel*, however, one must carefully distinguish between Thel's own vision and Blake's, since the two differ. Thel does see life, sense, and intelligence in the world around her, since she carries on dialogues with nonhuman objects; but she cannot come to share the sensual delight in the processes of material existence that marks the speech of her interlocutors. Kevin Hutchings finds Thel's problem to lie in what he calls "the violence of anthropomorphic colonization" (81). In other words, Thel falls on the anthropocentric side of Cooper's distinction, and Hutchings shifts to use Cooper's term – in contrast to his use of "anthropomorphic" in the previous quote – in arguing that "[i]f Thel could free herself from the anthropocentric ratio that circumscribes her existence – if she could open herself to the vitality of a relational infinity that includes but also surpasses human-centred utility – she would begin to understand the interrelational holiness of *all* life" (88). While I agree that Thel cannot ultimately embrace the "interrelational holiness of all life," I disagree that a selfish, human-centric colonial impulse is

[35] In their Introduction to the Princeton/Blake Trust edition of *Thel*, Eaves, Essick and Viscomi write that "a world in which all beings can speak suggests an Edenic condition in which 'the Cloud the River & the Field / Talk with the husbandman & shepherd'" (77). Essick discusses this tradition and its biblical origins as well (*Language of Adam* 31-32, 124).

solely responsible for this, especially when one considers the nonhuman objects to which Thel compares herself in the poem. In her opening speech, bemoaning her transience, she compares herself to "a watry bow," a "parting cloud," "shadows in the water," "the doves voice," "the transient day" itself, and "music in the air" (E 3). Inasmuch as Thel is able to personify nature, she can equally "nature-ify" her own person, evidence that she is not "circumscribed by an anthropocentric ratio," as Hutchings claims. She can see what Darwin would call the analogies between herself and the natural world she interrogates.[36] Her reverse personification implies the flat ontology that one perceives in *The Botanic Garden*: Thel is aware that she is "like" the natural world around her, just as those entities manifest human characteristics. There is no absolute difference between the human and nonhuman. I submit that Thel's difficulty is not her anthropocentrism so much as it is her fear of becoming nonhuman, of losing her notion of a stable identity in the evolutionary flux of living forms, even if that abandonment entails delight, as her interlocutors insist. She sees her own dissolution, but not the material regeneration that inevitably follows, as repeatedly depicted in the *Economy* and described by the Lilly, Cloud, and Clod. While she at times perceives her kinship with the natural world, she cannot embrace the consequences of such a relationship.

As her opening questions indicate, Thel's concern is with her own death: "why fades the lotus of the water? / Why fade these children of the spring?" (E 3). From her epistemological perspective, death is the end, and her life will prove fleeting and useless. To this the Lilly replies that although she is a "weak" and "watry weed," "very small," dwelling in "lowly vales," she is "visited from heaven and he that smiles on all" and told to rejoice, for she shall "be clothed in light, and fed with morning manna," to eventually "flourish in eternal vales" (E 4). The poem's

[36] Timothy Morton describes these comparisons as an instance of Thel's ambiguous sense of her own identity: "Thel describes herself as various tricksterish forms of environmental anamorphic shape" (156).

opening touches upon one of its central ambiguities: from one perspective, the Lilly's answer gestures toward a transcendent, eternal realm, a heaven and deity capable of visiting the material plane and bestowing celestial blessing upon it. Similarly, Thel herself can be read as a disembodied spirit presented with the choice to remain in the immortal vales of Har or to enter the "land unknown" (E 6), characterized by sorrow and death. Is the world Blake presents here monist or dualist? Raine presents the central conflict as

> a debate between the Neoplatonic and the alchemical philosophies. To Plotinus and Porphyry matter is evil and the soul's descent into body a death from eternity incurred by sin or by folly. […] But the Paracelsan philosophy is based upon the monism of the Smaragdine Table of Hermes, 'That which is beneath is like that which is above.' Which is the truth? *Thel*'s motto asks the question, but does not answer it. (1: 99)[37]

Thel, Raine argues, accepts Neoplatonic dualism, ultimately remaining unpersuaded by the monism of her interlocutors (1: 100).[38] Unlike the Angel of the *Marriage*, she is unable to convert and become one of the Devil's party. In her inability to embrace material existence, Thel is, according to Robert Gleckner, a "spiritual failure," marred by ignorance and pride (166) – though "material failure" might be more apt.[39]

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[37] Note that Raine's use of the term Neoplatonism is intended to convey the dualist aspects of this tradition, while I have noted – in my Introduction and in Chapter 2 – opposing strains in writers such as Plotinus. Also, I fundamentally disagree with her claim that the writings of Hermes Trismegistus are monist. I will discuss these writings at more length in the chapter's final section, but even the quote Raine proves here is dualist in its presumption of an "above" and "below," linked in the manner of Swedenborgian dualist correspondences. Harper also uses "Neoplatonism" in Raine's sense in his reading of the poem as enacting the spirit's descent into – and subsequent flight from – bodily existence (246-57). Bloom, in his commentary on the poem in Erdman's edition, rejects such a Neoplatonic reading, but he also believes that Thel is presented with "a choice between being born or dying into the vegetative cycle of her prison paradise" (E 895).

[38] Raine thus reads the Lilly as a monist.

[39] Morton satirically paraphrases the critique of Thel made by Gleckner and other interpreters: "'That stupid girl Thel. I myself am reconciled to the world with its cycles of life and death'" (156).

Although I agree with Raine that, like the *Marriage*, *Thel* presents a tension between monist and dualist visions of the world(s), there are significant challenges for anyone who chooses to read Thel as a wholly disembodied immaterial spirit who refuses to partake of material existence. For one, why is Thel already afraid of her death before the "eternal gates" are lifted and she enters the "land unknown" (E 6)? If the vales of Har are an eternal realm entirely separate from the transience of earthly life and death, how can Thel be beset by fear and worry of her own "fading" – which seems as she articulates it in plate 1 to be more of an inevitability than a choice? Raine attempts to avoid this dilemma by characterizing Thel's fear as being of a future state: "Thel fears that in descending into generation, she will lose her immortal nature" (1: 111). But Thel herself says nothing about "descending into generation" – she fears that she *is* fading. As Christopher Heppner writes, "Thel's initial situation […] is not simply a fear of dying, but also an intense anxiety about her present mode of existence, which seems to her to have death or absence already within it" (81). Moreover, the cast of nonhuman interlocutors – with the exception of the grave's voice on plate 8 – speak to Thel at length of their own dissolution and regeneration, the flux of material existence, while in Har. The Lilly speaks of eventually flourishing in "eternal vales," but she is *already in* the eternal "vales of Har."

One can ascribe this inconsistency to the later date of the etching of plate 8, or one can choose to read Thel in accordance with Anne Mellor: "Thel is portrayed as a real person, fully fleshed. She is not literally an unborn 'soul'" (*Human Form Divine* 21). While I agree with Raine that monism and dualism are central to the poem, I am drawn to Mellor's reading in the case of Thel's corporeal form, given her fears, and given the material flux that characterizes Har, as described – and lived – by her interlocutors. There are *not* two worlds in the poem, despite the "northern bar" separating Har from the "land unknown" in plate 8; rather, just as the Angel and

Devil see two different visions of the approaching Leviathan according to their contrasting philosophies, so the natural world in *Thel* alternately appears – to the Lilly, Cloud, and Clod – as a delightful realm of sensual pleasure and dynamic flux, as in *The Botanic Garden*, and – to Thel – as a dead land of fear and sorrow.

Moreover, Thel is not wholly ignorant, as Gleckner claims, of the monist worldview embraced by her interlocutors; in her first response to the Lilly she demonstrates an awareness of the web of life and the Lilly's utility therein. It is in fact Thel who describes the Lilly "[g]iving to those who cannot crave […] Thy breath doth nourish the innocent lamb […] Thy wine doth purify the golden honey, thy perfume, / Which thou dost scatter on every little blade of grass that springs / Revives the milked cow, & tames the fire-breathing steed" (E 4). Thel perceives the material processes that make the Lilly rejoice in her lowly station, but she sees her own being as useless when compared to such interconnectedness. Unlike the Lilly, who purifies the honey, and who provides sustenance to lambs, cows, and steeds, Thel describes herself as vanishing "from my pearly throne, and who shall find my place" (E 4). Thel's desire – the meaning of her name (Fisher, *Valley of Vision* 205 n. 35) – is not for intermingling with the material forms around her, but for a separate permanence, a static human identity that will remain identifiable to future rememberers. The Lilly, who scatters her material breath, wine, and fibrous body to the flora and fauna surrounding her, has no such desire to remain fixed in place. She is thus literally transformed into the world around her, another mode of the evolutionary slippage between the kingdoms that Darwin describes. This interaction between Thel and the Lilly is the first instance of what I take to be Thel's central problem – her sense of her own separation from the materialist web of life she at times perceives a part of, but to which she fears to abandon herself. Eaves, Essick, and Visomi note how Blake portrays this tension in the designs: "Are human beings part

of nature or distinct from it? […] In some designs, Thel responds to her companions with imitative or sympathetic gestures, much as she speaks about her similarity to them. Elsewhere she stands apart as a spatial expression of her separateness and role as an observer more than an actor" (81).[40]

For the second time in as many plates, Thel – in her contrasting herself to the Lilly – compares herself to a "faint cloud" (E 4), reiterating what she sees as her nonhuman properties. The Lilly then, sensing Thel's stubborn commitment to this analogy, defers to the analogue itself, which emerges to reveal itself as similar to Thel not just in the way she describes, but in its human form, sentience, and ability to speak. Addressing the Cloud, Thel again repeats the similarity she focuses on, emphasizing what she sees as her and the Cloud's lack of permanence and absence to future seekers: "tell to me, / Why thou complainest not when in one hour thou fade away: / Then we shall seek thee but not find; ah Thel is like to thee. / I pass away. yet I complain, and no one hears my voice" (E 4). That we should read Thel's perspective as erroneous here is indicated by her obvious error in the concluding clause: certainly someone *has* heard her voice, since the Lilly and now the Cloud respond to her complaint. Though she does not acknowledge the fact, she is already connected to the material nonhuman forms around her in that they demonstrate a conscious sensitivity – and sympathy – to her presence and plight. Hers is not a voice unheard, crying alone in the wilderness, since the wilderness listens and responds.

The Cloud then further challenges Thel's outlook, describing how when he passes away it is "to tendfold life, to love, to peace, and raptures holy" (E 5). His amorous description of his courtship with the "fair eyed dew" who takes him "to her shining tent" has explicit Darwinian

[40] They also make the compelling claim that "[b]y referring to herself in the third person (4:11; see also 5:3), Thel also separates herself from herself, as though consciousness without identity leads to a grammatical expression of alienation" (75).

overtones in its emphasis on the Eros that drives natural processes. Once united in the presence of the risen sun, the dew and cloud "arise link'd in a golden band, and never part; / But walk united, bearing food to all our tender flowers" (E 6). Moreover, the sun's presence in this sensual union recalls Darwin's emphasis on the solar origin of the life-kindling ether infusing all material bodies. The Cloud's portrayal of its afterlife implies that there is no immaterial "eternal vale" or spiritual kingdom awaiting it. Rather, together with the dew, it continues to disperse itself to the flora of the corporeal universe. The Lilly's earlier reference to her own post-dissolution future can also be read to be consistent with the Cloud's account, and not as a reference to some separate heaven for Lilly spirits. The "he that smiles on all" might not be a transcendent deity, but rather a personified sun, which would be in keeping with the personification prevalent in the poem. For certainly the sun "visit[s] from heaven," "[w]alks in the valley. and *each morn* over me spreads his hand" (my italics), and has the ability to fulfill the promise of making the Lilly "clothd in light." Read in this way, the Lilly, like the Cloud, envisions no immaterial afterlife; as in *The Botanic Garden*, eternity just is the endless evolutionary transformations of organic life, fueled by the sun's fire.

But Thel, repeatedly given the epithet "virgin" by Blake, does not see a kinship with the Cloud's erotic description of his existence; suddenly, despite her repeated assertions to the contrary, she declares, "I fear that I am not like thee" (E 5). This change of mind indicates that the Cloud has told Thel something about itself that she did not know and that its personified form is not the result of Thel's anthropocentric projection of her own ideas onto it. Marjorie Levinson argues that the nonhumans "do no more than repeat Thel's own knowledge" (290, 288), but the fact that Thel both learns from and resists such knowledge indicates that she is not just hearing

her own ideas.[41] In response to the Cloud's self-portrayal, Thel then shifts her complaint to stress what she now perceives as a dissimilarity; unlike the cloud, she cannot feed the world around her: "I feed not the little flowers […] I feed not the warbling birds […] And all shall say, without a use this shining woman liv'd, / Or did she only live. to be at death the food of worms" (E 5). Again, Thel here makes an obvious contradiction in conceding that she *can* feed other life, and the Cloud seizes upon her error: "Then if thou art the food of worms. O virgin of the skies, / How great thy use. how great thy blessing; every thing that lives, / Lives not alone, nor for itself: fear not" (E 5). The Cloud proclaims what I take to be the philosophical core of the poem, one that resonates with Darwin's picture of life as a constant flux of forms, none of which can remain "alone" nor live "for itself." Blake's personification of the nonhuman forms implies that, as in the *Marriage*, there is no material exception to the holiness of "every thing that lives" – all is alive, and as the Cloud here implies, blessed. Death is not an end to the living, eternal matter of which Thel is composed, so – following the lesson of Epicurus – the dissolution of her current form should not be feared, but should instead be celebrated. Roland A. Duerksen aptly expresses this challenge: "The only way for Thel to avoid the dread of extinction would be that of experiencing – of living by self-annihilating indulgence which begins by an open response to the senses" (20).[42]

The Cloud then summons the Worm for whom Thel concedes she will become food, but to her own astonishment, the nonhuman form that thus far is most like Thel, in that it is also an

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[41] Heppner also writes, "In each episode, Thel meets her own thoughts and even her own words in substantial form" (86). Hutchings agrees with these claims, arguing that "the knowledge that these natural entities articulate is not 'their own' so much as Thel's ventriloquistic and discursively influenced projection" (83). His qualification that "this does not mean that Thel cannot gain important insights from her interaction with the non-human inhabitants of Har" (83) seems dubious – she learns from her own ventriloquized knowledge? If he is implying a kind of *unconscious* projection, he provides no evidence for it.

[42] Hutchings makes a similar claim: "To see the Cloud on something like its 'own' terms, Thel must learn to decentre her pastoral selfhood, to engage in a species of what Blake will call, in his later works, 'Self-Annihilation'" (103).

animal, does not speak. Thel addresses her future devourer thus: "Art thou a Worm? image of weakness. art thou but a Worm? / I see thee like an infant wrapped in the Lillys leaf […] Is this a Worm? I see thee lay helpless & naked: weeping, / And none to answer, none to cherish thee with mothers smiles" (E 5). Thel's wonder at the worm, her depiction of it, and the worm's weeping and lack of speech all present difficulties for the reader. Since Thel will become, as she acknowledges, food for this being, is it really as "weak" and "helpless" as she claims? And at this point, should she really be "astonish'd" to perceive a nonhuman object appearing in human form, especially since this one does not speak? Hutchings claims that the Worm's non-speaking and Thel's repeated questioning of its linguistic designation can be read "as the sign of an alterity that refuses, paradoxically, to be silenced by the symbolic economy of naming; for once comfortably identified as 'Worm,' this creature would be assimilated to a regulative system of inscription that would definitively categorize it and thus attempt to contain its otherness." Thus, Thel's question "suggests something like an awareness that the label 'Worm' itself is ultimately inadequate to the naming of this creature's identity; that the very act of naming […] enacts a reduction, an effacement" (104). Such a reading, while compelling, works against Hutchings's (and Levinson's) earlier claim that the nonhuman objects are simply ventriloquizing Thel's anthropocentric projections back at her.[43] If Thel is just bouncing her own ideas off of nonhuman objects, why can't she do so with the Worm? She does speak for it in the above-quoted passage – "infantilizing it" in Hutchings's reading (104) – and while that can be seen as ventriloquizing, what the Lilly and Cloud do in their own speech, which is clearly outside Thel's epistemological framework and which causes her to change her conceptions, is quite different.

[43] Hutchings writes, "the Worm's failure to respond to Thel's linguistic questioning might be said to reinforce the *anthropocentric* bias of Western epistemology" (104, my italics).

And if the Worm is a "sign of alterity" that naming would "efface," why does it appear like Thel, i.e., in human form (illus. 21)? If lack of speech is the sign of alterity, then wailing human infants – which is how the Worm appears to Thel and therefore its failure to speak is no surprise – are also radically other. I contend that the interlocutors present a dual aspect: personified, they demonstrate that they are alive and holy like Thel, connected to her in the web of material existence. But silent, or conveying speech that challenges Thel's epistemological framework, they evince the fact that they are other entities deserving of her attention, respect, and ultimately, love, since they are all in the process of becoming each other. Just as the Lilly and Cloud diffuse themselves into the forms around them, Thel will become the Worm despite her lack of knowledge of it, echoing Hamlet's parable of the worm-eaten king passing through the guts of a beggar.

And once again, Thel seems to be in error in her claim that the Worm has "none to answer, none to cherish thee with mothers smiles," since no sooner does Thel utter these words than the "matron Clay" – mother not only to the Worm but to all earthly life – "heard the Worms voice & raisd her pitying head" (E 5). Each time Thel asserts that the she or another being is not heard, that the world is insensitive and marked by loss, she is refuted by the action of the poem and the words of her nonhuman interlocutors. The Clod then enacts the motherly self-sacrifice that is central to the poem, as she "bowd over the weeping infant, and her life exhal'd / In milky fondness" (E 5). Her exhalation is not just of breath, but also of life – she dies so that the Worm might be sustained, but her death is an act of love. The Clod repeats the Cloud's assertion that "we live not for ourselves" and continues, "My bosom of itself is cold. and of itself is dark, / But he that loves the lowly, pours his oil upon my head. / And kisses me, and binds his nuptial bands around my breast. / And says; Thou mother of my children, I have loved thee. And I have given

thee a crown that none can take away" (E 5-6). Blake's repetition of "of itself" emphasizes the difference between the "cold" and "dark" appearance of the clay to those – like Thel – who view themselves and other beings in isolation, and her actual life of erotic joy as progenitor of the living world. If we read "he" as God in this passage, then the Clod's claim that she has procreated with divinity poetically conveys Blake's pantheism and recalls his annotations to Lavater concerning God becoming a worm – one of the Clod's children – that he may nourish the weak. Echoing the claim in *No Natural Religion*, God has here not only become man, but all material forms, which, in their living holiness, are like man. The Clod's "crown," the Cloud's "throne," and the Lilly's "shrine" are poetic means by which Blake implies that these beings – despite their humble protestations of lowliness – are "in [their] essence … God" (E 599). And, as Hutchings writes, "the Clay's crown defies any ideology of transcendence that would devalue the realm of material existence in favour of a 'heavenly' afterlife" (89).[44] The holiness of and reverence due to these nonhumans is not transferred to an immaterial realm – they are sanctified for their selfless and sensual embrace of material transformation.

The Clod continues by admitting to her own lack of knowledge concerning the dynamic system in which she happily partakes: "how this is sweet maid, I know not, and I cannot know, / I ponder, and I cannot ponder; yet I live and love" (E 6). This statement might at first glance be taken to imply a qualitative difference between the lowly Clod and the complex human; it is not given to the Clod to know how these processes came to be, but she is content in her ignorance, and she implies that Thel should be as well. Donald Pearce, one of several critics who are suspicious of the nonhumans in the poem, paraphrases the Clod's statement thus: "'Everything flows into everything else, in wonderful, endless, mindless, natural cycles. But do not worry your

[44] See also Gleckner, who applies this idea to the Lilly and Cloud as well – each is "an important personage, if not the ruler, in his own special realm" (173).

head about it. It is all beyond both you and me.'" Given such insidious advice, he approves of Thel's rejection of it in the poem's final plate: "Who wouldn't flee?" (29). But Thel never worries her head about the cause of these cycles, which is what the Clod is specifically referring to. Both she and Thel demonstrate no knowledge of such matters. As in Darwin's poems, there is no serious concern about first causes. Thel, rather, is simply worried about her future condition of not-being-Thel, a state of affairs that is not "beyond" the Clod, Cloud, or Lilly, since each of them speak about their own – and by implication, Thel's – future integration into the "wonderful" cycles. And as with the Cloud, Thel's knowledge is altered – and ostensibly increased – by what the Clod tells her. "That God would love a Worm I knew," she confesses upon hearing the Clod, "but that he cherish'd it / With milk and oil, I never knew." Thel seems here to recognize the necessity and joy of interdependence, of the sensual rewards of interactive transformation. This is signaled by her switch to past tense: because she did not know what the Clod has just told her, "therefore did I weep, / And I complaind in the mild air" (6). But this state seems now to be behind her; like the Angel she has converted via an alteration of her opinions – she is no longer "like standing water" breeding "reptiles of the mind" (E 42).

The poem could end here – and, it seems, it did end here until Blake added plate 8 – with Thel's conversion and acceptance of the earthly transformations in which she must lovingly participate. The divine sensual delight proclaimed by her interlocutors involves the surrender of Thel's self-conception as separate and static; here she sees that divine love involves flux, dissolution, and regeneration, and the Clod's final invitation to "enter my house" with her "virgin feet" (E 6) recalls the Cloud's depiction of the dew taking him to her "shining tent"[45] – the

[45] Hutchings distinguishes the Cloud from the Clod and Lilly, writing that "the self-effacing Lilly and Clay give themselves willingly to others, whereas the self-centred Cloud demands that others surrender their will to his own" (97). But the fact that the dew takes the Cloud to her tent – and not the other way around – does not support his claim.

implication is that in partaking of the erotic delights of earthly life in the house of the "matron Clay," Thel will abandon her virgin, separate status. Since eternal life is only in these material processes, Thel should not fear engaging in them and enjoying the energy that is not just from her body, but from all bodies. The *Marriage*'s introduction similarly alludes to the progenitive – and regenerative – capacity of material clay with its Adamic reference: "Red clay brought forth" (E 33).

But the poem's final section adds a level of ambiguity that has led interpreters to question the worldview offered by Thel's nonhuman interlocutors. In plate 8 Thel does enter the Clod's "house," but despite what she has been assured, the "land unknown" appears to her in stark contrast to the land described by the Lilly, Cloud, and Clod: here she finds "couches of the dead," "[a] land of sorrows & of tears where never smile was seen," "[d]olours & lamentations" (E 6). Then, seated beside her own grave plot, she listens to the "voice of sorrow" articulate her own fears about the physical interconnectedness in which she is invited to partake; the voice asks why the orifices of the sense organs cannot be closed to "destruction," "poison," "terror trembling & affright" (E 6). As Eaves, Essick, and Viscomi write, from this perspective "the organs of sense and generation [are] arenas of frightening conflict" (78). In response to this fearful and fear-inducing speech, Thel "started from her seat, & with a shriek. / Fled" back to Har, abruptly bringing the poem to a close.

Has Thel been deceived by the words of the nonhumans, and does she come to finally see the monist material world they celebrate for what it is – a land of death, fear, sorrow, and sensual oppression, from which she rightly flees in terror? Pearce characterizes the philosophy of the Lilly, Clod, and Clay as "pernicious instruction and abominable advice" (24) in that they offer a deistic worldview that is "brutal" in its "patronizing, condescending" demand that all beings "be

patient and humble" (32, 30). Thel is justified, Pearce claims, in rejecting "the mindless immortality of vegetable processes," since "[w]hat sort of spiritual vision ought one to expect her to get [her interlocutors]?" (31, 30). A. G. Den Otter describes the interlocutors as treating Thel as though she were a "babbling fool" and reducing "her questions to trivia, thereby denying any attention to Thel as a human being concerned about the significance of life and death. By eschewing Thel's meditations, these characters ignore Thel's body, forgetting that it is indistinct from her soul […] and that, if 'nothing remains' of her body […] nothing remains of her soul either" (640). The nonhumans, Den Otter continues, are focused only on questions of utility, "the productive or consumptive possibilities of all that fades" (641). Deborah McCollister likewise claims that although the Clod has "seduced her into a terrible place, the revelation of that place allows Thel to know the truth and to reject her destiny on earth" (93). And in that rejection is empowerment, as Mellor argues: "Thel neither can nor should tolerate the evil and unnatural repressions of this 'land of sorrows.' Her return to the Vales of Har, then, can be seen as a positive personal action, an action that completes the progression of the plot (from ignorance to knowledge to action)" (34). For Timothy Morton, Thel's melancholia and uncertainty makes her a positive model for ecocritique; she "is a sentimental figure who is nevertheless critical of her ideological world" (157) as represented by her interlocutors.

I remain unpersuaded by such readings, believing instead that – in keeping with the philosophy of the *Marriage* and that presented in Darwin's work – the material world of sensual delight is here again for Blake the only divine world there is, and therefore worthy of entering without fear. Pearce reveals his own dualist proclivities in characterizing Thel as having an "immortal soul" (32), though there is no evidence for such a claim; likewise, in his demand that Thel attain "spiritual" knowledge in opposition to what the nonhumans offer, he assumes that –

contra Den Otter's claim, which is supported by the quote from the *Marriage* – there is a soul separate from the body. Again, neither *Thel* nor the *Marriage* suggests this. Pearce calls the Lilly, Clod, and Clay "all the old deistic standbys," though what he means by this is anyone's guess, since he does not elaborate. I cannot see their worldviews as embodying deism, since they do not exhibit the concern for a transcendent first cause and an immaterial soul that marks natural religion.[46] Pearce also claims that the Lilly and Clod describe the "Old Testament god of Genesis" (30). I have argued above, however, that the divine being they describe may very well be the material sun itself, and certainly the God who "cherishes" and procreates *with* the earthly "matron Clay" is quite distinct from any transcendent deity who in the Old Testament is often characterized as a cruel and brutal overlord. Finally, Pearce's claim that the interlocutors are "mindless" is contradicted at every encounter, as the Lilly, Clod, and Clay demonstrate sensitivity, reason, and compassion, implying Blake's panpsychist worldview.

Den Otter's argument, which employs the *Marriage*'s Aristotelian argument concerning the inseparability of the soul and body, echoes Thel's own concern for the immortal stasis of the soul/body. But nowhere does Blake suggest that bodies should remain unchanged so that souls can as well; Den Otter's phrasing implies that body and soul are conceptually separate entities, but Blake's pantheistic monism does not entail this. The interlocutors present a materialist vision that challenges readers – and Thel herself – to abandon the notion of an immaterial Thel-soul that somehow mirrors, as a Swedenborgian correspondent, Thel's bodily state. Since Thel's – and every material being's – bodily state changes even in the course of its organic existence, to

[46] See my Chapter 1 for a further discussion of this term. Pearce is clearly seeing natural religion differently than I, since he labels Holbach a deist (30-31), while on my reading he is an atheist, monist materialist. Eaves, Essick, and Viscomi write that "If Thel's teachers represent the "imprisoning 'dull round' … of fallen time and space… then the Lilly, Cloud, and Clod of Clay are natural religionists of the very sort Blake attacks in his early tractates" (80). The key word here is "If" – to take the interlocutors' own joyful depiction, there is nothing monotonous or dull about their material existence.

which state would such a soul correspond? Den Otter himself trivializes the nonhumans's worldview as concerned solely with use value; such a reading neglects the Eros and delight that characterizes the Lilly, Cloud, and Clod's existence. And it is hard to read – as he and Pearce do – their behavior toward Thel as patronizing, or as reflective of their conception of her as a "babbling fool," since their gestures and speech are marked by humility, kindness, and empathy; the Lilly smiles at Thel "in tears" (E 4). I agree with Michael Ferber, who, referring to critics who spurn the advice that Thel receives in the poem, writes, "These critics cannot accept that Blake really believed in self-sacrifice" (59). Here, self-sacrifice involves surrendering one's concept of a stable, separate self to embrace the divine flux of material existence. As Darwin also argued, there is no self that can remain isolated and untransformed amid the evolutionary transformation of being. Morton, who sees Thel as less certain and thus less of a stable identity than the self-sacrificing nonhumans, ignores her central desire: to be permanently Thel, and not to pass away as such. Morton approves of Thel's tricksterish self-comparisons to the rainbow, reflections in a glass, etc., but this is precisely what causes her anxiety; she does not *want* to be so transient. While her interlocutors celebrate their own change of form, Thel fears hers.[47] According to Morton, Thel's questions "productively trouble the still waters of ecologocentric identity" (156). But I find that the nonhumans trouble the logocentrism of identity as much if not more than does Thel.

Blake's implicit critique of Thel's desire for personal immortality is consistent with his pantheistic monism. Michael Levine claims that a belief in an immaterial soul that survives death is anathema to pantheism: "Pantheists deny personal immortality. There is no life after death in

[47] Morton's reading of Thel as a melancholic negation of all positive attempts to articulate some philosophical system makes her a representative of *his* version of ecocritique. I am arguing that Blake is implicitly critical of Thel, since his "ecological thought," to use Morton's term, is not characterized by melancholy and uncertainty, as is Morton's.

the sense that it is 'they' who survive" (242), and this anthropocentric concern with one's continuation as an immortal soul is "incompatible with a proper recognition of Unity" (355). In his *Pantheisticon*, Toland corroborates such a view:

> Neither is the constant dissolution of many things, that result from those parts, an hindrance to [the Whole's] perfection … nothing of the Whole perishes, but destruction and production succeed each other by turns, and all by a perpetual change of forms, and a certain most beautiful variety and vicissitude of things, operate necessarily towards the participation, good, and preservation of the whole, and make, as it were, an everlasting circulation. (17)

Both Blake and Darwin poetically dramatize this "everlasting circulation" of material existence, the beauty of which Thel cannot perceive. As the plot of *Thel* demonstrates, the pantheist's denial of an immortal soul and eternal salvation in an immaterial realm has ethical consequences – it affects the choices one makes while alive. Rather than lovingly embracing what Toland calls the "vicissitude of things," Thel separates herself, suggesting her privileged place in the chain of being and introducing the hierarchical power structure that Blake's flat ontology rejects. In fleeing the nonhuman forms around her, Thel flees the divine unity that for the pantheist is the only God.

And as for McCollister's and Mellor's claims, it is simply difficult for this reader to accept Thel's "shriek" and flight as indicative of a triumph over the oppressive advice of her interlocutors. I cannot see the shriek in Mellor's terms as one of anger and rejection (34), but rather read it as I do the Angel's "escape" from the perception of Leviathan in the *Marriage* (E 42): both characters flee what they perceive in terror. And as I have argued above, Thel's escape to Har is not a flight to some immortal realm of non-material existence, since it was in Har that

she engaged with the Lilly, Cloud, and Clod, who praised their own divine participation in the corporeal flux. Despite McCollister's claim, there is no non-earthly "destiny" that Thel might choose. The Vales of Har "have symbolized a divine and wholly satisfying life, a life of love, responsibility for the helpless, sensual pleasure, and complete emotional security," Mellor writes (34). This is true for the nonhumans, but not for Thel herself, whose experience in Har is marked by fear, isolation, and sorrow. Thel's fleeing back to Har will do nothing to alleviate these difficulties, since, like the Angel, the problem is with her metaphysics, which – despite the promise of plate 7's conclusion – she is ultimately unable to transform.[48]

Thel's vision of the "land unknown" is determined by the fear of death that has influenced her worldview from the poem's beginning, but beneath the landscape of sorrow and tears Blake subtly gestures toward the divine, living world of delight – here unperceived by Thel – that the nonhumans have been celebrating all along. In plate 8 the continuous, dynamic growth of vegetable life is described as the "restless twists" of roots, and the dew – earlier courted by the Cloud – is now seen to adorn a grave, the image stripped of its erotic and regenerative connotations. Moreover, the fact that even Thel's own grave has a living voice that "breathe[s]" (E 6) contradicts her conception that death is a terminus – there is life in death, just as Mellor observes death in life, noting the arching willow branch's resemblance to a tombstone on the poem's title page (23-24). Hutchings writes that the grave's voice "is a living, aspiring voice, reminiscent of the life-in-death characterizing 'the couches of the dead,' where Thel paradoxically espies the curiously living and organic 'fibrous roots'" (106). And even the grave's voice, which is commonly thought to reflect Thel's own fears concerning of sensual life, is not

[48] For Hutchings, Har is already characterized by "the violence of anthropomorphic colonization" (81), and thus Thel's return isn't a flight from experience and sexuality, but rather "she must go back into Har in order to enter Experience" and see the nonhumans on their own terms (108). Like Mellor, though, such a reading hinges on interpreting Thel's shriek and flight as somehow triumphant, and a prelude to a bold, transformative mission. I am not convinced that the poem's ending can be read in such a manner.

wholly negative in its characterization of such an existence, since it speaks of "an Eye of gifts & graces, show'ring fruits & coin'd gold," as well as a "Tongue impress'd with honey from every wind" (E 6). Like Darwin, Blake sees the earth as both grave and cradle. Thel is unable to surrender herself to the sensually delightful regenerative processes celebrated in *The Botanic Garden*, processes of which death is only a part, and which exist both in the "land unknown" and in the vales of Har. In fact, the Lilly, Cloud, and Clod have not been left behind; they are all still actively in the land that Thel enters on the final plate, evidenced by what might be the Lilly's own "fibrous roots," the "land of clouds" through which she wanders, and the "voices of the ground" – including that of her own earthy grave – to which she listens (E 6).

In the final plate Blake shifts the perspective so that we perceive the world from Thel's limited view and not in terms of the philosophy of the nonhumans. Whatever conversion might have been signaled by Thel at the end of plate 7 has clearly not carried over in this concluding plate; in the *Marriage*'s terms, Blake is here offering us the Angel's view of the approaching Leviathan, while the preceding plates had emphasized the Devil's philosophy – which is also Darwin's – of material delight and energetic transformation. Blake emphasizes that Thel's vision in plate 8 is not some ultimate, objective truth concerning material existence by stressing Thel's unexpanded perceptual apparatus: "She *saw* the couches of the dead" (my italics) even though the twisting roots belied her vision, just as the Angel *saw* the Leviathan; and it is not that there are no smiles of delight in the "land unknown," but rather "never smile was seen" – by Thel; her ears are "listning" solely to "Dolours & lamentations" and the "voice of sorrow" despite the fact that the grave's breathing voice suggests that life persists after Thel becomes food for worms, just as the Cloud had promised. The contrast between the final plate and the rest of the poem dramatizes the Proverb of Hell: "A fool sees not the same tree that a wise man sees" (E 35).

I do not think the poem's ending is happy, nor that it signals a triumph on Thel's part. Rather, her flight marks a failure to embrace the monist panpsychist/pantheist philosophy that is described in *The Botanic Garden* and the *Marriage*, and which is shared by *Thel*'s nonhuman characters. The hylozoic land is "unknown" to Thel because in Blake's early philosophy knowledge entails imagination and sensual interaction with the material world; it is only in this way that the cleansing of limiting metaphysical ideas and the expansion of sensory delight can occur. Blake's reiteration of Thel's virginity points to the biblical connotation of "knowing" and what he sees as the sexual nature of knowledge; as the nonhumans have repeatedly emphasized, it does not take place in isolation. The sexual, procreative fire, the *Marriage*'s hellish flames of desire and *The Botanic Garden*'s sun-born ether, are significantly absent in *Thel*, which features representatives from only three of the four elements: the "watry" Lilly, the airy Cloud, and the earthly Clod. Thel lacks the delightful, regenerative fire that pervades the material universe in the *Marriage* and in Darwin's work.

Thel's four-line motto – the other late-addition plate that either prefaces or concludes the poem depending on the copy[49] – articulates the distinction between the knowledge embodied by Thel's interlocutors and her abstract, limiting worldview: "Does the Eagle know what is in the pit? / Or wilt thou go ask the Mole: / Can Wisdom be put in a silver rod? / Or Love in a golden bowl?" (E 3). These questions have spawned countless interpretations,[50] but in light of the poem I see no reason to object to Raine's rather straightforward claim that the riddle is answered in a poem created four years later, *Visions of the Daughters of Albion*, wherein Oothoon declares: "Does not the eagle scorn the earth & despise the treasures beneath? / But the mole knoweth

[49] It is last only in copies N and O.

[50] Mary Lynn Johnson writes that in response to these questions "[a]lmost every conceivable combination of yes and no answers has been attributed to Blake or Thel or both" ("Beulah" 263 n. 10).

what is there, & the worm shall tell it thee. / Does not the worm erect a pillar in the mouldering church yard / And a palace of eternity in the jaws of the hungry grave?" (E 49, Raine, I, 119). The palace of eternity is here on earth, and the eagle is wrong to scorn its "treasures," since, as Oothoon continues, bliss awaits there: "And sweet shall be thy taste & sweet thy infant joys renew! / Infancy, fearless, lustful, happy! Nestling for delight / In laps of pleasure" (E 49). This characterization is in accordance with the earthly life described by the nonhumans in *Thel*, but the poem's protagonist cannot abandon her fear and taste the ever-renewed lustful delights of sensual existence. And it would seem erroneous to deny the rod and bowl in Thel's motto as symbols of genitalia and the sensual knowledge they impart.[51] As for the motto's first two lines, the poem suggests that while the eagle and mole have various ideas about what is in the pit – the mole being more intimately acquainted with it than the eagle – one would do best to ask the pit itself, since, as the matron Clay exemplifies, it is living, divine, and conscious. Ultimately, Thel cannot see herself as a divine part of the dynamic world around her, limited as she is by her perception of herself as an isolated entity doomed to oblivion. Unfortunately, given the monist world that Blake depicts, there is nowhere else for her to be.

Thel's interlocutors attempt to convince her that she already exists in a posthuman world of slipping, intermingled, sentient – and thus non-Newtonian –forms, and that this should be no cause for terror. But the finale of the poem suggests that the attempt is a failure, due to Thel's unwillingness to relinquish what she sees as her right to a separate and inviolable personhood. As Haraway writes, "human exceptionalism shows itself to be the specter that damns the body to illusion" (165). Blake's poem presents readers with a flat ontology throughout which consciousness is dispersed, and in which the horror of death is only felt by those who cannot

[51] Not all critics have accepted the sexual implications of the final two lines. Gleckner, for instance, writes that the golden bowl is of "self-love and material possessions" (173), and Mellor sees an allusion to "the state rod of office" and "the golden chalice of orthodox Christian ritual" (37).

sacrifice their selves to the mesh of material life. It may be tempting to patronizingly scold Thel, as some critics do, for being a silly, stubborn girl whose refusal to embrace the panpsychist/pantheist principles that Blake's nonhumans advance gives rise to her terrified state. But where is the reader who is beyond the horror of becoming food for worms?

3.4 *Europe* and the "finite wall of flesh"

While *Thel* is the narrative of an individual failure to convert to the pantheist monism described by Blake's Devil, *Europe a Prophecy* dramatizes – with complex symbolic concision – the catastrophic results of a societal commitment to a dualist philosophy that neglects the divinity of all material creation. This section will examine *Europe*, again with Darwin's *The Botanic Garden* in mind, a reading that has not yet been performed, despite the critical attention given to other Blake works of the 1790s in regard to what Nelson Hilton calls the "spectre of Darwin." Such an analysis finds Darwin's language and thought emanating through *Europe*'s poetry and designs in other ways than we have seen it do in *Thel*.

A mythopoeic rendering of all the Christian centuries and the dynamic revolutionary forces at play since the time of the Druids, *Europe*'s historical scope is larger than that of *America* (1793), its predecessor among Blake's continental prophecies. In addition to featuring Orc and Urizen, characters who appeared in *America*, *Europe* also introduces Enitharmon and Los, who will figure largely in the later epics. D. W. Dörrbecker, in his Blake Trust edition of the continental prophecies, explains the poem's "fundamental elusiveness" as due in part to the fact that after the French Revolution, Blake "clearly moved beyond, and away from, any direct historical representation in poetry as well as from the conventions of history painting […] and on

to his own visual/verbal mythmaking" (*Continental Prophecies* 141, 13).[52] We have already seen the absence of direct historical representation in the *Marriage* and in *Thel*, but *Europe* more closely resembles the former in that its dark vision – although it spans eighteen hundred years of historical time – eschews linear narrative.[53] Nevertheless, the grim and violent designs, imagery, and tone that pervade the poem convey a dystopian Europe that, as Dörrbecker writes, "by the end of the eighteenth century could be seen as the continent governed by absolutist monarchs, by empirical reasoning, and by Newtonian natural religion" (*Continental Prophecies* 142). While *No Natural Religion,* the *Marriage*, and the nonhumans in *Thel* all called for readers to perceive the divine infinite in all material creation and to become immersed in the energetic delights of bodily life – and, like Darwin, to embrace dynamic monist materialism – *Europe* presents the catastrophic results of a civilization failing to live according to such a philosophy. As explicitly expresses in the Preludium, the poem dramatizes the "bind[ing of] the infinite" (E 61). And yet, as in plate 8 of *Thel*, throughout *Europe* Blake subtly hints at the dynamic regenerative potential latent in material existence; there is infinite, holy life all around, though the poem's characters do not see it.

Europe's iconic frontispiece provides an apt emblem of the dualist philosophy that Blake had attributed to Swedenborg and had attacked in the *Marriage* and in his earlier works, and which he here depicts as having prevailed in his day (illus. 22). The design features an old male

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[52] Harold Bloom calls the poem "perhaps Blake's most experimental poem of middle length" (*Blake's Apocalypse* 152).

[53] Dörrbecker summarizes *Europe*'s structure as follows: the Preludium "thematizes some of the consequences of the eternals' fall into creation […] The second part of the poem reports on a seemingly joyous and peaceful night … Except for Orc, who has been 'bound', Enitharmon, Los, and their numerous sons and daughters are dancing the night away […] At the centre of the poem, and framed by this account of 'the night of Enitharmon's joy' […] readers find themselves thrust into dream-time. Enitharmon sleeps. Her 'female dream', lasting for 'Eighteen hundred years' […] fragments chronology and the linear succession of events in measurable time. Yet it is from this dream perspective that the poem looks at the historical growth of the old order, of the unholy alliance of organized religion with tyrannical monarchy" (*Continental Prophecies* 142).

nude kneeling within the disc of the sun, leaning down and extending a pair of dividers into the darkness. As the editors of the Blake Archive write, this figure "is very probably Urizen in the act of creating and/or circumscribing the material universe" (object 1, illustration description). The design echoes plate b10 of *No Natural Religion*, which similarly depicts an old man – who sees only the Ratio and "himself only" – looking down with dividers (illus. 6). Here God, or the oppressive demiurge Urizen in Blake's mythology, has divided or abstracted himself from the material world, which is unseen in the murkiness beneath him; it is an image of a transcendental creator god of which the pantheist monism evident in *The Botanic Garden* and in Blake's earlier works, has no need. Anthony Blunt sees the frontispiece as emblematic of Urizenic philosophy's reduction of the infinite to the finite: "The effect of Urizen's creation was to crush man's sense of the infinite, and to shut him up within the narrow wall of his five senses" (57). This reduction is in contrast to the expansion and cleansing of the same senses called for by the *Marriage*'s Devil. Similarly, Martin K. Nurmi reads the design as a negative commentary on Andrew Motte's designs for Newton's *Principia*: "Whereas Motte had placed Newton in a spacious heaven, Blake shows the true scope of 'natural religion' by squeezing Urizen into a tightly bounding sphere. Whereas Motte had shown Newton basking in celestial light and receiving inspiration, Blake turns Urizen away from the light and makes him peer down into darkness" ("Blake's 'Ancient of Days'" 213). I will discuss Blake's treatment of Newton more fully in the final chapter, but I note here that on Nurmi's reading Newton is representative for Blake of natural religion and its dualist implications.[54] Dörrbecker highlights the connection between the frontispiece and the poem's dystopian theme of binding the infinite, as he observes that in his

[54] See also Dörrbecker, who writes, "wherever Blake made use of the symbolism of the compasses in his designs, whether in plate b10 of *There is No Natural Religion*, in the large-scale colourprint depicting the spiritual form of 'Newton', or 'ye Newtonian' seen in one of the *Night Thoughts* designs, he was apparently addressing the enlightenment compound of science *and* natural religion" (*Continental Prophecies* 166).

Notebook "Blake sketched a design which was to serve as his first idea for the frontispiece […] captioned with the motto 'who shall bind / the Infinite', a question to be repeated in the 'Preludium' to *Europe*" (*Continental Prophecies* 164). Blake's most famous image, then, emblematizes a dualist philosophy of natural religion to which his early work is adamantly opposed.[55]

In the mythopoeic history given in body of the poem, the triumph of natural religion occurs when "[a] mighty Spirit leap'd from the land of Albion, / Nam'd Newton; he siez'd the Trump [of the last doom], & blow'd the enormous blast!" (E 65). This occurs only after a "red limb'd Angel" fails to make the trumpet sound. That Blake inserts Newton into this apocalyptic scene again emphasizes his belief that natural philosophy and metaphysics is integral to religious belief; to accept Newton's philosophy that – on Blake's reading – views the material world as dead and operating according to mathematically calculated ratios and limits, is to bring about the last judgment without hope of regeneration. This is evidenced by the lines that follow Newton's trumpet blast: "Yellow as leaves of Autumn the myriads of Angelic hosts, / Fell thro' the wintry skies seeking their graves; / Rattling their hollow bones in howling and lamentation" (E 65). This atmosphere of death, sorrow, and fear – what could make *angels* seek their graves? – is the same that predominates on the final plate of *Thel*, and is the consequence of a philosophy that sees the earth as dead, and death as an absolute end, not – as for Darwin and Blake – a living and eternal realm of sensual delight.

Newton's trumpet blast is one of several similar instances of binding the infinite that occurs throughout *Europe*. In the Preludium, the "nameless shadowy female" articulates the metaphysical perversion in botanical terms: "My roots are brandish'd in the heavens. my fruits in earth beneath" (E 60). This state is visually depicted by the inverted nude figure chained to a

[55] Jon Mee connects the frontispiece image to the "God of circumscribing Reason parodied in the *Marriage*" (118).

weight that appears just below this line in all copies of the poem. Carrying Thel's lamentation of her transience to a more cynical extreme, the female here curses her mother Enitharmon for bringing her into existence into a world in which she is only "Consumed and consuming! / Then why shouldst thou accursed mother bring me into life?" (E 60). There is clearly no blessing to be found by the shadowy female in becoming food for worms. But, as in *Thel*, this grim perspective is due to her perceiving heaven and earth as distinct entities as opposed to the *Marriage*'s claim that heaven, earth, and hell are all to be found in material existence: "I look up to heaven," the shadowy female laments, "Sitting in fathomless abyss […] Devouring & devoured roaming on dark and desolate mountains / In forests of eternal death, shrieking in hollow trees" (E 61). Although there are forests, the shadowy female, like Thel in the final plate, sees them only as eternally dead, not, as in *The Botanic Garden*, as part of the dynamically regenerating earth, where a tree's death only leads to further, eternal life. This vision, in which the shadowy female sees herself as "void as death" (E 61), is the antithesis of the pantheist hylozoism that Blake describes in *No Natural Religion*, the *Marriage*, and in *Thel*.

The deity that the shadowy female has abstracted from what she sees as her earthly abyss and projected into heaven is that which is depicted on the frontispiece, the answer to her question, "who shall bind the infinite with an eternal band?" But, given her torment, it is doubtful that such a god is the same nurturing deity who procreates with the matron Clay in *Thel*, as alluded to in the shadowy female's subsequent question: "who shall cherish [the infinite] / With milk and honey?" (E 61). While Thel declares her newfound but short-lived revelation that God loves the Worm and "cherish'd it / With milk and oil" (E 6), *Europe* depicts a world in which God refuses to infuse himself into material creation, or in the words of *No Natural Religion*, to become "as we are, that we may be as he is" (E 3). This vision is repeated by

Enitharmon herself in plate 5, as she tells her offspring Rintrah and Palamabron to "tell the human race that Womans love is Sin! / That an Eternal life awaits the worms of sixty winters / In an allegorical abode where existence hath never come: / Forbid all joy" (E 62). To declare bodily love as sinful is in direct contrast to the *Marriage*'s proclamation of energetic delight, and it is this limiting perspective that Darwin satirizes in *The Loves of the Plants*. Moreover, the degradation of organic life is reiterated here in Enitharmon's emphasis on measuring the worm's life by the season of death, winter, and her stressing the idea that joy must be reserved for some immaterial afterlife. But for Blake – in his earlier works – as well as for Darwin, joy and "eternal delight" are to be found in bodily existence on earth; there is no immaterial afterlife, and Blake's ironic indication of that is evident in his description of an immaterial heaven as "an allegorical abode where existence hath never come." For the shadowy female and Enitharmon, a dualist metaphysics underlies the dualist doctrine of organized religion; both degrade bodily existence and exalt transcendent immateriality.

The binding of the infinite receives its most extensive poetic depiction in Enitharmon's dream of plate 10, which describes the formation of the "ancient temple serpent-form'd" after men "[d]ivide the heavens of Europe," reenacting the *Marriage*'s narrative of man abstracting – or dividing – gods from their material objects to create a system of oppression (E 63). In Enitharmon's dream the "fiery King" – a Urizenic tyrant – "roll'd his clouds of war […] Along the infinite shores of Thames to golden Verulam" (E 63). But because of the King's natural religion these infinite shores become finite as man's senses become constricted on account of dualist metaphysics:

> […] the five senses whelm'd
> In deluge o'er the earth-born man; then turn'd the fluxile eyes

Into two stationary orbs, concentrating all things.

The ever-varying spiral ascents to the heavens of heavens

Were bended downward; and the nostrils golden gates shut

Turn'd outward, barr'd and petrify'd against the infinite.

Thought chang'd the infinite to a serpent

[…] then all the eternal forests were divided

Into earths rolling in circles of space, that like an ocean rush'd

And overwhelmed all except this finite wall of flesh.

Then was the serpent temple form'd, image of infinite

Shut up in finite revolutions, and man became an Angel;

Heaven a mighty circle turning; God a tyrant crown'd. (E 63)

Here Blake poetically narrates the consequences of embracing the empirical philosophy of the a-series of *No Natural Religion*: the senses, un-expanded by imagination and the Poetic Genius, become constricted and can only perceive the same dull round of "finite revolutions." Blake pits the resultant stasis of such philosophy against the dynamism of sensory, material life that is also emphasized by Darwin, demonstrated here by Blake's use of "fluxile eyes" and "ever-varying." Like the vision articulated by *Thel*'s voice of the grave, the senses here *shut out* the infinite,[56] and man becomes merely a "finite wall of flesh" in contrast to an infinite God, the same distinction drawn by Locke, Berkeley, and Newton. In contrast to *No Natural Religion*'s and the *Marriage*'s call for a monist union of God, heaven, and man, the above passage enacts an unholy separation. The conversion is the exact opposite of those that conclude the two earlier poems: here God becomes a transcendent tyrant and man becomes a Swedenborgian Angel, unable to

[56] Compare also the voice of the grave's description of the ear as a "whirlpool fierce to draw creations in" (E 6) to the serpent temple and the Stone of Night sinking down such that "round the feet / A raging whirlpool draws the dizzy enquirer to his grave" (E 64).

perceive his own infinite divinity, since his own "thought" – or dualist metaphysics – changed the infinite delights of earthly existence to a terrifying serpent, or approaching Leviathan.

Yet despite the grim, apocalyptic imagery dominating *Europe*, Blake's counter-vision of a philosophy conducive to earthly delight and infinite joy persists beneath the dark triumph of natural religion that he sees to have occurred during his time. This counter-vision is most explicit on the prefatory plate iii, which Blake only included in the final two printings of the poem, copies H (1795) and K (1821). This whimsical preface is in stark contrast to the dark, apocalyptic tone that pervades the rest of *Europe*, and it is anomalous for Blake in that it features a lyric "I" who captures a laughing fairy while out walking, which fairy then dictates the entirety of the poem. The fairy, seated on a "streak'd Tulip," along with the anthropomorphic wildflowers who "whimper because they were pluck'd" (E 60) are but two obvious instances of the shared motifs in Blake's and Darwin's work.[57] But beyond these surface parallels, the fairy opens the poem by voicing a satire of empirical philosophy that echoes Blake's critique in *No Natural Religion*, the *Marriage*, and *Thel*, as well as describes the satirical portrayal of human sexuality in *The Loves of the Plants*: "Five windows light the cavern'd Man," declares the fairy, who proceeds to name the nose, the ears, the mouth – through which "the eternal vine / Flourishes" – and the eye – through which one can "see small portions of the eternal world that ever groweth." Finally the sense of touch is listed as the portal through which man may "pass out what time he please, but he will not; / For stolen joys are sweet, & bread eaten in secret pleasant" (E 60). Here Blake, via the fairy, repeats the critique of limited and limiting sensory perception

[57] Mark Anderson draws a connection between Blake's use of the "streak'd Tulip" and a similar passage in Samuel Johnson's *Rasselas*, in which the poet Imlac claims that the poet's duty is to describe the species and not to bother with numbering the streaks of the tulip (128). Raine also finds a parallel between *Thel* and *Rasselas*; she claims that like Thel, Rasselas "asks wherein is the human lot different from that of the creatures, that he alone should be dissatisfied" (I, 113) John Adlard speculates on two other possible sources for the streaked tulip in *Europe*: Thomas Tickell's *Kensington Garden* (1722) and John Langhorne's *Fables of Flora* (1771) – only in the latter work is the tulip "streaked" (55-56).

grounded in Lockean empiricism that he initiated in *No Natural Religion*, and he reiterates the *Marriage*'s plate 14 dictum that because of such a philosophy man "sees all things thro' narrow chinks of his cavern" (E 39). Likewise, such a limited, unimaginative philosophy prevents man from seeing that the material world is infinite and eternal: just as the *Marriage*'s roaring lions, howling wolves, stormy seas, destructive swords, and eagles are all "a portion of Genius" or "portions of eternity too great for the eye of man," so here the eye under the sway of dualist and empirical philosophy sees only "small portions of the world that ever groweth."[58]

The last two words in the above quote from Blake's fairy stress the materialist idea of evolutionary flux that characterizes Darwin's work. For Blake here, as for Darwin, the eternal world is the material world, evidenced by Blake's repeated use of "eternal" to characterize the flourishing vine, an apt biblical allusion to John 15:1, in which Christ declares himself the "true vine." The scriptural passage has metaphysical implications for Blake's and Darwin's flat ontology: God became man, and divine man became vine, a transformation visually depicted on the handle of the Portland vase that Blake engraved for Darwin's *Botanic Garden*, which features a bearded male head with a leafy vine or tree sprouting from an open bud at its apex (illus. 23). The divine here is not confined to the human, but rather the holy lamp – to use Darwin's metaphor – shines in vines and all corporeal things. The sense of touch, the final "window" listed by the fairy, is central to sexual delight, and here Blake refashions the implicit argument of *Thel* in the fairy's claim that it is through touch that man can "pass out" of his cavern and partake of the pleasures of the divine, dynamic interconnectedness of earthly becoming. Darwin's plants certainly do this, just as Blake's Lilly, Cloud, and Clod do. But man, according to the fairy, like Thel, "will not," and is thus deserving of mockery for conceiving of

[58] Carol Kowle makes similar connections between the fairy's claims in plate iii and the *Marriage*, acknowledging Sloss and Wallis as being the first of several commentators to note these parallels in their 1926 edition of Blake's works (98). Mee also connects the fairy's statements to the *Marriage*'s celebration of sensual delight (117).

himself as isolated, selfishly stealing pleasures from the nonhuman world in which he is enmeshed and attempting to enjoy them alone.

The speaker selfishly captures the fairy in his hat, and reveals his – and Blake's – metaphysical preoccupations in the first question he asks his "possession," who is now bound to "obey": "tell me, what is the material world, and is it dead?" (E 60). I believe this question to be central to *all* of Blake's early work, and the answer is determined by one's chosen philosophical outlook. The fairy's laughing answer is Blake's own panpsychist vision as conveyed through his illuminated books: "I will write a book on leaves of flowers […] and shew you all alive / The world, when every particle of dust breathes forth its joy" (E 60). This is consistent with the *Marriage*'s claim for the hylozoic holiness of the material universe as well as the joyful and sensual divinity of *Thel*'s Clod – the matron dust or clay of which man is made.

The fairy, before proceeding to dictate the entirety of *Europe* to the speaker, accompanies him on a flower-gathering expedition during which "he shew'd me each eternal flower" and "laugh'd aloud" at their whimpering when plucked. This behavior causes Mark Anderson to distrust the fairy, who he finds "exhibits a disturbing lack of compassion for the world 'all alive' that he promised to show the poet." Such cruel laughter, Anderson argues, "can be taken to represent the use of the fantasy of eternal life in an allegorical abode as a justification of present death and suffering" (129). But I argue that it would be unwise to dismiss the fairy as unrepresentative of Blake's own philosophy, given the resonance of its earlier proclamations with what I take to be Blake's own arguments in *No Natural Religion*, *Thel*, and the *Marriage*. True, the fairy is mocking, but the target of his mockery is a dualist ontology and an empiricist epistemology that serve to en-cavern man, just as in *No Natural Religion* and the *Marriage*, both of which mock such philosophies. And in a material world whose dynamism is driven by Eros,

as Darwin describes, the plucking of a flower – a euphemism for the sexual act – should not be cause for fear or sorrow. Blake makes this explicit in *Visions of the Daughters of Albion*, as the nymph invites Oothoon to pluck her, declaring that "the soul of sweet delight / Can never pass away" (E 46). Moreover, in claiming that the fairy is somehow using the "fantasy of eternal life in an allegorical abode as a justification of present death and suffering" – which is what the shadowy female describes in the Preludium – Anderson neglects the fairy's own claim several lines earlier that the "eternal world" is the material one that "ever groweth" and not some immaterial afterlife. If the flowers whimper in fear of being plucked, they are like Thel and not like the Lilly, who celebrates her dissolution to feed the fauna around her, knowing that the material of which she is composed is the soul of eternal delight, and that, like the marigold in *Visions*, she will flourish "in eternal vales."

The dystopian vision the fairy then presents is a macrocosmic version of the one seen by Thel in plate 8 of that poem – a world in which man, under the sway of natural religion, "will not" enter into the material world and experience the eternal delight that Blake believes accompanies an embrace of a monist pantheism. But if the fairy's perspective is crucial to Blake's own vision, why is plate iii only included in the last two copies of the poem? Why not include what Bernard Blackstone calls "Blake's most brilliant description of the doctrine of the senses […] a reiteration of the doctrine of the *Marriage*" (56) in all copies, since, as Carol Kowle states, "the central theme of the binding of the infinite and the enslavement of man's senses repeated throughout *Europe* provides a strong link between the plate and the Prophecy" (92)? Anderson speculates that perhaps Blake "deliberately gave the poem a partial and limiting consciousness when he wrote it […] and then, after hitting on the idea of the unreliable muse in *The Book of Urizen*, decided to add one to *Europe* in order to delineate more clearly its partiality

and limitation" (133). But since I do not see the fairy as an unreliable muse, I am skeptical of such a claim, as I am of Kowle's hypothesis that "Blake may have felt that the plate made *Europe*'s meaning too obvious. The poet may have suppressed the plate until he clearly perceived that readers did not fully comprehend *Europe* without it" (99). Given Blake's extremely limited audience, it is difficult to imagine him changing a poem in response to what he perceived to be the failed comprehension of a body of "readers." Perhaps he may have felt plate iii to be too explicitly repeating what he had argued in the *Marriage* and other early works, and therefore to be unnecessary. But a concern for repetition did not stop him from repeating verbatim his metaphysical claim that "every thing that lives is holy" in the *Marriage*, *Visions*, and *America*. The question of plate iii's early omission and late inclusion is a historical mystery I cannot hope to answer here. But the plate's existence is further evidence of Blake's pantheist materialism.

In addition to the fairy's reference to the eternal world of delight that "ever groweth" in plate iii, there are other allusions – both textual and visual – to the joyful state of material existence sprinkled throughout the darkness of *Europe*. The two winged figures – perhaps representing the "sons & daughters" of Enitharmon – in the upper right of the design for plate 6, for instance, are engaged in an amorous embrace,[59] while the upraised arms of a smaller female to their left vegetate into willow branches (illus. 24), a motif that can also be traced to Blake's notebook, where it is accompanied by Milton's line from *Comus*, "As Daphne was root bound." This image of plant-human interconnection is another suggestion of the flat ontology seen in both Blake and Darwin, and the reference to Daphne recalls Darwin's claimed purpose of reversing Ovid's transmutations. Indeed, it is uncertain in Blake's design whether the woman is

[59] Similar embracing figures can be found on plate 7, as well as nudes in postures of what the Blake Archive editors call "erotic exhaustion" (copy H, obj. 7, illustration description).

becoming the tree or vice versa. Edward J. Rose argues that Blake depicts such vegetating humans to emphasize their fallen nature, and to imply that man "must transcend his vegetative world" ("Blake's Human Root" 57). While this may be true of Blake's later work, his early work repeatedly implies that a dualist belief in a transcendent realm beyond this vegetative one is erroneous and responsible for the catastrophic state depicted in *Europe*.

The designs on plate 17, in which Enitharmon calls her children to partake in the "sports of night" (E 65), emphasize the erotically driven transformations of earthly existence extensively described in *The Botanic Garden* (illus. 25). Blake's plate features an abundance of "flourishing" vines populated by numerous insects and other fauna. Notable among these are several caterpillars and butterflies, suggesting the allegorical representation of Psyche, which Darwin discusses in his Additional Note XXII concerning the Portland vase that Blake engraved for *The Economy of Vegetation*: "The Psyche of the Aegyptians was one of their most favourite emblems, and represented the soul, or a future life; it was originally no other than the Aurelia, or butterfly" (57). Given the monism of Blake's early works, as well as those of Darwin, the emblem can be read quite literally, since "eternal" life does not occur above or beyond the material realm, but within its flux. The psyche, or soul, is the energetic body and its perpetual transformations.

The text on plate 17 also carries Darwinian overtones. Enitharmon calls to her daughter, addressing her as "[s]oft soul of flowers Leutha," echoing the anthropomorphic language of *The Loves of the Plants*. Leutha is described later in the passage as "blushing," like Darwin's passionate plants. Addtionally, "the cold moon drinks the dew," Antamon is "prince of the pearly dew," "bliss is ripe," and as a result of the sportive play, "nature felt thro' all her pores the enormous revelry" (E 65-66). The moon and dew appear throughout *The Botanic Garden*, and

the phrase "pearly dew" appears in the first Canto of *The Loves of the Plants* (l. 320), while "blushing maids" sport in the groves in Canto IV (l. 472). And Blake's characterization of nature as a living being who feels through her pores the sensual revelry of the corporeal beings that she contains recalls Darwin's hylozoic account of the Eros-driven transmigrating Ens in *The Economy of Vegetation*.

But the night of sportive play in *Europe* is short-lived, as earthly existence under the aegis of natural religion and its serpent temple involves suffering, war, and religious and political oppression. But even here Hilton's "spectre of Darwin" is visible. For most commentators Enitharmon in *Europe* represents female materiality,[60] the fallen mother nature who is depicted as the winged central figure of plate 6, with hair and hands concealing her face. The fallen nature goddess calling to her sons and daughters is a Blakean inversion of the Goddess of Botany of Darwin's *Economy of Vegetation*, who spends each canto addressing her Salamanders, Gnomes, Nymphs, and Sylphs. Darwin's Goddess commands her creatures to create the earth, while Enitharmon summons her sons and daughters to "Spread nets in every secret path" (E 62), to dominate in cruel jealousy a war-ravaged Europe.[61] In Darwin, the Goddess calls for creation, while in Blake the summons is for destruction and oppression, which he believes results from the triumph of natural religion that has abstracted deities from the earth and degraded material existence.

In another Blakean reversal of Darwinian imagery on plate 12, male and female vegetative sprites, who would represent the love-play of the plants in Darwin, here blow a

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[60] Enitharmon's role changes in later poems. For a more complete discussion, see S. Foster Damon, *A Blake* Dictionary, 124-25. Dörrbecker discusses other readers' identifications of the central figure as the "nameless shadowy female" rather than Enitharmon (*Continental Prophecies* 180-81).

[61] Los has also been identified as a speaker here, calling to the sons and daughters. For a full discussion of the difficulty of attributing speech in the poem, see Dörrbecker, *Continental Prophecies*, 154-55.

pestilent blight from their horns, which will kill the drooping wheat surrounding them (illus. 26). This design also resembles Darwin's note in Canto IV of *The Economy of Vegetation*, describing the Ergot's horn: "There is a disease frequently affects the rye in in France, and sometimes in England in moist seasons, which is called Ergot, or horn seed; the grain becomes considerably elongated and is either straight or crooked, containing black meal along with the white, and appears to be pierced by insects, which were probably the cause of the disease" (203). Blake has personified the pestilential insects and literalized the "horn," from the mouths of which "black meal" emanates in copious black spots.[62]

Just as the grain is devastated by blight, the populace in *Europe* is infected with plague, scenes of which are illustrated on plate 9 (illus. 27), in which two female figures crouch in anguish before a boiling kettle, a dead child on the floor at their feet, and plate 10 (illus. 28), in which a dark bellman, surrounded by sufferers, calls for the dead before a door marked to indicate victims within. One of the sufferers raises her hands skyward in supplication, an apt emblem of the shadowy female's characterization of the consequences of dualist metaphysics: God and salvation are posited in an eternal, immaterial heaven, while the earth becomes an abyss of suffering and death. Though one might not expect to find such imagery in *The Loves of the Plants*, Darwin spends a long passage at the end of Canto III describing the Plague of London: "So when the Plague o'er London's gasping crowds / Shook her dank wing, and steer'd her murky clouds […] / While Death and Night piled up the naked throng, / And Silence drove their ebon cars along" (ll. 385-90). Later in the same passage, a mother and child, both afflicted with the plague are described, the child crying at its mother's milkless breast finally "[s]tretch'd its stiff limbs, and on thy lap expired!" (l. 401). This image, of the plague-stricken dead child and

[62] Dörrbecker sees a different connection to Darwin here, claiming that the design is "a vision contrary to Darwin's poetic urging to 'Shield the young Harvest from devouring blight, / The Smut's dark poison, and the Mildew white' [*Economy*, IV, ll. 511-12]" (*Continental Prophecies* 193).

the mourning mother (who will also soon die), strongly resembles Blake's plate 9 design, suggesting that Blake drew more than just personified floral imagery from Darwin.

Other Darwinian motifs can be found in Blake's verse for *Europe*. The musical analogy of the creative process compared to playing a harp or lyre is used repeatedly in both volumes of *The Botanic Garden*, as in the first canto of *The Loves of the Plants*: "So, tun'd in union, Eolian Lyre! / Sounds in sweet symphony thy kindred wire / Now, gently swept by Zephyr's vernal wings / Sink in soft cadences the love-sick strings" (ll. 101-104).[63] When Los appears at the beginning of *Europe*, he commands his sons to "Stretch forth your hands and strike the elemental strings! / Awake the thunders of the deep," and a few lines later: "Sieze all the spirits of life and bind / Their warbling joys to our loud strings" (E 61-62). Again, Blake inverts Darwin's creative musical analogy; here the strings are violently struck to create destruction (wrought from the thunders of the deep) and repression (binding joys). Blake's "thunders of the deep" line also recalls Darwin's lengthy descriptions of the tumultuous magma (lava as he calls it) in the central parts of the earth, as in the first canto of *The Economy of Vegetation*: "Round her still centre tread the burning soil, / And watch the billowy Lavas, as they boil" (ll. 139-40).[64]

Hilton argues that Darwin's "importance lies in the compendium of scientific imagery he offered rather than in massive direct influence" (39), but I hope to have shown that – questions of direct influence aside – Blake and Darwin share more than just the imagery surveyed in the above paragraphs. They both contend that liberating delight can only be obtained here on earth, since their monist metaphysics denies the notion of eternal salvation in an immaterial afterlife.

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[63] The eroticized description of the wind playing on the Eolian strings is of course picked up by Coleridge in his "The Eolian Harp." See King-Hele, 96.

[64] Worrall discusses the Darwinian echoes in Blake's "cataclysmic language" in *The French Revolution*, *America*, *Urizen* and *The Book of Los* (406-17), and the same connections he draws could also be extended to the many cataclysmic passages in *Europe*.

This world is alive and eternal. In *Europe*, however, because dualist deism denies such a premise, nature appears as a fallen realm of misery, oppression, and death.

But even here Blake subtly indicates his hope for mankind to recognize the regenerative potential of the material world that Darwin's work celebrates, and to embrace the infinite delights of bodily existence. This hope is most prominently emblematized by the fiery serpentine figure of Orc. The coiled serpent in Blake's designs for this work is a complication of the serpentine vines that can be found in his designs for *Songs of Innocence*; to develop the vine imagery, Blake draws from the recurrent serpent imagery in Darwin, including the serpent-twined caduceus of Hermes and the alchemical ideas attached to it, to develop a symbol of the vital, regenerative potential of the material world, as well as its revolutionary powers. I see the serpent that emerges contemporaneously with Blake's engagement with Darwin as a symbol of the energetic potential of matter itself, elusively twining toward both good and evil, depending on the metaphysics of those that behold it.

Europe's title page depicts a large rising serpent coiled into five loops, its mouth open in right profile, tongue extended (illus. 29). This image is repeated in smaller form by the vines, also coiled into five loops, foliating from the "E" (which itself mirrors the serpent's position) and "R" of "Europe." The lower vine terminates in two leaves or an open blossom that mirrors the serpent's head and open mouth. And among the many plants, insects, snails, and birds that illustrate plate 17, there are several serpents, one of which twines upward – vine-like – around a small tree in the lower right. This fusion of serpent and vine – animal and plant – suggests Blake's flat ontology and such imagery can be seen in other poems of this period, as at the bottom of the final plate of *America*, where a right-facing serpent is coiled – nearly indistinguishably in some copies – among vegetation, and is mirrored by a leftward coiling vine

with a similar blossom/head (illus. 30). Moreover, *The Loves of the Plants* also features this fused image of serpent and vegetation. Describing the Upas tree that would become the Poison Tree in Blake's *Songs of Experience*, Darwin writes, "from one root, the envenom'd soil below, / A thousand vegetative serpents grow" (III, ll. 239-40). John Beer, commenting on what he calls this "play of opposites" between the vine and serpent in Blake's designs, observes: "It is as if Blake had moved during these years from a rather despairing contemplation of the contrast between vegetating innocence and tyrannical energy to a vision of possible conjunction between the two states; this he sets forth in vivid designs where serpentine forms, flames, and foliage are sometimes seen in contrast, sometimes run together by his organic wit" ("Blake, Coleridge, and Wordsworth" 236). Such an interpretation assumes that the serpent is a static symbol of "tyrannical energy" – but, as is consistent with Blake's dynamic materialism, the serpent represents much more than that.

Several other critics have treated the vine and serpent as opposites, to use Beer's term, in Blake's designs. Twining vines proliferate in the *Songs of Innocence*, as in the "Introduction," the second plate of "The Ecchoing Green," and "The Lamb." For Rodney M. Baine, the vines in *Innocence* are never parasitic; he identifies most of them as morning glories, claiming, "sometimes used by Renaissance artists as an emblem of perfect love, the morning glory was an apt symbol of Innocence, needing protection, yet not harming the protective tree" (157). And Elaine Kauvar, discussing Blake's use of another vine, wild thyme, in *Milton*, writes: "The Wild Thyme, an emblem of sex, creation, and eternity, underscores Blake's insistence that human sexuality must triumph over the hypocricy of holy chastity for man to reside in paradise" (84). Another image that associates the vine with eternity and paradise is the Tree of Jesse motif that occurs on the "Introduction" plate of *Innocence*, as well as in "The School Boy" of *Songs of*

Innocence and of Experience, wherein the figures joyously ascend the helical grape-hung vines, contrasting the caged joylessness of the schoolroom experience bemoaned in the poem (illus. 32). Baine argues for "[t]he grapevine as a symbol of universal brotherhood and love, Christ himself established" (156), and Erdman also claims that "[t]he Tree of Jesse, father of David, author of the Psalms, as a symbol of God and his mercy makes a suitable emblem for Innocence" (*Illuminated Blake* 46). Blake, in these fruitful, ascending vines, depicts a symbol of eternity, recalling Christ's self-identification as the true vine in John's gospel. This association of vegetation and divine eternity is echoed in the Fairy's "eternal vine" at the beginning of *Europe*.

But not all vines in Blake are symbols of innocence, sexuality, or divinity. Baine discusses the leafless and fruitless ivy in many of the designs of *Experience*, as in "The Angel," as well as the vines that grow in isolation, not energetically twining with other vegetation, but instead becoming symbolic of death, envy, and selfhood (158). This can clearly be seen in plate 12 of *Europe*, with the ivy encumbering the blighted wheat (illus. 26). The same motif can be either positive or negative depending on the context and man's philosophic attitude toward these organic forms.

Regardless of the connotation, Blake's vines' resemblance to serpents is undeniable. His first explicit visual acknowledgement of this similarity occurs in "Earth's Answer" and in the complex imagery of "The Little Girl Lost" (illus. 33). Here a serpent is coiled around the tendrils of a morning glory vine, while in the opposite margin a couple embraces beneath another vine-twined tree. Tristanne Connolly notes this association when she claims, "[t]he spiral form pervades Blake's visual art, in serpents, vines, the curls of letters, and human posture: of course, because the human form, which Hogarth says is based on the serpentine line […] is the true form of all things, including words and rhetorical figures" (61).

Many commentators have, like Beer, assigned negative connotations to serpents in Blake's work. S. Foster Damon points to several instances wherein the serpent represents evil, hypocrisy, priesthood, fallen nature, and the worship of that nature (*Blake Dictionary* 365-66). Adding selfhood to the list of associations already established, Baine, in his lengthy discussion of serpent imagery in Blake, is even more definitive in his assertion that serpents represent "all kinds of evil": "Although in the emblem books the serpent often served as a symbol of health, prudence, foresight, and wisdom, Blake never employed it in any such way. Only in *The Marriage of Heaven and Hell*, moreover, did he paradoxically use reptiles for creative missions" (103).[65] To the tradition of positive serpentine associations to which Baine refers, one might add the ouroboros, the circular serpent biting its own tail, which is a symbol of eternity and regeneration. Michael J. Tolley claims, in regard to the serpent in plate 13 of *Europe* (illus. 35): "Blake significantly rejects […] the obvious emblem of infinity as a serpent with its tail in its mouth, the circular ouroboros. The serpent he actually draws on this page stands on its tail and rears its body up […] in seven coils: this is presumably what Blake intends by his 'image of infinite shut up in finite revolutions.' The seven coils project history as the spiral repetition of cycles" (136).[66] On this reading, just as Blake has inverted Darwinian imagery in this poem, he transforms the traditional emblem to signify a fallen and cyclically confined state. Fuseli, who provided the drawings for Blake on the engravings for *The Botanic Garden*, remarked, "The Serpent with its Tail in its Mouth, from a Type of Eternity, is become an Infant's Bauble" (qtd. in Beer, "Blake, Wordsworth, and Coleridge" 250).

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[65] He sees the viper being lifted by the eagle in plate 15 as an image of creative activity (illus. 34). Viscomi expands on this reading. On his view the viper of the second chamber in the Printing House in Hell represents the second stage in producing an illuminated plate. The viper is the "sinuous, calligraphic" line of text ("Illuminated Printing" 43), while the eagle is symbolized by the feather passed over to eliminate the gas bubbles and "to keep the acid from undercutting" the design (48), in effect lifting the serpentine line of text into relief.

[66] For a similar reading of this image, see also Daniel Hughes, 72.

However, attending to the serpents' specific position and shape in Blake's designs renders problematic the predominant reading of the serpent as symbolic of all kinds of evil. The serpent in *Europe* and the other continental prophecies is most closely identified with Orc, the bearer of revolutionary energy, which will ultimately become corrupted into the rigid, tyrannical law of Urizen later in the Orc cycle, representing for most commentators Blake's eventual disappointment with the French Revolution. But as Damon and Northrop Frye note, the serpent was already a powerful symbol of the American Revolution, evidenced by Benjamin Franklin's famous "Join, or Die" cartoon depicting the thirteen colonies as discrete units of a serpent, as well as the popular slogan (heard again today), "Don't tread on me" (Damon 435, Frye 210) – and, indeed, Orc is first described in *America* as "serpent-form'd" (E 53). The serpent here represents the energetic rebellion against the evil oppression spawned by natural religion – not that oppression itself, as Beer would have it – and Blake adopts this in his representation of Orc. Edward J. Rose notes the fiery associations of Orc's name, whose Hebrew root means "to burn" ("Good-bye to Orc and All That" 137), which is appropriate considering the Stoic idea – present both in Blake and Darwin – of material fire pervading the universe. Additionally, Dörrbecker makes a compelling argument concerning the visual contrast between the Urizenic rigidity of the frontispiece and the fiery, energetic rebellion of Orc: "Here, in Blake's title-page, the serpent breaks the spell of natural philosophy's law-enforcement, first opening up into spiral movement and then about to break away, dynamically stretching its body upward as a sign of the imminent apocalypse which will put an end to cyclical time" (*Continental Prophecies* 170).[67] And the ability of the serpent to renew its skin, to regenerate and transform, is a positive quality that complicates a strict reading of the serpent as evil, as Morton Paley observes: "Orc's complexity is increased by the fact that his serpent form is not a mere evil aspect but is itself ambiguous,

[67] For the full discussion of this imagistic contrast, see Dörrbecker, *Continental Prophecies*, 168-174.

suggesting renewal as well as finitude" (*Energy and the Imagination* 79). Inherent in the serpent is the energy of regenerative transformation that for Blake is inherent to material existence.

Furthermore, the serpent's ability to shed its dead skin and transform into new life makes it an apt symbol of Christ, a seeming paradox that Blake was certainly not the first to address. For instance, in his widely read *Three Books of Occult Philosophy*, which some critics argue may have been a source for Blake's *Tiriel*,[68] Cornelius Agrippa writes, "the serpent doth sometimes typifie Christ, and sometimes the devill" (3: 432). Frye, discussing the image of the brazen serpent that Moses raises in the wilderness, expands on this ambiguity:

> The energy of Orc which broke away from Egypt was perverted into the Sinaitic moral code, and this is symbolized by the nailing of Orc in the form of a serpent to a tree. This was a prototype of the crucifixion of Jesus, and the crucifixion, the image of divine visionary power bound to a natural world symbolized by a tree of mystery, is the central symbol of the fallen world […] Some idea of this serpent-symbolism seems to underlie the Gnostic cult of the Ophites, who worshiped the serpent as Jesus and considered Jehovah an evil being. (137)

In his designs Blake embraces the ambiguity referred to by Agrippa and commented on by Frye; this is observed most readily in *The Marriage of Heaven and Hell*, where Christ, who acts on impulse and energy and resists being rigidly fixed to any moral code, is of the devil's party (E 43).

We have already seen such serpentine ambiguity in the *Marriage*'s plate 18-19, in which the Angel sees the Leviathan as a terrifying serpent, while the Devil sees a joyful, serene landscape. Similarly, the image of children riding a bridled serpent in the last plate of *Thel* (illus.

[68] See Damon, *Blake Dictionary*, 306. Serpents and transformation figure strongly in this poem as well.

37), which Blake replicates in plate 13 of *America*, though containing sexual overtones, is not menacing, though Thel might see it as such. As John Beer argues regarding this design:

> This, in Blake's eyes, is the condition of 'organiz'd innocence' (as David Erdman has suggested [in *Prophet against Empire* 107]). Whereas in the normal human condition the energies of Nature are repressed or distorted, here they are lightly controlled by innocence – a perfect image for that play of energy in a state of visionary desire which Blake regarded as the essence of childhood delight and the secret of adult happiness. (*Blake's Visionary Universe* 75)

The serpent's playful interaction with the children suggests the joyful sensuality of material existence celebrated by both Blake and Darwin, and, moreover, the lack of fear that such a materialist philosophy should entail.[69]

Blake's use of the serpent as a dynamic symbol of material regeneration and divinity, the perception of which is determined by one's metaphysics, is clearly expressed in the text and design of plate 13 of *Europe*, which features a fiery, crowned Orc serpent ascending the left margin of the plate. The text here describes the construction of the serpent temple, during which "[t]hought chang'd the infinite to a serpent" (E 63). The implication here is that the infinite and the serpent are the *same thing*, but it is man's imaginative (or unimaginative) engagement with his surroundings that determines how the material object is viewed – as a degraded "portion" of vile matter, or as a fiery fragment of divinity, no different in kind than corporeal man. If dualist and empirical philosophy changed the infinite into a serpent, Blake's pantheist monism can just

[69] George Quasha, in a compelling analysis of the twining serpent motif in Blake's designs, coins the phrase "poetic torsion" to describe an energetic marriage of contraries: "the vinelike torque of the serpent whose winding is indeterminate – and creative – and whose movement *around* pillars and limbs is also a movement *up*, eventually to 'burst the stony roof'" (277).

as easily change the serpent back into the infinite.[70] In *Europe* and *Thel*, Blake's serpents indicate transformative possibility as opposed to simply fallen materiality.

The transformative image of the serpent, like many other themes and images in *Europe*, can be found in Darwin as well. Paley briefly calls attention to this connection: "Erasmus Darwin observed that the serpent was an ancient symbol for renovated youth and that 'a serpent was wrapped around the large hieroglyphic egg in the temple of Dioscuri, as an emblem of the renewal of life from a state of death'" (*Energy and the Imagination* 79). The quote from Darwin is taken from the Additional Note XXII in *The Economy of Vegetation* describing the Blake-engraved plates for the Portland Vase. And as Paley notes, for this information Darwin cites another source with which Blake was familiar: Jacob Bryant's *New System of Mythology*, on the engravings for which Blake worked as James Basire's apprentice. The illustration to which Darwin refers is strongly suggestive of the serpent motifs discussed above (illus. 38). Like a climbing vine, the serpent is coiled in a spiral shape around the egg, and like the serpent in plate 13 of *Europe*, it is rising. Given Darwin's description of the emblem as indicating the renewal of life from death, it is not surprising that Blake uses this image to signify revolutionary energy, the struggle of material life to throw off the deathly tyranny of natural religion.

The serpent is a key image in the second compartment of the Portland Vase depicting the Eleusinian Mysteries (illus. 39). In the same note in which he refers to the serpent-twined egg in Bryant, Darwin describes the central figure, "a beautiful female, a symbol of IMMORTAL LIFE. This is evinced by her fondling between her knees a large and playful serpent, which from its annually renewing its external skin has from great antiquity, even as early as the fable of

[70] Dörrbecker also stresses the importance of perception in relation to the serpent symbol: "Orc accepts the ambiguous reptile shape only on certain occasions and always for specific purposes. With this guise he accepts what the eyes of 'Angels' wish to see in him, a representative of original sin and political *terreur*" (*Continental Prophecies* 172).

Prometheus, been esteemed an emblem of renovated youth" (Additional Note XXII, 55-56). The serpent emerging from between the female's legs also suggests birth, or rebirth in this instance. As Hilton observes, Blake uses this image in plate 16 of *America* (illus. 40), another poem dealing with revolutionary energy and the hope for regeneration (43).[71] Darwin's stress of "immortal life" – just as Blake's repeated use of "eternal" as an adjective in *Europe* – should not be taken to signal his adherence to the theory of an immaterial afterlife, however. As in Blake's early work, the only immortality evident in *The Botanic Garden* is that of matter itself, in keeping with Darwin's Epicurean materialism.

A third Darwinian serpent illustration that has resonance in Blake's designs is found in the third edition of *The Economy of Vegetation*, and is one on which Blake may have collaborated with Fuseli: "Tornado" (illus. 41).[72] In this impressively dynamic image, the figure of Tornado rises from the storm-tossed sea, wielding lightning bolts and spirally twined by a winged serpent, the tail of which merges with the waves. The energetic and potentially destructive transformation inherent in the tornado is here fused with the rising, spirally coiled – and this time winged – serpent. Hilton makes the intriguing argument that "Blake's engraving is striking in comparison with others done about this time – as a Tornado, or spiral eddy, the various coiled serpents represent the circular velocity of the vortex. The left-hand figure in plate 6 of *The Book of Urizen* suggests, in particular, the inverse, inverted image of 'The Tornado'" ("Spectre of Darwin" 46, illus. 42). Hilton's contrast takes note of the vertical position of the serpents (rising or descending) as well as the figures within the coils – in "Tornado" both figure

[71] Seeing Blake's image as indicative of productive energy, Hilton here disagrees with Erdman's description of the figure in Blake as a "death-preaching sibyl"; given the fact that Erdman does not note the connection between this image and the one in Darwin, I am inclined to side with Hilton's reading.

[72] For a more complete discussion of Blake and Fuseli's collaboration on this image as well as "The Fertilization of Egypt," see Hilton, "The Spectre of Darwin."

and serpent ascend, while in the *Urizen* image, both figures and serpents are downward facing, the implication being that in Blake's symbolism, one can travel either way through the serpent spiral. The direction is determined by the imagination and philosophy of the participant. Also, the vortex created by the funnel cloud of a tornado bears a strong relation to the "ever-varying spiral *ascents* to the heavens of heavens" described in *Europe* (E 63, my italics). Contrarily, one can descend the vortex of a whirlpool, the shape of which resembles a tornado, as in the final line of plate 13: "A raging whirlpool draws the dizzy enquirer to his grave" (E 64). In addition to recalling the voice of the grave's lament concerning the whirlpool of the ear in *Thel*, this description resembles the maelstrom described in the third canto of *The Economy of Vegetation*: "Vast watery walls in rapid circles spin, / And deep-ingulph'd the Demon dwells within" (ll. 97-98).

Furthermore, the spirally twining winged serpent rising from the water in "Tornado" suggests the serpent-wound caduceus of Mercury/Hermes, another symbol of transformation that recurs throughout *The Botanic Garden*. In alchemical imagery, the serpent is used to signify the liquid element mercury, which must be combined (married) with the solid sulphur and saltpeter to effect the transformation into gold, the philosopher's stone.[73] The element mercury is thus often figured pictorially as the god Mercury/Hermes, associated with water and the serpentine caduceus, as in Baro Urbigerus's image of the divine mercurial water. Thus, in alchemical terms, the serpent effects transmutation and is distinct from the fallen, dark, earthly *prima materia* which it – together with the other elements – transforms. Both Darwin and Blake demonstrate an awareness of the alchemical dimensions of serpent symbolism in their works, which depict a

[73] References to mercury as the feminine, serpentine, liquid, elusive quicksilver that must be "fixed" by the masculine sulphur in the alchemical process are widespread. See, for instance, Alexander Roob, 19-28.

material realm that is more immanently infused with transformative energies than are the dead atoms that Blake took to constitute Newton's deistic universe.

For Darwin, in addition to the serpents in the engraved plates, Hermes and/or the caduceus appears several times in the poetry of both volumes of *The Botanic Garden*, and each time it initiates a transformation of the elements. In the first canto of *The Economy of Vegetation,* the Goddess of Botany describes how the "living landscape" acquires its colors: "Thus with Hermetic art the Adept combines / The royal acid with cobaltic mines" (ll. 486-87), imbuing this creative act with alchemical diction. In addition to the note – quoted in section II – suggesting the actual efficacy of alchemy, in the poem's last canto, the foliation of the vegetable world is described in explicitly alchemical terms:

> So the learn'd Alchemist exulting sees
> Rife in his bright matrass Diana's trees;
> Drop after drop, with just delay he pours
> The red-fumed acid on Potori's ores…
> Branch after branch extend their silver stems,
> Bud into gold, and blossoms into gems. (ll. 551-60)

Here the transmutation referred to by Darwin in the note produces the gold blossom of what alchemists refer to as the "philosophical tree," the foliage of which is composed of various elements.[74] And the caduceus appears several lines later; as the emergent vegetation burgeons, the Goddess commands: "Oh, wave, Hygeia! o'er Britannia's throne / Thy serpent-wand, and mark it for thy own" (ll. 623-24). Mercury, symbolized by the serpent-twined caduceus, is an indispensable element of this productive transformation. Canto II of *The Loves of the Plants* contains two more Hermetic passages, as the speaker describes further vegetative transformation:

[74] See Roob, 304-309.

"High raised the Chemists their Hermetic wands, / (And changing forms obey'd their waving hands,) / Her treasur'd gold from Earth's deep chambers tore, / Or fused and harden'd her chalbeate ore" ll. 147-50). And later in Canto II, Hygeia returns to employ the caduceus to transform "tormented Tantalus": "—O'er Him She waves her serpent-wreathed wand, / Cheers with her voice, and raises with her hand, / Warms with rekindling bloom his visage wan, / And charms the shapeless monster into man" (ll. 429-32). In all of these examples, the "serpent-wreathed wand" and the alchemical processes of nature yield positive transformations, especially seen in the revitalizing metamorphosis of Tantalus. For Darwin, as for the alchemical tradition on which he drew, the twining serpent wrought change within the natural world.

The same possibility of energetic transformation within a monist metaphysical system is depicted in the spirally ascending and resplendent Orc serpent in plate 13 of Blake's *Europe*. Like the winged serpent twining around the leg of the rising Tornado, many of Blake's serpentine motifs reflect the shape of the serpents writhing around the staff of Hermes. Of course Hermes, as mythological character, does not appear in Blake, who never uses direct representations of pagan gods to illustrate his poetry. Instead, Hermes, as the volatile transforming agent in Darwin, becomes philosophical thought itself in Blake, which can transform one's state and relationship to the world. Like the other reversals of Darwinian motifs that have been discussed above, while the caduceus transforms the monster Tantalus into revitalized man in Darwin, in *Europe* the change goes the other way: deistic ideas "chang'd the infinite into a serpent," which, despite the implications of the accompanying design, is a symbol of oppression in the text of the poem.

In a similar inversion, the life-giving flame featured in both *The Botanic Garden* and the *Marriage* has, by the final plate of *Europe*, become fires of destruction from which the figures

flee in terror at the bottom of plate 18 (illus. 43). Whereas Thel erroneously fled from the flames of desire and sensual delight, the family depicted here cannot be held at fault for seeking escape from "the strife of blood" that, in Blake's view, is due to the triumph of natural religion. Unlike in *Thel*, the suggestion that the earth itself is divine and capable of regenerative potential is in *Europe* limited to the designs, which in places such as plate 13 contradict the dystopian narrative of the poetry. *Europe* details the multiple ways in which a dualist metaphysics that removes divinity from the material plane constitutes a binding of the infinite. Blake here moves beyond satire to jolt readers into full awareness what he takes to be the nightmarish consequences of such a philosophy.

3.5 *The Song of Los* and Dualism's Dead Sun

In *The Song of Los*, the last of the continental prophecies, Blake makes the symbolism of Orc as the fiery serpent of material regeneration – and its associations with classical theories of *pneuma* and *anima* – even more explicit. While the book's material production differed from that of *Thel* and *Europe*,[75] its philosophical preoccupations remain consistent with *Thel* and the *Urizen* cycle. As Bloom observes, "[t]he purpose of *The Song of Los* is to give the background for the action of *America* and *Europe*, and also for the *Urizen-Ahania-Los* sequence of poems" (E 905). In this sense, the work, with what Beer describes as an "over-compression of symbolism" (*Humanism* 139) p/refigures many of the metaphysical themes and ideas traced thus far and again demonstrates affinities with Darwin's vital materialism. Like *Europe, The Song of*

[75] Viscomi describes *The Song of Los* as "an unevenly shaped illuminated book that is also oddly structured, in that it is two poems in one book to form a quartet of works within a trilogy of artifacts." According to Viscomi, the book marks a shift in Blake's method of production: "Between 1789 and 1794, Blake printed illuminated plates as book pages; in his later style, beginning with the color printed designs of 1794, he printed the plates more like miniature paintings" ("Blake's Virtual Designs").

Los gives a concise, symbolic philosophical history of the binding of the infinite as a result of an acceptance of what is here called "the Philosophy of the Five Senses" (E 68), which Blake explicitly attributes to Newton as well as the target of *No Natural Religion* – Locke. On Blake's reading, Newtonian mechanism and Lockean empiricism entail a dualism and deism that degrades material existence, which he contrarily argues is the only source of eternal delight. Blake forcefully makes his monist, pantheist argument at the poem's conclusion, which, unlike the endings of *Thel* and *Europe*, conveys a hylozoic image of material regeneration.

With the frontispiece to *The Song of Los*, Blake again creates a design that is emblematic of his philosophical argument (illus. 44). In many ways, the image of the old man kneeling at a stone altar beneath a darkened sun parallels the frontispiece of *Europe* and its depiction of a transcendent, Urizenic god creating the universe; here the perspective is from the dark abyss that dualist philosophy makes of the earth. Dörrbecker compellingly discusses the connection between the two frontispieces, as well as the relation between the dark sun of *The Song of Los*'s frontispiece and Blake's annotations to Swedenborg dualist theory concerning the dead material sun:

> Blake's frontispiece, through the symbol of the obscured and light-consuming sun, visually identifies religion as prayers wrongly directed to "a phantasy of evil man." [The frontispiece provides a] visualization of the abstract rules and regulations which are imposed upon the natural world by Urizen's act of creation […] making the book's reader aware of what the author believed to be the disastrous effects of the "abominable" worship of that natural world of physical appearances, the inauguration of which is under way in *Europe*, plate 1. […] In worshipping some external deity and his creation of the natural world, humankind – as represented by the Procrustean figure at the altar –

> becomes an enslaved part of this motionless (and, as such, "lifeless") pattern of abstraction that will not admit any "unregulated" movements. (*Continental Prophecies* 303-305)[76]

Bowing before a transcendent god, man neglects the deity in his own breast and thus perceives the material world as dead evidence of that god's creation. This is not in keeping with a pantheist worldview, as Levine writes: "There is nothing in pantheism that corresponds to the inferiority/superiority dichotomy taken […] as essential to worship" (317). And as James McCord argues, Blake's annotation about the dead Sun "provides an appropriate gloss for the frontispiece of a misguided worshipper humbled before a globe" (23). However, I contend that Dörrbecker erroneously ascribes a dualism to Blake when he claims that the main theme of *The Song of Los* is "the history of organized religion as a hindrance to humankind's self-realization and to humanity's participation in the spiritual world of eternity as opposed to the world of physical appearances and of sequential time" (*Continental Prophecies* 298). As we have seen in Blake's pantheist monism there is no opposition between the "spiritual world of eternity" and the "world of physical appearances and of sequential time" – the "ever growing" world is itself eternal, as in *The Botanic Garden*, and there is no spirit apart from physical appearances. To live as if there were is to be in the very fallen condition that the frontispieces of both *The Song of Los* and of *Europe* illustrate.

The title page of *The Song of Los*, rather than provide a counterpoint to the frontispiece as does the title page of *Europe*, again emblematically depicts man's state when dominated by

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[76] Dörrbecker also finds precedent for the frontispiece in Thomas Burnet's *Sacred Theory of the Earth* (1684, English edition), "which claimed that the earth 'will be changed into the nature of a sun' after the last day of Judgment" (*Continental Prophecies* 305). Paley first made this argument in his "Blake and Thomas Burnet's *Sacred Theory of the Earth*" (75-78). But a similar natural-philosophic argument – without reference to the Christian Apocalypse – is found in Darwin's *Economy*, which describes the earth and all planets as being projected from the sun and ultimately returning to their solar state in a series of what contemporary astrophysicists would call big bangs and big crunches.

natural religion (illus. 45). Here another old man lies supine, looking sadly skyward with his hand resting on a skull. This image visually echoes both the shadowy female of *Europe*'s self-characterization of woefully looking up to heaven from her "fathomless abyss" and Thel's lament for her future death, here represented by the skull. But the landscape surrounding the old man is not some murky abyss, but in most copies of the poem is vibrant green, with rivulets of lava flowing in the background.[77] The surrounding scene does not suggest death and stasis, but the ever-growing dynamism of the flame-infused earth, which is discussed at length in Canto II of *The Economy of Vegetation*, where the nucleus of the earth is composed of lava projected from the sun. Like Thel, the old man on the title page neglects this hylozoic vision of earthly life, focused as he is on a transcendent – and here *invisible* – god, as well as on his own death.

The text of the poem combines the final two continents, Africa and Asia, and – beginning with the former – presents another version of the dystopian narrative we have already seen in the *Marriage*'s account of the system of oppression formed by abstracting gods from their material bodies as well as in *Europe*'s description of the erection of the serpent temple and the constriction of cavern'd man to an empirical theory of matter and perception that lacks imagination. Here Blake's symbolic compression weds biblical allusion to the history of philosophy, interspersed with Blake's own cast of mythopoeic characters. The poem is sung by Los, who does not yet demonstrate the positive attributes with which he becomes associated in the later epics. Los begins the account of Africa with Adam in Eden and Noah on Ararat, who both witness Urizen, here conflated with Yawheh, "give his Laws to the Nations," while "Rintrah gave Abstract Philosophy to Brama in the East" and "[t]o Trismegistus. Palamabron gave an abstract Law: / To Pythagoras Socrates & Plato" (E 67). Blake equates abstract

[77] The background hills are more muted in copies C and E, but in all copies the river is colored red, indicative of its fiery or lava-like nature. Dörrbecker identifies "volcanic motions" in the background of the plate (*Continental Prophecies* 307).

philosophy – in which spirit is abstracted from matter – with Old Testament Law, both of which lead to systems of oppression and suffering. Thus, Moses receiving the tables of the law on Mt. Sinai from a transcendent creator God is described as beholding "forms of dark delusion" (E 67).

Blake names four ancient philosophers as receiving the abstract law from Palamabron – who in *Europe* is introduced as a "horned priest" (E 62) – and developing it in their respective dualist systems. The works attributed to the Egyptian Hermes Trismegistus, which were translated into English by John Everard in 1649,[78] demonstrate an explicit division between an immortal God and his corruptible creation, as well as one between the soul and body. In the first book, Hermes addresses his son, claiming that the soul, "while it is in the Body, lightens" it (2). Here the division of the soul into a mortal and immortal parts is also evident, as Hermes writes, "that part which is Sensible is mortall, but that which is Reasonable is immortall" (6), and, moreover, "[n]o thing in a Body [is] true" (7). As for the distinction between God and his creation, Hermes does not equivocate: "Nothing good upon Earth, nothing evill in Heaven. God is good, man is evil" (7-8).[79] Pythagoras, a predecessor of Plato, similarly distinguished between the corrupt realm of matter and the abstract, harmonious heaven, governed by number. And Socrates is the speaker of the explicitly dualist passages in Plato's *Phaedo*, discussed in chapter two.[80] In Blake's philosophical history, which in its symbolic concision neglects the much less explicitly dualist passages that can be found in Plato's *Timaeus*, for example, the dualist

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[78] Everard's translation was based on Marsilio Ficino's fifteenth-century Latin translation, and has since been deemed unreliable. The term "ancient" is not entirely accurate in this case, since in the early seventeenth century Isaac Casaubon argued that the writings could have been written no earlier than the first century C.E. (Haanegraaff 390).

[79] Raine discusses other such passages in the work; see 1: 22, 158, and 272, wherein she claims that according to the Hermetic view, "matter is the principle of evil." It is surprising, therefore, that she refers to Trismegistus as a monist (1: 99). Her most prolonged discussion of the work concerns its connection with Blake's *Vala* (1: 271-289).

[80] As for the reference to "Brama in the East," Raine speculates that Sir William Jones's *Asiatick Researches* (1794) is probably the source of this information. Jones writes, "among other *Indian* curiosities [it] was a *technical system of logick*, which the Brahmans had communicated to the inquisitive Greek" (qtd. in Raine, 1: 425 n. 44).

metaphysics propagated by these ancient systems is evident in the Christian worldview and responsible for the "dark delusions" in contemporary natural philosophy – as the poem proceeds to reveal.

As in *Thel*, Blake here briefly introduces two speaking nonhumans as representatives of a monist, panpsychist philosophy – the Night and Cloud are parenthetically portrayed as commenting on the conflict and suffering resulting from the introduction of the dualist systems: "Night spoke to the Cloud! / Lo these Human form'd spirits in smiling hipocrisy. War / Against one another; so let them War on; slaves to the eternal Elements" (E 67). A philosophy that casts the body as corrupt and evil – and not as a hylomorphic "Human form'd spirit" as it is also represented in the *Marriage* – makes its destruction in acts of war more justifiable. Believing himself to have an immortal soul trapped in a vile body, man has thus become enslaved to material existence, which he sees as a degradation, and not as eternal delight. Though he does not refer to this specific passage, Bloom succinctly characterizes the situation: "Unfallen, according to Blake, we are our bodies; fallen we only have them, and finally we are possessed and imprisoned by them" (*Blake's Apocalypse* 156). Unlike in *Thel*, however, the sentient nonhumans do not try to intervene or share their knowledge; they remain peripheral observers cynically bemoaning man's fate, bracketed by parentheses in Blake's text.

"The human race began to wither" as a result of dualist philosophy and religion's abstraction of spirit from the material world. Like Thel, mankind as a whole is characterized in *The Song of Los* as "fearing the joys of Love" and thus erecting not a serpent temple, but similar symbols of the suffering and oppression of earthly existence under deistic law: "Churches: Hospitals: Castles: Palaces," which are described as "traps to catch the joys of Eternity," which in turn is "obliterated & erased" (E 67). Such a fate reinforces Blake's materialist belief that

eternity is not in some "allegorical abode" such as the heaven described by dualism of Trismegistus, but rather – as for Darwin – only exists in corporeal becoming. As Piloo Nanavutty argues, Blake "is concerned only with the Eternal as it is revealed here and now in earthly life" ("Hindu Creation Myths" 181). Unable to see the eternal delight of earthly existence, mankind, like Thel, flees such a vision and becomes diminished, as in *Europe*, within his cavern of empirical philosophy, which changes his infinite nature into a serpent: "as they fled they shrunk / Into … narrow doleful forms: / Creeping in reptile flesh upon / The bosom of the ground" (E 68).

The culmination of "Africa" presents the en-caverning of man as a result of the "Philosophy of Five Senses" that Urizen, weeping, "gave […] into the hands of Newton & Locke" (E 68). Such a philosophy denies the infinite divinity in all material creation, and Blake here explicitly connects Newtonian and Lockean deism to Platonic and classical dualism, which divided earth from God and the soul from man, who is repeatedly described as consequently shrunk, closed, restrained, and bound in the final twenty lines. Moreover, Blake again suggests that metaphysics influences perception, as he writes, "all the vast of Nature shrunk / Before their shrunken eyes" (E 68). The natural world, infinite and eternal in Blake's pantheist monism, becomes finite and corrupt under the gaze of dualist empiricism. Although Blake has drastically altered the style and mode of the critique of empiricism introduced in *No Natural Religion*, in substance the argument made seven years later in *The Song of Los* is no different.

To illustrate the shrunken appearance of the natural world to man's finite senses, Blake again features a giant serpent twisted among copious vines and other vegetation at the top of plate 3 (illus. 46). But this serpent, unlike the ascending, fiery serpents on plates 2 and 13 of *Europe*, faces downward and with open mouth approaches a nude, sleeping shepherd boy. As Dörrbecker notes, this serpent does not represent the revolutionary and regenerative potential of

Orc, but is rather depicted as a menacing threat to humankind (*Continental Prophecies* 309). This mirrors the Angel's vision of the Leviathan as a fearsome threat in the *Marriage*, and is an image of man's thought –specifically man's metaphysical thought – changing the infinite into a serpent poetically described in *Europe*.

Despite the shrunken state of man in the culmination of "Asia," Blake uses other designs on the two plates of the poem to suggest his counterargument and materialist vision. Just as in plate 17 of *Europe*, plate 3 of *The Song of Los* is rife with energetically twining vegetation and winged insects, again recalling the transformative potential of organic life – and not, I argue, as Erdman reads them, as signifying "decay and corruption" ("Symmetries" 182). I find Dörrbecker to make a more compelling argument: "if there really are any signs of hope in this design, then they have been relegated to the regeneration symbolism of the caterpillar on the vine and the butterfly-soul which is making its way toward 'Eternity' in line 2" (*Continental Prophecies* 309). As before, Blake's eternity, like Darwin's, is in the dynamism of material existence, and his implicit flat ontological argument that humans are not separate from this sphere is visualized on plate 4 (illus. 47), which features a soaring, winged, nude human form as an imagistic contrast to the text on the same plate, which describes shrunken man creeping reptile-like upon the "bosom of the ground." Confined by the perspective of natural religion, Blake suggests that man neglects the delightful potential of his own bodily form.

But *The Song of Los* does not end with the same bleak vision of suffering and strife with which *Europe* culminates; "Africa," the final continental poem, features a material regeneration that recalls the optimism of Darwin's hylozoic *Botanic Garden*.[81] Here Orc re-emerges as an

[81] Plate 5, one of the two full-page designs included within the book that Blake executed in the same manner as his large color prints of the same year, also strongly recalls Darwin's work, as it depicts two figures – one male and one female – resting within lily blossoms (illus. 48). According to the editors of the Blake Archive, these figures may represent Shakespeare's Oberon and Titania or Blake's Har and Heva. Dörrbecker claims that the mysterious plate

explicit symbol of both revolutionary energy and the vital material *pneuma* or *anima* permeating the universe as described in the classical traditions discussed in the previous chapter, and as playing a central role in the evolutionary vision of *The Botanic Garden*. Blake describes the "thick-flaming, thought-creating fires of Orc," who is characterized on the next plate as a "serpent of fiery of flame" (E 68, 69). In Blake's panpsychist system, fire – here in the form of Orc – creates psyche, or thought, in material bodies. Orc's energies are directed against the "Kings of Asia" who, under the spell of Urizen's deistic dualism, have contributed to the binding of man's infinite potential; they have striven

> To turn man from his path,
>
> To restrain the child from the womb,
>
> To cut off the bread from the city …
>
> That the lust of the eyes may be quench'd:
>
> That the delicate ear in its infancy
>
> May be dull'd; and the nostrils clos'd up;
>
> To teach mortal worms the path
>
> That leads from the gates of the Grave. (E 69)

Here we see the same pattern of political repression following upon a philosophy that scorns bodily desire and restrains the expansive capacity of organic sensation – an empiricism un-supplemented by the fires of imagination – that Blake has depicted in "Africa," *Europe*, *Thel*, the *Marriage*, and *No Natural Religion*. As Jon Mee writes, the poem envisions "the disastrous effects of the acceptance of the religious devotion to an abstract soul over the body. The 'disease'd' come to dominate human energies in the world of religious dualism; desire cannot be

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"has resisted all interpretive efforts" (*Continental Prophecies* 111). Nevertheless, whether the figures are fairies or anthropomorphic representations of the flowers themselves, they echo Blake's personified designs of flowers in both *Thel* and *Visions*, and parallel Darwin's anthropomorphizing of flora.

eradicated only restrained and deformed" (130).[82] Man in this dualist system is taught to see himself as only a worm awaiting an allegorical abode beyond the degraded plane of material existence. Urizen's deistic philosophy is spread over Europe in the form of "Books of brass iron & gold," casting "woven darkness" that leaves Adam "a mouldering skeleton," not the generative clay capable of bringing forth eternal life (E 69).

Yet even as the "sullen Earth" shrinks as a result of natural religion, Orc rises "like a pillar of fire above the Alps," initiating a material resurrection that concludes the poem:

> Forth from the dead dust rattling bones to bones
>
> Join: shaking convuls'd the shivring clay breathes
>
> And all flesh naked stands …
>
> The Grave shrieks with delight, & shakes
>
> Her hollow womb, & clasps the solid stem:
>
> Her bosom swells with wild desire:
>
> And milk & blood & glandous wine
>
> In rivers rush & shout & dance,
>
> On mountain, dale and plain. (E 69-70)

This is the hylozoic vision of *Europe*'s fairy, where every particle of dust "breathes forth its joy." Here, amid the dark destruction that permeates Blake's imagery in the continental prophecies, is a Darwinian depiction of erotic delight in earthly evolution; the grave swells with desire and shoots forth milk, blood, and wine, spawning the lush vegetation that is also visually depicted on the plate. Erdman describes this final stanza as "a cosmic orgasm, apocalypse, regeneration"

[82] Although Mee's approach concerns theology more so than philosophy, he makes what I take to be an accurate assessment of Blake's early work, implying that in Blake's view theology and philosophy are intertwined: "Much of Blake's writing in the 1790s is fundamentally averse to any notion of a transcendent principle outside the human totality, including the rational monotheism towards which the deist tradition tended" (141). I would, however, qualify such a claim by noting that it applies more to the work of the first half of the 1790s than the second half.

(*Illuminated Blake* 180), and Dörrbecker finds an explicit parallel in Canto IV of Darwin's Economy of Vegetation: "The red heart dances, the Aorta bends; / Through each new gland the purple current glides, / New veins meandering drink the refluent tides" (ll. 428-30).[83] Blake is also re-imagining the conclusion of *Thel* – who cannot see the grave in such a way, and whose final shriek is of fear – in more Darwinian terms, since both Blake and Darwin view the earth as cradle and grave. The shriek that ends "Asia" is explicitly one of delight, and comes from the grave itself, which unites "all flesh" in Blake's monist metaphysics.[84]

The final plate of *The Song of Los* features a full-page design that inverts the frontispiece and features Los as nude blacksmith, kneeling on a cloud or astral body from which emerges flames, and looking down with a serious – perhaps melancholy – expression at a dark red sun or star – perhaps the same orb that is being worshipped by the old man in plate 1 (illus. 49). Viscomi describes these two designs as constituting a single "virtual design," due to their being "executed on the front and back of the same copper plate" ("Blake's Virtual Designs" n. p.). Yet in Plate 8 Blake has elevated the creative human form above what in plate 1 was figured as a transcendental object of worship. Here Los, who becomes affiliated with imagination in the later epics, is surrounded by "thought-creating" fire, and the orb over which he sits emits rays that Erdman compares to "spurting blood," recalling the hylozoic vision of earth that closes "Asia." Yet Erdman ascribes a dualism to Blake's vision, claiming that Los is here forging a material sun, to be distinguished from the "true sun of Imagination" which is "outside the picture" (*Illuminated Blake* 188). An argument that presumes to know what is outside of Blake's frame

[83] Mee also finds *The Song of Los* indebted to Darwin, claiming that "Orc's voice echoes that of Darwin's giant [a figure of the Revolution] in its ability to rouse 'the living world'" (156).

[84] Leonard W. Deen also makes this connection: "When the grave becomes a womb […] we see that [*The Song of Los*] responds to and completes *The Book of Thel*, in the last section of which […] the womb is seen as a grave" (64). See also Mee: "The orthodox climax of history, the intervention of the judgemental deity, is replaced by a cosmic act of copulation" (143).

strikes me as presumptuous and difficult to support. Dörrbecker follows a similar line of interpretation, writing that Los's melancholic expression is a result of having "fallen into the natural world" ("*The Song of Los*" 56). This may be true in the context of Blake's later prophecies, which treat material creation as a fall into materiality. But we have seen in these earlier works that in Blake's monist system, as in Darwin's, there is nowhere to fall from – the natural world is all there is. The suggestion of the design, I submit, is that Los's song has articulated Blake's pantheist vision of a living sun that infuses the material universe with divinity and desire, in contrast to natural religion's dualist vision that casts the sun as dead, and the earth as a shrunken abyss of misery to be reviled in favor of an "allegorical" hope for some immaterial afterlife. Why then is Los melancholy? Perhaps because Blake's – and Darwin's – monist natural philosophy was overshadowed by the deism that dominated late-eighteenth century European thought. Nevertheless, in the final plate Blake portrays a symbol of the fiery/bloody thought-creating orb that emblematizes the vitalist vision of life he explores more fully in the Urizen cycle, which is the subject of the next chapter.

CHAPTER 4

"Horrible Forms of Deformity": The Degradation of Intelligent Flames in the Urizen Cycle

"It is in vain for us to pretend to lay down any one certain uniform Rule, and say to Nature, This is thy Scheme; such are thy Statutes; and from these thou shalt not deviate."

—John Needham[1]

"We shall find, throughout all Nature, that all what can be, is."

—Comte de Buffon[2]

4.1

The poems constituting Blake's Urizen cycle – *The Book of Urizen*, *The Book of Ahania*, and *The Book of Los* – present his most sustained nightmarish portrayal of the fallen world as seen from the perspective of both a dualist philosophy and of a materialist metaphysics, both of which deny divinity to the natural world. Just as the vision of the terrifying chaos traversed by the approaching Leviathan in the *Marriage* was "owing to" the Angel's metaphysics, in the Urizen cycle multiple metaphysical visions intersect with and contradict each other, creating paradox and ambiguity for the reader. Clearly, however, the philosophical first cause of the cataclysmic events in these poems is owing to Urizen's Newtonian metaphysics; though he is here unnamed, the shrill trumpet blast, which had been blown by Newton to usher in the dark

[1] *Observations upon the Generation, Composition, and Decomposition of Animal and Vegetable Substances*, 14.

[2] *Barr's Buffon*, 3: 220.

modern age in *Europe*, sounds again in the first chapter of *Urizen*. Moreover, Blake's conflation of cosmology and embryology in the Urizen cycle testifies to his view that Newtonian mechanism and empirical philosophy had infiltrated the new discoveries being made in the eighteenth-century life sciences. Ironically, however, emerging vital materialist physiologies, though voicing allegiance to the laws of Newton, ultimately revealed a living world that could not be contained in or explained by his metaphysical system – a state of affairs that I argue Blake dramatizes in the Urizen cycle. Despite their non-Newtonian aspects, the vitalist natural philosophies were for Blake another form of natural religion, for they too denied divinity to the self-active living matter of the universe. Thus, this chapter argues that Blake satirizes both Newtonian law and the materialist embryological theories that transgressed it, presenting equally horrific visions of a petrified world in which man is enslaved to a transcendent, abstract deity, and of a violently monstrous chaos teeming with repugnant forms, which, in direct contrast to Blake's earlier pantheist monism as celebrated in *The Marriage of Heaven and Hell*, are depicted as unholy. On Blake's reading, either philosophical perspective, in positing an immaterial God separate from the universe, or in implying that the divine is altogether unnecessary, occlude the living, intelligent, energetic flames that comprise the infinite, divine universe.

Yet in these poems Blake's pantheist, monist counter-vision is not delivered with the force that it is in his earlier works. Part of this is due to the fact that unlike Blake's earlier satires, *No Natural Religion* and the *Marriage*, there is no clear protagonist or speaker to articulate what readers might identify as Blake's philosophical perspective – there is no "b" series or voice of the Devil. While Urizen can easily be identified as the fallen embodiment of Newtonian metaphysics, Los, the other main actor in the cycle, is just as flawed in his misguided efforts to bind Urizen and to create the degraded human form by the light of a dead sun. Bloom notes that

in these poems Los lacks the positive association with creative imagination that he acquires in the later prophecies; in the Urizen cycle both he and Urizen are satirized demiurgic creators, and the three poems constitute an "intellectual satire" that lacks a "serious reworking" of what Blake saw as flawed natural philosophy into any clear articulation of his principles (E 906-907).

What is more, like *Thel*, all three Urizen poems are rife with allusions to contemporary developments in the life sciences, but unlike *Thel*, in the latter works the poetic narratives of material growth, reproduction, and evolution are cast in as unfavorable a light as other passages in the cycle wherein the natural world is a "petrific" void through which dead Newtonian corpuscles hurl. Although there are once again echoes of Darwin's writings – here specifically on regeneration and eighteenth-century embryological debates – the Urizen cycle only rarely celebrates the delight of bodily life and the corporeal universe in the way we have seen in Darwin's *Botanic Garden* and in *No Natural Religion*, *Thel*, the *Marriage*, and the conclusion of *The Song of Los*. Blake presents equally horrific visions of both a stony, deadened world in which man is enslaved to a transcendent, abstract deity, and of a violently monstrous, ungoverned chaos teeming with "unnatural" forms. The universe is still coursing with what are described in *The Book of Los* as living, "intelligent flames" (E 91), but due to the misguided labors of Urizen and Los, the bodies they give rise to evince only disgust and terror. The Urizen cycle, I submit, presents the same satirical critique of empirical and Newtonian metaphysics that characterized Blake's 1788 tractates, but the pantheist propositions for a divine infinitude of material existence of *No Natural Religion*'s "b" series and the *Marriage*'s emphatic proclamation that every thing is alive and holy as various forms of fiery energy are difficult to discern here. The universe may be alive, but, with the exception of passages conjuring a past state of affairs, it does not appear holy. Viscomi, in tracing the complicated production history of

The First Book of Urizen, writes that most of the twenty-eight plates of this work were engraved on the verso side of the same plates used in the *Marriage* (*Blake and the Idea of the Book* 280). This aspect of both works' material production parallels what I see as a symmetry in their content: *Urizen*'s monstrous, unholy forms are the dark inverse of the *Marriage*'s celebration of the divine energies of bodily life.

David Worrall summarizes the majority of critical commentary on the Urizen cycle when he writes that the poems, together with the continental prophecies, "form a more or less co-ordinated project of poetic inquiry into the origins of man, religion and the development of political, sexual and social systems" (*Urizen Books* 9). This project was undertaken to add what I take to be a fundamental dimension to such a characterization: Blake's inquiry is philosophic as much as it is poetic, and the systems listed by Worrall are contingent on the adherence to crucial metaphysical principles concerning the relation of the soul to the body, the nature of the material world, and the status of the divine. This chapter seeks to trace Blake's investigation into the origins of man – and the universe – from a natural philosophical and embryological standpoint, in contrast to the majority of critical readings of the Urizen cycle in terms of Blake's relationship to eighteenth-century biblical scholarship and in terms of his revision of Milton's account of man's origins.[3]

This is not to deny that there is good reason for reading the Urizen poems as instances of Blake's grotesque satire of the biblical and Miltonic accounts of Genesis. Despite the conundrums these difficult works present, one would be hard-pressed to challenge the oft-repeated claim that the Urizen cycle is a dark parody of creation, of the same cataclysmic fall

[3] Bloom writes that the targets of the Urizen cycle are "the Bible, Plato, and Milton" (E 906), but his own commentary – as well as that of most other critics attending to these poems – focuses on the first and last while neglecting the middle, philosophical member of this list. Raine, for instance, reads *Urizen* as an attack on Milton's vision of God (2: 61).

into bodily life told multiple times from multiple perspectives. As the first poem of the cycle, *The First Book of Urizen* is commonly understood as "Blake's new version of Genesis" and the first book of the The Bible of Hell promised readers at the end of the *Marriage* (Worrall, *The Urizen Books* 12).[4] E. D. Hirsch was among the first critics to offer a reading of *Urizen* as a parody of Genesis (*Innocence and Experience* 73-81), and Bloom likewise interprets the character of Urizen as Blake's perverse commentary on the Old Testament God (*Blake's Apocalypse* 176-189). Leslie Tannenbaum also reads *Urizen* as Blake's attack on orthodox theology, wherein two Old Testament creators are satirized: Urizen represents the abstract Elohim, while Los is the anthropomorphic Jahweh ("Blake's Art of Crypsis" 145).[5] Blake's unfavorable characterization of the Old Testament creator god is not new, as we have seen in the case of the frontispiece to *Europe*, but in the Urizen cycle it takes on full satirical force, and Tannenbaum aligns this heterodox parody of creation with the Gnostic tradition, which locates "the Fall in the creation of the world and the division of the sexes" ("Blake's Art of Crypsis" 145).[6]

Jon Mee continues the approach of reading the Urizen poems alongside the bible by arguing that the next poem in the cycle, *The Book of Ahania*, in taking up the tangled narrative begun in *Urizen*, "shadows the other books of the Pentateuch" and has as its central concern "the emergence of Moses as a biblical hero and the corruption of this reforming hero into the moral lawgiver" (190). And for Mee, *The Book of Los*, the cycle's third poem, "moves the ironical treatment of the Old Testament on into the prophetic books of the Bible and also provides an

[4] All but the last printed copy (copy G, c. 1818) of the poem contain the word "First" on the title page. Copy A (1794) lacks "First" on the Preludium page, though it contains it on its title page (Worrall 144).

[5] For a challenge to these identifications, see Esterhammer, 145.

[6] See also Damrosch, *Symbol and Truth* 360, and Worrall, *Urizen Books* 135.

ironic comment on the conventional reading of the Book of Revelation" (201). Mee's and others' readings of the Urizen cycle poems as biblical parodies gain support from the form of the poems, all of which are divided into chapters, and all of which mimic the double columns of contemporary bibles (Worrall, *Urizen Books* 25). Additionally, Jerome McGann compellingly places Blake's challenge to the bible alongside his contemporary Alexander Geddes, who hypothesized that the bible should be read as "a heterogeneous collection of various materials gathered together at different times by different editors and redactors" (321). On McGann's reading, Blake was, like Geddes and other biblical scholars of the time, challenging the orthodox understanding of the Bible as a unified, authoritarian text. This argument garners material support from the fact that Blake's *Urizen* is not a unified work but is itself a variant copy – all seven extant copies feature a different plate order, each variation having obvious consequences on the context of the poem, thus presenting a serious challenge to editors and readers seeking the "one law" of a stable text.[7]

McGann's situating of *Urizen* within contemporary debates among biblical scholars also reflects the political emphasis that commentators have placed on the cycle, since the contentions over the cultural authority of the Bible were not without political ramifications. Mee's reading of the poems as an attempt to "undermine scriptural authority" (172) is accompanied by his historicizing of Blake's satire in the context of the volatile political climate of the 1790s; in addition to discussing the ties to Geddes as identified by McGann, Mee also articulates points of contact between the Urizen poems and Constantin-François Volney's *The Ruins* (179), as well as the work of Thomas Paine, writing, for instance, that "[t]he poem's representation of Urizen as a druidic practitioner of human sacrifice anticipates Paine's claim that 'there are things done in the

[7] See chapter 29 of Viscomi's *Blake and the Idea of the Book* for a fuller discussion of the variant copies of *Urizen*, some details of which I will return to later in this chapter.

Bible at the express command of God as shocking as anything done by Robespierre'" (192). Worrall also links the argument of the Urizen works to the polemical writings of Geddes, Paine, and Volney, and additionally to the Muggletonian religious tradition, whose influence he traces through Blake's mother and whose idiom – marked by a distrust of reason – he claims "is the idiom of Blake" (*Urizen Books* 13).[8] Such historical readings offer a persuasive explanation for the horrific vision offered by the Urizen poems: they come after the Reign of Terror and the failed promise of the French Revolution. The guillotined head and bloody, dismembered body parts on the last plate of *Ahania* only lend force to such an interpretation (illus. 50).

This chapter brackets the many scriptural, political, and Miltonic approaches to the Urizen poems in an effort to emphasize their relation to natural philosophic discussions, and to examine how Blake's metaphysical positions developed in the seven years since the tractates of 1788. Since all three poems feature the same characters and depict the same primal event – *Ahania* continues the narrative of *Urizen* while *The Book of Los* "intersects the action of *The Book of Urizen* in the midst of Chapter IV" (Bloom, E 908)[9] – there is no need to confine the discussion of each poem to separate sections, as was done in the previous chapter. I do wish, however, to begin at the beginning, with *Urizen*, which is the longest of the three works and which has by far garnered the most critical attention, as it lays the groundwork for the subsequent poems in the cycle, which orbit and depend upon it like Ahania does Urizen. My discussion of *Urizen* in section 4.2 examines the work's continuation of epistemological and metaphysical themes initiated in *Thel*, and reads Urizen as a more fully developed and menacing

[8] Worrall acknowledges that another historicist critic, E. P. Thompson, was the first to draw the connection between the Urizen books and the Muggletonian tradition (*Urizen Books* 12).

[9] Worrall writes that *The Book of Los* "is very much a parallel of *Urizen* but as a re-telling of the story from the perspective of Los with an emphasis on the creation of human beings as an organism ruled by Urizen through the agency of religion" (*Urizen Books* 10).

version of the protagonist of the earlier work. Section 4.3 then turns to Urizen's creation of a stony cosmos in absolute space, bound by a universal law of gravitation, which is Blake's parody of Newtonian metaphysics as he understood it – just as the "a" series of *No Natural Religion* is his parody of Lockean empirical philosophy. As in *Europe* and *The Song of Los*, the figuration of the world in Newtonian terms coincides with a diminishment of human sensory capacity, a binding and degradation of the once-infinite human form. Section 4.4 delves into the natural philosophical history from which Blake's multiple accounts of bodily genesis in all three poems draws. Here I examine the manner in which Newtonian materialism informed embryological debates over the course of the eighteenth century, and in turn how other materialisms – such as those of Pierre de Maupertuis, Georges-Louis Leclerc, Comte de Buffon, John Needham, and Darwin – deviated from Newton. Section 4.5 continues this discussion, but focuses on a central Blakean emblem for the vital materialisms emerging in the second half of the eighteenth century: the polypus. Finally, section 4.6 searches the Urizen cycle for whatever positive counter-vision might exist to oppose the negatively portrayed dualist and materialist philosophical systems in these works.

4.2 Urizen's Divisive Desire and "activity unknown"

The Book of Urizen is a book of division; its physical manifestation in eight heterogeneous copies, each with a different order of plates, attests to the fundamental theme of unassimilable fragmentation as a fallen version of creation.[10] Andrew Cooper succinctly summarizes the main subplots interwoven throughout the poem:

[10] Erdman's eclectic edition of the poem avoids much of the problem of determining a unified or original version of the work, since its eschewing of Blake's images means that he can ignore the ten plates containing full-page designs and the various orders in which they appear in each copy. "There is only one possible arrangement of the text, since it is organized into numbered chapters," Erdman writes, but then immediately acknowledges that "Plate 2 is out of

> 1) Urizen's bungled construction of a brave new world separate from Eternity; 2) Los's redemptive fashioning of a body for Urizen, and his [Los's] subsequent collapse in despair; 3) Los's attempt to repossess Pity, his divided female half, through rape, leading to the birth and binding of their child, Orc; 4) Urizen's reawakening to power over a now fully differentiated earthly world; and 5) throughout, the hardening of the Eternals' protective barriers against Urizen into the Net of Religion. (215)

Such a summary, however, belies the impossibility of assigning a sensible chronology to the poem. Why, for instance, does Urizen's embryological development occur *after* he has separated from Eternity and created the material universe? And as Worrall notes, "it is deliberately unclear which came first, Los or Urizen," adding, "the three Urizen books are distinct amongst Blake's works in their lack of temporal locations" (*Urizen Books* 10, 11). George Mills Harper addresses this temporal ambiguity when he writes, "At another level, however, Urizen himself appears to represent the result of the process of degeneration rather than the cause" (210).[11] For Anne Mellor, "the poem moves backward in three actions: first, Urizen's creation of the universe; then the preceding creation of Urizen himself, who is separated off from Los; and finally, the original conflict within Los which resulted in that separation" (*Human Form Divine* 93). Mollyanne Marks most aptly describes Blake's "attempt to transcend the ordinary limits of plot and language" in *Urizen*: "Instead of proceeding through a chronological narrative, the poem demonstrates that the fall of Urizen, the creation of the world, and all the apparently divergent

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order in copy E, 15 follows 18 in A, and 8 follows rather than precedes 10 in copies B and F" (E 804). My citations of Blake's text of *Urizen* will be from the Blake Archive's transcription of copy A, since it is among the earliest printed copies (1794) and is one of only two copies (the other being copy B) containing all 28 plates.

[11] McGann makes a similar claim concerning the poem's lack of a clear narrative sequence: "disorder is a permanent presence with which the work's conventional narrative inertia seems always to be engaged" (306). Ault makes the point somewhat more abstrusely: "Blake refuses, however, to allow either the characters … or the reader … to find a place of security or a vantage from which a comprehensive principle … could be rigorously constructed and that would dialectically reconcile the conflicts of the plot" ("Blake's De-Formation of Neo-Aristotelianism" 125).

actions it describes are aspects of a single event" (581).[12] The poem's contradictory temporal ambiguity and multiplicity is visually represented in the frontispiece: despite the singularity of "Book" in the title, the design portrays Urizen writing, eyes closed, simultaneously in two books – holding a quill or engraving device in each hand – while seated on a third, and with a fourth tablet looming, tombstone-like, behind him (illus. 51). Just as Geddes had argued that the contradictions in the Bible were the result of it consisting of an assemblage of heterogeneous texts, Blake's frontispiece implies that there is no single book of Urizen, and of the multiple, contradictory narratives, it is impossible to determine an original "first."

But Blake cannot strip language of its fundamental temporal character, and his convoluted warping of chronology only emphasizes this crucial feature. Chapter I thus begins *in medias res*, with the "shadow of horror" having already "risen / In Eternity" (pl. 3). This shadow is of Urizen's creation, described – presumably from the perspective of the Eternals – as "Self-closd, all-repelling," an "abominable void" and a "soul-shudd'ring vacuum." Urizen is named by an unspecified "Some" of the Eternals as the "Demon" – even though Urizen is an Eternal himself – responsible for this oxymoronic creation of a void (pl. 3). This is the first instance of Blake's parody of biblical naming in the poem,[13] and Urizen's name has generated abundant hypotheses regarding its etymology and punning possibilities. McGann traces the name to Geddes's 1792 translation of Genesis, in which the word "horizon" indicated the boundary separating light from darkness, "a Greek word … which signifies to bound or terminate" (317-

[12] Mitchell also argues that the poem presents "increasingly complex displacements of a single archetypal action" ("Poetic and Pictorial Imagination" 92).

[13] Tannenbaum writes, "The namings in *Urizen* describe a perverted creation: things that should never exist are called into being. The namings, instead of celebrating life, creation, and divine benevolence, express the traumatic eruption of death, destruction, and an antagonism between the human and the divine" ("Art of Crypsis" 159).

318).[14] And while the horizon/bounded connotation is certainly appropriate for Urizen's "self-closd" creation, Worrall articulates the more common critical perspective: "The simpler, and more traditional, critical explanation might be to make an association between Urizen and Reason, that is, Your-Reason" (*Urizen Books* 128).[15]

The connotation of Urizen's name with reason resonates with the adjective "abstracted" in the first stanza of the first chapter (pl. 3), describing both Urizen's reasoning power – which is more explicitly manifested later in the poem – and his separation from his creation. As depicted in the frontispiece of *Europe* with its iconic portrayal of the dividers, Urizen has here also abstracted himself from his creation, and in this separation he is "unknown," "secret," "hid[den]," and thus susceptible to being manipulated in the service of oppression by a power-hungry priesthood. But here, as the Preludium of *Urizen* specifies, Urizen himself is the "primeval Priest" who first "assum'd power" (pl. 2). Blake is again enacting the disastrous consequences of the "abstraction of mental deities from their objects" as outlined in plate 11 of the *Marriage*, but Urizen is both the abstract deity and the priest usurping power from a secret, hidden god. Such abstraction is a consequence of a dualist and deist metaphysics that posits a creator god outside of creation. As Stuart Peterfreund argues, Urizen's act of abstraction "disowns the origins of his own reasoning and distorted genius by disavowing his own body as a 'bodying forth' or 'measure' of poetic genius, and the very poetic genius responsible for that

[14] Essick lists numerous other proposed puns on Urizen's name (*Language of Adam* 215). Lisa Kozlowski proposes an additional one: Urizen is "a perfect anagram and near homophone of 'Urezin,' in which the 'Rezin' refers to the resinous material found in the stopping-out varnish of relief etching" (411). Her reading of the content of the poem as a veiled allegory for the production process of the illuminated book itself is compelling, and in this regard similar to Viscomi's interpretation of the printing house in hell passage of the *Marriage*. See also Paul Mann, "*The Book of Urizen* and the Horizon of the Book," for another argument concerning the bookmaking allusions in *Urizen*.

[15] Ault suggests that there is a pun on ur-reason as well (*Visionary Physics* 120).

body as he perceives it prior to disavowal" (77).[16] Urizen's creation is described as "soul-shudd'ring," which carries the connotation of fear-inducing, but given Blake's proclivity for punning – which in this work is abundantly evident – one can also read the adjective as "soul-shuttering," carrying the suggestion that Urizen's metaphysics excludes – or shutters – the divine soul – Blake's poetic genius – from material creation, a contrast to the hylomorphic soul-body composite described in the *Marriage*.

Urizen's creative act is described in the second stanza of chapter I as the repeated division and subsequent measurement of time and space, which will be in chapter II contrasted with the undifferentiated infinite flux of Eternity: "Times on times he divided, & measur'd / Space by space in his ninefold darkness" (pl. 3). But these disparate chunks of time and space are not mere void or vacuum, as the first stanza suggests. Urizen is initially described as "unprolific," but in addition to the void there are "shapes / Bred from his forsaken wilderness. / Of beast, bird, fish, serpent & element," "vast forests," "hills," and "mountains." In short, his creation is "[t]he dread world" as given by atomistic metaphysics – material forms and void between (pl. 3). This is one of many paradoxes in the first chapter; others include the fact that Urizen's "conflictions with shapes" is described in detail (the shapes are of "beast, bird, fish, serpent & element") but is also depicted as being "unseen," and his creative labors are referred to as "silent activity" but are also described as being accompanied by "ten thousands of thunders" (pl. 3). The contradictory nature of Urizen's universe is captured by the phrase, "petrific abominable chaos": it is a universe petrified in "dark," "silent," "desolate" frigidity – a "[c]old" world of "hail & ice"; but it is also a tumult of "perturbation," "combustion," and "blasts" (pl. 3). Why the contradictions? As he had done in the *Marriage* and in *Thel*, Blake depicts the

[16] Robert Essick makes a similar claim concerning Urizen's division: "Urizen's self-separation from immediate co-presence with the other Eternals, an act that establishes difference as the fundamental category of being, is dominated by struggle, pain and isolation" ("Variation, Accident, and Intention" 201).

contrasting visions resulting from contrary philosophical perspectives. This first chapter is, as Worrall points out, "sometimes narrated as if viewed from the perspective of Eternals in eternity" (*Urizen Books* 22), who can only see Urizen's universe as a cold, empty void. Urizen himself, however, engaged in "battles dire," sees his creative act as one of immense, catastrophic labor, borne out of "tormenting passions" (pl. 3). From either perspective, however, whether petrific or chaotic, Urizen's creative act is clearly abominable.

But Blake does not offer a stable, objective perspective from which to assess the opening events of the poem, which, as Worrall notes, are "not user-friendly" (*Urizen Books* 129), suggesting that objectivity itself is a fable, and rather always determined by one's metaphysical principles. The Eternals, W. J. T. Mitchell argues, "are implicated as actors, not merely spectators, in the conflict of the poem" ("Poetic and Pictorial Imagination" 88), and, as events depicted in later chapters attest, it is thus unwise to trust their perspective as accurate. As is evident in chapter II, Urizen does not see his own separation from the Eternal company as a fall from an ideal state; like Blake's depiction in the *Marriage* of the Devil's perspective, to whom it seemed "that the Messiah fell. & formed a heaven of what he stole from the Abyss" (E 35), Urizen sees Eternity as a land of death and torment: "Why will you die O Eternals? / Why live in unquenchable burnings?" (pl. 4). To Urizen's eyes, Eternity is hell. Thus, Mitchell writes, "From the perspective of the Eternals, Urizen is a rebel who can be cast into hell; from Urizen's point of view, the Eternals are already there. The poem satirizes both of these perspectives by revealing them as different versions of the Urizenic tendency to assume the superiority of one's own perspective" ("Poetic and Pictorial Imagination" 100). But it is important to note that Urizen, despite his assessment of the Eternals' predicament, does not see his own as particularly heavenly or delightful, as is the case with the *Marriage*'s Devil. As chapter I's adjectives

suggest, the universe to Urizen appears "forsaken," "abominable," "gloom'd," – his is a "dread world" (pl. 3). Chapter II, which is more explicitly narrated from Urizen's perspective, continues this characterization, as his created forms are called "terrible monsters Sin-bred" (pl. 4). In the *Marriage* the imaginative Devil embraces the divine flames of energetic, bodily life; Urizen, however, "fought with the fire" in "conflicts dire," and he is repulsed by his own creation, as becomes more evident as the poem continues.

The incommensurability of disparate perspectives in *Urizen* is marked by an adjective that is repeated four times in the course of chapter I's six stanzas to describe Urizen and his creative activity: "unknown." As I argued in the previous chapter's discussion of *Thel*, knowledge for Blake in the early works involves more than reason and abstraction; it entails imagination, desire, and physical engagement with one's material environment. Thel's desire to divide herself from the nonhuman web in which she is immersed causes material existence to appear horrifying to her as she enters the "land unknown." Similarly, the Eternals, now separated from Urizen, cannot fully know his creation or activity. And, what is more, Urizen is not only divided from the Eternals – who are now unknown to him – but also from his own creation, which appears to him as sinful and monstrous. Cooper argues that *Urizen* thus gives "insight into Reason's secret fear of contamination by the unknown, reflected in its haste to dismiss as irrational whatever lies beyond the reach of its procedures" (214). Given the punning association of Urizen with reason, Blake's point is emphatically repeated in the first chapter of *Urizen*: reason and abstraction alone do not equal knowledge.

Because Urizen cannot know the forms that he creates, Blake suggests that the fires with which Urizen fights – and thus divides himself from – are not hellish, but divine and the source of eternal delight; these fires give rise to the shapes of beast, bird, fish, and serpent, and as such

they are the fundamental material elements of Blake's pantheist system. Their affinity with the Stoic/Platonic sentient flames permeating the corporeal universe is made clear in *The Book of Los*, when the flames are described as "living flames / Intelligent" and "infinite" (E 91, 94). The *Marriage*'s Devil celebrates these divine fires, but both Urizen and Los in these later poems cannot know them as such, and their perverse creative acts make the universe godless, unknown, and monstrous.

Epistemologically, both Urizen and Thel are prevented from knowing the world because they primarily see themselves only – Urizen, self-bound in the horizon of his reason, is thus described as "self-contemplating" in chapter I (pl. 3).[17] His divisive, dualist metaphysics entails that his engagement with the material world be one of labor and conflict; like Thel, he cannot enter into sensual communion with a world that, in his case, sprung from within him – he is repulsed by it. As a result, he remains apart, "all-repelling" and "clos'd" (pl. 3).[18] In chapter II Urizen further emphasizes his desire for alone-ness, speaking as he does from "the depths of dark solitude" (pl. 4). "I alone, even I," he proclaims of his condition, despite the multitudinous forms around him, repeating himself in the next stanza: "Here alone I in books formd of me- / -tals / Have written the secrets of wisdom" (pl. 4). As Nelson Hilton has observed, Blake's line break emphasizes Urizen's narcissism, since his books – his own use of the plural here contrasts the title of the work and corresponds to the image of multiple books in the frontispiece – are formed not only of metals, but of himself, of "me-" (*Literal Imagination* 250-51). As the product of a limited vision and of a creator who lacks complete knowledge, the wisdom contained in Urizen's

[17] As discussed in the previous chapter, Thel does at times exhibit an awareness of and a capacity to be changed by the nonhuman elements around her, in contrast to Urizen.

[18] Julia Kristeva's theory of abjection applies here. Urizen, in Kristeva's terms, "*separates* (himself). … Necessarily dichotomous, somewhat Manichaean, he divides, excludes, and without, properly speaking, wishing to know his abjections is not at all unaware of them (8).

books, which were "written in my solitude," can be no wisdom at all. The books are declared to contain "[l]aws of peace, of love. of unity" (pl. 4), but peace, love, and unity require community, and Urizen, "all-repelling," has divided himself into an unknown sphere of solitude. As the *Marriage*'s Proverb holds, the palace of wisdom is reached via the road of excess – an excess of sensory delight, imagination, *and* reason; relying on the latter alone, divided and "[s]elf-clos'd," is an insufficient means.

Moreover, like Thel, Urizen sees death rather than the Eternity characterized by the dissolution and re-emergence of material forms. His question "Why will you die O Eternals?" is not so much a paradox as it is a reflection of his lack of knowledge that the divine flux of materiality is eternal, and that change of form does not equal death. This inability to embrace a monist, pantheist perspective plagues Thel as well, who desires a dichotomous self in contrast to the ceaseless change of the living world around her. Urizen's similar desire is explicitly stated in chapter II: "I have sought for a joy without pain, / For a solid without fluctuation" (pl. 4). This is wishful thinking in the dynamic material world wherein, as stated in the *Marriage*, "without contraries is no progression." In spite of the swirling material forms surrounding them, Thel and Urizen seek stasis and singularity; Urizen's books cannot accommodate plurality, but contain only "[o]ne command. one joy. one desire, / One curse, one weight, one measure / One King. one God, one Law" (pl. 4). Unlike Thel, Urizen is a prolific creator, but he is alienated from his creation, wanting to maintain the illusion of his solitude. But that solitude does not confer any power on him; as a parody of the Old Testament creator god, Urizen is neither omniscient nor omnipotent, as his subsequent formation and binding at the hands of Los demonstrates.

If Urizen's division from the Eternals and his creation of an "abominable" universe are described in such a horrific manner, one might assume that the only preferable condition is an

utter rejection of corporeal existence, a reviling of bodily life in the manner of Plato's *Phaedo* or Hermes Trismegistus's *Pymander*. Eternity, then, would be equated with immateriality, and the Eternals would be read as incorporeal beings unsullied by earthly life. This is the conclusion reached by Mellor in her reading of *Urizen*. In this work, she argues, "Innocence and expanding Energy no longer exist on earth" (89). In contrast to *No Natural Religion*'s propositions concerning the infinite, divine nature of material – and thus human – forms, in *Urizen*, according to Mellor, "whoever bears a mortal body is automatically cut off from the infinitely expanding Energy of the Eternals" (94). Thus, "Man can return to the divine vision only by rejecting his physical form" (100). Such a reading obviously imputes to Blake a dualist metaphysics, and while I do not deny that Blake's later works attest to such a philosophy, I disagree that he has embraced such a stance at this point. His pantheist, materialist monism is still discernible in the Urizen cycle, though it is not so boldly trumpeted as it is in his earlier works. As I argued in the previous chapter, in *Thel*, *Europe*, and *The Song of Los*, Eternity does not exist on some transcendent, immaterial plane, but is rather a condition of material existence if engaged with the proper metaphysical attitude – one that recognizes all bodies as divine. I contend that Blake's figuration of Eternity is the same in the Urizen cycle, and one need accept Mellor's conclusion concerning Blake's dualism in *Urizen*.

Peter Otto presents a compelling argument against reading eternity as outside of – and therefore diametrically opposed to – material creation in *Urizen*. "Eternity is quite clearly able to incorporate error and, even more surprisingly, some kind of sequential and therefore temporal progression", Otto observers regarding chapter I. He continues, "If this were not so we would be at a loss to explain how any change, let alone 'horror,' could arise *in* Eternity" (360). Thus, on his reading, Urizen's division and withdrawal occurs *within* Eternity, and both Urizen and the

Eternals "live in a world characterized by transmutation and therefore time" (361), much like the dynamically transforming nonhumans in the "eternal vales" of *Thel*. And, like Thel (though Otto is not comparing the two works), "[o]nly Urizen demands a world which is free from fluctuation, pain, dying and 'burnings.'" He has, according to Otto, "confused the eternal existence of 'Mathematical Form' with 'Living Form' and Eternity" (362). Unable to perceive/experience the delight of material fluctuation as living form, Urizen, like Thel, sees Eternity as a land of death.

If Eternity is not the timeless, immaterial Christian heaven, what is it like before Urizen's divisive and fallen activity? Unlike in *Thel* and the *Marriage*, where we are given multiple depictions of the joys of sensual existence in the energetic flux of materiality, prelapsarian life in *Urizen* is given short shrift. Chapter II, the events of which precede and re-depict those of chapter I, begins with a glimpse into Eternity before Urizen's divisive act:

> Earth was not: nor globes of attrac-
>
> -tion
>
> The will of the Immortal expanded
>
> Or contracted his all flexible senses.
>
> Death was not, but eternal life sprung (pl. 3)

Since "the Immortals" have senses and therefore bodily form, one can conclude that with the statement "Earth was not," Blake has in mind "Earth" specifically as Urizen has created it – lacking the divine, fiery essence – and is not suggesting that Eternity lacked material forms altogether. The flexible and expansive senses that obey the will of the Immortal – rather than determine empirical sensation and thus knowledge on Locke's model – recall the "enlarged and numerous" senses described in the *Marriage* and Blake's critique of Lockean epistemology in

No Natural Religion.[19] And like the womb/grave in *Thel* and the conclusion of *The Song of Los*, there is no death in Eternity, despite Urizen's assessment of conditions on the subsequent plate (4). For Otto, Eternal life "is linked with a continual emergence" as indicated by the consistent state of "springing" (363-64), and in this sense material Eternity again resembles the dynamic materialism of Darwin's *Botanic Garden* as well, in which death and dissolution merely herald a change of material form.

The contrast between Eternity and Urizenic creation, then, is not one of immaterialism versus materialism; rather, if divisive, self-contemplating isolation leads to a limited, bounded perception of bodily life as one of death, life in Eternity then entails community and interdependence in Haraway's "multi-species knot." Otto reads Blake here as suggesting that the "spring of eternal life is a collective *and* individual emergence" and that "Eternity is discovered in relationship" (365). To leave Eternity, as Urizen does, is not to fall into materiality from an incorporeal state, but rather to withdraw from others into a state wherein exists only "ruinous fragments of life," as Blake describes the Urizenic universe in chapter III (pl. 5); in Otto's words, "To leave Eternity is quite literally to be 'Unorganized'" (366). The Eternals' pluralistic lack of differentiation indicates the ego-less community of mutual interdependence and continual flux that characterizes Eternity.[20] Blake emphasizes the fragmentary act of Urizen's separation from the organized unity of Eternity by his uncharacteristic repetition in chapter III of "Departing;

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[19] Harald A. Kittel, reading *Urizen* as another Blakean critique of Lockean epistemology, writes, concerning this passage: "In contradistinction to Locke's view, the will exerts control over the senses independent of external causes or objects of experience" (114).

[20] Karl Kroeber makes a similar point; on his reading Urizen and the Eternals "exist through the activity of their mutual interdependence" (*Blake in a Post-Secular Era* 97). The same argument is made by Mee: "The Eternals represent an idealized alternative or antecedent to the hierarchical order consistently identified with Urizen. Their plurality may be related to the influential historiographical theory … that the original state of humanity was essentially communitarian" (174).

departing: departing" (pl. 5) to suggest that Urizen's flight necessitates a severing from the community of which he is now de-parted.

However, because of this mutual interdependence, the Eternals are also implicated in Urizen's division and the disastrous events precipitating from it. By naming Urizen, having "spurn'd back his religion," and giving him "a place in the north" (pl. 2), the Eternals in turn withdraw from Urizen's withdrawal. As Otto writes, "it is the Eternals themselves who confirm and substantiate the religion of withdrawal that they are attempting to reject" (371). Los, however, differentiates himself from the other Eternals by not retreating; he alone, Otto claims, "watches over the space of Urizen's absence" and gives Urizen form (372-73). But, as will be discussed in detail in this chapter's later sections, Los's activity is as fallen as Urizen's, and ultimately he and Urizen form, in Otto's words, "a closed unit" (374), from which "Eternity stood wide apart" (pl. 5). The repulsion of the Eternals from the Urizen-Los complex alters the former's perspective, just as Urizen's separation changed his view of the Eternals: "The Eternals said; What is this?" Blake writes in chapter III, and the answer they give themselves is "Death / Urizen is a clod of clay." Here even the Eternals are unable to see a clod of clay as the divine, sentient being that it appears as in *Thel*; like Urizen, their separation causes them to see a material form – formerly a part of them – as dead. Ultimately, in chapter V, their activity is that of Urizenic separation from Urizen, Los, and their offspring – marked by their construction of the Tent of Science, woven with "curtains of / darkness" in order "that Eternals may no longer behold them" (pl. 19). Thus, every actor is implicated in the cataclysmic, degraded action of Blake's narrative.[21] Although there is the brief suggestion that life in Eternity was once characterized by ever-emergent sensorial delight and mutual interdependence, once the division

[21] Ault notes that Urizen and the Eternals are both guilty of exclusion: "whereas Urizen formed the globe around himself to shut the Eternals out, the Eternals form the tent around the void to close the Los complex inside" ("Blake's De-Formation of Neo-Aristotelianism" (135).

is begun, even the Eternals become devoted to the labor of withdrawal and separation, causing them to see – through the lens of dualism – the other as dead.

4.3 "globes of attraction": Urizen as Newton

In *Europe* and *The Song of Los*, Blake portrays Newton as the natural philosopher responsible – together with Locke in the latter poem – for ushering in the dark "philosophy of the five senses" that separates humankind from the inherently divine energies of material existence, and there is ample evidence in *Urizen* to suggest that although Newton is unnamed in the work, readers are meant to associate Urizen and Newton. Perhaps with Newton's definition of matter in Query 31 of the *Opticks* as composed of "solid, massy, hard, impenetrable" particles in mind, Frye is among the many Blake critics who identify Urizen's creation with Newtonian metaphysics and what Blake took to be its separation of divinity from materiality. Frye writes: "To the imagination the dead cohesion and solidity of the Newtonian universe makes it look more than ever like the stone rolled against the tomb of a sleeping Man-God" (255). And Ault, whose *Visionary Physics* is devoted to tracing Blake's engagement with Newton, contends, "Urizen … is associated negatively early in the poem with several obviously Newtonian concepts: the 'void', 'all-repelling', ... 'measurement', 'dark revolving', 'globes of attraction'" (98).[22] Peterfreund echoes Ault's claim, writing that Urizen in the eponymous work engages in a "mistaken demiurgic creation of the Newtonian universe of matter, motion, and force, as well as in his creation of the rigidly prescriptive and reductive book of law by which that universe is to be understood" (46). Indeed, Urizen's desire for a "solid without fluctuation" and "a wide world of solid obstruction" (pl. 4) echoes Newton's definition of matter, and the combination of

[22] Ault's extended reading of Urizen as Newton, however, is conducted in the context of *The Four Zoas*, a work that is outside the scope of this discussion.

externally-acted-upon massy solids and void in Urizen's universe also resembles Newton's Epicurean metaphysics. Moreover, the trumpet blast of degraded natural philosophy that is explicitly made by Newton in *Europe* is repeated as the "Shrill" trumpet at the beginning of chapter II of *Urizen*, heralding the creation of the Newtonian universe (pl. 3).

To emphasize the Newtonian nature of Urizen's creation, Blake foregrounds the non-Newtonian aspects of Eternity as it existed before Urizen's separation and demiurgic activity. Prelapsarian Eternity, we learn, did not contain "globes of attrac- / -tion," alluding both to Newton's Epicureanism and his universal law of gravitation – what Blake here satirizes as "one law." Newton defines gravity in the *Principia* as a centripetal force, "by which bodies tend toward the center of the earth" (61), but this same force is of course applied to all astral bodies, as he writes a few pages later: "I use interchangeably and indiscriminately words signifying attraction, impulse, or any sort of propensity toward a center" (64). As Worrall notes, "When 'Earth was not', there was no gravity and so Blake's 'attrac- / -tion' is split and floating to make that point" (*Urizen Books* 132).

Urizen creates his universe in chapter I via the act of dividing and measuring time and space, alluding to Newton's well known argument for absolute space as a structure (but not a substance) independent of objects, and time as an entity (but not a substance) independent of events. "Absolute, true, and mechanical time," Newton writes in the *Principia*, "in and of itself and of its own nature, without reference to anything external, flows uniformly and by another name is called duration." On the same page, he continues, "Absolute space, in its own nature, without reference to anything external, always remains homogenous and immovable" (64). While most eighteenth-century natural philosophers readily accepted Newton's theory of gravity, his argument for absolute space as necessary for his laws of motion met with much greater

resistance, from Berkeley to Kant. Leibniz's famous correspondence with Clarke is primarily devoted to these topics; Leibniz argues against Newton's absolutist stance on time and space, extolling a relativist metaphysics. As he writes in his third letter, "I hold space to be something purely relative, as time is – that I hold it to be an order of coexistences, as time is an order of successions" (14). Newton's theory of absolute space, he continues, violates the principle of sufficient reason, for why would God "have placed [bodies] in space after one certain particular manner and not otherwise?" (15). In *Urizen*, the continual springing of emergent materiality does not entail absolute time and space, and Leibniz's relational argument has more affinities with Blake's Eternity, which is predicated on relations. As Paul Mann writes, in *Urizen* "Newtonian absolute space is the most restrictive prison of all" (525 n. 5).[23]

Urizen's obsession with abstraction also has Newtonian overtones. "[I]n philosophy abstraction from the senses is required," writes Newton in the *Principia* (66). His approach both here and in the *Opticks* involves the application of mathematics and tools of measurement to empirical observation. In chapter VII, Urizen develops four tools of abstraction to assist him in exploring "the Abyss" of his own creation: "a line & a plummet," "a dividing rule," "scales to weigh," "massy weights," "a brazen quadrant," and "golden compasses" (pl. 20). Blake's term "massy weights" is also satirically directed at Newton, since it was Newton's conceptual innovation to separate the terms "mass" and "weight." For Newton, mass – a term that he introduced – is an intrinsic feature of a body and is fundamental to the laws of motion; in defining mass, Newton added to what he viewed as the insufficient Cartesian definition of matter as consisting of extension and solidity – nothing in this definition could explain matter's motion.

[23] Worrall also argues for the Newtonian nature of Urizen's creation, writing that the flames of desire present in Eternity become fiery spheres that "solidify into atomic particles of 'impenetrable' hardness making a pre-existent universe in the Newtonian image" (*Urizen Books* 199). Raine also argues that the properties of Newtonian metaphysics do not apply "in the beginning" (2: 61).

Weight, on the other hand, is dependent on the location of a body and the force of gravity acting upon it.[24] In applying the adjective "massy" to "weights," Blake thus conflates the distinction Newton sought to make. Urizen's association with abstraction is continued in *Ahania*, as Fuzon, the fiery rebellious son, calls his father an "abstract non-entity" who is later lying in "slumbers of abstraction" (E 84, 87).[25] Blake's satire thus incorporates several of Newton's most well known ideas, all of which characterize a universe that on Blake's view is "rent from Eternity."

Blake's attentiveness to key aspects of Newton's philosophy should come as no surprise, since Newton's influence permeated all spheres of eighteenth-century thought, both in England and beyond. His legacy as the symbol of Enlightenment reason is nowhere so aptly expressed as in Pope's famous epitaph: "Nature and Nature's Laws lay hid in Night. / God said, *Let Newton be!* and All was *Light*" (6: 317). For Pope and other deifiers of Newton in the years following his death in 1727, he is the "light" in the Enlightenment (though of course Pope would not have used this term), not least because his *Opticks* transformed the way in which light was understood. James Thomson's "A Poem Sacred to the Memory of Sir Isaac Newton" (1727) is even more unabashed and hyperbolic than Pope in deifying Newton, who is variously described as the "all-piercing sage" (l. 23) and the "philosophic sun" (l. 90) "whose well purged penetrating eye" (l. 73) "could trace the secret hand of Providence" (l. 15). He is capable of "ardent flight" (l. 57) and is powerful enough to subdue nature so that "every latent glory" (l. 38) is laid open to his view. In Thomson's mythologizing account, Newton's laws bind the sun and planets to their spheres, and his mind is even brighter than light in that he could discern the latter's

[24] I am grateful to Andrew Janiak for clarifying these distinctions in Newton's natural philosophy.

[25] Tannenbaum argues that "[t]he basis of Fuzon's revolt is his refusal to accept a god that he cannot meet face to face" (*Biblical Tradition* 229).

constituent colors.[26] In contrast to such a hagiographic treatment of Newton's legacy, George H. Gilpin writes that *Urizen*'s satire "offers an anti-elegy to the scientific progeny of Newton, and we see the Satanic Urizen not in an apotheosis in which he ascends to a joyous Heaven but, rather, descended into the dark hell of a world comprised of his own crazed nightmares" (37).[27]

The fact that Urizen's abysmal universe displays the characteristics of Newtonian metaphysics demonstrates the astral application of the natural philosopher's abstractions. On a macrocosmic scale, the "one law" of gravitation binds the planets and stars in their courses, an activity that, while capable of being measured and explained in mathematics, is satirized by Blake as being "unknown." But *Urizen* also portrays what Blake took to be another aspect of the fall from Eternity: the infiltration of Newtonian metaphysics on a microcosmic scale. By conflating a narrative of universal creation with a poetic description of Urizen's – and Los's in the cycle's third poem – embryological development, Blake both shows Newton's insidious influence on the life sciences, as well as presents a critique of competing contemporary theories of life and generation. Ultimately, the degraded forms of "human illusion," shrunken and incapable of divine vision, with which the Urizen cycle concludes, testify to Blake's growing dissatisfaction with the materialist and vitalist natural philosophies on offer in his day, despite those philosophies' non-Newtonian aspects.

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[26] Here Thomson attempts to one-up Milton's famous hymn to light at the beginning of Book III of *Paradise Lost* by placing Newton above God insofar as Newton could discern and dissect the light that, for Milton, was God.

[27] Blake was rare but not alone in his satirical treatment of the much-revered natural philosopher at the end of the eighteenth century. Christopher Smart's *Jubilate Agno* also criticized what he took to be the absence of God in Newton's system: "Newton is more of error than of truth, but I am of the Word of God" (Fragment B, l. 195). And a novel by Blake's Polish contemporary Jan Potocki, *The Manuscript Found in Saragossa*, features a geometer, Don de Velásquez, who declares that "by following Locke and Newton I might be said to have reached the very frontiers of human intelligence" (267), and who follows what he takes to be Newton's example in applying abstract geometry to human emotions like love and happiness: "the pursuit of happiness," he says, "can, it seems to me, be compared to the solution of a quadratic or cubic equation" (230). He later asserts, "the formula of the binomial invented by the noble Don Newton must be our guide in our investigation of the human heart as in all other calculations" (371).

4.4 The "red globe of life blood" and Blake's Embryology

Urizen's world, formed of flames that give "no light" and from which "Eternity roll'd wide apart" (pl. 5), appears in chapter III as a living body, similar to Plato's hylozoic description of the earth and all astral bodies in the *Timaeus*. Urizen frames "a roof vast petrific around" the horizon of this planet, which is "like a womb: / Where thousands of rivers in veins / Of blood pour down the mountains." This "black globe" appears to the Eternals "[l]ike a human heart strugling and beating" (pl. 5). Not only is the earth one big human form, but the elements constituting it are also personified. Blake's anthropomorphic rendering of the four elements in the full-page designs of *Urizen* (pl. 24, illus. 52) and his naming them in chapter VIII – Thiriel (air), Utha (water), Grodna (earth), and Fuzon (fire) (pl. 23)[28] – echoes the hylozoic/panpsychist vision of earlier works, but here, although the elements might be alive, they are not depicted as expressing the same rapturous delight as they are on plate 11 of the *Marriage*. Rather, the elements are wrought "[i]n howlings & pangs & fierce madness," the products of a demiurge laboring [i]n despair and the shadows of death" (pl. 5). As Gilpin writes, the elemental "sons are described as suffering from the limitations and deformities that their father's violent and catastrophic theories of creation have wrought upon them" (52). Creation is a struggle in the Urizen cycle, and the forms life takes – though human – are characterized by torment and despair, owing to Urizen's sickening realization that "life liv'd upon / death" (pl. 23). He sees only death where the nonhumans in *Thel* see continually emerging forms of life.

As stated above, the Eternals also see Urizen as a lifeless, "[c]old, featureless" clump of clay, an inert Newtonian corpuscle, once he has departed from them (pl. 7). And in chapter III, Los is introduced as another Eternal who separates form the undifferentiated mass in order to

[28] Worral's discussion of the designs to this work in his *Urizen Books* argues that these elementals might also be depicted separately in full-page designs (34, 39, 58).

witness and bind Urizen's embryological development from seemingly dead matter. Los is not the force of imaginative re-integration that he is in later works; his activity in *Urizen* and *The Book of Los* is basically Urizenic – separating from the community of Eternals and, Prometheus-like, stealing and petrifying the divine fires of Eternity in order to create shrunken, degraded bodily forms, namely that of the "formless unmeasurable death" that is Urizen himself. Again, as with the other Eternals who fled from Urizen, Los's perception is affected due to his being "affrighted" by Urizen's otherness and separation from him. Ironically, Los is frightened by that which came from him, since we are told at the beginning of the chapter that "Urizen was rent from his side" (pl. 6).[29] Los is thus tasked with watching over and giving form to what was formerly a part of him. Ultimately, the degraded bodily form that Urizen takes is similar to the description of Los's own formation as recounted in *The Book of Los*. Unlike earlier works, the Urizen cycle devotes ample attention to how such abject human bodies – including those of Urizen and Los – came to be. In so doing, Blake fuses his parody of human creation in Genesis with eighteenth-century theories of embryology. Urizen and Los are on one level Old Testament creator gods or Gnostic demiurges and on another level shown to develop from the fetus with no intervention from a transcendent creator. Both aspects of this paradox violate Blake's claim in the *Marriage* that there are no transcendent gods apart from the human breast; Urizen and Los are shown to be all too human, but in their bounded corporeality there is nothing divine to be celebrated. Before turning to the theories of embryology and reproduction that inform the Urizen cycle, I offer the following summary – with minimal commentary – of key passages in *Urizen*, *Ahania*, and *The Book of Los* that concern such topics so that connections between Blake's text

[29] Unlike Urizen, who also separates from Eternity, Los's "wrenching apart was healed" (pl. 7). Why the rupture initiated by Los's separation heals and that caused by Urizen's division from the Eternals "heal'd not" is one of the poem's many mysteries whose solution lies outside of this reader's grasp.

and the lively debates in eighteenth-century natural history and philosophy, which will be introduced after this summary, can be better seen.

Chapter IV of *Urizen* begins the narration of Urizen's embryological development, which is initiated when "Los formed nets and gins / And threw the nets round" Urizen, then "watch'd in shudd'ring fear / The dark changes & bound every / change / With rivets of iron & brass" (pl. 8). Los's clamorous activity is that of a blacksmith laboring at an infernal forge, "[b]eating," "[p]ouring sodor of iron; dividing," with "bellows," "tongs," "hammer," and "chains" in an effort to make Urizen's "eternal mind bounded" (pl. 10). Just as Urizen formed a petrified roof over the world, which became a black globe, so Los labors "[t]ill a roof shaggy wild inclos'd / In an orb, [Urizen's] fountain of thought" (pl. 10). Thus bound, ages of embryonic development, characterized as states "of dismal woe" pass over the enclosed Urizen:

> In a horrible dreamful slumber;
> Like the linked infer'nal chain;
> A vast Spine writh'd in torment
> Upon the winds; shooting pain'd
> Ribs, like a bending cavern
> And bones of solidness, froze,
> Over all his nerves of joy. (pl. 8)

Urizen's initial growth from a tormented spine writhing in pain and shooting forth ribs and bones that immediately petrify into "caverns" echoes the fairy in *Europe*'s description of "cavern'd man" and parallels Urizen's own agonized creation of the petrified forms of the universe in the book's opening chapters. In this developmental process, the "nerves of joy," like the divine fires of Eternity and the hellish flames of sensual enjoyment in the *Marriage*, become frozen over.

Blake reiterates the caverned depiction of the human body in the next age and introduces a symbol that is central to the Urizen cycle:

From the caverns of his jointed Spine,

Down sunk with fright a red

Round globe hot burning deep

Deep down into the Abyss;

Panting: Conglobing, Trembling

Shooting out ten thousand branches

Around his solid bones. (pl. 11)

Here the heart is introduced as a red, round globe, which becomes for Blake the metonymic image of biological growth, microcosmically paralleling the image of the earth as a black globe rolling in the void of the cosmos – what Worrall calls "Blake's two-way image of both a blood corpuscle and a planetary universe" (*Urizen Books* 22).[30] Chapter V concludes with the Eternals seeing Los's "dark visions" of life – Urizen's, Entharmon's, and Orc's – as derived from "the globe of life blood trembling" (pl. 15). Although the atomic living unit is here described as containing life, the forms it gives rise to are seen as dead, and exist separate from the divine joys of Eternity.

As Urizen's heart, the globe of blood sinks with fright, suggesting that his organs have a separate, independent existence, characterized by fear. Just as he is divided from Eternity, his unorganized organs are divided within him. Likewise, his brain rolls around "[i]n harrowing fear," shooting forth another branching network of nerves: "His nervous brain shot branches / Round the branches of his heart." The description of Urizen's eyes as "two little orbs … fixed in

[30] Marks makes a similar point: "The formation of the closed circle which is both the human heart and the circumference of the fallen world is the event that 'The Book of Urizen' describes" (584).

two little caves" follows similar portrayals of limited sensory perception in other works, as does the account of his ears "in close volutions," which "petrified / As they grew" (pl. 11). After the development of the nostrils that "bent down to the deep," the "Hungry Cavern" of the stomach, the "Tongue / Of thirst & hunger," and the arms and feet that "stampd the nether Abyss," Urizen appears as a being made to suffer in "trembling & howing & dismay" (pl. 13). Contrary to the proclamations of goodness regarding the creations in the Old Testament, all is far from good here, and there is no joy to be had in such corporeal life. Nor does Los take any delight in his creation, as chapter V begins, "In terrors Los shrunk from his / task" (pl. 13). Both his and Urizen's separation from the delight of Eternity, which exists all around them, is made explicit here: "All the myriads of Eternity; / All the wisdom & joy of life; / Roll like a sea around him" (pl. 13). But divided by fear, bound to their shrunken, petrified forms, such wisdom remains "unknown" to Los and Urizen, who cannot partake in the joys of Eternal life.

Urizen, though emerged from a red globe of life blood, ultimately appears to Los as "*deadly* black, / In his chains bound" (pl. 13, my emphasis). The pity Los feels for this death-bound form initiates another sequence of division: Los begins "[i]n anguish dividing & dividing / For pity divides the soul" (pl. 13). Thus we see another embryological development, of Enitharmon/Pity this time, as "a round globe blood / Trembling upon the Void" (pl. 13).[31] Enitharmon's emergence as a globe of blood from the head of Los, to become "the first female form now separate" (pl. 18) is visually depicted on plate 17 (illus. 53). She is described as participating in the same course of painful development as Urizen: "Fibrous, writhing upon the winds; / Fibres of blood. milk and tears; / In pangs. Eternity on eternity, / At length in tears & cries imbodied" (pl. 18). And just as Los recoiled in terror from the fully developed Urizen, so

[31] The same characterization is repeated on the next plate in copy A: "The globe of life blood trembled / Branching out into roots" (pl. 18).

here "All Eternity shudderd at sight / Of the first female form now separate" (pl. 18). Furthermore, the Eternals repeat the process of naming and fleeing: "They call'd her Pity, and fled" (pl. 19). Chapter V ends with the Eternals weaving the "curtains of / darkness" that become the Tent of Science, separating them from Urizen, Los, and Enitharmon. Crucial here is Blake's use of the term "science," which had not yet acquired its contemporary connotation but instead denotes knowledge in general. Ironically, in Blake's satire, the Tent of Science, in separating the actors in the poem and preventing communion and integration, prevents true knowledge, or *scientia*, from ever occurring, evidenced again by Blake's repetition of "unknown." Levine's claim that pantheism "takes seriously the view that there is more to the world than can be accounted for, even in principle, by the natural sciences" is appropriate in this regard (359).

Blake introduces a third embryological account in chapter VI, this time pertaining to the gestation and birth of Orc. The child of Los and Enitharmon, Orc is conceived "[I]n perverse and cruel delight" after Enitharmon's attempts at refusal and flight from Los's embraces fail. Sexual reproduction in the fallen world is thus associated with rape and fear, despite Enitharmon once being part of Los's body, as the Eternals see it in disgust: "Eternity shudder'd when they saw. / Man begetting his likeness, / On his own divided image" (pl. 19). After her rape, "Enitharmon sick, / Felt a Worm within her womb," which, like the globe of blood, is "trembling" (pl. 19). The worm soon "grew to a ser- / -pent / With dolorous hissings & poisons … Coild within Enitharmons womb." After this initial development,

> The serpent grew casting its scales,
> With sharp pangs the hissings began
> To change to a grating cry,
> Many sorrows and dismal throes:

Many forms of fish, bird & beast

Brought forth an Infant form

Where was a worm before. (pl. 19)

Fully gestated, the infant causes his mother to groan, the Eternals are again "[a]larm'd with these gloomy visions," and once birth occurs "[a] shriek ran thro' Eternity: / And a paralytic stroke; / At the birth of the Human shadow" (pl. 19). Needless to say, this is not the delightful image of birth as portrayed at the bottom of the *Marriage*'s plate 3. Like the growth of Urizen and Enitharmon, Orc's embryonic emergence occurs within a climate of pain, sorrow, and fear.

Chapter VIII features more births, this time of Urizen's progeny, including the elementals described earlier. His "Sons & daughters of sorrow" are described as horrific monstrosities:

his world teemd vast enormities

Frightning: faithless; fawning

Portions of life; similitudes

Of a foot, or a hand, or a head

Or a heart, or an eye, they swam mis-

-chevous

Dread terrors! delighting in blood. (pl. 23)

These perversions of life are begotten "from green herbs & cattle / From monsters, & worms of the pit," and in *The Book of Ahania* Blake describes them emerging from "[e]ggs of unnatural production" (E 85). At the sight of them Urizen's

soul sicken'd! he curs'd

Both sons & daughters; for he saw

That no flesh nor spirit could keep

His iron laws one moment …

For he saw that life liv'd upon

death. (pl. 23)

Later in the chapter Urizen appears spiderlike as he wanders among the petrified and monstrous forms of his dark creation, trailing a "cold shadow … [l]ike a spiders web" that becomes reified into an actual "[w]eb dark & cold" – the "Net of Religion" that permeates the universe. "So twisted the cords," Blake writes, "& so knotted / The meshes: twisted like to the human brain" (pl. 25). From the web emerge more "human shadows," whose limited sensory capacities should by now be familiar: again the nerves freeze, bones harden "till weaken'd / The Senses inward rush'd shrinking, / Beneath the dark net of infection." In chapter IX Urizen's progeny, with "shrunken eyes clouded over," appear "in reptile forms shrinking together," "shrunk from existence," "[a]nd forgot their eternal life," "bound down / To earth by their narrowing perceptions" (pl. 25). These monstrous children appear again in *Ahania* as an "army of horrors" whose "skulls harden" and who "reptilize upon the Earth" (E 88). As he had in *Europe* and *The Song of Los*, Blake portrays man's unholy bodily growth as a binding of the infinite and a shrinking of form. The result is only death, without hope of the eternal reemergence that characterizes the womb/grave sequence at the end of *The Song of Los*; here Urizen's children "lived a period of years / Then left a noisom body / To the jaws of devouring darkness" (pl. 28).

In a similar manner in chapter II of *The Book of* Los, Blake depicts the generation of Los's bodily form as he separates from Eternity and falls through the "horrible vacuum" of Urizen's world.[32] After "[m]any ages of groans … there grew / Branchy forms. organizing the Human / Into finite inflexible organs" (E 92). Apart from the infinite unity of Eternity,

[32] Los falling through the vacuum of a world created by Urizen even though Urizen himself is rent from the side of Los is another of the temporal paradoxes discussed earlier.

"organizing" here simply means acquiring organs, in keeping with the common meaning of the term – as Nelson Hilton points out[33] – whose petrified, finite state is like that of the bodies in *Urizen*. In chapter III Los's lungs are the first organs to develop:

> The Lungs heave incessant, dull and heavy
>
> For as yet were all other parts formless
>
> Shiv'ring: clinging around like a cloud
>
> Dim & glutinous as the white Polypus
>
> Driv'n by waves & englob'd on the tide. (E 93)

As with Urizen and Enitharmon, Los's organs are "[h]eavy falling … Shooting out from the seed," eventually "[o]utbranching / An Immense Fibrous form, stretching out" (E 93). The concluding chapter IV repeats the action of chapter IV *Urizen* as Los's "binding of Urizen," whose backbone Los first sees "Hurtling upon the wind / Like a serpent! like an iron chain / Whirling about in the Deep," is described (E 93). At the end of *The Book of Los* Urizen's brain is reduced to "a rock" and his heart is bound in "a fleshy slough [that] formed four rivers / Obscuring the immense Orb of fire / Flowing down into night." The ultimate human form, like the shrunken progeny of Urizen, is "a Human Illusion / In darkness and deep clouds involvd." Thus ends the dark parody of various forms of creation – universal and bodily – that characterizes the Urizen cycle.

With the exception of rare, remembered prelapsarian moments, nothing that lives is holy in the Urizen cycle. Blake presents both asexual and sexual means of reproduction as consisting of torment, fear, violence, and sorrow, all leading to a shrunken, "cavernd" forms of material existence. In the passages cited above, Blake's diction testifies to his awareness of the complex

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[33] "'Organizing' in the sense of forming into a systematic whole was a meaning new during Blake's lifetime" (*Literal Imagination* 252).

body of natural philosophic writings on animal and human generation and reproduction. The debates in which such works engaged hinged on the same metaphysical questions we have seen Blake prioritize in his other early works: what is the nature of matter? Is there a difference between mineral, vegetable, animal, and human modes of existence and reproduction? What, among all these material organized and unorganized forms, is alive? What is the nature of the soul? What role does divinity have in the creation, sustenance, and procreative processes of the universe? Although Blake gestures toward the panpyschist and pantheist positions taken in *No Natural Religion*, *Thel*, the *Marriage*, and *The Song of Los*, the three poems of the Urizen cycle do not offer a hopeful solution to the pain and misery of bodily life. He rejects not only the dualist, atomistic Newtonian metaphysics that characterize Urizen's universe as well as many eighteenth-century embryological theories, but also the non-Newtonian variations of vital materialisms that emerged over the course of the long eighteenth century as well. The reason the Urizen cycle ends in the dark obscurity of the Human Illusion, I contend, is that both Newtonian dualism and vital materialism deny divine intelligence to all forms of material existence; they are both forms of natural religion for Blake.

For all its parodic similarity to Genesis and other Old Testament books, the Urizen cycle differs in an aspect that is crucial for this discussion: there is no creation of life *ex nihilo* by a transcendent, immaterial deity.[34] The Eternals, including Urizen and Los, are material and, obviously, eternal. In this sense, Blake's satire draws from Epicurean metaphysics, which likewise does not posit a creator god, but rather argues that matter has always existed.[35]

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[34] Kittel also notes this fact in the context of his reading of *Urizen* as a satire of Locke's views on immaterial substance (122). And Mee writes, "In place of the transcendent God of established religion, he reveals three different versions of divine creativity: Eternals, Urizen, and Los" (180).

[35] Michael Levine writes, "for pantheism, creation remains somewhat problematic and even mysterious. However, difficulties associated with the theistic doctrine of creation *ex nihilo* … vanish" (176).

Although Los engages in furious, anguished labor, he does not create Urizen, who is "rent from his side" (pl. 6) in Blake's distorted chronology; rather, Los presides as a witness over Urizen's embryological development, binding his changes. As Matthew J. A. Green points out, "Los's position as a spectator 'smitten with astonishment' … makes it clear that the 'changes' are 'of Urizen' both because they are the properties of his body and because they are caused, albeit unconsciously, by Urizen himself" (*Visionary Materialism* 62). The question then becomes: how does life arise from eternal matter?

As we have seen in chapter 2, in the Epicurean atomistic system, life emerges from specifically organized systems of inert corpuscles, including the ultra-rarefied soul-particles that initiate a body's motion. Even Priestley's radically modified conception of matter argues for life and thought as an emergent process of organized systems of attraction and repulsion. Urizen's claim that "life liv'd upon death" is similarly a product of his Newtonian/Epicurean metaphysics, which holds that life arises only from specifically organized systems of dead matter. But although Blake draws a distinction between the organization of Eternity and the disorganized, fragmented state of Urizen's world – and of Urizen himself – organization is not the sole criterion for life itself. As we have seen above, Urizen – though seen as dead by the other Eternals – is alive and active; even his organs demonstrate a life – albeit a fearful one – of their own. As Blake's trembling globe of *life* blood suggests, this fundamental unit of living beings is itself already alive, even before becoming organized into the more complex forms of Urizen, Los, and their offspring. Ironically, Urizen's limited vision cannot see the life of his own organs or the living globe from which he sprang, which in chapter VIII becomes the "globe of fire" enabling him to explore the "dens" of his creation (pl. 20), as Blake makes clear in the analogous designs of the globe of blood (pl. 17) and the globe of fire (pl. 23, illus. 54). As Worrall writes,

"The living globule of blood neatly subverts and replaces the doctrine of the atomic composition of matter, which, in Blake's day, was thought to be composed of impenetrably hard particles" (*Urizen Books* 138). Thus, while from a Newtonian perspective the Urizenic universe is composed of petrified and dead atoms bound by gravitational law, on the level of individual living form Blake introduces a symbol that is consistent with his earlier panpsychist and hylozoic metaphysics, which contends that matter is active and alive at all levels of organization.

Among the few critics who have attended to the history of medicine and natural philosophy informing the vitalist resonances of *Urizen*'s living globe of blood, Carmen S. Kreiter has drawn compelling parallels between Blake's image and the work of the seventeenth century physician William Harvey, who insists in his *Exercitationes de generatione animalium* (*On Animal Generation*, 1651) that "the blood exists before any particle of the body appears" and that it is both "the primary generative principle" and "celestial … the instrument of heaven" (qtd. in Kreiter 117). Harvey's pioneering work on the circulation of the blood and its role in life and generation proved profoundly influential for physicians and natural philosophers alike throughout the later seventeenth and eighteenth centuries, and Kreiter traces his intellectual impact to the work of Blake's contemporary, the surgeon and anatomist John Hunter, whom Kreiter finds to be the primary influence on *Urizen* (112).[36] On Kreiter's reading, Blake owed his characterization of Orc's worm/serpent development to Hunter's argument for "the resemblance of the phases of embryonic life to the series of inferior forms of animal species" (114). Blake's use of surgical and anatomical diction in such terms as "conglobing" is also owing to Hunter,

[36] Among this evidence is Kreiter's speculation that Blake might have visited Hunter's anatomy museum in London (114). Stephanie Engelstein makes a connection between *Urizen*, which she calls Blake's "most explicitly embryological text," and the illustrations in John Hunter's brother, William's work, *Anatomy of the Human Gravid Uterus* (1774). Engelstein focuses on the designs in *Urizen* to support her claim that "Blake's images in this work look like a bizarre distortion of an obstetrical atlas" (79).

Kreiter argues, since the word "describes something seen only when the heart is viewed through a surgically opened chest. Only then can it be seen to 'conglobe' or contract into a smaller globe when propelling blood into the arteries" (114). And in the seven ages of Urizen's genesis, Kreiter claims that Blake is following Hunter, who in turn is following Harvey's description of the seven days of chick embryogenesis (116).[37] Like Kreiter, Gilpin also draws parallels between Hunter's physiological writings and Blake's work, seeing a similarity between both writers' description of the veins as "branches" (45). Gilpin quotes from Hunter's *A Treatise on the Blood, Inflammation, and Gun-Shot Wounds*, published the same year as *Urizen*, to emphasize the role of the blood in Hunter's vitalist physiology: "To conceive that blood is endowed with life, while circulating, is perhaps carrying the imagination as far as it well can go; but the difficulty arises merely from its being fluid, the mind not being accustomed to the idea of a living fluid" (qtd. in Gilpin 39).[38] As both Gilpin and Kreiter recognize, Hunter's argument that the blood is alive and crucial to the organization of animals resonates with Blake's repeatedly deployed symbol of the living globe of blood, as well as with the fact that Urizen's heart is the first organ described.[39]

A closer look at Hunter's *Treatise* reveals another parallel: like Blake, Hunter believed life not to depend on organization, but rather to be a property of the globules of blood themselves. "Organization, and life," Hunter writes, "do not depend in the least on each other … organization may arise out of living parts, and produce action, but … life can never rise out of, or

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[37] The "fibres" of milk, blood, and tears branching out from Enitharmon's globe of blood are also argued by Kreiter to refer to "three kinds of vessels anatomists had discovered in the body, the last two only recently – vessels conveying blood, milky chyle (lacteals), and tears (lacrymals)" (115), though he doesn't specify Hunter in this regard. I argue below that a relevant passage discussing these vessels can be found in Darwin's *Zoonomia*.

[38] According to Gilpin, Urizen's realization that "life liv'd upon death" is an ironic allusion to Hunter because "the medical scientist, in his effort to understand 'life,' had to dwell obsessively and intellectually on death" (39).

[39] Along with Harvey, Marcello Malpighi is another seventeenth-century physiologist whose work is influential in this regard, since he posited – based on microscopic observations – the existence of what he called the *punctum saliens*, the palpitating point that becomes the heart (Thomson, *Bodies of Thought* 193).

depend on organization." Life, then, is not an emergent property as in the Epicurean system, but rather inheres in the blood as a living principle: "mere organization can do nothing, even in mechanics, it must still have something corresponding to a living principle; namely, some power" (*Treatise* 78). Hunter repeatedly stresses that life is inherent in the blood: "Blood is not only alive itself, but is the support of life in every part of the body … no part of the body is to be considered as a complete living substance, producing and continuing mere life, without the blood" and the living principle or power it contains (85). This power is later described as a "*materia vitae*," a living matter that is diffused in the blood but forms an organ as the brain (90). Both Hunter and Blake saw life inhering not in organized systems of inert matter, but in the fundamental material units of organized beings.

But both Kreiter and Gilpin neglect the fact that although Harvey and Hunter posit life in the blood, their vitalist physiologies nevertheless are premised upon a dualist metaphysics. In Harvey's case this is indicated by his claim, quoted above, that the blood is a celestial gift from heaven. Ann Thomson writes that Harvey "saw the vital principle informing bodies as a divine emanation" (69), and while she claims that Harvey's theory of the blood "could … appeal to those defending a monistic view of the world which ascribed everything to a living matter possessing motion and sensibility" (69), she acknowledges that Harvey was not explicitly espousing a monist materialist metaphysics. And as seen in the passage quoted above, Hunter ultimately differentiated between the *materia vitae* and the blood in which it was infused. The vital principle was thus superadded to the blood, leaving Hunter to concede that "life is a property we do not understand: we can only see the necessary leading steps towards it" (90). In contrast to Blake's earlier brand of pantheist monism, which held that the material universe itself is divine, neither Harvey nor Hunter's vitalisms entail such a claim.

A brief survey of other physiologists and natural philosophers of the long eighteenth century reveals that Blake's living globe of blood partakes of a rich tradition of vital materialist thought that resisted both Newton's characterization of matter as being inert and, consequently, the Epicurean argument for life as being contingent on specifically organized systems of such dead matter. Albrecht von Haller, for instance, whose portrait Blake engraved for the publication of Henry's *Memoirs of Albert de Haller* in 1783 (Essick, *Commercial Book Illustrations* 34), devoted two dissertations to the *Motion of the Blood and the Effects of Bleeding* (1757), the first of which describes in detail the behavior of the "globules" of blood, likening them to vital atoms of living beings: "there is not any one globule observed smaller than those of the red class" (23). And he writes, "I have constantly observed that the globules reciprocally attract each other" (144), echoing Blake's use of "globes of attraction" to describe life in Urizen's world. Moreover, the *Second Dissertation* argues that the globules "moved in a serpentine manner" (4), recalling the worm/serpent imagery of Orc as a fetus.[40] In the first volume of his *First Lines of Physiology* (1786), Haller makes the similar Stoic claim made by Hunter and Harvey concerning the vital nature of the blood: "That fire is contained in the blood may be proved from its heat" (77). On Haller's view, a blood globule contains all four elements, and one can taste the "sea salt" in it (80), an image that resonates with the concluding image of *Urizen* with its macro/microcosmic overlay conveyed via Blake's play on the term "globe": "the salt ocean rolled englob'd" (pl. 28). Moreover, Haller's lectures on physiology discuss "conglobate glands in the fetus (2: 313), indicating that Blake did not necessarily borrow the term "conglobing" from Hunter.[41]

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[40] Nelson Hilton draws attention to the connection between Blake's Orc passages in *Urizen* and Haller's *First Lines of Physiology*, which discusses "seminal worms" visible under the microscope that might eventually become materials of the human nervous system (*Literal Imagination* 93).

[41] See also the second volume of John Aitken's *Principles of Anatomy and Physiology* (1786), which describes "conglobate glands" in the lungs (79).

In addition to his writings on the vital, fiery properties of blood globules, the first chapter of the first volume of Haller's *First Lines* is "Of a Fibre," and in it he writes: "The solid parts of animals and vegetables have this fabric in common, that their elements, or the smallest parts we can see by the finest microscope, are either fibres or an unorganized concrete" (9). As Darwin will later do, Haller here identifies a common fundamental element of both plant and animal life, suggesting a flat ontology. These fibres are described as forming a "net-like substance" or "cellular net-work" (12), and the "interwoven" substance extends to humans as well: "This cellular web-like substance in the human body is found throughout the whole" (13). Haller's cellular "net-work" has close parallels with Blake's "Net of Urizen," which extends like a spider's web from the Eternal and whose fibrous cords become "twisted like to the human brain." Blake's satirical vision of Haller's cellular network as a binding snare is visually depicted on plate 28, as Urizen is enmeshed in the interwoven cellular fibers that constitute his being, and which Blake here sees as a degraded form of material existence (illus. 55).

That Urizen – whom Blake clearly equates with Newton – should be associated with Haller's physiology is not surprising when one considers that Haller was, as Shirley Roe notes, "a Newtonian mechanist and a deeply religious man" (2). Roe makes an essential point concerning the influence of Newton on both the macro- and microcosmic level of eighteenth-century natural philosophy: "The freedom that Newtonian mechanism offered to biology – the addition of force to matter and motion as the fundamental categories of explanation – played an important role in embryology as well as in other areas of physiology" (18). Haller's blood globules reciprocally attract each other, evidence of Newton's laws of attraction applying not only to planetary motion, but to the movement of living matter as well. Like Newton, Roe writes, "Haller believed that matter possesses no abilities whatsoever on its own, without these having

been designated by God" (30). Haller's reverence for the Englishman even took the form of poems of praise, containing such hyperbolic lines as "he breaks open the tables of the eternal laws, / Once made by God and never broken" (qtd. in Roe 99). Similar to Thomson's elegiac poem, Haller's lines are sincere, but they correspond with Blake's parodic verses regarding Urizen's Newtonian striving after "one law."

However, even a professedly devout Newtonian dualist like Haller recognized the challenge living organisms posed to Newtonian mechanics. As Roe writes, "Rather than reducing vital phenomena to the known laws that govern inorganic bodies, Haller proposed to create a distinct 'animal mechanics.' … Living organisms thus may possess forces that are not found in nonliving matter; yet these forces operate mechanically in exactly the same way as physical forces do" (97). Thus, Haller was constrained to admit that there is something different about the matter composing living beings – including humans – even though he attempted to describe these new forces mechanically. This is especially true of Haller's most influential idea concerning the irritability of muscular tissue: the ability to contract with a force far greater than the force of the stimulus, a phenomenon which could be demonstrated even in severed human limbs. And although like Newton, who attributed the origin of material forces to God, Haller claimed that irritability was "given to matter by God" (Roe 35), its observed activity nevertheless violated Newton's third law of motion as stated in the *Principia*: "[t]o any action there is always an opposite and equal reaction" (*Philosophical Writings* 71). Peter Hanns Reill writes that according to Haller, "[t]he heart possessed the greatest degree of irritability," as Blake's description of "strugling & beating" and "conglobing" heart – all that motion incited by no matching stimulus – indicates. Reill concludes that Haller, while adamantly differentiating irritability from the traditional mechanical forces, introduces in his physiology "the specter of

vital force" (130). Blake's recognition of such a vital force that cannot be accommodated by the Newtonian laws of mechanism is evident in chapter VIII of *Urizen*, as Urizen sickeningly realizes that "no flesh nor spirit could keep / His iron laws one moment" (pl. 23). Likewise, Haller's muscular flesh, made irritable by the immaterial spirit of God, does not obey Newton's "eternal laws" as Haller described them in his own poetry praising Newton as lawgiver. In this sense, Blake's Old Testament parody of Urizen as a demiurge has a double meaning: both God and Newton give laws to creation, which are subsequently violated.

Blake's dark vision of organisms emerging from fundamentally living units of matter in the absence of the transcendent god of Newtonian deism has parallels with more radical eighteenth-century vital materialisms, which demonstrated less affiliation with Newton's system than did Haller's. The emergence of various theories of life both in England and on the continent (especially in France) in response to Cartesian mechanism has been discussed in chapter 2, but I return to a few specific representative mid-century natural philosophers whose systems entail a non-Newtonian view of living, active, and in some cases intelligent matter to highlight the impact such theories had on Blake's poetic depictions of embryological growth in the Urizen cycle. In France, a contemporary of La Mettrie, who shared the latter's materialist conception of self-activating matter as the basis of life, Pierre-Louis de Maupertuis advanced a monist theory of biological development in his *Vénus physique* (1745), which features a flat-ontological account of life arising spontaneously from active matter. "Do not be angry if I say you were a worm, or an egg, or even a kind of mud," Maupertuis writes, "Also, do not feel that all is lost in losing the form now attained when this body, full of charm, is reduced to ashes" (4). *Urizen* echoes such ideas, with its image of Orc as a worm in utero and Urizen as a "kind of mud," or clod of clay that the Eternals see as dead. Maupertuis also anticipates Thel's and Urizen's fear of

losing their human form in the dynamic flux of life; like Darwin and Blake's earlier images of material regeneration, Maupertuis advises readers not to despair at the fact of bodily dissolution. Blake's and Maupertuis's depictions of human life originating in vermicular fashion references what many physiologists referred to as the "spermatic animal" contained in male semen, or as Maupertuis writes, "The tiny worm, swimming in seminal fluid" (15). For Blake, the embryological image overlaps with his biblical parody, since the image of the male Orc growing from a worm also alludes to and inverts the Psalmist's complaint that "I am a worm, and no man" (22:6).[42] For Maupertuis and Blake, one is both a worm *and* a man, and for Blake this is consistent with *Thel*'s infant worm discussed in the previous chapter.

Maupertuis also reiterates vitalist ideas we have seen presented in the works of Harvey and Haller. Again anticipating Blake's trembling, self-active globe of life blood, Maupertuis draws explicitly from Harvey's work in describing the spherical "animal principle, that is, a 'capering bloody point,' [Maupertuis is quoting Harvey's phrase] before any of its future parts were formed" (25). The "capering" here is not transferred from some immaterial first cause, but is an intrinsic feature of the embryo, a movement upon which the growth of future organs is predicated. And like Haller, Maupertuis describes the "network" of cellular fibers formed when the spermatic animal "adhere[s] to the membrane [of the womb] by a special web which will become the placenta" (25, 17). These "filaments," Maupertuis continues, are "stretched from one horn of the uterus to the other, forming a kind of webbing similar to that made by spiders" (24). The analogy is the same as that used by Blake to describe the cold, ensnaring web trailing from Urizen and from which his progeny emerge. But Maupertuis also uses a more positive analogy to describe the same process: "From caterpillar to butterfly and from the spermatic worm to man

[42] See also Job 17:14: "I have said … to the worm, Thou art my mother, and my sister," a passage I will return to below.

we seem to find a kind of analogy" (18).[43] Like Darwin, Maupertuis is prone to philosophize via analogy and image, and both similes offered here are seen in Blake's work: the profusion of caterpillar/butterfly imagery in *Europe* signals a positive materialist/panpsychist undercurrent in that work, but in *Urizen* Blake favors the darker, spiderweb image to represent what he here considers the fallen nature of bodily life.

But like Darwin, and similar to Blake's pre-Urizen-cycle works, Maupertuis does not see the dynamic growth and dissolution of active matter as a cause for despair. *Vénus Physique*, like *The Botanic Garden*, nods to the Epicurean idea of pleasure as the guiding motive of earthly life. Pleasure, he writes, "in the human species sweeps everything before it. In spite of multiple obstacles in the way of a union of two hearts, and of a thousand torments that must follow, Nature still leads the lovers to her desired end." The footnote to this passage then quotes Lucretius: "'So captivated by thy charms and by thine allurements, all animate nature follows thee with desire whither thou wishest to lead them'" (34). Just as Eros is the guiding force for Darwin's evolutionary account, so here "all animate nature" is sustained by the force of love, a force conspicuously absent in the Urizen cycle, except, as we shall see, as remembered by Ahania and Eno. Maupertuis's titling his work – translated as *The Earthly Venus* – after the goddess of love signals both the importance of eros in his account of life, as well as his materialism: as in Blake, the gods are of the earth – there is no immaterial first cause.

Despite the absence in *Vénus Physique* of a transcendent, omnipresent God whose crucial role in the sustenance of the dynamic universe was asserted by Newton, the latter's theory of gravitation nevertheless plays a significant role in Maupertuis's embryological theory, which was one of the first eighteenth-century instances of the revival of epigenesis as a means to explain the

[43] Later he asks, "Might not the little worm introduced into the uterus have woven the membrane forming the first envelope? … Thus the silkworm constructs its cocoon" (30).

growth and development of animal organisms, in contradistinction from its rival theory, preformation. According to Roe, whose work traces epigenesis/proformation debates over the course of the eighteenth century, preformationists:

> believed that the embryo preexists in some form in either the maternal egg or the male spermatozoon. … Most [preformationists] … thought that all embryos had been formed by God at the Creation and encased within one another to await their future appointed time of development. Epigenesists, on the other hand, argued that each embryo is newly produced through gradual development from unorganized material. (1)[44]

Haller was a major proponent of preformationist theory, and Roe's study focuses on the debate between him and his later epigenesist rival, Caspar Friedrich Wolff, though she acknowledges the publication of *Vénus physique* as the moment when "a new challenge to preformationism arose – epigenesis through attractive forces" (13).[45] Indeed, in his work Maupertuis asserts the applicability of the same Newtonian laws that apply to astral bodies to the growth of fetal bodies: astronomers applied attraction "to explain the movements of the celestial bodies," he explains, and "[s]ince then chemistry has felt the same necessity of adopting this concept. … Why should not a cohesive force, if it exists in Nature, have a role in the formation of animal bodies?" (55-56). Newton's influence is also evident in the series of queries that concludes *Vénus physique*, similar in form to the questions appended to the *Opticks*. Yet despite this similarity, Maupertuis's

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[44] Roe traces the pre-eighteenth-century history of the debate: Epigenesist thought can be attributed to Aristotle and Galen, both of whom contended that both male and female were crucial in the development of the fetus, and whose theories were modified by the epigenetic arguments of Harvey and Descartes, the latter of whose embryological theory involved fermentation (3-4). Preformation, on the other hand, had a more recent origin: "the notion that all embryos had existed from the beginning of the world was first formulated in the 1670s with the work of Malebranche, Swammerdam, Perrault and others" (2-3). That Descartes and Malebranche are both considered mechanists and yet can be classed in opposite camps in terms of their embryological views testifies to the danger of an over-reliance on labels in considering such matters.

[45] Stephen Gaukroger makes a similar point in naming Maupertuis "the great defender of Newtonian attraction in the 1730s, who revives epigenesis" (*Collapse of Mechanism* 360).

materialist deviation from Newton's dualist deism is signaled here as well, as he speculates on the instinct possessed by all animals: "Does not that instinct, found in animals causing them to seek what suits them and flee from what harms them, also exist in the animal's smallest particles?" (85). Such particles are not then inert, as Newton would define them, and Maupertuis borrows a term from Newton's rival, Leibniz, to characterize their relationship to the will; perhaps, he asks, "because of some pre-established harmony, these movements [of the smallest particles] would always be in accord with the will?" (86). Although Newtonian gravity is important to Maupertuis's theory, the fundamental particles exhibiting attraction are themselves alive and active, not inert and acted upon as is in Newtonian mechanics.

Preformationism is invalidated as a theory for the development of animals and humans, Maupertuis writes, both by the fact that a child resembles the mother *and* the father and by the existence of hybrid animals (43-51). The parts of a body are organized by seminal fluid from both parents, the particles of which have "a stronger affinity for one another" (78). But Maupertuis's appeal to gravitational affinity is insufficient to explain why the particles assemble in the specific way that they do, forming particular organs, and ultimately a particular type of organism. His response to this problem is to deviate even further from Newtonian metaphysics by adopting a panpsychist theory of living matter. As Roe writes, "Maupertuis's solution was to attribute to the smallest particles that make up living organisms a capacity of intelligence and memory" (15). His 1751 work, *Systême de la nature*, is explicit in this regard, as in it he writes that in the fundamental particles of living beings "it is necessary to have recourse to some principle of intelligence, to something resembling what we call desire, aversion, memory" (qtd. in Roe 15).[46] Thus, Roe argues, Maupertuis "adopted … a Leibnizian notion of matter as

[46] Gaukroger quotes this same passage in arguing that Maupertuis was "seemingly advocating a form of hylozoism" (*Collapse of Mechanism* 362).

fundamentally active," since some principle of intelligence is to direct the gravitational organization of living particles, or, in Blake's terms, "globes of attraction." As is the case with Leibniz's individuated, infinite monads, that intelligence inheres in the particle itself, it is not an emergent property of the organism as a whole. David Skrbina notes that Maupertuis referred to his intelligent particles "as 'percipient particles,' a notion that recalls both the soul-atoms of Democritus and the monads of Leibniz" (106). The panpsychist aspect of his system was later explicitly remarked upon by Diderot, who, according to Thomson, "spelled out the dangerous implications of his theory[:] If each molecule possessing feeling and perception melts into the whole animal to form a single consciousness, then in the same way, the world forms a single whole, a 'tout', and is one great animal, with a soul which is God. This was considered to be Spinozism" (195). As Diderot recognized, it was not a great leap from panpsychism to pantheism.[47]

Maupertuis's intelligent particles explain the emergence of organs and the organized fetus in the womb, but they also support his argument for spontaneous generation, the emergence of life itself out of matter – again without the intervention of an immaterial creator. As J. Peter Bowler writes, Maupertuis "adopted a materialistic view of the origin of life based on spontaneous generation. When the earth was originally covered with water, some especially active particles of matter had been able to arrange themselves into living structures without requiring a womb" (74).[48] But this theory implied that particles had to know how to behave, and thus intelligence is necessary on a fundamental level. And as Roe points out, "Spontaneous

[47] Levine writes, "Pantheism, interpreted as the doctrine that divine consciousness is in everything, could be interpreted as a kind of panpsychism" (115).

[48] Like Gaukroger, Bowler sees Maupertuis as espousing, along with La Mettrie, "hylozoism, the belief that matter itself is alive" (82).

generation, if true, would certainly call into question the role of God in the creation of new organisms" (32). Maupertuis's argument for life evolving into more complex forms from living particles tracks with Darwin's later dynamic materialism – which allows for the spontaneous generation of life from self-active particles – and the hylozoism celebrated in *Thel* and the *Marriage*. And in the Urizen cycle, only Orc gestates in a womb – Urizen, Enitharmon, and Los grow asexually, a point to which I will return below.

Another strong mid-century proponent of spontaneous generation was the Englishman John Needham, the first Catholic priest to be elected fellow of the Royal Society, whose microscopic observations of various infusions of both plant and animal matter were well known both in Britain and on the continent, and were first published in 1745 and then elaborated in his *Observations upon the Generation, Composition, and Decomposition of Animal and Vegetable Substances* (1749), addressed to Martin Folkes, the president of the Royal Society. In it, Needham describes his observations of microscopic animals emerging from infusions of plant and animal matter in sealed vials after a few days' time. Similar to Maupertuis's assertions for a flat ontology in *Vénus physique*, Needham declares to have discovered "a new Class of Beings, whose Origin has hitherto been unknown, wherein Animals grow upon, are produc'd by, and, in the strict Sense of the Word, brought forth from Plants" (15-16). Needham's anti-Urizenic/Newtonian stance regarding his theory of life is made explicit early in his work: "It is in vain for us to pretend to lay down any one certain uniform Rule, and say to Nature, This is thy Scheme; such are thy Statutes; and from these thou shalt not deviate" (14). On Needham's view, Urizen's search for one law that his progeny will obey is futile.

In one experiment, Needham placed hot mutton-gravy in a phial to prevent it from interacting with "[e]ggs floating in the Atmosphere" (23), whereupon he shortly observes that

"[m]y Phial swarm'd with Life, and microscopical Animals of most Dimensions, from some of the largest I had ever seen, to some of the least. The very first Drop I used, upon opening it, yielded me Multitudes perfectly form'd, animated, and spontaneous in all their Motions" (24). These same organisms were seen to emerge from infusions of wheat, which, after dissolving into gelatinous matter, gave rise to "moving Globules … perfect Zoophytes teeming with Life, and Self-moving" (31). Here, on a microscopic level, is the material regeneration of new life from dissolved matter as later described – in positive terms – by Darwin and Blake. No immaterial spirit intervenes in such a process, and Needham concludes: "Hence it is probable, that every animal or vegetable Substance advances as fast as it can in its Resolution to return by a slow Descent to one common Principle, the Source of all, a kind of universal *Semen*; whence its Atoms may return again, and ascend to a new Life" (40). Similar to the material version of Stoic *pneuma*, this universal semen is the force inhering in all living bodies, giving rise – depending on "Time and Circumstances" – to specific plant or animal organisms (41). Crucial here is the fact that the semen inheres in matter that has decayed, i.e., dead matter, the lifeless clod of clay that initially is Urizen before his embryological development – similar also to Blake's conflation of grave and womb imagery at the conclusion of *The Song of Los*. As Gaukroger writes, Needham "concluded that the observed animalcules must have been born of dead matter, and there must be a 'vegetative force' in every particle of matter" (*Decline of Mechanism* 364). Roe notes that Needham's specific microscopic observations were eventually refuted by Lazzaro Spallanzani, Charles Bonnet, and others preformationists (19), but spontaneous generation as a theory, with its entailment of matter as alive at a fundamental level, remained influential throughout the century, as Darwin's adherence to it demonstrates.[49]

[49] According to Thomson, "Despite the obvious support his theories provided for materialistic arguments, Needham continued to deny he was defending spontaneous generation, claiming that his experiments only demonstrated the

Needham's experiments were cited as evidence in other radical materialist works that proliferated mid-century. In France, La Mettrie's *L'homme plante* (*Man a Plant*), discussed in the previous chapter, cites Needham's work in order to advance his flat-ontological argument (80-81). Though Needham's speculations of a vegetative force were mocked by Voltaire, the idea was later used as an argument in Diderot's *Rêve de d'Alembert* (1769), in which the dreaming d'Alembert describes the development of a living being from nothing, after the appearance of a "living point" (Thomson 192). Needham's correspondent Buffon is another vitalist natural philosopher from whom Blake might have drawn in his treatment of the polypus. Buffon's thirty-six-volume*Natural History* was published 1749–88 and was widely available in multiple English translations. Most notable among these was J. S. Barr's rendering, titled*Barr's Buffon*, the first edition of which was published in 1792. Buffon's work was so well known and discussed both in England and on the continent in the latter half of the century that "to know what Buffon or Albrecht von Haller … believed did not require one either to have read these authors directly or to have owned their books: the compilations and reviews sufficed" (13). While it is unknown whether Blake read Buffon directly, the structure of *Urizen* – in which the account of Urizen's creation of the earth precedes the account of Urizen's own embryological development (as well as those of his offspring) – resembles the structure of the first two volumes of Barr's translation: volume 1 is devoted to "The Theory of the Earth," the exposition of which spills into volume 2, which contains the first five chapters of "The History of Animals." Like Blake's satire, Buffon moves from macrocosm to microcosm in elaborating his vitalist natural philosophy.

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functioning of laws laid down by God and invoking Leibniz's conception of matter to defend his own" (*Bodies of Thought* 192).

In describing the origin of the planets and the formation of the earth in the first volume, Buffon first summarizes at length the accounts of terrestrial formation presented by three British physico-theologians from the end of the seventeenth century: William Whiston's *A New Theory of the Earth* (1696), Thomas Burnet's *Sacred Theory of the Earth* (Latin 1681, English 1684), and John Woodward's *An Essay toward a Natural History of the Earth and Terrestrial Bodies* (1695).[50] Buffon ultimately rejects all three theories as insufficient, and in such a rejection Gaukroger sees Buffon as "in effect rejecting any connection between the bible and the study of natural philosophy" (*Collapse of Mechanism* 373), and Blake's dark parody makes a similar implication: there is nothing good, in the Old Testament sense, about the organisms that arise in the Urizen cycle. But Buffon does follow Whiston and Burnet in signaling his allegiance to Newton and claiming that "Newton found that the force which caused heavy bodies to fall on the surface of the earth, extended to the moon, and retained it in its orbit." This power of gravity, Buffon continues, is "diffused throughout all matter; planets, comets, the sun, the earth, and all nature, is subject to its laws, and it serves as a basis to the general harmony which reigns in the universe" (1: 72[51]). As with the natural philosophers discussed above, Newtonian gravity played a role on all levels of genesis for Buffon, and he bolsters his account of the formation of planetary "globes of attraction" with multiple citations from "the great" Newton's *Principia* (1: 78ff.).

Just as Urizen's creation of the universe is described as both measured and chaotic, so too is Buffon's explanation of planetary origins. The order perceptible today was "formerly a *chaos*"

[50] Some Blake critics have drawn parallels between Burnet's work and Blake's: Vincent De Luca cites Burnet as a source for Blake's account of the earth's origin in *Urizen* (*Words of Eternity* 155-58), while Paley connects the illustrations in Burnet's *Sacred Theory* to the frontispiece of *The Song of Los* ("Blake and Thomas Burnet's *Sacred Theory of the Earth*" 75-76). Dörrbecker claims that the volcanic imagery in *America* might owe a debt to both Darwin's work and Burnet's (*Continental Prophecies* 32 n. 5). It is possible that Blake may have known of Burnet via Buffon, given the extensive summary given of the Burnet's work in volume I of the *Histoire naturelle*.

[51] All citations of Buffon are from Barr's 1792 translation.

(6) and in many places of the earth violent forces continue to prevail, as evident in Buffon's description of these "tempestuous regions":

> [w]here the winds blow with irresistible fury; where the sea and heavens, equally agitated, join in contact with each other, are mixed and confounded in the general shock; in others, violent intestine motions, tumultuous swellings, water-spouts, and extraordinary agitations, caused by volcanos, whose mouths, though a considerable depth under water, yet vomit fire from the midst of the waves, and send up to the clouds a thick vapour, composed of water, sulphur, and bitumen. Further we perceive dreadful gulphs or whirlpools, which seem to attract vessels merely to swallow them up. (1: 9-10)

The diction here – "fury," "agitated," tumultuous," "vomit," "dreadful," – is similar to the opening chapters of *Urizen*, in which the creation of the world is characterized by fury, suffering, and the destructive cataclysm of terrifying forces. And just as Urizen fights with fire to produce the opaque solids without fluctuation, Buffon – like Darwin after him – claims that the planets have their origin in the sun: "We must … admit, that the matter, of which the planets are generally composed, is nearly the same as that of the sun, and that consequently the one may have been separated from the other" (1: 82).[52] Interestingly, Buffon attributes this idea to Newton's rival, Leibniz, "who supposes that the earth and planets have formerly been suns" (1: 76), and whose *Protogaea*, which depicts the formation of the earth from fire, is summarized later in the volume (1: 144). Buffon acknowledges that the planets, despite their origin in solar fire, are now "cold and opaque" (1: 92), an idea Blake dramatizes in Urizen's conversion of the prelapsarian fire of Eternity into the cold solid spheres of the planets in their gravitational orbits.

[52] Buffon also anticipates Darwin's *Economy* in arguing that "all terrestrial substances, wherever they may be placed, are filled with shells and other substances the productions of the sea," and that "it is easy to be seen how much subterraneous fires contribute to change the surface and internal part of the globe" (1: 15, 57).

Despite his citations of Newton in discussing planetary orbits in the first volume of his *Histoire*, Buffon's radical deviation from Newtonian mechanism – and his closer affinity with Leibnizian matter theory – becomes evident in his chapters on animal generation and reproduction in the second volume. In the chapter entitled "A Comparison Between Animals, Vegetables, and Other Productions of Nature," Buffon initially distinguishes between "inanimate" mineral matter, which has "not any kind of life or motion" and the matter composing plants and animals (2: 256). He proclaims a dualist metaphysics in which "thought, which is the constituent principle of our being, is, very probably, entirely independent [of matter]" (2: 258) and argues for a traditional hierarchy descending from humans down to animals, on to vegetables, and terminating in minerals (2: 259). But these early claims become blurred as the chapter continues and Buffon makes a contradictory argument that "there is no absolute essential and general difference between animals and vegetables" (2: 262-63). The similarity he observes between the two kingdoms is due to the vital properties of matter itself: "the living animated nature, instead of composing a metaphysical degree of beings, is a physical property, common to all matter" (2: 271). Such a claim works against his description of a chain of beings descending from the most perfect to the least. Here Buffon rejects the notion of a "metaphysical degree" of beings, instead asserting that all life is reducible to the animated quality of matter itself, shared by all organisms. Hence, the flat ontology we have seen in Darwin and other natural philosophers is evident in Buffon as well, insofar as plant and animal life is concerned. Thomson observes that "Buffon himself, who held an official post and wanted to protect his career, consistently rejected accusations of freethinking and was careful in his *Histoire naturelle* to distinguish humans from animals by their immortal soul. This was

perhaps not his true belief, at least in the 1730s when there is evidence that he doubted the immateriality of the soul" (197).[53]

Like La Mettrie, Maupertuis, and Needham, Buffon believed that the matter comprising vegetables, animals, and humans was self-activating and possessed epigenetic qualities. He terms the fundamental units of living matter "organic particles," which are similar to Leibnizian monads; like monads, organic particles exist below the threshold of human perception. Buffon writes, "there is an infinity of organic particles actually existing and living in nature, the substance of which is the same with that of organized bodies" (2: 275). These particles are merely reorganized into other bodies upon the dissolution of any one being: "death or dissolution is nothing more than a separation of the same [organic] particles" (2: 280). "It is certain," Buffon asserts, "that all animals and vegetables contain an infinity of organic living molecules" (3: 205-206), a claim that corresponds with both Leibniz's and Blake's contentions for the infinitude of humans and the material universe as discussed in chapters 1 and 2.[54] Reill writes, "Like Aristotle and the hermetic philosophers, Buffon vivified much of nature" (45), and Gaukroger notes how Buffon's proto-evolutionary vitalism was the first to historicize and "dynamize" natural

[53] This evidence Thomson finds in letters from that period and in the fact that Buffon was interested in the works of British freethinkers like Toland, and sympathetic to their arguments against an immaterial soul (*Bodies of Thought* 197). Buffon contradicts his early claim for a hierarchy of beings in volume III as well, where he writes, "lines of separation do not exist in nature" and "the grand division of nature's productions into *Animals*, *Vegetables*, and *Minerals*, do not contain every material being: since there are some that exist which cannot be classed in this division" (166, 167). According to Reill, Buffon's "theory of species classification negated the concept of unbroken continuity upon which the Great Chain of Being was predicated. There are breaks in nature, minute though they may be, which were ensured by the universal and invariable law of fertile reproduction" (49).

[54] Jacques Roger discusses both Maupertuis's and Buffon's shift from Newtonian metaphysics to "a more Leibnizian image of [the] living atom," though he notes that Maupertuis was more cautious in this regard (275). And according to Reill, "Although Leibniz insisted upon the absolute theoretical necessity for divine preformation, his definition of the organic machine could be, when abstracted from its philosophical base, reinterpreted in a manner consistent with the idea of living matter" (61).

philosophy, in contrast to Newton's theory, which sought consistent physical laws to describe the activity in the universe (*Collapse of Mechanism* 368).[55]

Buffon's anti-mechanistic theory of life does not feature an immaterial intelligent principle creating or sustaining living organisms. As Jacques Roger writes, Buffon "did not believe that living beings were created directly by God" (268). Rather, like his friends Maupertuis and Needham, the latter of whom he calls a "very capable observer of nature" (2: 328) and whose "superior microscope" he borrowed for his own experiments,[56] Buffon notes that specific conditions in the earth's development gave rise to the spontaneous generation of plant and animal forms from living organic particles. As Bowler writes, Buffon "supposed that at certain periods of the earth's history, spontaneous generation produced even the higher forms of life directly from free organic particles" (80), or, in Blake's account, directly from the epigenetic growth of living globes of blood.[57] In their epigenetic aggregation into complex plants and animals, these particles obey what Buffon calls an "internal mould," a force he likens to gravity, "which penetrates the internal parts of bodies" (2: 293). These internal moulds resemble Aristotle's substantial forms, immanent guiding principles that for Buffon are beyond our cognitive abilities "because their action is made on the internal part of the body" (2: 302).

But how do internal moulds know how to organize the infinite organic particles into particular and various forms of life? Unlike Maupertuis, Buffon refrains from ascribing intelligence either to the organic particles themselves or to the internal mould driving their organization. But even if he doesn't declare himself a panpsychist, there is no doubting his

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[55] Reill devotes his first chapter to the vitalist qualities of Buffon's thought, and Gaukroger makes similar claims in his chapter ten. See also Bowler, 76-80, and Foucault, who quotes Buffon's anti-Linnaen claim: "nothing really exists in nature except individuals" (147).

[56] Needham's experiments with infusoria are approvingly summarized in volume 3, 160ff.

[57] For further discussion of Buffon's theory of spontaneous generation, see Reill (68) and Roe (32).

rejection of mechanistic explanations of living forms. "Matter may have many general qualities which we shall ever be ignorant of," he writes (2: 308), and declares that the properties of extension, impenetrability, motion, shape, and divisibility – as posited by Descartes and others – are insufficient to explain organic beings:

> to explain the animal economy, and the different movements of the human body, solely by mechanical principles, is the same as if a man would give an account of a picture by shutting his eyes and feeling on it; for it is evident that neither the circulation of the blood, nor the motion of the muscles, nor the animal functions, can be explained by impulsion, nor other common laws of mechanics: it is as evident that nutrition, expansion, and reproduction, is made by other laws. (2: 316-17)

By "other laws" Buffon cannot simply mean Newtonian gravity, since an appeal to gravity alone cannot explain the differential development of specific organisms.[58]

So while in volume I Buffon asserts that harmony and order characterize the macrocosmic universe, when it came to biological forms, as Gaukroger writes, for Buffon "there is as much disharmony and disorder in nature as there is harmony and order, and there are no clear-cut species because various qualities that one might use to mark out one species from another come in imperceptible gradations" (*Collapse of Mechanism* 369). Once he begins to discuss living organisms, appeals to Newton's *Principia* are not to be found, since the laws of mechanism and mathematics do not apply to biological forms. The fifth chapter of his "History of Animal and Vegetable Life" begins with a summary of Plato's *Timaeus*, which Buffon

[58] According to Thomson, the view that animals and plants "are too complicated to have been produced by the laws of mechanism alone" was also adopted by Denis Diderot, another influential French materialist for whom activity was a fundamental property of matter (*Bodies of Thought* 190).

critiques for its "Pythagorian" reification of abstractions like number and geometric shapes, which play a causal role in Plato's account:

> All this Pythagorian philosophy, which is purely intellectual, turns entirely on two principles, one of which is false and the other precarious: those are, the real power of abstraction and the actual existence of final causes. … To regard numbers, geometrical lines, and metaphysical abstractions, as efficient and real physical causes, on which the formation of the elements, the generation of animals and plants, and all the phenomena of Nature depend, seems to me to be the most absurd abuse of reason, and the greatest obstacle that can be put against the advancement of our knowledge. (2: 331-32)

Like Blake, Buffon mocks mathematical abstraction – Urizen's dividing and measuring – as having no explanatory efficacy when it comes to living forms. Abstraction is an obstacle rather than a means to true knowledge.[59]

Buffon's discussion of animal generation continues into the third volume of the *Histoire*, in which the epigenetic systems of Aristotle and Harvey are summarized,[60] and in which Buffon elaborates his own epigenetic theory. The analogy between the human fetus and the worm is discussed again here and Buffon cites ancient precedent: "Democritus speaks of certain worms which take the human figure, and Aristotle says, that the first men came out of the earth in the form of worms," as do Plato and Hippocrates (3:62). After summarizing various versions of preformationism, both of which "suppose an infinite progression; which as we have said, is not so much a reasonable supposition as an illusion of the mind" (68), Buffon approvingly refers to the epigenetic theory presented in *Vénus physique* and commends its anonymous author

[59] As Reill writes, "Buffon considered a mathematical proof sterile, incapable of affirming anything other than its starting point" (40).

[60] Included in the summary of Harvey is his description of the formation of the chicken over the course of seven days – similar to Blake's seven ages of Urizen – at the end of which "a small globe" appears (3: 17).

(Maupertuis) as "the first who has returned into the road of truth" (3: 76). And in discussing his own microscopic experiments, Buffon reintroduces motifs seen in the work of his friends and contemporaries discussed above, as well as in the embryological passages of the Urizen cycle: he reports his observation that the seminal liquid eventually forms "a net-work, very like to a cobweb, on which the moisture hung in an infinite number of globules" (3: 96); these globules are later described as being "very black and very small," microcosmic parallels to the black globe created by Urizen. Like Maupertuis, Buffon's epigenetic theory necessarily involves semen from both the mother and the father: "the activity of the organic molecules, in the semen of one individual, has need of being counterbalanced by the activity or force of those of another individual, in order to fix and bring them into a kind of equilibrium, a state of rest highly necessary to the formation of the animal" (3: 235), an idea that recalls Blake's proposition in the *Marriage* that "without contraries is no progression."

Thus for Buffon the blending and accretion – through nutrition – of organic molecules results in a complex animal whose life is not the result of an arrangement of inert matter, but rather is a characteristic of its fundamental particles: "Each of these particles [organic molecules] possessing animation, an assemblage of them must be endowed with life, and thus these living organic molecules, being common to all living beings, they necessarily form any particular animal or vegetable, according as they are arranged" (3: 238). The arrangement of the animated particles determines the particular animal or vegetable – or human – but it does not confer life to the system, which is alive, like Blake's globe of blood, at the fundamental level. These organic particles constitute a dynamic material eternity that transcends individual death: "there is an organic matter perpetually active, and always ready to from, assimilate, and produce beings similar to those which receive it. Animals and vegetables, therefore, can never be extinct; so long

as there subsists individuals the species will ever be new" (3: 316). Each individual human or animal is both part of the undifferentiated larger whole of the species – like Blake's Eternals – and also a Leibnizian infinite microcosm of the universe: "its body is a centre, to which everything is connected; a point where the whole universe is reflected; a world in miniature" (2: 260).

Buffon's picture of a dynamically evolving material universe that is alive at the most minute level anticipates Darwin's natural-historical account as presented in *The Botanic Garden* discussed in the previous chapter, but the first volume of Darwin's *Zoonomia; or, The Laws of Organic Life* (1794) contains further resonances with the mid-century physiological theories discussed above, as well as with the Urizen cycle. In *Zoonomia*, Darwin abandons the verse form he had earlier used to convey his natural philosophy (though he would return to it in his 1804 work, *The Temple of Nature*) and instead presents a sectioned prose account that elaborates on the physiological ideas introduced in *The Botanic Garden* – although the focus now is on animal and not plant life. Darwin's monist materialism, founded on theories of active matter inherited from the natural philosophers discussed above, remains more or less unchanged in *Zoonomia*; here his discussions of physiology and disease are premised on four fundamental "fibrous motions" of animals: irritative, sensitive, voluntary, and associative.[61] The epigraph to the work, taken from Book VI of the *Aeneid*, poetically suggests Darwin's panpsychist/hylozoic proclivities, as well as his tendency to personify the nonhuman world:

> Earth, on whose lap a thousand nations tread,
>
> And Ocean, brooding his prolific bed,
>
> Night's changeful orb, blue pole, and silvery zones,

[61] In the previous chapter Darwin's citations of Haller's work on muscular irritability were discussed, and Haller is also cited again in *Zoonomia*, given that "irritative" motion constitutes its own class (1: 123).

Where other worlds encircle other suns,

One Mind inhabits, one diffusive Soul

Wields the large limbs, and mingles with the whole. (Title page)

As we have seen in the earlier discussion of *The Botanic Garden*, Virgil's characterization of a world-soul diffused throughout the material universe, all of which is "inhabited" by mind, is congruent with Darwin's natural philosophy.

Darwin's debt to Buffon, whom he explicitly praises for having "with great ingenuity imagined the existence of certain organic particles, which are supposed to be partly alive, and partly mechanic springs" (1: 491), is evident at the outset of the first volume of *Zoonomia*, where Darwin criticizes previous "inquirers into the knowledge of diseases" who "busied themselves in attempting to explain the laws of life by those of mechanism and chemistry; they considered the body as an hydraulic machine, and the fluids as passing through a series of chemical changes, forgetting that animation was its essential characteristic" (1: 1). As for Buffon, the laws of mechanism are on Darwin's view insufficient to explain living organisms, and while he praises "the unparalleled sagacity of the great Newton" for discovering the laws of gravity, he classifies the motions that characterize life as being distinct from those that obey gravitational laws (1: 5-6). And while Darwin claims to espouse an orthodox, Cartesian brand of dualism – "The whole of nature may be supposed to consist of two essences or substances; one of which may be termed spirit, and the other matter. The former of these possesses the power to commence or produce motion, and the latter to receive and communicate it" (1: 5) – he devotes his work entirely to discussing matter's active properties, the class of motions that characterize living beings, abandoning any speculation as to the role of immaterial substances. Rather, as Thomson points out, Darwin "described human sensation and thought in purely physical terms" (224), and the

"spirit of animation," which was introduced in *The Botanic Garden*, is claimed to reside in the brain and nerves and to be "the immediate cause of the contraction of animal fibres" (1: 30). This spirit is later called a "vital ether" (1: 66), again indicating the Stoic aspects of Darwin's system. Moreover, Darwin is "ready to allow, that the powers of gravity, specific attraction, electricity, magnetism, and even the spirit of animation, may consist of matter of a finer kind." An immaterial God, then, is "the ultimate cause only," as Darwin then quotes Acts 17:28 – the passage so favored by Berkeley – about living, moving, and having our being in God (1: 109). While he cites Malebranche's occasionalism in this same passage, for Darwin God is not necessary as the efficient cause of all animal movement. Like Buffon, Darwin also proclaimed himself a Cartesian dualist while elaborating a materialist natural philosophy in which the living, active properties of matter account for all animal functions, including thought.[62]

Darwin's monism – as indicated elsewhere in the first volume of *Zoonomia* as well as in *The Botanic Garden* – contradicts his alleged dualism, as the critics cited in the previous chapter have pointed out. In the preface to the later work, Darwin states, "*the whole is the family of one parent*" (n. p.) and later makes the Spinozan one-substance claim, "the whole universe may be considered as one thing possessing a certain figure" (1: 15). In discussing the spirit of animation later in the volume, he speculates that it must be able to assume the property of solidity in order to interact with muscles and nerves, since "[n]o two things can influence or affect each other, which have not some property common to both of them" (1: 115), the same argument Lucretius makes for rejecting immaterial substances, as we have seen in the previous chapters. The spirit of animation operates in all living beings, again suggesting the flat ontology evident in *The Botanic Garden*. By the end of the first volume, this idea becomes more prominent, as Darwin speculates

[62] Jon Mee discusses the religious attack on *Zoonomia* in a 1795 edition of the *British Critic*, which indignantly asserted that Darwin "had discarded 'all the authority of Revelation' in favour of 'the sports of his own imagination'" (qtd. in Mee 150).

on the origination of all organic life – plants and animals – to "living filaments": "shall we conjecture, that one and the same kind of living filaments is and has been the cause of all organic life?" (1: 507). Thus, Buffon's organic particles, Maupertuis's intelligent atoms of life, Darwin's living filaments, and Blake's globe of life blood all testify to a vital materialism that posits life, activity, and even intelligence at matter's fundamental level.

Zoonomia also reiterates several images and themes from the natural philosophies discussed above and which are evident in the Urizen cycle. Darwin's worm imagery is poetically reiterated in his section describing the instinct common to all organic life, a section he concludes by blending allusions to Proverbs 6:6, which advises, "Go to the ant, thou sluggard, consider her ways, and be wise," and Job 17:14: "I have said … to the worm, Thou art my mother, and my sister." Darwin writes, "Go, thou sluggard, learn arts and industry from the bee, and from the ant! Go, proud reasoner, and call the worm thy sister!" (1: 183). Here Darwin's flat ontology and condemnation of reason and its associated pride – which Blake satirizes in the Urizen cycle – is explicit.[63] Like Maupertuis, Darwin places humans and worms in the same family in that they share the same vital matter. Moreover, Blake's description of "branching" veins, equating humans with vegetables, and which Kreiter claims is owing to Hunter's work, has a stronger parallel in *Zoonomia*, since the passage in Darwin also contains a description of what will become Enitharmon's fibers of milk, blood, and tears:

> the extremities of this artery terminate either in glands, as the salivary glands, lacrymal glands, &c. or in capillary vessels, which are probably less involuted glands; in these some fluid, as saliva, tears, perspiration, are separated from the blood; and the remainder

[63] Blake's caption to the final plate of *For Children: The Gates of Paradise* (1793) quotes the same passage from Job beneath a seated figure whose vermicular tail coils around her from beneath her robe (E 33).

> of the blood is absorbed or drank up by branches of veins correspondent to the branches of the artery. (1: 8)[64]

It should come as no surprise that Darwin compares humans to trees and plants, given his earlier work, and he here continues his tree analogy when describing how certain veins "unite into a trunk in the liver," and the human-worm analogy is reiterated as he writes, "The stomach and intestinal canal have a constant vermicular motion" (1: 9).

Before discussing Darwin's passages on animal reproduction in *Zoonomia*, a passage from *The Economy of Vegetation* is worth quoting in full insofar as its connection to the embryological passages in *Urizen* is concerned, as well as its suggestion of the materialist principles Darwin elaborates in *Zoonomia*. In Canto IV of the *Economy*, Darwin compares the bursting of floral life from seeds to the hatching of a crocodile, the "Monster of the Nile," from its shell:

> First in translucent lymph with cobweb-threads
> The Brain's fine floating tissue swells, and spreads;
> Nerve after nerve the glistening spine descends,
> The red Heart dances, the Aorta bends;
> Through each new gland the purple current glides,
> New veins meandering drink the refluent tides. (IV, ll. 425-30)

Here we have the cobweb imagery of cellular fibers from which life emerges in the mid-century natural philosophies discussed above, which for Blake becomes Urizen's Net of Religion, the cords of which – as in the passage from Darwin – are twisted into brain tissue and "spread" throughout the organism. Prominent here is the "glistening spine," which Blake emphasizes in the developing forms of both Urizen and Los, while Darwin's dancing red heart parallels the

[64] Worrall mentions *Zoonomia* in connection with *Urizen* in this regard (*Urizen Books* 138).

conglobing heart of Urizen. Unlike in Blake's satire, however, nothing in Darwin's diction suggests that this growth is painful or violent; rather, his use of "floating," "glistening," "dances," "glides," and "meandering" suggests a joyful ease to the embryological process. The resulting "Monster" *is* violent, however, as Darwin describes how he "[r]olls his fierce eye-balls, clasps his iron claws, / And champs with gnashing teeth his massy jaws" (IV, ll. 437-38). The fact that the crocodile has a "Tyger-paw" (l. 434) has prompted some Blake scholars to link this passage to Blake's famous Song of Experience and its implication of a Gnostic demiurge,[65] but the imagery of the above passage has much in common with *Urizen* as well, though Blake's tone is much darker. Certainly this "Monster of the Nile" belongs to the Urizenic web-formed progeny who do not obey Urizen's mechanistic iron laws. Kathleen Raine uses these lines from Darwin to support her claim that *Urizen*'s "nightmare-like account of the stifling ensnaring of the soul in a physical organism as it descends into generation seems to be the product of Blake's vivid imaginative realization of passages he found in Erasmus Darwin" (1: 240). But Raine is inaccurate in a crucial regard: nowhere does Darwin or Blake mention a *soul* ensnared in a physical organism. Like the spontaneously generated organisms discussed by Maupertuis, Needham, and Buffon, these creatures emerge from the mud of the Nile in Darwin's account, and from formless clods of clay and fibrous nets in Blake's. Raine presumes a Platonic dualism that is absent in these two works.[66]

In describing animal reproduction in *Zoonomia*, Darwin professes his allegiance to the epigenetic theories of Buffon and Maupertuis. Preformation, he writes, is "unsupported by any analogy" and "ascribes a greater tenuity to organized matter, than we can readily admit" (1: 490).

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[65] See for instance King-Hele, 47-49.

[66] Drawing another parallel between the *Economy* and *Urizen*, Worrall cites the first canto of Darwin's work as the "cosmological source" for the "primal big bang" described in *Urizen* (*Urizen Books* 130).

Also, the regeneration of limbs in some animals contradicts preformationist theories, as well as does the fact that new parts of bodies emerge during disease that cannot be supposed to have been there in miniature. Darwin then asks, "how could mule-animals be produced, which partake of the forms of both parents, if the original embryon was a miniature existing in the semen of the male parent?" (1: 490). These are all objections raised by Buffon, whom Darwin then summarizes approvingly before presenting his own slight modification: Darwin – punning on the meaning of "conception" – writes, "I conceive the primordium, or rudiment of the embryon, as secreted from the blood of the parent, to consist of a simple living filament as a muscular fibre" (1: 492). The growth of this "fibre" with the aid of fluids from both parents in the womb is then discussed, and like Buffon, Darwin cites the fact of monstrous animal and vegetable births as further evidence against preformationist theories. "All animals," he continues, "have a similar origin, viz. from a single living filament" (1: 498), and his dismissal of preformation as an explanation of embryological development is reiterated: "When we consider all these changes of animal form … we cannot but be convinced, that the fetus or embryon is formed by apposition of new parts, and not by the distention of a primordial nest of germs, included one within another, like the cups of a conjurer" (1: 502). Darwin inherits and modifies epigenetic theories developed earlier in the century to present an account of animal growth that Blake also shares in his image of the globe of life blood branching into human form.

Darwin's living filaments, like Buffon's organic particles, provide him with an image of material eternity, as they are passed from individual to individual, down through the generations:

> all warm-blooded animals have arisen from one living filament, which THE GREAT FIRST CAUSE endued with animality, with the power of acquiring new parts, attended with new propensities, directed by irritations, sensations, volitions, and associations; and

> thus possessing the faculty of continuing to improve by its own inherent activity, and of delivering down those improvements by generation to its posterity, world without end! (1: 505)

Once the first cause endues the filament with its "inherent activity" – already the contradiction resulting from Darwin's nod to an immaterial creator god is manifest, since if the "animality" is supplied from without, can it be called "inherent"? – there is little left for a transcendent Deity to do, but watch as the "world without end" spins out from the proliferation of self-activating living filaments. Darwin approvingly cites Hume's suggestion that "the world itself might have been generated, rather than created" (1: 509) and also appeals to ancient philosophy in venturing his own anti-biblical, proto-evolutionary conclusion:

> This idea of the gradual generation of all things seems to have been as familiar to the ancient philosophers as to the modern ones; and to have given rise to the beautiful hieroglyphic figure of the … first great egg, produced by NIGHT, that is, whose origin is involved in obscurity, and animated by … DIVINE LOVE; from whence proceeded all things which exist. (1: 529)

Darwin's deistic claim that we can proceed from cause to cause and eventually arrive at the "Great Source" (1: 533) of all things is belied by the monist material metaphysics predicated on the self-activating powers of eternal living matter he has elaborated in his physiological and botanical works.

Like Maupertuis, who stresses the role of pleasure in reproduction, Darwin suggests that the pleasurable sensations associated with the secretion of semen during sexual reproduction "may constitute the unnamed pleasure of existence" (1: 518), the pursuit of which drives the dynamism of organic life. The Epicurean sensibility evident in *The Botanic Garden*'s ruling Eros

is echoed here as well, as Darwin calls sexual pleasure "the purest source of human felicity" (1: 146). But as we have seen, pleasure is absent in the Urizen cycle,[67] and sexual reproduction happens only once: Orc's birth as a result of Los's rape of Enitharmon. Los himself is rent from the side of Urizen, while the globe of blood that becomes Enitharmon emerges from the head of Los.[68] Most Blake critics have discussed these "births" in the context of Blake's biblical parody, as allusions to Eve's formation from the rib of Adam,[69] but the image also has resonance for the asexual means of animal reproduction as discussed by the natural philosophers cited here, and as Darwin himself recognizes: "This idea of the reproduction of animals from a single living filament of their fathers, appears to have been shadowed or allegorized in the curious account in sacred writ of the formation of Eve from a rib of Adam" (1: 489). In considering generation in such a manner, Darwin draws attention to the inaccuracy of the term "new animal" to describe offspring: such a being "is in truth a branch or elongation of the parent; since a part of the embryon-animal is, or was, a part of the parent" (1: 480). Blake adopts such an idea in the Urizen cycle, wherein the "horrible forms of deformity" proliferate by branching off from forms that are already horrible. For example, Fuzon reveals himself to be no different from his progenitor, Urizen, as he proudly and erroneously asserts his lone supremacy and declares in chapter II of *Ahania*, "I am God … eldest of things!" only to be crucified by his father. It is not a joyous process.

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[67] Except in Ahania's and Eno's memories, a point that I discuss below.

[68] In a passage pertinent to the image of Enitharmon's globe of blood being "birthed" from Los's head on plate 18, Buffon cites Harvey, for whom "[t]he ideas conceived by the brain are like the images of the objects transmitted by the senses; and the foetus, which may be considered as the idea of the matrix, is like that which produces it" (3: 21). The double meaning of conception – as giving rise to ideas and offspring – is a part of Harvey's physiology and depicted by Blake.

[69] See, for example, Mee, 186.

As a representative of this mode of asexual reproduction, Darwin cites the fresh-water polyp, or polypus: "Those who have attended to the habits of the polypus, which is found in the stagnant water of our ditches in July, affirm, that the young ones branch out from the side of the parent like the buds of trees, and after a time separate themselves from them" (1:488). As Darwin was well aware, the polyp was at the nexus of a vast eighteenth-century discourse considering animal generation, and all of the natural philosophers mentioned in this chapter participated in the debate as to the implications of discoveries made concerning its regenerative and reproductive properties. Blake was no doubt keenly aware of the subject, since he compares Los's lungs to a "dim & glutinous" "Polypus" "englob'd on the tide" in *The Book of Los*. His incorporation of the organism as an emblem of materialist generation and regeneration at the close of the Urizen cycle is the subject of the next section.

4.5 A Polypus Appears

The "white Polypus" to which Los's lungs are compared is the first instance of Blake's usage of the term designating the asexual self-regenerating "animal flower" – as several natural historians referred to it – that will become prominent in the symbolism of his later prophecies. According to Volume 3 of the *Cyclopaedia* of Ephraim Chambers (1786-1788), all coral animals, including the "polype," belong "to the genus of HYDRA, in the class of *worms*, and order of *zoophytes*, in the Linnaean system."[70] References to the polyp in the eighteenth century are difficult to find without the accompanying name of Abraham Trembley, the Swiss naturalist whose experiments with the freshwater polyp in the early 1740s were first published in French in

[70] While I use Blake's – and Darwin's – spelling of "polypus" when discussing the creature in connection with his work, I use "polyp" when discussing the larger eighteenth-century discourse concerning the creature. The term was also used in eighteenth-century medical texts, as it still is today, to designate abnormal growths of tissue. Thus, as Worrall observes, "Blake metamorphoses (with apposite organicist fluidity) the 'Lungs' into a 'white Polypus', part-vegetable, part-animal, part-cancerous organism" (*Urizen Books* 200).

1744. His findings were discussed and replicated in England even before this date, however, as evidenced by his three-way correspondence with the president of the Royal Society at the time, Martin Folkes, and the French naturalist Buffon. These letters were published in the 1742-1743 *Philosophical Transactions*, and Trembley's reputation in England grew immediately thereafter.[71] Another correspondent with Folkes, Henry Baker, an Englishman and fellow of the Royal Society, published *An Attempt towards a Natural History of the Polype* in 1743, which both summarized Trembley's work and described Baker's own course of experiments that replicated Trembley's. It is quite likely that Blake would have been aware of Trembley's experiments without reading a direct account of them; Engelstein makes the astute observation that he makes a punning reference to Trembley in *Milton*, where the polypus "Must *tremble* in the Heavens" (quoted in Engelstein 101; her italics).[72]

Trembley (and Baker) discovered that cutting the polyp into segments resulted in the regeneration of each segment into an autonomous organism; each of these autonomous beings would then become parents themselves, capable of further division into separate organisms.[73] In the absence of cutting, the polyp reproduced asexually: offspring would emerge as buds from a creature's main stem, vegetate, and detach from the parent, often budding offspring of their own before detaching. Moreover, Trembley found that he could graft separate polyps to each other to

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[71] For a more detailed historical account of Trembley and his experiments, see Janelle Schwartz's chapter 3, Aram Vartanian, "Trembley's Polyp, La Mettrie, and Eighteenth-Century French Materialism," and Susannah Gibson (43-57).

[72] Engelstein is one of a few critics to connect Trembley to Blake's work. Hilton, writing in 1983, was the first Blake scholar to specifically discuss Trembley within the history of the polyp in the eighteenth century, and to apply this history to Blake's work (*Literal Imagination* 87-89). Kevin Hutchings also discusses Trembley in connection with Blake's use of the polypus in *Milton* (188ff.). Blake also uses "tremble" twice in *The Book of Los*, to describe the "eternal Oak" beneath which Eno sits and to characterize the "gigantic flames" with which Los creates the sun (E 90, 91); punning aside, "tremble" is a word found in many places throughout his oeuvre.

[73] Although Trembley was the first to observe this in the polyp, such properties of living organisms had been noted as early as Aristotle, who writes, in *De Anima*, "plants and many animals when divided continue to live, and each segment is thought to retain the same kind of soul" (409a8-9).

form a larger, hybrid creature. Thus, the organism could exponentially divide into multiple autonomous creatures and those disparate organisms could fuse with each other and become a unified polyp. Given the polyp's plant-like characteristics and the fact that its original discoverer, Antonie van Leeuwenhoek, had called it a plant, Trembley resisted identifying the organism as an animal. He was eventually convinced by the older and more renowned naturalist René Réaumur, who is credited with naming the polyp.[74]

The creature's remarkable regenerative capabilities challenged both Cartesian mechanism and Newtonian physical laws, which dominated natural philosophy throughout the first half of the eighteenth century. Gaukroger contends that Trembley's study challenged the preformationist theory of reproduction held by biomechanics, which stated that preexistent invisible germs of all organisms were contained in the ovaries or sperm (depending on the variant of the theory) of humanity's first parents;[75] challenged classification (was the polyp an animal or plant?); and suggested the disturbing possibility that nature was able to generate living beings. "If this was the case – and especially if the distinctions between mineral, plant, and animal realms were ones of degree rather than ones of kind – then the question had to be raised whether matter was intrinsically active" (*Collapse of Mechanism* 358). Thus, as Aram Vartanian writes, the polyp became involved in "speculations … ranging from the nature of the soul to the teleology of organic forms" (260).[76] Would God have preordained such rampant, chaotic, and seemingly monstrous growth? Susannah Gibson's recent study of eighteenth century natural history makes a similar point concerning the questions raised by the polyp: "did Trembley's experiment count

[74] Resistance to identifying the polyp as an animal did not stop with Réamur's assertion. According to Vartanian, Voltaire was not alone in insisting that the polyp was a plant in 1768 (284).

[75] Descartes himself was not a preformationist, as mentioned earlier, but most mechanist natural philosophies – beginning with Malebranche – favored a version of preformation.

[76] Reill also discusses the challenge the polyp presented to preformationism (62).

as a creation event without any input from God? … if you cut a polyp in two and each part re-grew into a fully functioning individual, was the soul also split in two?" (55).[77] Although for Michel Foucault "the continuity of nature is a requirement of all natural history" in the eighteenth century (147), the polyp represented the shadowy underside of such continuity, resistant as the creature was to the rigid classificatory categories – instituted by Linnaeus and others – that characterized eighteenth-century taxonomy.[78]

Such larger metaphysical debates and speculations were not taken up by Trembley himself, who remained a preformationist despite the implications of his experiments. However, the natural philosophers discussed above and in previous chapters were more than willing to seize upon the polyp in support of their materialist systems. In his *Observations*, Needham wrote that the difficulty for preformationism and mechanism to explain life "still increases immensely, if we look into the Vegetation of Plants, and the wonderful Re-production of the Parts of Polypes, Starfish, Lobsters Claws, &c" (10). And La Mettrie appealed to Trembley's experiments with the polyp in support of his argument that no transcendental, immaterial creator god is necessary to create life. "Look in your turn at Trembley's polyp!" La Mettrie exclaims in *L'homme machine*, "Does it not contain inside it the causes of its own regeneration? Why then would it be absurd to believe that there exist physical causes for which everything was made …. There may be something else which is neither chance nor God; I mean nature, the study of which can as a result only produce unbelievers" (24). For La Mettrie, the self-propagating polyp was one of many examples of the irritability of living tissue described by Haller, to whom La Mettrie

[77] To demonstrate the popularity of this topic beyond the circle of natural philosophers, Gibson cites a 1740 satirical poem by Charles Hanbury Williams about the obsession over the "Polypus" in London (53).

[78] The polyp's significance as an emblem of changeability predates eighteenth-century debates concerning mechanism and vitalism. Desiderius Erasmus advises readers in the *Adages* to "adopt the outlook of the polyp" (41), and claims, "There will be nothing to prevent us from applying the name 'polyps' to those who turn themselves into any and every shape in the wish to stand well with everyone" (42). I am grateful to Jessica Wolfe for this reference.

dedicated *L'homme machine*.[79] For La Mettrie, irritability pointed to the generative and active powers inherent in matter itself; *contra* Cartesian mechanism and Newtonian laws of force, which were helpless to explain an irritable reaction of tissue far exceeding the force of stimulus, no God or spiritual agent was necessary as first, efficient, or final cause. As Vartanian writes, "In La Mettrie's opinion, the ability of severed muscle-tissue to move in its functional manner when touched (independently of the nervous system) was evidence of the materiality of the soul or, at least, of the 'vital principle' of organisms" (271). In the polyp, this vitality was present not just in the parent organism, but in all of its autonomous parts when the creature was cut into pieces.

La Mettrie pushed his controversial vitalist materialism further with his next publication, *L'homme plante* (1748). Far from excluding man from taxonomic ambiguity, he instead writes (after noting several parallels between human and plant functionality): "If man is not a vegetal production … he is at least an insect whose roots grow into the womb, as the fertilised plant germs do in theirs. However, there would be nothing surprising about the idea, since Needham observes that polyps, barnacles and other animals multiply themselves by vegetation" (82). By alluding to the experiments of Needham, and by describing man as a root-producing insect here, La Mettrie introduces a flat ontology to his natural system, implicitly bringing man to the level of the polyp and of the vegetable.[80] The suggestions in the two works that man is an organic machine capable of plant-like self-generation scandalized orthodox natural philosophy and triggered much debate both on the continent and in England throughout the latter half of the

[79] According to Thomson, however, "La Mettrie did not really grasp the essence of Haller's principle, which was confined to muscles … La Mettrie did not accord muscular tissue any specificity as he was mainly concerned … to defend an active conception of matter. For Haller the distinction between sensibility and irritability (the capacity to react to stimuli which only muscular tissue possesses) was a rampart against materialism because only the soul could be aware of sensations brought by the nerves, a point later emphasized by his translator Tissot in order to dissociate him from La Mettrie" (*Bodies of Thought* 184).

[80] La Mettrie also compared man to a plant in *Man a Machine*: "[man] is like a wandering plant which has transplanted itself" (9).

eighteenth century. In La Mettrie's metaphysics, the matter of all living organisms is self-motile and self-organizing, and there is no divine causal agent or immaterial soul to distinguish man from the beasts.

Like La Mettrie and Needham, Buffon also devoted much attention in his *Histoire* to the polyp, which for him bridges the animal and vegetable kingdoms. Buffon writes:

> there is no absolute essential and general difference between animals and vegetables, but that nature descends by degrees imperceptibly from an animal which is the most perfect, to that which is the least, and from the latter to the vegetable. The water polypus may therefore be considered as the line where the animal creation ends and that of plants begin… the [animal] foetus, at its first formation, may be said rather to vegetate than live. (2: 262-263)

By making the epigenetic claim that the animal fetus vegetates, or expands its material form like a plant,[81] Buffon's metaphor suggests that humans, polyps, and plants all develop in the same fashion, again indicating his flat ontological view. The "polypus" is discussed in several volumes of the *Histoire*, and, unsurprisingly, Trembley's experiments are described at length.[82] Summarizing the experiments of "Mr. Trembly," Buffon again concludes regarding the indeterminate form of the polyp: "We cannot call these animals, nor can we say they are vegetables, and certainly we can still less assert they are minerals" (3: 166).[83] Rather, the polyp is a vital, self-proliferating nexus where the animal and vegetable kingdoms converge, and it is

[81] For Buffon, this is something different from living, as the last phrase indicates. He is perhaps differentiating between the asexual cell growth of the embryo and sexual animal reproduction.

[82] In addition to the passages quoted above, Barr's translation addresses the "polypus" in four other volumes. Three volumes of an earlier, six-volume English translation (1775–76) contain references to the "polypus"; vol. 4 features an extended description of the creature, with references to Trembley.

[83] In volume 1 Buffon speculates on the unity of such an organism: "These organized beings are not so much a single animal, as a number united under one common covering, as trees are composed of a multiplicity of young trees" (1: 241).

this idea of Buffon's that seems to have been most often repeated by English naturalists and commentators in the latter half of the century. For example, in the 1800 translation of Johann Herder's *Outlines of a Philosophy of the History of Man*, a copy of which was owned by Blake's friend, Henry Fuseli (according to the auction catalogue of his library), Herder writes: "When Nature makes a transition from a plant, or a stone, to the animal kingdom, does she more clearly unfold to us the instincts of organic powers? The polypus appears to blossom like a plant, yet is an animal" (60).[84]

And as indicated by his reference to the freshwater polyp in the passage from *Zoonomia* quoted above, Darwin was also attracted to the polyp as a representative of a monist materialist natural philosophy. The "eight-footed Polypus" is first described in Additional Note XXVII, on shell fish, of *The Botanic Garden* (1: 72-73), where it appears among other coralline creatures. A later Additional Note on "Vegetable Impregnation" speculates on the hermaphroditic aspect of polyps: "A conjunction however of both the male and female influence seems necessary for the purpose of reproduction throughout all organized nature, as well in hermaphrodite insects, microscopic animals, and polypi" (1: 106). Describing vegetable animation in the first volume of *Zoonomia*, Darwin writes, "the anthers and stigmas are real animals, attached indeed to their parent tree like polypi or coral insects, but capable of spontaneous motion" (1: 110). As in

[84] See also John Collier's *Essays on the Progress of the Vital Principle from the Vegetable to the Animal Kingdoms and the Soul of Man* (1800): "The line of demarcation is so slightly marked in the Polypus, Star-fish, Sea-nettle, and other marine plants, as well as in the Tremellae and self-moving plants, that … it remains a doubt whether to class them as subjects of the vegetable kingdom or animal" (249-50). Others who reiterate Buffon's claim for the "polypus" as bridge between animal and vegetable include Bonnet (24), Spallanzani (*Tracts* 318), Sturm (3: 116), Goldsmith (7: 244), Sulivan (3: 338), Smellie (524), Brookes (4: xiv), Mavor (2-3), Lobb (2: 188), Wesley (3: 73), and Sibly (52). All of these works were published in English before 1804. According to the 1821 sale catalogue of his library, William Hayley, Blake's patron and neighbor in Felpham from 1800 to 1803, owned Goldsmith's *An History of the Earth, and Animated Nature* (Munby 2: 115). I include this lengthy list to indicate the degree to which the "polypus" was a contentious issue of discussion in England in the sixty years following Trembley's experiments. And there are many works that do not match Blake's spelling of "polypus," but that also taxonomically locate the creature in the unstable border between plant and animal. For instance, Adams devotes an entire chapter to the "Water Polipe," discussing its properties as well as Trembley's experiments. Significantly, this chapter, full of illustrations, is the last of his chapters on animals; the following chapter is "Of Vegetables."

Buffon, the polyp is here linked to coralline animals, while it is also used as an analogy for vegetable growth. And, like La Mettrie and Buffon, Darwin conflates the vegetable and animal kingdoms: the reproductive organs of plants are "real animals." Darwin, who claims that polyps are "all male animals" (1: 553), carries the conflation by analogy further, stating that the creature "can only propagate like vegetable buds by the same kind of irritative motions, which produces the growth of his own body" (1: 495). By comparing Los's lungs to such an "animal flower," capable of taking form without external guidance, Blake alludes to this vitalist tradition.

The "unformd" polypus takes human form in *The Book of Los*, vegetating plant-like into organs: "Heavy falling his organs like roots / Shooting out from the seed, shot beneath" (E 93). Like Buffon's epigenetic model of embryological growth, the fetus that is Los acquires living organic particles from without: "around his spent Lungs / Began intricate pipes that drew in / The spawn of the waters." Los then becomes monstrous, "Outbranching / An immense Fibrous form, stretching out / Thro' the bottoms of immensity raging" (E 93). Like all of the bodies in the Urizen cycle – either self- or sexually generated – Los's is horrible, terrifying, deformed. As Engelstein claims, "Blake's presentation of the polypus as a nonorganized prolific body is every bit as negative as his presentation of Urizen's stultifying ossification" (101). The dark "Form" of "Human Illusion" with which *The Book of Los* ends is incapable of partaking in the eternal delight celebrated in the *Marriage*.

But why should the vital materialisms upon which Blake draws be characterized as equally repugnant as Newtonian metaphysics, since the former were clearly anti-Newtonian in many respects? Why does Blake here suddenly reject the immanently energetic capacities of a monist universe that he had celebrated in earlier works? I contend that it is because the materialist natural philosophies surveyed here – like the dualist systems of Swedenborg and

others – removed the divine from the material universe. They either gestured toward a remote, deistic God as an immaterial first cause, as Darwin and Buffon did, or, like La Mettrie, they were explicitly atheistic. Even a panpsychist materialism like that of Maupertuis was unsatisfactory to Blake, for whom it is necessary that intelligent matter be holy. All of the natural philosophies satirized in the Urizen cycle do not conceive of matter – whether is it dynamically self-active or atomistic and obeying the laws of gravity – as divine. As discussed in the previous chapter, Darwin's *Botanic Garden* is close to such a pantheistic outlook, but even though strong evidence for his monist materialism remains in the first volume of *Zoonomia*, contradictory assertions are much more pronounced in the latter work, such as his opening dualist distinction between matter and spirit quoted above. His conclusion, praising the "Great Source" or immaterial first cause of the material world, takes pains to disassociate his work from accusations of Epicurean atheism:

> had those ancient philosophers, who contended that the world was formed from atoms, ascribed their combinations to certain immutable properties received from the hand of the Creator, such as general gravitation, chemical affinity, or animal appetency, instead of ascribing them to a blind chance; the doctrine of atoms, as constituting or composing the material world by the variety of their combinations, so far from leading the mind to atheism, would strengthen the demonstration of the existence of a Deity, as the first cause of all things. (1: 533)

Darwin thus ends his vital materialist account with a declaration of allegiance to natural religion, impugning the properties of living matter as demonstrative of a transcendent, remote and immaterial first cause. Even if this is an instance of what Donald Hassler calls Darwin's "lip service" to a deistic worldview (17), Blake would have found such a passage repugnant.[85]

[85] Robert Simmons also sees *Urizen* as "a rigorous and scathing satiric critique of the whole basis of eighteenth-century rationalism and its offspring: natural religion" (146).

A monist, pantheist metaphysics, which posited all material creation as being alive, sentient, and divine, provided Blake a foundation for declaring that bodily life was a holy delight in poems like *Thel* and the *Marriage*. In the Urizen cycle, as in passages of *Europe* and *The Song of Los*, that same bodily existence is equated with torment, despair, and shrunken, ossified sensorial existence, owing to a metaphysics – either dualist or monist – that denied the material world's inherent divinity. The flat ontology suggested by eighteenth-century natural philosophers, which was earlier celebrated by Blake because it implied that every form was holy, is in the Urizen cycle a nightmarish vision of corporeal life, aptly visualized in the writhing serpent-worm-chrysalis-human-bat conglomeration on plate 25 (illus. 56), an image that Erdman calls a "can-of-worms picture" (*Prophet against Empire* 207). The chaotic bolus of human and animal forms connotes nothing divine, but rather, as Worrall writes, "The serpent or chrysalis-like shapes suggest the ability of life to change itself in bewildering sequence" (*Urizen Books* 52). The image provides additional evidence for Paley's claim that Blake's serpent imagery acquired a more negative connotation than it had in *Thel* and *Europe* (*Energy and the Imagination* 154-57). Another image conveying this point is on plate 6, which features three plummeting figures bound within serpent coils in a design that Mitchell calls an "upside-down crucifixion" (*Blake's Composite Art* 148, illus. 42), lending support to the idea that *Urizen* is a dark inverse of the *Marriage*. The spiral serpent, image of rebirth and fiery, divine energy in *Europe*, here descends with its despairing human prey, and there is no Devil to reverse the perspective. The protean dynamism of organic life testifies to the divine eternity of material existence in the earlier works, but here the anti-Newtonian lawlessness of living matter creates an image of terror and degradation.

4.6 Remembrances of Holy Things Past

The Urizen cycle alludes to a time when eternal life sprung, when "earth was not" – presumably earth as it is known either through the lens of Newtonian mechanism or vital materialism. We are given a fleeting glimpse of this period in chapter II of *Urizen*, before division and abstraction precipitated the fall, when eternity was characterized by delight in the "flexible senses" of undifferentiated community of Eternals. Ahania's lament in the second poem of the cycle sheds further life on this state of undivided existence. Ahania is identified as Urizen's "parted soul" (E 84), cast off to become "a faint shadow wandring / In chaos and circling dark Urizen, / As the moon anguished circles the earth" (E 85). This division of the soul from the body is, according to the *Marriage*, the fundamental error leading to a fallen condition, and it has happened in *Urizen* as well: Enitharmon's separation from Los in the form of pity occurs because "pity divides the soul" (pl. 13). As Blake emphasizes in "The Human Abstract," the song of Experience that offers another critique of Urizen's abstracting tendencies, pity is an emotion that presupposes division and differentiation: "Pity would be no more, / If we did not make somebody Poor" (E 27). Pity is a product of seeing oneself as separate from and superior to others, like Thel, Urizen, and, ultimately in *Ahania*, Fuzon.

Lust and jealousy, the motivating factors in Urizen's "stretching his awful hand" to cast off Ahania (E 84), lead to the same consequence as pity: both females – Enitharmon and Ahania – are divided from what Darwin describes as a hermaphroditic unity when discussing the polyp. And as has been discussed in the previous section, the question of the fate of the individual polyp's soul during reproduction was central to eighteenth-century natural philosophers studying the phenomenon; in the asexual formation of Enitharmon and Ahania, Blake appears to be satirizing this aspect of the debate. There is no immaterial agent guiding the material

outbranching, epigenetic growth of Enitharmon from a trembling globe of life blood. There is division here, but it is not the Cartesian division of immaterial substance from material substance. Blake's use of "soul" in the Urizen cycle thus retains the same Aristotelian hylomorphic connotation as it had in the *Marriage*, but as his initial pun in *Urizen* on "soul-shuddring" suggests, soul does carry with it a sense of divinity conferred on material existence in the Urizen cycle. To separate the soul from the body is not to deny the existence of some inhabiting, transcendentally supplied immaterial substance – though that is also denied – but simply to deny that the body is godly and the source of delight.

Ahania's lament in chapter V signals her own bodily nature. Now confined to circling Urizen like a petrific planet bound to the laws of Newtonian gravity, she bemoans the loss of the blissful sensory contact that characterized her union with Urizen: "I cannot touch his hand … nor see his eyes / And joy … I cannot kiss the place / Whereon his bright feet have trod" (E 88, 89). These are all sensory – not spiritual – deprivations that Ahania mourns, as she remembers "the bliss of eternal valleys" when she would wake "[t]o embrace Ahanias joy / On the bredth of his open bosom" (E 89). Blake's diction here borrows from the Song of Solomon and echoes Oothoon in the *Visions of the Daughters of Albion*, as Bloom notes (E 908), but the "eternal valleys" recalls the "eternal vales" sung of by the Lilly in *Thel* as well. Like the nonhumans there, the erotic bliss Ahania laments stresses the eternal nature of her bodily joys:

> When he gave my happy soul
>
> To the sons of eternal joy …
>
> When I found babes of bliss on my beds.
>
> And bosoms of milk in my chambers
>
> Fill'd with eternal seed

O! eternal births sung round Ahania

In interchange sweet of their joys. (E 89)

Again, Blake uses "soul" to refer to bodily delight, and the eternal joy sung of here transpires on the material plane and is characterized by interchange; joy cannot occur in isolation, as Karl Kroeber asserts in discussing this passage: Blake's Eternity is not "some vague after-life" but rather the "sustained mutuality of mental and sensual pleasure with other human beings" (*Blake in a Post-Secular Era* 101).[86] Her erotic happiness is conflated with earthly abundance in another micro/macrocosmic parallel: Ahania's "dew" falls "[i]n showers of life on his harvests," and she in turn is "[s]well'd with ripeness" with "[m]y ripe figs and rich pomegranates" (E 89).[87]

Urizen is described by Ahania as walking forth "[w]ith thy hand full of generous fire … On the human soul to cast / The seed of eternal science" (E 89). Again, as in *Thel*, interchange is crucial to the shared joy experienced by both Urizen and Ahania and the "human soul" itself, as Urizen generously shares the divine fire that in *Urizen* he describes himself as fighting and perverting for his selfish purposes. The erotic exchange of bodily pleasure leads to true knowledge; the bliss shared by Ahania and Urizen does not occur in a land "unknown." Rather, true knowledge, science in eternity, comes from a material seed, and Blake's double meaning conveys the flat ontology of his divine material monism: such seeds – both plant seed and human semen – are the source of eternal knowledge, which abstraction cannot reveal. As Engelstein

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[86] Stephen Behrendt makes a similar claim concerning Ahania: "Ahania's vision at once recalls prelapsarian unity and posits an alternative to Urizen's way of looking at the universe, an alternative grounded in exuberance and fertility, in beauty and the mutualism of selflessness" (*Reading William Blake* 147).

[87] Ahania's lament is echoed by Eno at the beginning of *The Book of Los*: "O Times remote! / When Love & Joy were adoration" (E 90). As Mee writes, both women lament "the passing of an age when human desire was recognized as a source of divine inspiration rather than as sinful appetite" (201-202). Worrall claims, "Nothing in Ahania's narrative, not even the concluding lament of its eponymous heroine, should be trusted as verity: it is all derivation and Blake's derivation is as valid as any other" (*Urizen Books* 154). Even if her account is suspect, it nevertheless conveys a positive vision of material Eternity.

writes, this eternal science "is not the science endorsed by Bacon and Locke or practiced by Newton. These natural philosophers represent the arts of rational demonstration which lead to deism and the worship of nature" (107). Green, in characterizing what he calls Blake's "visionary materialism" in the early works, also offers what I take to be an apt analysis in this regard: Blake's materialism is "a system in which seeing the physical world entails a vision of the spiritual, in which the sensual is not denied, nor restricted to the pursuit of philosophical pleasure, but improved to such an extent that corporeal and intellectual pleasures occur simultaneously" (*Visionary Materialism* 70).[88] But even here Green implies a vague dualism – seeing the physical entails a vision of the spiritual, thus suggesting that the two are separate. I wish to stress that Blake does not want a double vision here, but rather a monist one: the spiritual *is* physical. To separate oneself from the eternal seeds in order to magnify, measure, and reason about them, as the natural philosophers discussed above did in order to develop their materialist physiologies, strips them of divinity on Blake's view. It is to erect a Tent of Science between oneself and other beings, which one then sees as godless and degraded.

The Urizen cycle concludes with Los's creation of the dead sun, Blake's image for a deistic dualism that we have seen in his annotations to Swedenborg, the *Marriage*, and on the frontispiece to *The Song of Los*. The uniform substance that characterizes Blake's pantheist monism in the *Marriage* is fire; it is the source of bodily energy and the delight enjoyed by beings whose form is ever changing, ever springing. In *The Book of Los* these "flames of desire" are explicitly characterized as "living flames / Intelligent, organiz'd," as well as "infinite" (E 91, 94). But due to the divisive acts of Los and Urizen and the ensuing conflict and sorrow, these same flames are described as "[r]aging furious," "arm'd / With destruction & plagues," standing "[w]ide apart" from Los, offering neither light nor heat; ultimately, "the separated fires froze in /

[88] Engelstein also argues for Blake's "vision of an immanently divine and mutable materiality" (106).

A vast solid without fluctuation" (E 91). Los seizes the infinite divine fire and in his smithy he is described "beating incessant, condensing / The subtil particles in an Orb" until "the Sun / Stood self-balanc'd. And Los smild with joy" (E 94). In Blake's parody of demiurgic creation, Los forges the divine flames of the universe into a dark, cold perversion of themselves.[89] The sun becomes the ossified, dead image of a static, dark world that Urizen seeks at the outset of the cycle, as Ault observes: Los "inadvertently creates the very thing he hates, 'a solid without fluctuation'" (*Visionary Physics* 150). In his reading of this passage, Ault argues that "Blake fuses the Cartesian and Newtonian optical and cosmological principles in Los's act of cosmogeny, and, in the process, Blake criticizes all these doctrines" (142). There is a clear connection between the particulate composition of the dead sun and Ault's observation that "[f]or Newton, light is composed of the same inert material particles as solid matter" (152); less clear is what Ault claims to be the Cartesian aspect of the satire: "The whirling of Urizen's backbone associates him with the Cartesian vortices" (151) seems a bit of a stretch, and Ault neglects that the world of atoms and void – of "bright mass" and "Dark vacuity" (E 94) – in which Los binds Urizen applies to Newtonian atomistic metaphysics, but not to a Cartesian plenum, which does not admit of a vacuum.

Nevertheless, Ault's pointing out the parallel between this passage and the distinction made in Genesis between the creation of light and the creation of the sun is compelling (153). Los's sun is dead, as is the dark, cold, world, proliferating with monsters that such a sun fails to illuminate. The sun is dead because the fires comprising it have – owing to a dualist and deist metaphysics – been made inert, particulate, and stripped of their infinite divinity and intelligence. Whatever trembling globes of life blood do emerge in such a cosmos – despite the anti-

[89] Leopold Damrosch keenly observes that the question posed in "The Tyger" regarding the creator – "Did he smile his work to see?" is answered affirmatively here (*Symbol and Truth* 379).

Newtonian nature of the material giving them form – are seen from Blake's metaphysical perspective as horribly deformed because they are conceived to be separated by the Tent of Science from the divine, which has been displaced to a transcendent first cause. Life resists Newtonian law, but that does not make it holy.

Blake's Urizen cycle presents a horrific world seen and lived through the perspective of natural religion, whether in the form of Newtonian metaphysics, which separated God from the inert matter of the universe, or the vital materialism of the proliferating life sciences of the eighteenth century, which, while arguing for active matter, posited God as a remote, immaterial first cause, whose existence could be known by the rational practices of experimental philosophy, which combined empiricism and abstraction. Raine expresses this point aptly: for Blake, "the hell cut off from God is the universe as conceived by the scientific philosophy" (2: 56). However, Raine then ascribes a dualism to Blake that I believe is unsupported in the early works: "life is, as Blake believed, spiritual in origin, and 'earthborn' creatures are a fantasy of Urizen's scientific universe" (2: 86).[90] Blake will eventually turn towards such an extreme version of Christian dualism, but nowhere in the works discussed here does Blake suggest that life has an immaterial – spiritual in Raine's sense – origin. The divine paradise remembered by Ahania is not spiritual in origin – its delight is wholly owing to material, sensual pleasures, the spring of eternal life. And the intelligent flames with which Los creates the dead sun are not, as Raine claims, immaterial to begin with, an influx from a separate, spiritual realm (1: 229); rather, Los fails to recognize the divinity inherent in the material, living fire – thus he kills it.

[90] Raine claims that Blake approvingly draws from Swedenborg's influx theory (2: 66), which is discussed in the previous chapter, where I argue against such a view. I am of the opinion of Daniel Stempel, who contends that Blake "rejected Swedenborg's doctrines, because he felt that any divine influx through the affections would rob man of freedom of choice and make him a puppet dangling from the strings held by a Urizenic deity" (118), though I would add that any divine influx would also imply that man was not God.

Blake's dark satire thus resonates – more so than his early tractates – with Hume's negative characterization of natural philosophy in *Dialogues Concerning Natural Religion*. In chapter 1 I discussed how Hume's Philo introduces some of the properties concerning the material universe that Blake articulates in *No Natural Religion*. Philo's claims can now be seen to resonate with the various vital materialisms surveyed in this chapter. For instance, Philo says, "For aught we can know *a priori*, matter may contain the source or spring of order originally within itself, as well as mind does" (30). Hume seems to have physiological and embryological theories in mind as Philo continues:

> By observation, we know somewhat of the economy, action, and nourishment, of a finished animal; but we must transfer with great caution that observation to the growth of a fetus in the womb, and still more to the formation of an animalcule in the loins of its male parent. Nature, we find, even from our limited experience, possesses an infinite number of springs and principles, which incessantly discover themselves on every change of her position and situation. (32)

Philo is here cautioning against making inferences concerning the origin of the universe based on limited empirical knowledge, but in doing so he acknowledges, as had Buffon, Maupertuis, Needham, and Darwin, that the "infinite number of springs and principles" acting in the development of living beings is outside the explanatory scope of rational systems like mechanism. As discussed in the first chapter, from the infinite self-activating properties of living matter, Philo, like Plato in the *Timaues*, infers that the world itself is an animal with the deity as its soul (56).[91]

[91] According to Harper, Blake's "conception of [the earth in *Urizen*] as one animal 'with thousands of rivers in veins of blood' 'like a human heart, strugling and beating' is indebted to the Platonic theory of the universe as one great animal" (209).

But such pantheism as speculated upon by Philo quickly deviates from Blake's assertions in *No Natural Religion*, and the former's speculations on the nature of the universe sound more like descriptions of the chaotic deformities portrayed in the Urizen cycle. Critiquing Cleanthes's argument from design, Philo says, "This world, for aught [Cleanthes] knows, is very faulty and imperfect, compared to a superior standard; and was only the first rude essay of some infant deity, who afterwards abandoned it, ashamed of his lame performance" (52). Later, Philo's critique becomes more scathing concerning the "lame performance" of the creator(s)[92] of the universe, as he introduces the problem from evil – given the disorder, pain, and suffering evident in the world, how can one infer a benevolent, all-powerful deity? Continuing the analogy of the universe as a building and God as the architect, Philo claims: "If you find any inconveniences and deformities in the building, you will always, without entering into any detail, condemn the architect" (91). And there are certainly inconveniences and deformities in the universe that both Philo and Blake describe. "Look round this universe," Philo instructs his interlocutors:

> What an immense profusion of beings, animated and organized, sensible and active! You admire this prodigious variety and fecundity. But inspect a little more narrowly these living existences, the only beings worth regarding. How hostile and destructive to each other! How insufficient all of them for their own happiness! How contemptible or odious to the spectator! The whole presents nothing but the idea of a blind Nature, impregnated by a great vivifying principle, and pouring forth from her lap, without discernment or parental care, her maimed and abortive children! (96-97)

This is an apt description of Urizen's world, swarming with beings that are "animated and organized" according to self-activating material powers, but which operate in an atmosphere of hostility and destruction, living upon death, devoid of pleasure, happiness, and care. It is a world

[92] Philo earlier entertains the possibility of more than one deity (51-52).

whose lack of familial community isolates individuals to torment and misery, despite the "great vivifying principle" that animates them. For Hume, such horrible forms of deformity invalidated any recourse one might take in an all-wise God as immaterial first cause.

Hume's diction in the above passage captures a crucial aspect of Blake's satirical argument: natural philosophers, including Darwin, had indeed "inspect[ed] a little more narrowly these living existences," and thus their deistic conclusions were the result of limited, narrow perceptions. Blake does not find his ideal of expansive, "all flexible," imaginative perception in the microscopic discoveries of a Needham or a Buffon. Ironically, on Blake's view, the new beings and properties they introduced into the realm of natural philosophy served only to shrink humankind into the illusory belief that God is not exclusively active in the human breast, but rather only as a distant immaterial cause. By denying God's manifestation as not only human communities, but as the entire material universe, natural philosophers and their natural religion had given birth to a monstrous world.

CHAPTER 5

Sea Change: Blake's Two Versions of *Newton* and the Turn Away from Nature

"We are not to consider the world as the body of God, or the several parts thereof, as the parts of God."

—Isaac Newton[1]

5.1

Blake's satire of natural religion in the Urizen cycle still faintly suggests his vision of pantheist monism, though this metaphysics is more implied in these poems than explicitly stated, as it is in the early tractates, *Thel*, and especially the *Marriage*. In the mid-1790s, I argue, he surrenders his claim for the holy infinitude of the material world and comes to share the vision he satirizes in works like *Europe* and *Urizen*: the natural world is a dark, monstrous, and evil, and salvation and eternity no longer lie in materiality. The works that best capture Blake's turn away from the natural/material world as the only locus for divinity are the series of large color printed drawings, which were first designed and executed in 1795. In this concluding chapter, I focus on a particular color print, *Newton*, the two extant versions of which – one executed in 1795 and the other in 1804-05 – serve as emblems of what I argue is Blake's philosophical transition from pantheist monism to a brand of Christian dualism, the "One Religion" that in *Jerusalem* Blake calls the "Religion of Jesus" (E 170), which privileges the human while rejecting all other forms of corporeality as a fallen state to be transcended. In the later version of

[1] *Opticks,* Query 31, 379.

the print Blake depicts Newton in an undersea landscape proliferating with polyp-like sea anemones, and the design undermines what Blake saw as the inflexibility of Newton's mechanical philosophy. Here the natural philosopher sits contracted in underwater darkness, blind to the vital properties of the self-replicating coralline creatures for which his physical laws could not account. Moreover, in Blake's design Newton's gloriously powerful body is only contracted and fallen solely as a result of his mental fixation on an abstract diagram.

The two versions of *Newton* continue Blake's satirical attack on both Newtonian natural philosophy and vital materialism that was initiated in the Urizen cycle. In the visual metaphysical argument made via the 1804-05 design, however, Blake suggests that Newton has both enslaved himself to mathematical abstraction, and that his "human form divine" (*Jerusalem*, E 173), in order to attain (or regain) its divine form, must become disentangled from the oppressive and monstrous material world surrounding him. Blake's flat ontology, which in the *Marriage* recognized God and the infinite in all beings, not just man, is here abandoned. The shudder of disgust that can be discerned in Blake's treatment of the polyp – both in his poetry and in the visual design of the later *Newton* print – heralds, I argue, a wholesale rejection of nonhuman forms as degraded agents of illusion in the Christianized natural philosophy of his later works. The later *Newton* design serves as a symbolic fulcrum for Blake's metaphysical shift, and is also characteristic of Blake's imaginative mode of natural philosophizing. Here he argues through image alone, and the single striking design engages viewers on the primal level of vision: we *see* Blake's argument, conveyed not through verbal rationalization, nor through the lyric or narrative vehicle of verse, but in a mysteriously rich and arresting hieroglyphic emblem.

In the second section of this chapter, I consider the material history of Blake's two versions of the *Newton* print and the significant differences between the two. In section 5.3, I

examine the historical natural-philosophical sources – some of the authors of which will be familiar from chapter 4's survey of writings on the polyp – that pertain to Blake's deployment of the sea anemone in the 1804-05 version of *Newton*, an analysis of which is given in the final section.

5.2

Blake printed the *Newton* large color print three times, twice in 1795 (first and second pulls) and once in 1804–05. The dating of the final impression is owing to Martin Butlin's discovery of an 1804 watermark on this print, a finding published in his 1981 article "A Newly Discovered Watermark and a Visionary's Way with His Dates."[2] One of the two 1795 impressions is untraced, leaving two of the three extant: one from 1795 (Butlin *Paintings and Drawings* no. 307, illus. 57) and one from 1804-05 (Butlin *Paintings and Drawings* no. 306, illus. 58).[3] *Newton* is part of the series of twelve large color prints, centered, according to the editors of the William Blake Archive, "around images of the fallen world." The 1804-05 impression, which features the naked natural philosopher contracted and applying dividers to a mathematical design while seated on what appears to be a coral reef on the ocean bottom, certainly adheres to this theme. In this fallen world, one cannot fall any lower than the sea floor. The mysterious image invites interpretation, especially given Newton's prominence as a target—along with Bacon and Locke—insofar as he represents limited imaginative vision and a mechanistic metaphysics throughout Blake's poetry, as has been discussed in previous chapters.

[2] The other design reprinted in 1804–05 is *Nebuchadnezzar*; he, like Newton, appears in a contracted, fallen position (illus. 59). I am grateful to Joseph Viscomi for generously sharing information concerning the dates of the three printing sessions for *Newton* from a manuscript for a forthcoming book; he argues that *Nebuchadnezzar* was reprinted twice c. 1804–05.

[3] Butlin acknowledges that there may have been a third printing (*Paintings and Drawings* no. 307), and Viscomi argues for the untraced 1795 impression based on evidence of a second printing during that year.

David Bindman, for instance, reads the print as representing "the triumph of Science and Natural Religion in the 18th century" (*Graphic Works* 477).

No interpretation, however, has discussed the marked differences between the two prints of *Newton*: the 1795 version portrays Newton sitting in the same hunched posture on a very dissimilar rock formation, the surface of which—with the exception of some patches of burnt orange and blue—is largely bare, like his own body.[4] He seems meant to be associated with the rock on which he sits, emphasizing Blake's view that the laws of Newtonian physics had fixed the world in Urizenic petrification, as later stated in *A Descriptive Catalogue*: "The Horse of Intellect is leaping from the cliffs of Memory and Reasoning; it is a barren Rock: it is also called the Barren Waste of Locke and Newton" (E 546).[5]

In the 1804-05 print the rock is teeming with life, as if a coral population of sponges and spiky urchins had proliferated on the work in the intervening ten years. The richly textured and finely articulated coralline forms result from Blake's method of color printing, which Viscomi has described as "printing wet paint from flat millboards or relief plates onto large sheets of paper." The printed paint could be left in its "accidental" spongy state (closely resembling the

[4] Butlin writes that the inscription "NEWTON" that appears on the rock in the 1795 print "is totally uncharacteristic of Blake's hand and would seem to be some later restorer's imaginative reconstruction of some worn pen drawing indicating texture on the rocks to the left of the protagonist" ("Physicality" 17). In his catalogue raisonné, he provides a clue as to why a restorer or owner might have written Newton's name on the design: the print was sold as "Archimedes" in the Hogarth sale of 1854 (p. 167). Since Blake inscribed "Newton" below the design of the 1804–05 print (166), the text on the 1795 print might have been an attempt to rectify the misidentification of Newton as Archimedes. I am grateful to Robert Essick for informing me that the 1795 print was sold on 11 Dec. 1865 by the estate of Samuel Prince for £5.10s. to Halstead (Butlin indicates this sale as well, p. 167) and that it was titled "Newton" and described as "a fine fresco drawing in colours, signed by the artist" (Blake signed the print "Fresco W Blake inv"). Thus, at least by 1865, the figure in the 1795 print was correctly identified as Newton. William Michael Rossetti's catalogue raisonné, included in Alexander Gilchrist's 1863 biography of Blake, identifies the 1804–05 print (owned by Butts) as *Newton* (2: 203), but makes no mention of another extant print. Rossetti lists "Archimedes" (2: 250) in Blake's "Uncoloured Works"; Butlin suggests that this is a reference to the pencil sketch for *Newton* (*Paintings and Drawings* no. 308) or a confusion with the 1795 color print.

[5] Jean H. Hagstrum connects the *Newton* print to this quotation ("William Blake Rejects the Enlightenment" 73); he, however, is referring to what is now identified as the 1804-05 print.

rough texture of a coral reef), which Blake could choose to refine by washing over the printed colors in watercolors and by outlining them in pen and ink (*Blake and the Idea of the Book* 128). Perhaps the rich, spongy forms resulting from Blake's color-printing technique suggested, in the later version, marine creatures, which he could then develop in pen and ink. The most notable additions in this regard are the two sea anemones or marine polyps rooted below Newton's buttocks. Their tentacles trail in an ocean current, an effect that lends a dynamism to this later design.

The sea anemones in this print of *Newton* are Blake's first visual depiction of the polyp, the asexual self-regenerating "animal flower" that made its textual debut in Blake's poetry in the *Book of Los*, as discussed in the previous chapter. S. Foster Damon refers to the creatures depicted in the 1804-05 print of *Newton* as "squid" (332), erroneously I think, since their rooted stems and tentacles bear a much closer resemblance to the sea anemone. According to several eighteenth-century naturalists, the sea anemone, along with the polyp, is one of the many coralline members of the Zoophyte family. The close relationship between these creatures was explicitly articulated in three essays by Abbé Dicquemare published between 1773 and 1777 in *Philosophical Transactions*, all of them containing engravings by James Basire, under whom Blake served as an apprentice during those years (illus. 60, 61).[6] For Dicquemare, the larger sea anemone afforded the natural historian a more perceptible demonstration of the reproductive and self-organizing properties also observable in the polyp: "In so minute an object as the fresh-water polypus, much is easily overlooked; but in the sea-anemonies, although we are far from seeing every thing, yet it is possible, even without the assistance of glasses, to discern a great deal which must escape us in the most diligent examination of the other animal" ("A Second Essay"

[6] William S. Doxey provides a complete list of *Philosophical Transactions* articles containing engravings by Basire published from 1772 to 1778 (254-60). Dicquemare's essays were translated from the original French for their publication in the *Transactions*.

232). By his third essay, he felt confident enough to declare that his observations had "afforded [him] an opportunity to justify some eminent men, whose assertions concerning the multiplication of the fresh-water polypi by sections, have met with the most unmerited contradictions" (57).

Another essay in *Philosophical Transactions* containing engravings by Basire focuses on a third member of the Zoophyte family, the *Gorgonia* (illus. 62). In "On the Nature of the *Gorgonia*; That It Is a Real Marine Animal, and Not of a Mixed Nature, between Animal and Vegetable," John Ellis writes that "the *gorgonia*is an animal of the *polype* kind, resembling the common fresh water *polype* in many of its qualities" (2). The polyp "sends out its young from its side, like buds," as "every one knows," and "the *gorgonia* grows nearly in the same manner" (2). Although the images of the sea anemone and *Gorgonia* engraved by Basire more closely resemble the coralline forms in Blake's later print than do illustrations of the polyp in works addressed in the previous chapter, all of the organisms demonstrate the vital, self-regenerative, and reproductive properties that are crucial to my discussion. In this essay I use the term polyp—which Blake spells "polypus"—to designate a set of vital properties exhibited by several organisms, including the sea anemone, in the coralline family of Zoophytes.[7]

In addition to the detailed coralline forms and the shading and enhanced musculature of Newton's body, another aspect of the later print that is lacking in the 1795 design is the mathematical diagram that Newton is measuring with his dividers: a curve inscribed within a triangle. Although he is clearly using dividers on a scroll in the earlier print, no design is

[7] Ebenezer Sibly's *A Key to Physic, and the Occult Sciences* discusses, under the broader heading "Of Animal Flowers," the "polypus" and the "sea-anemone." Sibly writes, "The grand argument for animal life in vegetables, was inferred from the curious construction of the fresh-water polypus, and the *actinia* genus, called animal flowers, sea-anemone, sea-sun-flower, &c. which having indeed the external form and figure of vegetables, with scarcely any progressive motion, might easily deceive superficial observers" (56). James Anderson's *Recreations in Agriculture, Natural-History, Arts, and Miscellaneous Literature* (1799–1802) also calls the sea anemone an "animal flower … an animal of the polypus tribe, so called from the resemblance it bears to the flower of that name" (2: 79, 80).

perceptible. These details—polypus and diagram—raise the question, what motivated Blake to make such significant changes to the design in the later print? The 1795 print is neglected in critical discussions,[8] though Butlin's discovery allows for a comparative examination of the two extant prints, executed nearly ten years apart. I take that opportunity here.

Butlin initially assumed that 1795 was the date of composition for the Tate (1804-05) print because it is the date that Blake himself inscribed on the work (see *Paintings and Drawings* no. 306). However, his discovery of the watermark led him to characterize Blake's date as an instance of "visionary dating": "There is absolutely no way in which the copy of *Newton* in the Tate Gallery …, on paper watermarked 1804, can have received its basic color printing some nine years earlier in the '1795' of the date actually written on the design by Blake himself" ("Physicality" 6). According to Viscomi, Blake is operating more like a printmaker than a painter: he dated the printable matrix and not each subsequent printing, just as he did with the illuminated books.[9]

Although the detailed coralline forms in the 1804–05 print provide substantial evidence, several commentators have been tentative about or outright opposed to locating the scene undersea. In the catalogue raisonné assembled for Gilchrist's biography, William Michael Rossetti described the print as "full in the colour of the sky and rocky bank" (2: 203), while Dante Gabriel Rossetti – in the supplement to the biography – characterized Newton as sitting on

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[8] Paul Miner, in the earliest full essay devoted to Blake's symbolic treatment of the polypus in his poetry, writes, "Blake illustrated the sea anemone in his famous color print of *Newton*" (198n1), suggesting that he is referring to the 1804–05 print. Anne T. Kostelanetz [Mellor], Essick ("Blake's 'Newton'"), John Gage, and Engelstein all refer to and include reproductions of the later print in their studies, as does W. J. T. Mitchell. Reproductions of the work in the two book-length studies of Blake and Newton, Ault's *Visionary Physics* and Peterfreund's *William Blake in a Newtonian World*, are of the later print. Additionally, all major articles and chapters addressing *Newton* over the past half century have discussed only the 1804–05 print.

[9] I am again indebted to Viscomi's manuscript for this information. Critics prior to Viscomi have also addressed the difficulty of dating Blake's works. See, in addition to Butlin's "A Newly Discovered Watermark," Erdman's "The Dating of William Blake's Engravings."

a "rock covered with fossil substance or lichen of some kind"; interestingly, however, this "fossil substance" must have suggested something aquatic, since he compared its intricate and realistic-looking texture to "a photograph from a piece of seaweed" (1: 375). Yet a century later, Hagstrum described Newton as sitting "on a rock in [a] kind of stony and desolate landscape" ("William Blake Rejects the Enlightenment" 73); according to Gage, "it seems improbable that [Newton] is seated on the sea-bed (i.e. beneath the waters of materialism), as has recently been suggested" (372),[10] and the aquatic appearance of the vegetation is merely a result of the "colour-printing process, and does not differ from similar features in the *Nebuchadnezzar*" (373n8).[11] More recently, Mitchell asked, "Are we beholding a nocturnal meditation or an undersea tableau, a coral reef adorned with luminous vegetation washed by invisible tides?" (455).[12] I believe the latter, insofar as the 1804–05 print – with its carefully depicted sea anemones, sponges, and urchins – is concerned.

I do not make the same claim for the 1795 print, however, which appears not to be undersea. The coloring here suggests that Newton is sitting on a rock that is partially covered with moss and lichen, like the rocky forms surrounding Urizen in plate 9 of *Urizen* (illus. 63). The blue-green area in the lower left corner of the 1795 print has been touched up in places, as at the base of the rock, to resemble tufts of grass, and the reddish-orange splotches here could be

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[10] As Gage notes, the "recent suggestions" had been made by Kostelanetz and Raine. Prior to these suggestions, Geoffrey Keynes, in discussing the pencil drawing on which the design is based, argued that "it has not usually been noticed that in [the later color print] Newton appears to be seated at the bottom of the sea, the water symbolising the materialism of Newton's philosophy. The evidence of this are the anemones attached to the rock … and the sea-weeds waving in the current" (*Pencil Drawings*, no. 8). Paley also identifies the sea anemones in the later print, but refers to the "lichened rock" – not a coral reef – behind Newton (37).

[11] Essick claims that "the oft repeated contention that 'Newton' is an underwater scene is as difficult to substantiate beyond reasonable doubt as it is hard to dismiss" ("Blake's 'Newton'" 149).

[12] Ault also poses the possibility in the form of a question, suggesting another option as well: "Is the figure sitting under water on a rock? Or is he in an outer-space void (perhaps dotted with the particulate 'aether')?" (3). I find that the rich variety of forms surrounding Newton in the 1804-05 print discounts the hypothesis that the scene is set in merely an aether-dotted void.

fallen leaves. There is more evidence in this early print to indicate that the scene is located at the base of a large rock in a dark forest, and not at the ocean bottom. I contend that between 1795 and 1804–05 Blake decided to change *Newton*'s rock to a coral reef – a drastic modification, and an instance of what Essick calls Blake's "creative revisionism – not the static maintenance of the same 'original' image, but its continual reconception each time it is executed" (*Language of Adam* 163).[13] I find that Blake's treatment of the corallines in the later *Newton* print shares philosophical affinities with the vast and contested body of writing on the polyp as an emblem of vitalist metaphysics, which was discussed in the previous chapter.

The sea anemone in the later print of *Newton* corresponds to a proliferation of references to the polypus in Blake's poetry between 1795 and 1804-05. After its first appearance in *The Book of Los*, the polypus emerges in abundance in the texts of the later prophecies: three times in *The Four Zoas*, nine times in *Milton*, and eight times in *Jerusalem*. In addition, there are the numerous designs for *Jerusalem* that feature human-animal-plant hybrids, the representative symbol for which, according to Denise Gigante, is the polyp: "By providing empirical evidence for the generation of new life forms beyond the traditional coupling of the sexes, [the polyp] decentralized God's creative power, spreading it through all the fibers of nature and shattering those structures (preformed parts and germs) supposed to contain it" ("Blake's Living Form" 481).[14] After 1795 – and thus after the initial printings of *Newton* – the polypus occupied a

[13] Viscomi argues in his unpublished manuscript that the method of color printing made it so that Blake was not tied to the model. He could take liberties with the design because the medium encouraged improvisation. The millboard matrix from which the design was printed contained only the outline of the composition. Each time the outline was painted anew, the surface areas, as well as the foreground and background, created noticeably different-looking designs.

[14] See chapter 3 of her *Life*, which is devoted to an analysis of epigenetic symbols in both *Jerusalem* and *Urizen*. Epigenesis refers to the theory that matter contains within itself the capacity for growth and differentiation into various organs (in the case of an embryo). Gigante uses this biological model as a lens through which to discuss Blake's two illuminated books and speculates that Blake may have been influenced in this regard by the German vitalist physiologists Caspar Wolff and Johann Blumenbach (111).

significant place in Blake's imagination, appearing as a multifaceted motif, having philosophical affinities with the vast and contested body of writing on the polyp as an emblem of vitalist metaphysics discussed in the previous chapter. The change to the design of *Newton* serves as a record of this artistic and philosophical transformation.[15]

5.3

What influenced Blake to feature the polypus so abundantly in his poetry after 1795, and to visually depict it in the 1804-05 *Newton* print? In the second chapter of *Anxious Anatomy*, Engelstein suggests that Blake's source was the *Cyclopaedia* (1802–20), for which he engraved eight plates: "Rees's *Cyclopedia* discusses coral not only under its own entry …, but also under the heading 'Polype, Marine'" (104).[16] Although Essick writes that "Blake may have become involved in the project as early as 1803" (*Commercial Book Illustrations* 109), Blake could have read the same entries Engelstein refers to in Rees's 1786-88 edition of the *Cyclopaedia*.[17]

I find the identification of the *Cyclopaedia* as Blake's source to be doubtful for several reasons. Although he contributed engravings to the 1802–20 edition, those engravings were mainly of sculpture, unrelated to any coralline topic. Blake's sculpture plates have imprint dates of 1815 and 1816 (Essick, *Commercial Book Illustrations* 110-12), while fascicle 55, containing the entry on the "polype," was published in 1814. Given these late dates, the edition of the *Cyclopaedia* that Engelstein and Mitchell cite could not have been the source for Blake's

[15] This study, in confining its interpretive scope to the two large color prints of *Newton*, does not attempt to analyze the polypus as it functions in the poetry of Blake's late prophecies. Aside from Gigante's chapter (see note 13 above), the most extended specific study of the polypus motif in Blake's poetry remains Miner's 1960 essay.

[16] Mitchell also suggests that Rees was Blake's primary influence ("Chaosthetics" 457).

[17] The *Cyclopaedia* was first published by Ephraim Chambers in 1728, and several editions followed. Rees supplemented and expanded upon Chambers in a five-volume 1786-88 edition. The version to which Blake contributed engravings had grown to thirty-nine volumes.

incorporation of the polypus in the *Newton* print. Even the entry on coral – to which Engelstein alludes – was not published until 1808, more than two years after the later version of*Newton* was printed.[18] Moreover, Blake's consistent spelling of "polypus" differs from the "polype" that appears in all editions of the *Cyclopaedia*.[19] I propose that the entry on the polyp in Rees's editions is only part of the varied discourse that proliferated over the course of the eighteenth century, which was discussed in the previous chapter, and that, in addition to the *Philosophical Transactions* articles with engravings by Basire, there are more likely and compelling sources for Blake's employment of the polypus – among them Buffon and Darwin.[20]

A few additional points from the authors addressing the polyp discussed in section V of the previous chapter are particularly relevant to Blake's rendering of the sea anemone in the 1804-05 *Newton* print. For one, Henry Baker's *Attempt towards a Natural History of the Polype* includes over 150 illustrations of the polyp, several of them bearing a resemblance to the waving tendrils in the coralline forms in Blake's later print of *Newton* (illus. 64). And Buffon is also notable, insofar as Blake's design is concerned, for not restricting his discussion of the polyp to Trembley's freshwater variety, but for describing the many forms that the creature can take, including the sea anemone. A two-volume abridged translation (not Barr's) of *Natural History*, also published in 1792, contains a nine-page section on the "polypus." In discussing its marine forms Buffon writes, "In other parts of the sea are seen sponges, of various magnitude, and extraordinary appearances, assuming a variety of phantastic forms, like large mushrooms, mitres,

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[18] Thomas Butts's receipt account with Blake indicates that the later print was purchased on 7 Sept. 1805 (Keynes, *Letters* 117-18).

[19] Blake's use of the three-syllable spelling was metrically significant as well.

[20] Though I focus on literary sources (some of which – such as the *Philosophical Transactions* articles – contain illustrations), it is also possible that Blake witnessed an exhibition of coralline creatures. Nelson Hilton speculates that Blake may have seen a "polypus" in the 1780s at John Hunter's Anatomical Theatre ("Blake and the Perception of Science" 57-58). Moreover, during his time by the sea in Felpham (1800-03), he might have observed coralline creatures in tidal pools near his home.

fonts, and flower-pots" (2: 396).[21] He goes on to discuss how the polyp produces the coral in and on which it lives, with the multitude of excretions joined together to form "a considerable mass, and, as most animals are productive, in proportion to their minuteness, so these multiplying in a surprising degree, at length form those extensive forests that cover the bottom of the deep" (2: 398). Such a living forest of sponges and flower-like coralline forms is an apt description of the "considerable mass" upon which Newton sits in the 1804-05 color print, as opposed to the mostly barren rock of the 1795 version.

Darwin's *The Temple of Nature* (1804), like his earlier works already discussed, makes additional references to the marine polyp. Like *The Botanic Garden* before it, *The Temple of Nature* poetically describes – with the supplement of natural-philosophical prose notes – a world formed by what contemporary theorist Jane Bennett calls "vibrant matter."[22] Darwin echoes La Mettrie's and Buffon's arguments for the self-activating and self-organizing capacity of organic matter, which is radically different from Newton's inert corpuscles: "Hence without parent by spontaneous birth / Rise the first specks of animated earth" (1.4.247-48). The "animated earth" recalls the *anima*, or world-soul, of the Neoplatonists, which for eighteenth-century vitalists was diffused as an immanent, generative principle throughout living matter, as Trembley's polyp saliently demonstrated. In the eighth additional note Darwin describes how polyps "perpetually propagate themselves by solitary reproduction." Moreover, in the second canto, he writes:

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[21] Like Buffon, Dicquemare observed the same vitalist properties of the polyp in the larger sea anemone, and he was aware of the anti-mechanistic metaphysical implications of such organisms: "The sea-anemonies give evident marks of sensibility; shall I thence conclude, that a soul animates them; or shall I grant that they are deprived of sensation, although favoured with the organs of it?" ("A Second Essay" 239). In the third essay the question still concerns him: "Can it be admitted that in these animals the vital principle is peculiar to every particle?" (64). The sea anemone takes its name from the flower, as Anderson later remarked (see note 6). Anderson also observed a similarity between other types of polyp and the marigold blossom (2: 80); see Sibly 59 on the sea anemone and the marigold. The rough, tufted texture of the creatures in Blake's later color print conveys this parallel, suggesting that there may be more polyps on the reef than just the two sea anemones.

[22] Placing herself in the monist tradition of Spinoza, Bennett writes, "The habit of parsing the world into dull matter (it, things) and vibrant life (us, beings) … encourage[s] us to ignore the vitality *of* matter and the lively powers *of* material formation" (vii).

So the male Polypus parental swims,

And branching infants bristle all his limbs;

. . . . . .

Unknown to sex the pregnant oyster swells,

And coral-insects build their radiate shells. (2.2.85-86, 89-90)

By linking the polyp to other coral insects, Darwin is referring to the marine form of the creature, and by describing the offspring as "branching," he again echoes La Mettrie and Buffon in hybridizing the creature as a link between the plant and animal kingdoms, an animal flower.

Even if Blake did not read these lines in the poem itself, this passage is quoted in reviews of *The Temple of Nature* in the *Annual Review* for 1803 (1804): 592-93 and the *Universal Magazine* (May 1804): 514.[23] In addition to reviews of Darwin's work, several other references to the "polypus" can be found in British periodicals between 1795 and 1804. One is a letter from "B. E." to both the *Universal Magazine* (Aug. 1801) and the *Edinburgh Magazine* (Oct. 1801), "On the Difference between Animals and Vegetables," which contains references to Buffon and Darwin.[24]

Thus, many works participate – more forcefully and to greater effect than Rees's *Cyclopaedia* entry – in the eighteenth-century debate over the vital properties of the polyp. I contend that Blake drew on the ideas shared by La Mettrie, Buffon, and Darwin – and

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[23] *Phytologia* was reviewed in the *Monthly Review* of Oct. 1800: "According to some [naturalists], the union of small beings, which may be reproduced individually, has formed the approximation of the coral and polypus to a vegetable state" (114).

[24] Buffon is even quoted: "The fresh water polypus may be regarded as the last of animals and the first of plants" (*Edinburgh Magazine* 255), though the author is arguing against Buffon's famous conflation of the two kingdoms. An anonymous letter to the editor of the July 1804 issue of the *Universal Magazine* is entitled "On the Propagation of Life among Animals and Vegetables" and states, "The principle of *life* seems equally diffused through every part of [the polypus's] structure" (15).

disseminated in the numerous works that engage in the same ideas – to develop a design in the later *Newton* print that is more symbolically complex than the 1795 version.

5.4

In the *Newton* prints Blake is drastically subverting the poetic tradition of deifying the natural philosopher that was discussed in the previous chapter[25] – nothing could be more antithetical to Thomson's image of Newton than the nude figure hunched in the gloom of the seafloor in the later print. Taken in isolation, Newton's youthful, muscular body is consistent with the angelic, heroic image conjured by Thomson's poem. But Blake ironizes this deification by immobilizing such a body in a contracted, humiliating posture.[26] The same contraction and lowering of a powerful human form is seen in *Newton*'s companion color print, *Nebuchadnezzar*, which depicts the tyrant bestialized, crawling on his hands and knees with a terrified expression on his face.[27] Mellor argues that these two prints show Blake using "the conventions of romantic classicism" to depict a fallen world characterized by political tyranny and "limited, rationalistic

[25] See Nicolson for a full account of the treatment of Newton in eighteenth-century British poetry. She claims that Blake's animosity belied a secret attraction: "We may question whether Blake could have hated Newton so heartily had he not responded to him more than he was willing to admit" (166); see also Ault, *Visionary Physics*, 162.

[26] Anne Mellor compellingly argues that the posture of Blake's figures is more revealing than facial expressions or other physical attributes, given the smallness of most of Blake's designs: "Once the identity of, say, Urizen has been established … his particular gesture – crouching down, crawling, spreading his arms over a prostrate figure – further exemplifies his closed or oppressive mind" (*Human Form Divine* xxii). Janet Warner also discusses the language of gesture in Blake's designs. She writes that Newton's "downturned" left hand signifies "creativity turned to rationalism and abstraction" (102).

[27] Paley reads Newton's posture as "mid-way between the hunched-over Adam [of *God Judging Adam*] and the on-all-fours Nebuchadnezzar" (37). According to Anthony Blunt, *Nebuchadnezzar* "is evidently intended as an exact pendant to the *Newton*, and the parallel probably extends to the settings" (*Art of William Blake* 60 n. 17).

philosophy" (*Human Form Divine* 151, 155).[28] It is Newton's mind, preoccupied with mathematical abstraction, that has brought his divine body to such a fallen state.

Blake's positioning of Newton at the bottom of the ocean further ironizes his angelic physicality. As Butlin notes, the undersea setting is for Blake often a symbol of a limiting and limited materialist vision (*Paintings and Drawings* p. 167). This motif is previously evident, for instance, in the underwater depiction of Urizen (whose rigidly rational metaphysics and desire for "one Law" result in his fall) in plate 12 of *Urizen* (illus. 65). In the 1804-05 color print, Newton has fallen from the heights described in Thomson's poem to the marine floor, where he persists in imposing his mechanistic laws. Blake's rendering of Newton's body suggests that he could regain his angelic nature – in vital, material form – if he could abandon his mental fixation on abstraction.

Blake stresses Newtonian metaphysical imposition of order from above with the iconographic use of the dividers in the design. The dividers are an apt symbol for the deity's (or deified Newton's) division of the material from the spiritual during the act of creation. Blake had previously employed them to make a similar visual argument: plate b10 of copy L of *No Natural Religion* also features a man in a compromised position (crawling on all fours) using dividers to measure a triangle inscribed on the ground (illus. 6).[29] The text accompanying this design is applicable to the *Newton* print: "He who sees the Infinite in all things sees God. He who sees the

[28] Blunt traces the position of Newton's body to Blake's drawing based on Ghisi's engraving of Michelangelo's Abias on the ceiling of the Sistine Chapel (Butlin, *Paintings and Drawings* no. 168, verso). He claims that Blake combined the Michelangelesque form with the figure of Euclid from Raphael's *The School of Athens*("Symbolism of the Compasses" 61n6, *Art of William Blake* 35). Mellor also notes the connection between the figure of Newton and Michelangelo's Abias (*Human Form Divine* 130), and Paley describes Newton as "Michelangelesque" (37).

[29] The crawling man also prefigures the posture of Nebuchadnezzar in the companion piece to *Newton*.

Ratio only sees himself only" (E 3).[30] Likewise, Newton focuses only on the ratio of his geometric design; he is consumed by his own metaphysical system, which he mistakes for the lone reality, despite the evidence of the proliferating marine world around him. And as discussed in chapter 3, Blake also employed dividers in the "Ancient of Days" frontispiece to *Europe*, in which, as Butlin writes, "the Creator in the guise of Urizen imposes a rational order on the universe" (*Paintings and Drawings* p. 167).[31] Like Urizen, Newton is consumed and confined by the ratio of his law, blind to the creative potential of the material universe.[32]

As has been discussed in previous chapters, Newtonian metaphysics also divides its fundamental massy, inert particles from the active gravitational forces responsible for the dynamism in the universe, as Blake's use of the dividers suggests. There is in Newton's view a strict distinction between inanimate material particles and the immaterial transcendent deity responsible for their motion. This ontology radically differs from the vitalist materialisms also previously considered, in which matter immanently contains the active forces responsible for its regenerative and reproductive properties. As Dicquemare writes, these vitalist properties are immanent in every particle of the living organism: "The smallest particle of a living animal, has an organization which far exceeds every idea we can conceive of it" ("A Third Essay" 57). Such self-active and self-organizing particles are a far cry from the dead atoms of Newton's system.

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[30] Hagstrum also connects the text on pl. b10 to *Newton* ("William Blake Rejects the Enlightenment" 73), as does Bindman (*Blake as an Artist* 100).

[31] Hagstrum reads the design – and text – of pl. b10 of *No Natural Religion* as anticipating the frontispiece to *Europe* (*Poet and Painter* 78).

[32] Dividers closely resemble another design tool, the compass, which has a stylus on one end for inscription; dividers lack a stylus and are used to measure or compare lengths in a drawing. Given the placement of the ends of the tool at two of the triangle's vertices in the *Newton* print, it seems that Newton is measuring one of the sides, since a compass cannot be used to inscribe a triangle. (If he were using a compass to inscribe the arc within the triangle, the non-stylus end would be incorrectly placed.) In this regard I disagree with Blunt's identification of the tool as a compass ("Symbolism of the Compasses" 61).

By including the mathematical diagram in the later color print, Blake strengthens his ironic subversion of Newtonian mechanism. According to Gage, the diagram resembles figure 2 of the first part of book 1 of the *Opticks* (illus. 66). Figure 2 does indeed contain a triangle, observed from the lower right by the disembodied eye (with the browless eyebrow hovering above it) that appears in most of the illustrations to Newton's work. I argue, however, that the diagram in Blake's design corresponds more closely to figure 10 in the same work, which, in addition to the triangle, contains the same curved line that is found in Blake's diagram (illus. 67).[33] This line curves away from the disembodied eye, which looks at it; the resemblance between Newton's diagram and the conical side-view of the eyeball (conical because the eyelids meet to form the apex of the open triangle) with its inward curving line of the iris is explicit. The single eye visible in the profile of Newton in Blake's design also visually echoes the diagram on the sea floor. The lone eye, separated from its human form in the figures of the *Opticks*, suggests what Blake refers to in an 1802 letter to Butts as Newton's "Single vision" (E 722), and it is replicated in the color print in Newton's one eye and lone optical diagram. As Essick writes, "Newton is himself calculating the extent of his fallen vision as he measures the width of his pupil" ("Blake's 'Newton'" 158). One would need only to close the right side of the triangle in Newton's figure 10 to reproduce what Blake depicts. The fact that Blake has closed the triangle – in effect blocking the eye's capacity for vision – further reinforces the limited nature of Newtonian vision.

Blake's setting Newton and the reef against a background of obscure undersea gloom, indicated by the marine greenish-blues above and to the right of the natural philosopher's head in the 1804-05 print, also parodies Newton's own description of his experiments in the *Opticks*. In order to discern the mathematical properties of light, he shut himself in dark rooms with his

[33] All editions of the *Opticks* contain these figures.

prism, allowing only a *single* small hole for light to enter: "And, the Sun shining into my dark Chamber through a little hole in the Window-shut, I placed [the prism]" (47).[34] Blake's design emphasizes this aspect of the Enlightenment hero: he spent a lot of time in the dark. And if Newton seeks to understand the sun, Blake portrays him facing the wrong way, in thrall to a diagram of his own creation.[35] His downward-focused gaze suggests a perverted form of worship and recalls Blake's later claim, in the annotations to Berkeley's *Siris*, that "God is not a Mathematical Diagram" (E 664).

I stress a contrast between Newton's philosophy and the coralline universe by which he is surrounded, while the few critics who have commented on these aspects of the later color print more often attempt to equate Newton with the polypus. Essick, for instance, writes that the creature is "a pictorial embodiment of a symbol which in Blake's poetry describes the world created when man falls from divine vision into material perceptions …. Newton is fittingly portrayed as the inheritor of some of Blake's major images for the limited world created by that vision" ("Blake's 'Newton'" 156). Similarly, Engelstein claims that "the polypus is a monster of Newtonian materialism, the consequence of a failure of imagination," revealing "the danger implicit in the failure of scientific objectivism to recognize complicity in its conclusions" (102).[36] As for Engelstein's first claim, I argue that the vital polypus operates in

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[34] He refers to his "dark Chamber" twelve other times in this edition.

[35] Kostelanetz also makes this claim: "The limited vision of Newton is further emphasized by the fact that he looks *downward* rather than up to heaven" (126).

[36] Additionally, Raine writes, "Blake saw in this soulless vegetation the same error at work that produced Newton's soulless physics" (1: 241). The only eighteenth- or early nineteenth-century text linking Newton and the polyp is *The Newtonian System of Philosophy Adapted to the Capacities of Young Gentlemen and Ladies, and Familiarized and Made Entertaining by Objects with Which They Are Intimately Acquainted* (1761), the title page of which indicates that the work is a collection of lectures delivered by "Tom Telescope" to the "Lilliputian Society," collected and published by John Newbery. The work went through nine editions between 1761 and 1798, and in it "Master *Telescope*, a young Gentleman of distinguished abilities," asks his classmates, "is it not … miraculous, that if some animals are cut in pieces, every separate piece … of the original animal will become one entire animal of itself? Yet that the *polype* or *polypus* is endowed with this property has been demonstrated" (2, 93-94). Telescope

opposition to Newtonian materialism – it is not a monster of such a worldview, but a monstrous and shadowy threat to it. The unchanging laws of Newton's philosophy are better symbolized by the stony structure in the 1795 print – with its connotations of the tomb and death, a motif also evident in the title page of *Urizen* – than by the dynamic living coral in the 1804-05 revision.[37]

Discussing Newton's body and the coralline organisms surrounding him, Mitchell writes, "What the picture really shows us, however, is the 'swerve' between two antithetical conceptions of the world, depicted as contrasting regions" (456). However, as his title, "Chaosthetics," indicates, Mitchell is more concerned with the contrast between chaos and order, specifically as it is manifested in Blake's artistic method (reticulated paint bounded by an imposed line); I, on the other hand, am emphasizing the metaphysical contrast of vitalism with mechanism. Additionally, I argue for a contrast between the diagram and the polypus, which I take to be more fundamental than the contrast that Mitchell emphasizes between the "enamel-like clarity" of Newton's naked body and the richly textured vegetation of the "aquamarine atmosphere" surrounding him (455). He goes on to suggest that, like the coralline polyps, Newton also excrementally contributes to the growth of the reef on which he crouches: "Newton must be seen as sitting on—indeed, inhabiting as his ground and dwelling place—a gorgeous mound of excrement that he himself has produced" (457).[38] However, if Newton's body exhibits

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then invites his peers to view such regenerated polyps through a microscope, though he fails to explain exactly how this property accords with the "Newtonian System" indicated in the work's title.

[37] I do not mean to imply that the polypus should be taken as a positive emblem of artistic creation. As Miner and others have shown, such a claim cannot be substantiated when considering passages elsewhere in Blake's work, such as pl. 34 of *Milton*, where Ulro is characterized as a polypus of "living fibres" that is "self-devouring" and "monstrous." I am suggesting that in the context of the 1804–05 *Newton*, the polypus is emblematic for Blake of a vitalist philosophical system – elaborated by La Mettrie, Buffon, and Darwin – that cannot be contained within a Newtonian mathematical and mechanistic worldview.

[38] Engelstein also discusses Newton's attachment to the coral: "Blake's figure of Newton, which resembles Los in his youth, strength, and muscular definition, remains, like each individual polyp, anchored by his foot to the coralline surface on which he sits" (104). Focusing on the excremental nature of coral formation, Mitchell bolsters his claims with the writings of Georges Bataille, who is fascinated with excess and those forces – whether of sex,

polyp-like properties, he is not behaving like one in all respects, since contemporary accounts stressed the fact that the polyp had a distinct propensity for facing the sun, unlike Newton in Blake's design.[39]

As the disembodied eye in the figures of the *Opticks* suggests, Newton's abstract mathematical system is divorced from the material reality of both the coralline creatures' and his own living form. I argue that it is this separation that Blake's later design critiques.[40] Ault writes that Blake objected to Newton because of the latter's attempt to reify subjective metaphor in the form of mathematics: "Newton's system is a substitute for Imaginative organization" (162). In the 1804–05 print Newton's system is represented by the idealized and idolized geometric diagram of the eye, not by the body of the philosopher, which is connected (according to the flat ontology implied by the living matter in the systems of La Mettrie, Buffon, and Darwin) to the living and foliating coralline structure around him. In his limited and limiting concentration on an externalized mathematical form, which is positioned below both his body (he is partially stepping on his drawing) and the coral reef, the natural philosopher neglects the vital and non-mechanistic properties of his own divine body. For Blake, that body is the highest form of the living universe, contrasting in appearance with but integrally connected to the corallines.[41]

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violence, or death – that resist orderly containment. The shadowy, prolific, unclassifiable polyp would be an appropriate subject for Bataille's philosophy, and Mitchell stresses the fact that Newton is unknowingly shitting the reef on which he sits.

[39] See, for instance, "Description of the Common Polypus" in the *Ipswich Magazine* of 1799: "All animals of this kind have a remarkable propensity to turn toward the light" (69).

[40] The image, then, is a variant of Blake's theme of the dangers that ensue when systematizers – like Newton – "realize or abstract the mental deities from their objects" (*Marriage of Heaven and Hell*, E 38).

[41] Dicquemare likewise makes connections between the vital tissue of the sea anemone and that of the human body. In considering the irritability and sensitivity of all parts of the marine organism, he hints that the same might be true of the human body: "The nerves seem to be the chief, perhaps the only, organs of sensibility in man, and the muscular fibres to be the principal seat of irritability; yet how many are the doubts entertained concerning the parts that are and are not endowed with one and the other!" ("A Second Essay" 209). He asks, "Might not the rapid and singular reproduction of the parts of this animal [the sea anemone] be attributed to their gelatinous texture? and if so,

In modifying the 1795 color print of *Newton*, which had equated Newton and his philosophy with the rocky form on which he sits, Blake was able to make a strikingly ironic and more complex visual argument. This argument drew on a vast discourse concerning vitalism as an anti-Newtonian philosophy of life, a discourse whose emblematic organism in the eighteenth century was the polyp. Placing Newton at the bottom of the ocean drastically inverts the tradition of elevation and deification that had been occurring for a century. Hunched in the submarine depths, blindly consumed by his mathematically abstracted system, Newton in Blake's later print is a dark parody of his reputation as a Promethean bringer of light, and Blake's inclusion of the diagram resembling figure 10 of the *Opticks* adds a further level of irony. By radically transforming the rock of the 1795 print into the living coralline mass in the later version, he presents a powerful contrast between the Urizenic rigidity and transcendent imposition of Newtonian mathematical mechanism – represented by the diagram – and the vital, immanently generative polypus, with which Newton's own body has more in common. While both the polypus and the mathematical laws may be products of a fallen world, only the polypus is capable of transformation, unlike the oppressive and unchanging Newtonian law, which is insufficient to explain the vital properties of lions, oxen, and all other dynamic forms of life.

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may we not reasonably conclude, that the reproduction of our vascular and fleshy parts in the consolidation of wounds is in great measure owing to such a gelatinous matter" (209-10). His third essay goes further, comparing the "gelatinous" appearance and texture of the sea anemone to that of the human brain: "Shall we suppose that the gelatinous matter [of the sea anemone] is nothing but an irregular, incoherent substance? At first sight the same might be said of the white substance of the brain, although it seem [*sic*] to have more consistency; yet in many places it appears fibrous, and if we could trace it through the nerves, we should no doubt discover a most admirable organization" (75).

CONCLUSION

Shadowy Obstruction: The Ghost of Pantheism

"But what is my God? I put my question to the earth. It answered, 'I am not God,' and all things on earth declared the same. I asked the sea and the chasms of the deep and the living things that creep in them, but they answered, 'We are not your God. Seek what is above us.'"

— Saint Augustine[1]

"Am not I / A fly like thee? / Or art not thou / A man like me?"

— William Blake[2]

As a natural philosopher arguing in poetry and visual art, Blake eclectically integrated numerous traditions in developing the panpsychist and pantheistic metaphysics that permeates his early work. But, as this project has shown, his monist, materialist ontology that argued for the divinity of all material things becomes increasingly muted and eventually abandoned by the *Newton* color print of 1804-05. Blake's shudder of revulsion at the polyp and other forms of vital life can be observed in the mid 1790s, and his rejection of all forms of nonhuman nature is glaringly evident in his address "To the Christians" in the last illuminated prophecy, *Jerusalem* (1804-c.1820), wherein he asserts that "this Vegetable Universe is / but a faint shadow" of the "eternal World" one enters when "these Vegetable Mortal Bodies are no more" (E 231). Here the

[1] *Confessions*, 212.

[2] "The Fly," from *Songs of Innocence and of Experience*, E 23.

material universe is a shadowy hindrance to divine vision, and the corporeal, or "Vegetable" body prevents its realization, as Blake asserts in his annotation to Berkeley's *Siris*: "The Natural Body is an Obstruction to the Soul or Spiritual Body" (E 664).[3] This is clearly not the same philosopher who in the *Marriage* declares, "Man has no Body distinct from his Soul" (E 34). A detailed analysis of Blake's later prophecies is beyond the scope of this work, which has challenged the prevailing assertion that such statements from *Jerusalem* and the *Siris* annotations are emblematic of Blake's philosophy throughout his oeuvre. And in the same way that Blake's pantheism is modified in each work studied here, I do not assume that a rigid Christianized dualism or Berkeleyan idealism uniformly characterizes everything Blake wrote, drew, painted, printed, or engraved from the mid-1790s until his death in 1827. Indeed, close inspection may reveal passages in which a strain of pantheism persists in the later works, as in the following passage from *The Four Zoas* (1797): "So Man looks out in tree & herb & fish & bird & beast / Collecting up the scatterd portions of his immortal body / Into the Elemental forms of every thing that grows" (E 385). Such exceptions notwithstanding, Blake's natural philosophy profoundly shifts between the works of the late 1780s/early 1790s and those that follow.

Why did Blake relinquish his pantheistic worldview and begin to cast nature as a hindrance to humanity's exclusive right to divinity in the mid-1790s? The most common answer, given by historically minded commentators not only on Blake but on the other first-generation Romantic poets, is that the Reign of Terror following the French Revolution from late 1793 into 1794 – as well as the subsequent rule of Napoleon – were responsible for the disillusionment and despair of artists during this period. Erdman's *Blake: Prophet against Empire* is most notable, but certainly not alone, in arguing for Blake's work as deeply engaged in the tumultuous political and revolutionary landscape of the late 18th and early 19th centuries. Indeed, it requires no great

[3] Geoffrey Keynes dates this marginalia circa 1820 (*The Complete Writings* 773).

strain to see how the horrific events following upon the promise of the Revolution precipitated a retraction of the more ebullient pantheistic claims of the early works and a turn to biblical prophecy as more fully informing the mythos of Blake's late period, as critics like Frye have proposed. My scant mention in these chapters of the radical politics of the 1790s, or of Blake's interpretation of scripture as manifested in his works, is not intended as a dismissal of such critical perspectives, which are undoubtedly necessary and illuminating for any reader of Blake.

Rather, I have emphasized Blake as a natural philosopher in order to demonstrate his own belief that metaphysics is fundamental to social, political, and religious practice. The events of the French Revolution enact, on the political plane, the ontological conflicts I have been tracing here: the aspirations for democratic equality that recognizes the value of all citizens parallels the pantheist flat ontology, which as Levine notes is "antithetical to any power structure" (360), and which recognizes the sentience and divinity of all material beings; this worldview is violently usurped upon the Jacobin dictatorship's institution of the Reign of Terror, mirroring the dualist vision of natural religion, which entails alienation, hierarchy, and thus tyrannical oppression. The analogy is oversimplified, to be sure – for one, the concerns of pantheism and natural religion extend beyond the human sphere – but I merely wish to stress the general point: that one's way of acting in the world is inextricable from one's metaphysical beliefs about what the world is.[4] And as I have noted in the preceding chapters, pantheism is best suited as a metaphysics that entails equality and not tyranny. In describing the ethical entailments of pantheism, Grace Jantzen writes, "Those who have once seen themselves and the world about them, as the embodiment and self-manifestation of God are unlikely to continue to treat it in a cavalier way or feel it utterly alien or devoid of intrinsic significance and worth" (157).

[4] Susannah Gibson implies a similar analogy concerning the societal implications of eighteenth-century naturalists' disruption of the Great Chain of Being: "if God had not created well-defined boundaries between the kingdoms of nature, was it possible that he had similarly neglected to segregate society?" (175).

This interfusion of pantheist metaphysics and morality is central to Blake's early work, and his initial attraction to pantheism need not be explained as a product of purely rational contemplation. What McFarland claims concerning Coleridge can also be applied to Blake: "it is not the rationalized, explicit, connexion of poetry and pantheism that concerns a poet … We are here interested in the emotional attraction of pantheism" (121). Blake's early embrace of pantheism and his elaboration of it in art forms that operate on more than just a rational, argumentative level are evidence of Harold W. Wood's suggestion that "[p]antheist worship may involve artistic expression" (157-8). Blake's art engages more than the rational faculty, which is why Urizen – your reason – is a representative of limited knowledge and vision, as well as an instigator of oppressive systems. Blake's poetry and designs eschew didacticism and instead recast metaphysical arguments in lyric, narrative, and visual form. His satires and the dystopian nightmare worlds presented in *Europe* and the Urizen cycle elicit fear in order to influence the reader to reconsider her own ontological commitments. Blake conceived of art as offering a more complete and convincing natural-philosophical argument.

Should we then conclude that the horrors of the Reign of Terror caused Blake to revile the entirety of the nonhuman world? Did political events constitute for him what philosophers refer to as the "problem of evil," forcing him to abandon a metaphysics that posited divinity immanently infusing the material realm and to scorn earthly life altogether? I hesitate to concur with such a causal hypothesis, which, like any attempt to explain Blake's philosophical shift in autobiographical terms, will ultimately be speculative and elide any number of factors that might influence such a transformation. Blake was nearly forty by the time of the Revolution, and he could hardly have been a stranger to evil and oppression on both a personal and a national scale. And as Levine aptly observes, the problem of evil is more a problem for the Christian theist than

for the pantheist: "Evil might be taken to be indicative of a lack of pantheistic Unity, as evidence of some kind of chaos instead. But it cannot count against the existence of a pantheistic Unity in the way it can count against the existence of a theistic God" (207).

Rather than attempting to identify a personal/historical motivating factor for Blake's philosophical transformation, I hope to have instead traced the contours of Blake's early metaphysics and shown how an initial embrace of nature as essentially God became a rejection of it as godless by roughly 1794. The polyp, despite its non-Newtonian properties, is Blake's emblem for the chaotic, unholy monstrosity of nature itself. Blake could not see such a creature as part of the infinite divinity of material existence, which is how nonhumans like the eagle are described in the *Marriage*. Unlike other nonhumans whom Blake addresses and gives voice to in the works discussed here and in works of the period – like the *Songs of Innocence and of Experience* (1794) – that merit further attention,[5] Blake's polypus is mute, blind, a shadowy obstruction to human transcendence. Was he simply revolted when confronted with the polyp and the details of its behavior? Is visceral disgust enough to catalyze a wholesale change in ontology? Again, such questions lend themselves to speculative conjectures, and I refrain from concluding one way or another in this regard. Nor do I mean to imply that Blake's relinquishing of pantheism is a sign of philosophical cowardice. As a prodigious murderer of cockroaches, ants, and insects of all sorts, I am well aware of the difficulties of living in accordance with a pantheistic worldview, however emotionally attracted to it I may be. In theory, the pantheist dispenses with agitating about her own death and personal immortality, but as I asked at the conclusion of chapter 3, who among us will throw the first stone at Thel for fearing her own dissolution?

[5] Blake's working through the human/nonhuman relationship in poems like "The Fly" (quoted in the epigraph to this conclusion) is deserving of more extended analysis, which I plan to do as I revise this manuscript for publication as a book.

Nevertheless, Blake's later denigration of nonhuman nature as a "faint shadow" and an obstruction to a salvation reserved exclusively for humans is impossible to reconcile with the repeated pantheistic claims and implications in his early works. In devaluing other material beings, Blake breaks from the flat ontology of his early metaphysics and reintroduces the hierarchic power structures – and hence opportunity for oppression – that he had so vehemently satirized as a fault of dualistic natural religion. From an ecocritical perspective, this is lamentable, especially given the persistence of this latter viewpoint in our current Anthropocene age characterized by climate catastrophes and ecological destruction on a global scale. According to many contemporary ecological theorists and philosophers, any hope for the continuation of our civilization must involve abandoning the dualist perspective that views nature as alien and merely instrumental to human purposes. According to Matthew Hall, western culture has created a human/nature dualism that renders "nature as an insignificant Other, a homogenized, voiceless, blank state of existence, a perception of nature that helps justify domination of the Earth," which results in "an assault on the global environment that risks undermining biospheric integrity" (1). The title of Hall's book, *Plants as Persons: A Philosophical Botany*, suggests the panpsychist/hylozoic vision he calls for, and which has parallels in the works of Erasmus Darwin and Blake that were discussed in chapter 3. Hall discusses the need to recognize "plants as subjects deserving of respect as other-than-human persons" (13), since it is "[o]nly in the company of others do we arrive at the true sense of our own personhood and ecological identity" (15). He focuses on plants, but the "company of others" could extend to all material forms and be considered in more pantheistic terms.

Philosopher Michael Marder's *Plant Thinking: A Philosophy of Vegetal Life* offers a similar metaphysical viewpoint: "The unipolarity of reason, objectifying everything in its path,

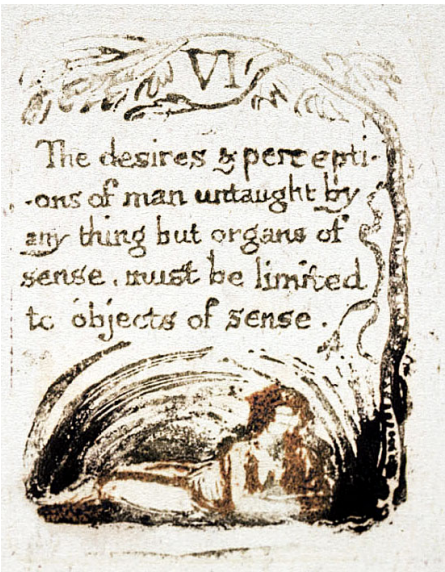
and the self-proclaimed exclusiveness of the human existential comportment, which according to Martin Heidegger separates us from other living beings 'by an abyss,' are two salient obstacles on the road to an ontologically and ethically sensitive relation to plants" (8). Such a claim is poetically dramatized and visualized in Blake's early works, and Marder also recognizes the link between a hylozoic worldview and artistic practice, as he writes, "The aesthetic attitude, broadly conceived, seems to be more propitious to a nonviolent approach to plants than either their practical instrumentalization or their nominalist-conceptual integration into systems of thought" (4). We continue to operate under the dualistic metaphysical assumptions that Blake's early works satirize, since, according to Marder, we "routinely pass a negative judgment on [plants'] worth, as well as on the place they occupy in the modern version of the 'Great Chain of Being,' from which both the everyday and the scientific ways of thinking have not yet completely emancipated themselves" (3). Marder and Hall are part of a swelling chorus calling for a reconsideration not only of plant life, but of our relationship to all forms of nonhuman materiality, since the judgment Marder mentions can only be more negative when applied to the nonorganic realm.[6]

Blake's pantheistic works resonate with such modern appeals to reconsider our metaphysical assumptions, since centuries of destructive behavior have been the consequence of them. I have foregrounded his early natural philosophy not only because it changes the way we think of Blake's evolution as an artist and thinker, as well as of his relationship to other Romantic-era poet-philosophers, but also because it urges a reassessment of the available modes of philosophizing, both then and now. Moreover, his artistically rendered pantheistic vision is a

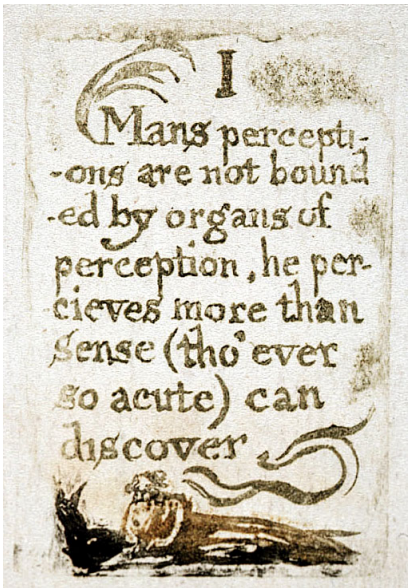
[6] The Pacific garbage patch is but one example of this. Other recent ecocritical works that advance a more hylozoic – and even pantheistic – outlook include Donna Haraway's *When Species Meet*, Daniel Chamovitz's *What a Plant Knows*, and Jane Bennet's *Vibrant Matter*. The advocacy for the recognition of plant rights has resulted in the Swiss Federal Bioethics Committee's recognition of the dignity and intrinsic worth of plants in 2008.

devilish challenge to our current perception of the Leviathan approaching in the form of planetary destruction. Reasoned argument alone will not quell our terror, or change our minds. But fully imagined art might. Blake's declaration, at the height of what we may call his pantheist period, that every thing that lives is holy, is a pressing message for our time, and indicative of a metaphysics we owe it to ourselves to embrace.

ILLUSTRATIONS



Illus. 1: *There is No Natural Religion*, copy B, c. 1794, pl. a9. Yale Center for British Art. Reproduced courtesy of the William Blake Archive.



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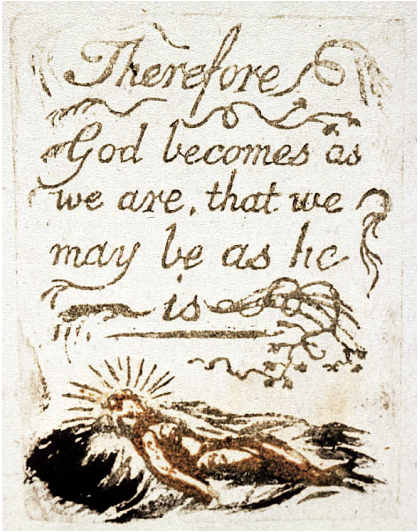

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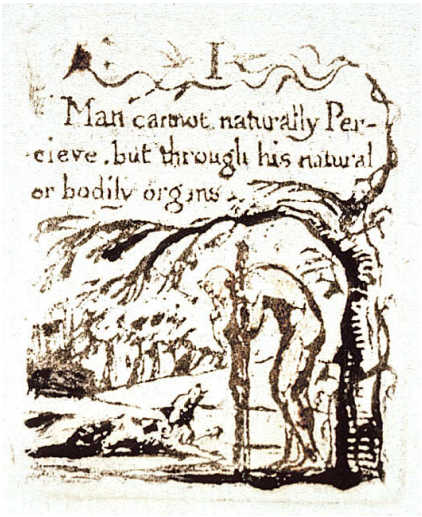
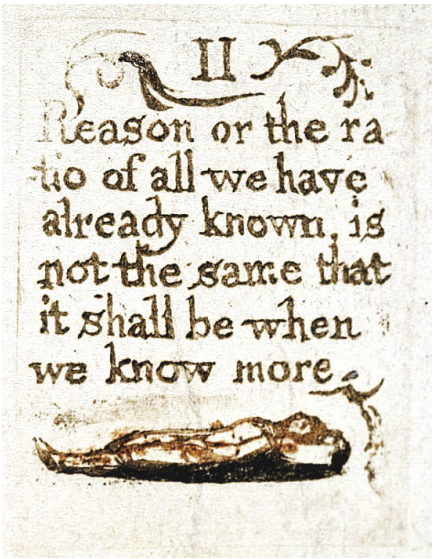
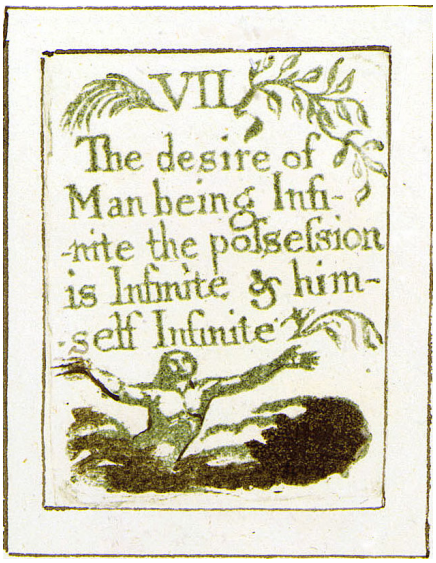


Illus. 4: *There is No Natural Religion*, copy B, c. 1794, pl. a4. Yale Center for British Art. Reproduced courtesy of the William Blake Archive.



Illus. 5: *There is No Natural Religion*, copy B, c. 1794, pl. b4. Yale Center for British Art. Reproduced courtesy of the William Blake Archive.

Illus. 6: *There is No Natural Religion*, copy L, 1795, plate b10. Morgan Library and Museum. Reproduced courtesy of the William Blake Archive.



Illus. 7: *There is No Natural Religion*, copy L, 1795, plate b9. Morgan Library and Museum. Reproduced courtesy of the William Blake Archive.

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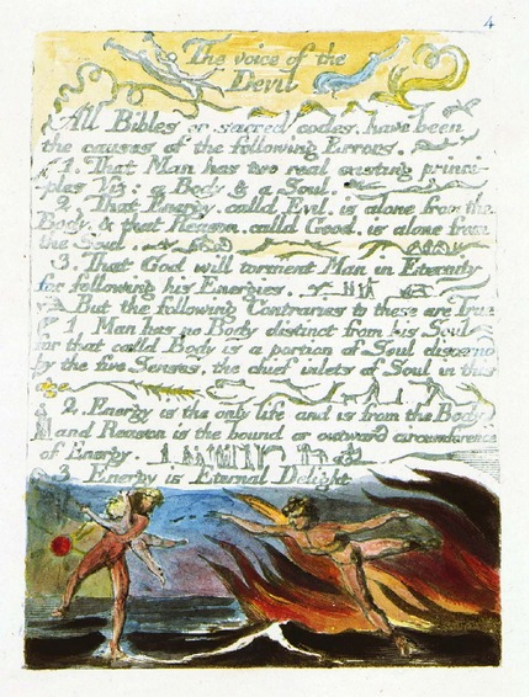
Illus. 10: *There is No Natural Religion*, copy L, 1795, plate b1. Morgan Library and Museum. Reproduced courtesy of the William Blake Archive.

Illus. 11: *The Marriage of Heaven and Hell*, copy D, 1795, plate 1. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 12: *The Marriage of Heaven and Hell*, copy D, 1795, plate 3. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



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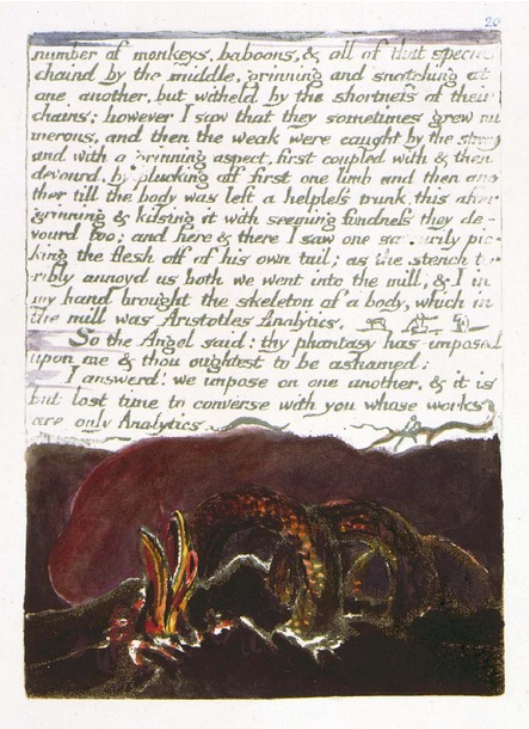
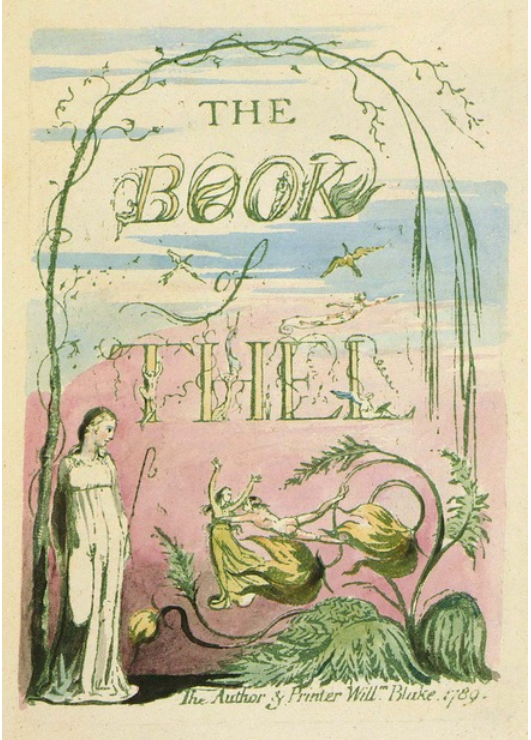


Illus. 14: *The Marriage of Heaven and Hell*, copy D, 1795, plate 20. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 15: *Illustrations to the Book of Job*, "Behemoth and Leviathan," 1826. Collection of Robert N. Essick. Reproduced courtesy of the William Blake Archive.

Illus. 16: *The Marriage of Heaven and Hell*, copy D, 1795, plate 11. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 17: Henry Fuseli, design, Anker Smith, engraving, *Flora Attired by the Elements*, for Erasmus Darwin, *The Botanic Garden*. 1791. British Library.



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Illus. 19: *The Book of Thel*, copy H, 1789, plate 3, detail. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

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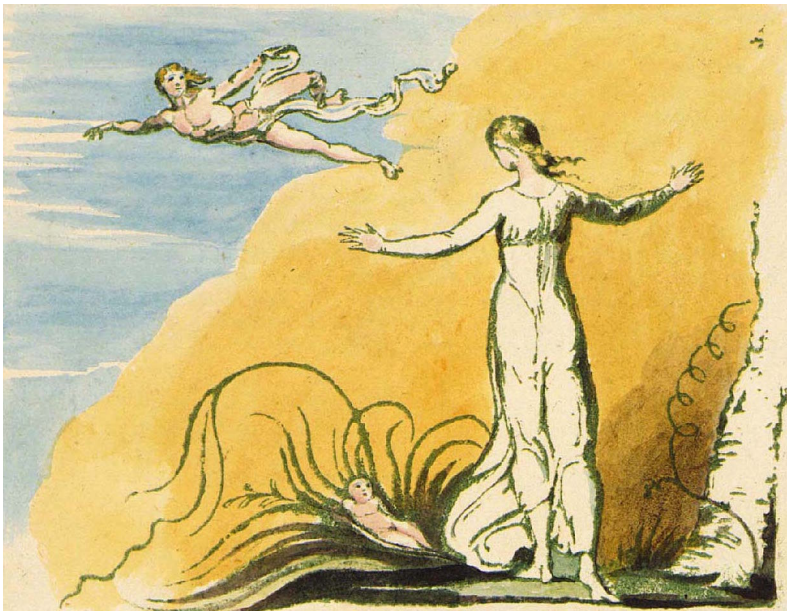

Illus. 21: *The Book of Thel*, copy H, 1789, plate 6. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 22: *Europe*, copy E, 1794, plate 1. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 23: Blake, engraving, Portland Vase, detail, for Erasmus Darwin, *The Botanic Garden*. 1791. British Library.

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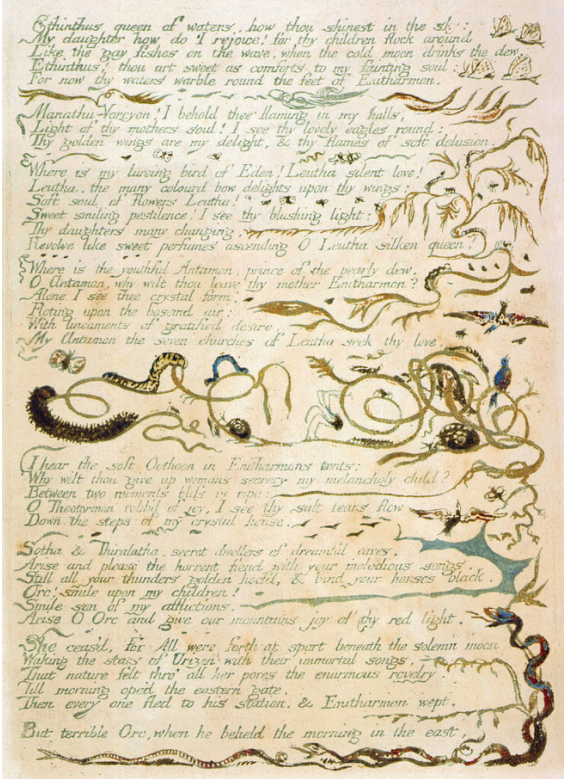

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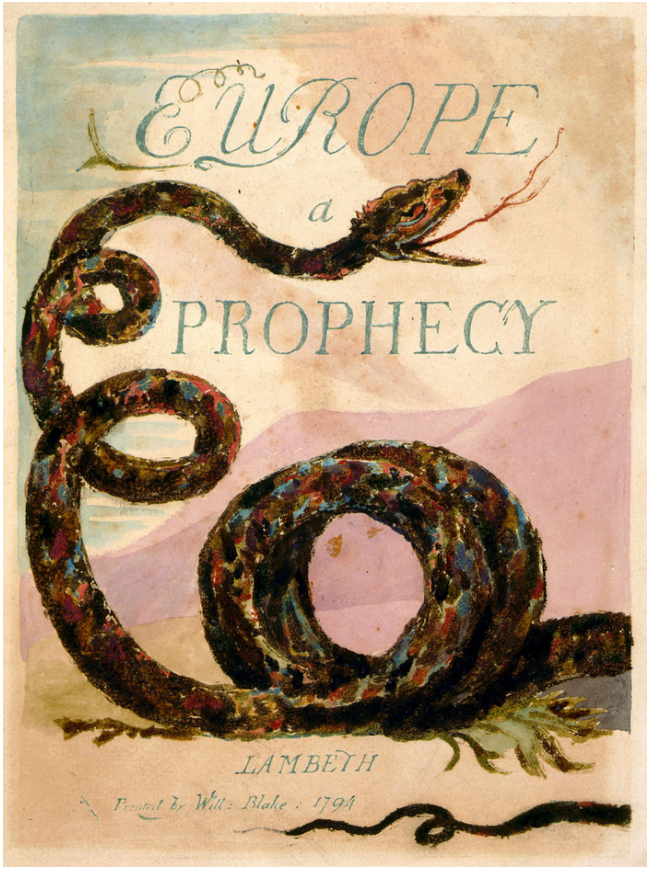

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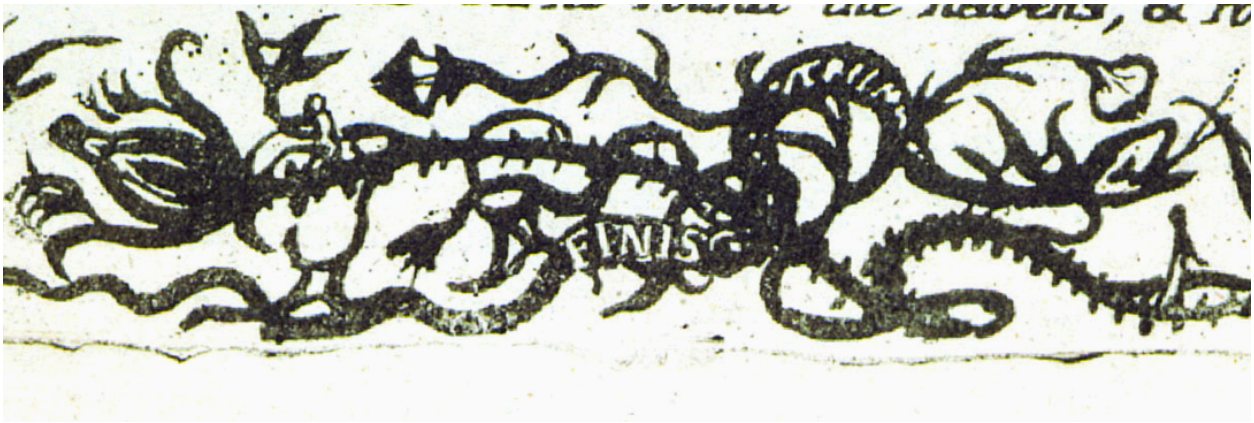
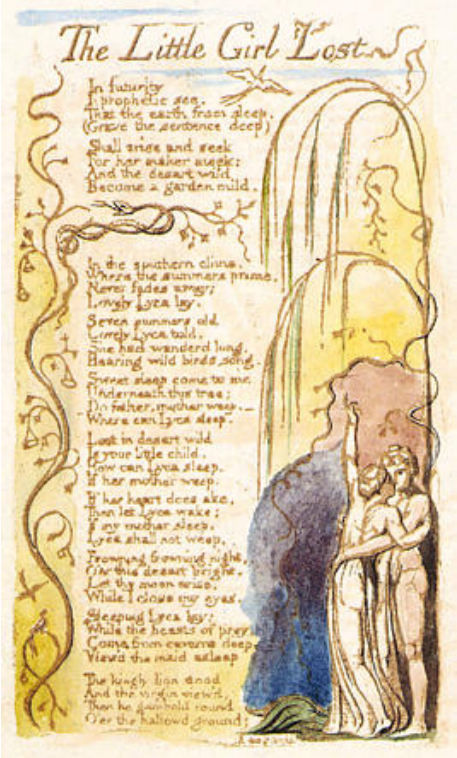


Illus. 30: *America*, copy E, 1793, plate 18. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

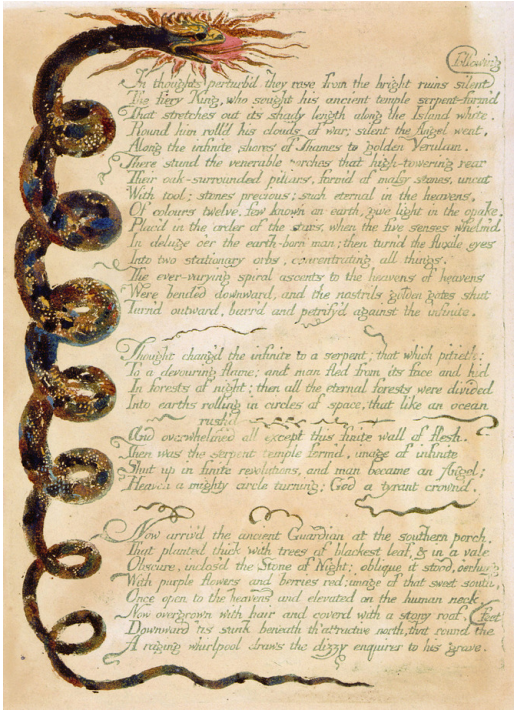
Illus. 31: "Introduction," part II of "The Ecchoing Green," "The Lamb," from *Songs of Innocence*, copy B, 1789. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 32: "The School Boy," from *Songs of Innocence and of Experience*, copy C, 1789, 1794. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



Illus. 32: "Little Girl Lost," from *Songs of Innocence and of Experience*, copy C, 1789, 1794. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 34: *The Marriage of Heaven and Hell*, copy D, 1795, plate 15, detail. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



Illus. 35: *Europe*, copy E, 1794, plate 13. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 36: Benjamin Franklin, *Join or Die*. 1754. Wikimedia Commons.

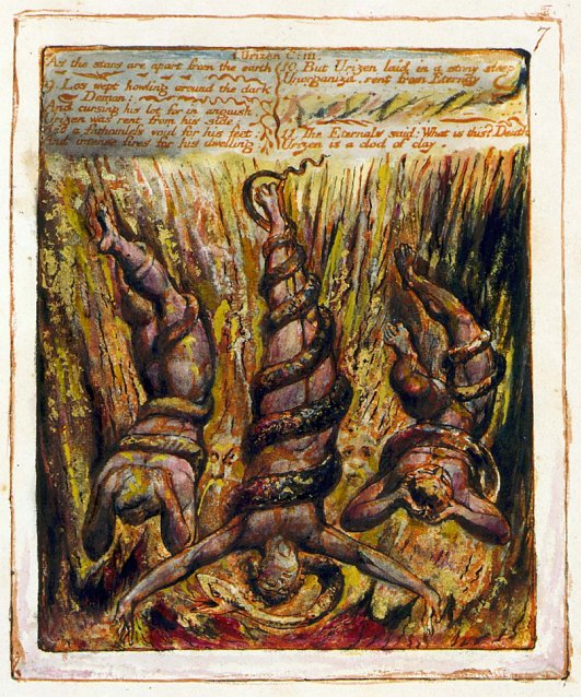
Illus. 37: *The Book of Thel*, copy H, 1789, plate 8, detail. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 38: James Basire, engraving for Jacob Bryant's *New System of Mythology*. 1774. Wikimedia Commons.

Illus. 39: Blake, engraving, Portland Vase, for Erasmus Darwin, *The Botanic Garden*. 1791. British Library.

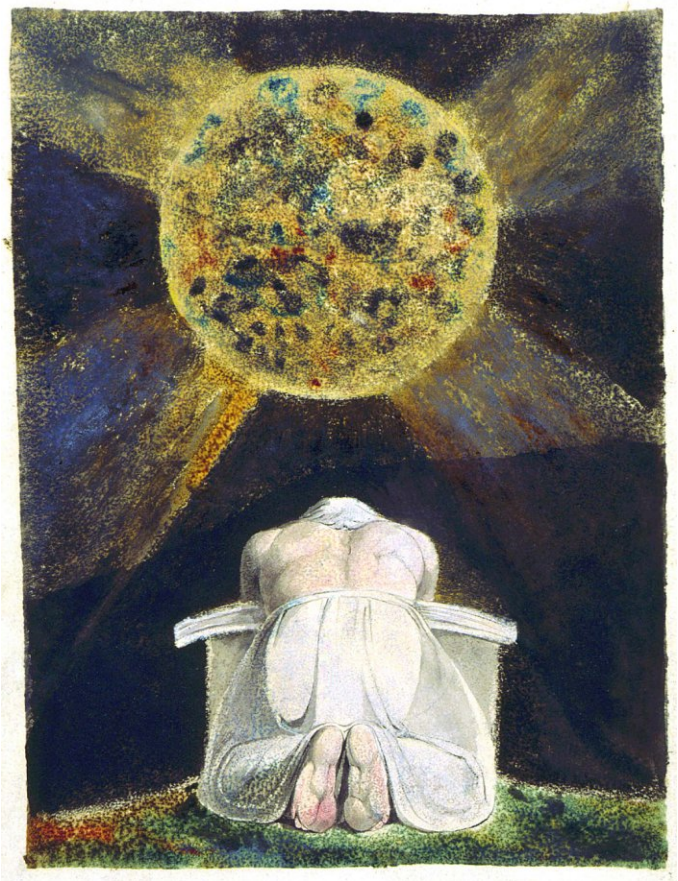
Illus. 40: *America*, copy E, 1793, plate 16. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 41: Fuseli, design, Blake, engraving, "Tornado," for Erasmus Darwin, *The Botanic Garden*. 1795. Wikimedia Commons.



Illus. 42: *The First Book of Urizen*, copy G, 1794, plate 6. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 43: *Europe*, copy E, 1794, plate 18. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



Illus. 44: *The Song of Los*, copy B, 1795, plate 1. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 45: *The Song of Los*, copy B, 1795, plate 2, detail. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

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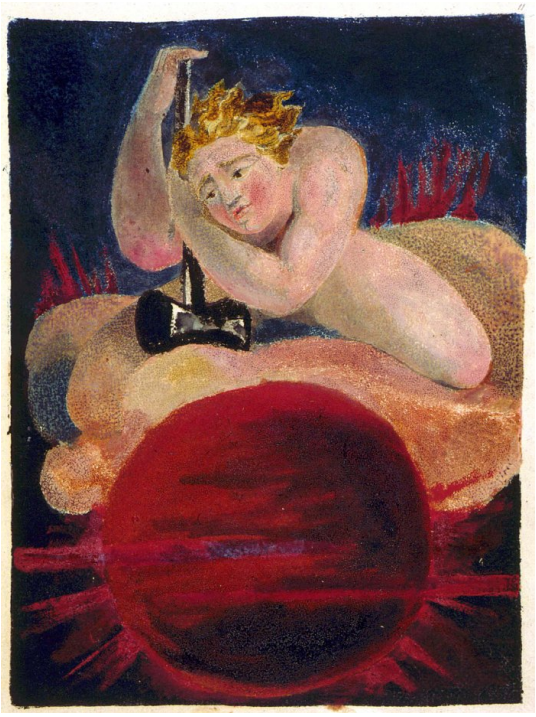

Illus. 49: *The Song of Los*, copy B, 1795, plate 8. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

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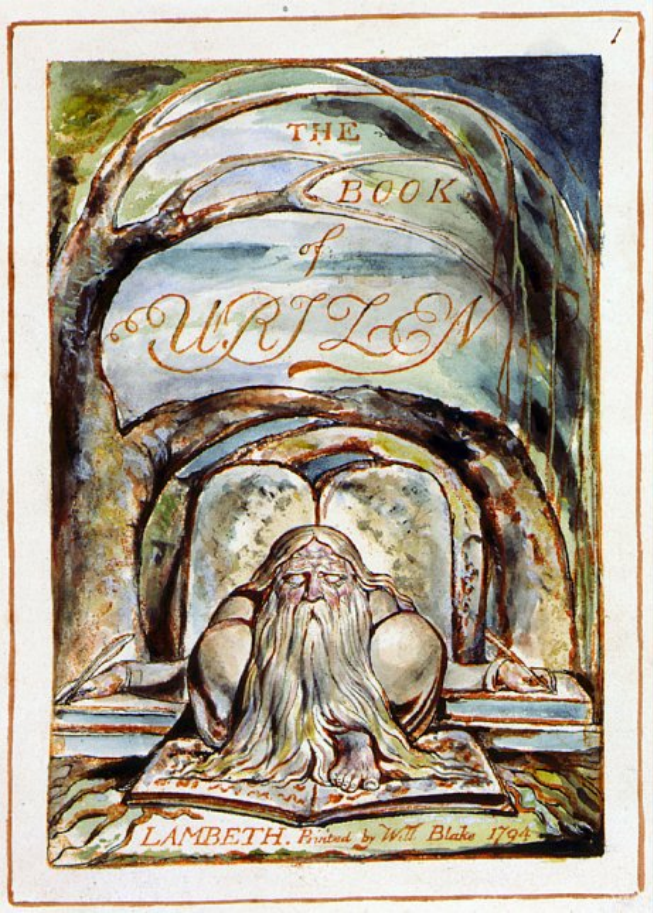
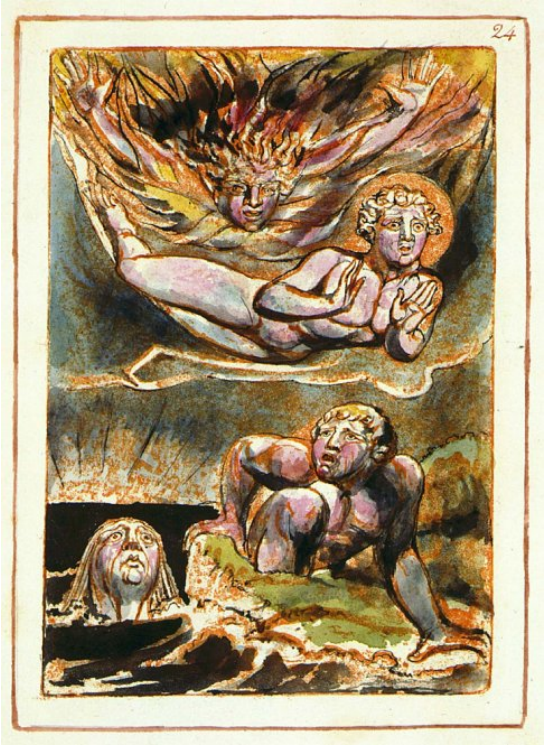


Illus. 51: *The First Book of Urizen*, copy G, 1794, plate 1. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



Illus. 52: *The First Book of Urizen*, copy G, 1794, plate 24. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

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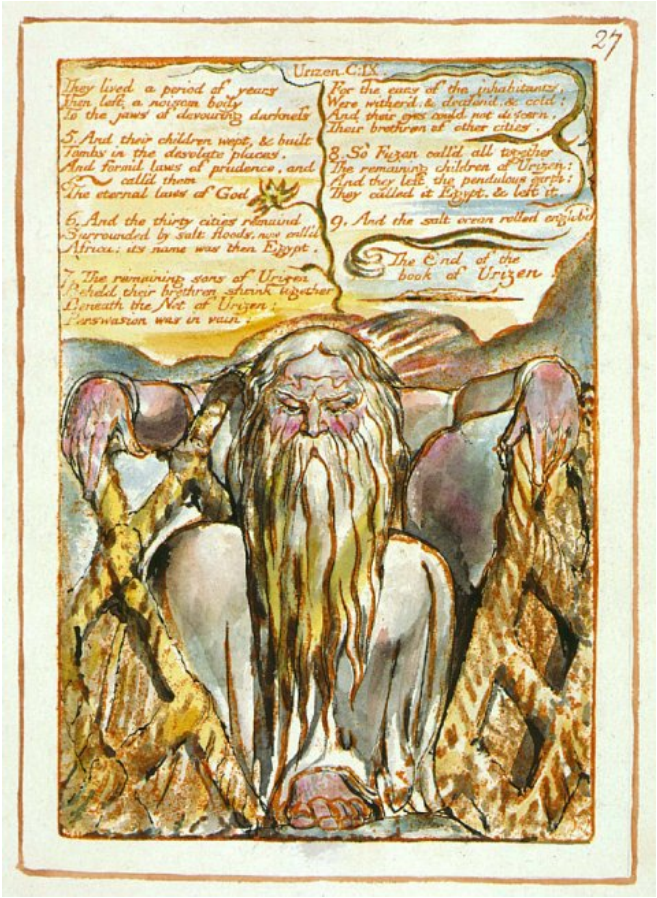
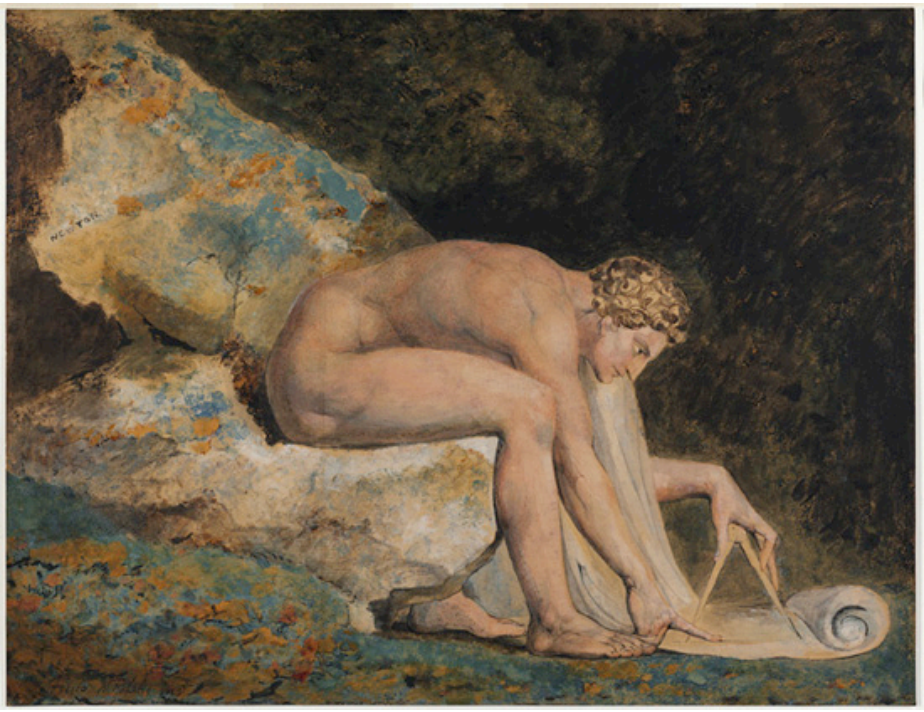


Illus. 55: *The First Book of Urizen*, copy G, 1794, plate 28. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.

Illus. 56: *The First Book of Urizen*, copy G, 1794, plate 25, detail. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



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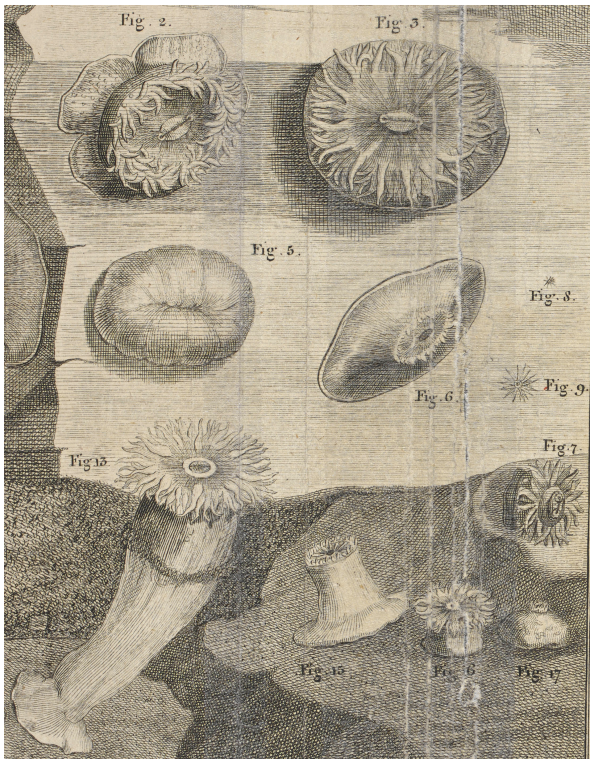
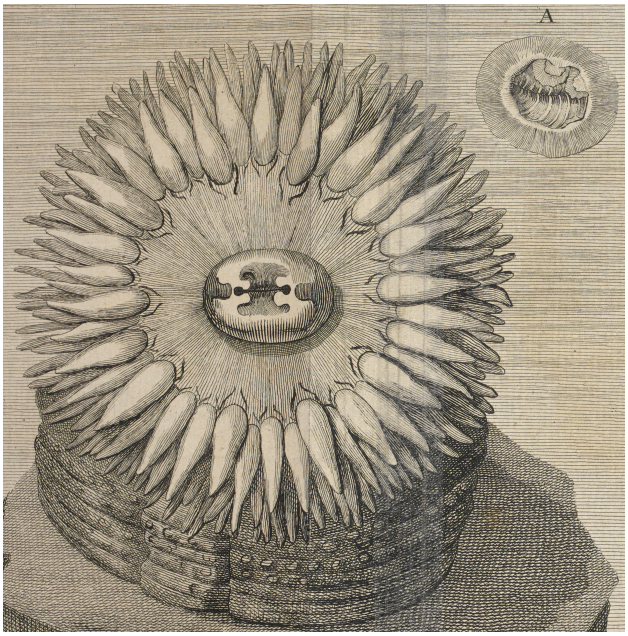
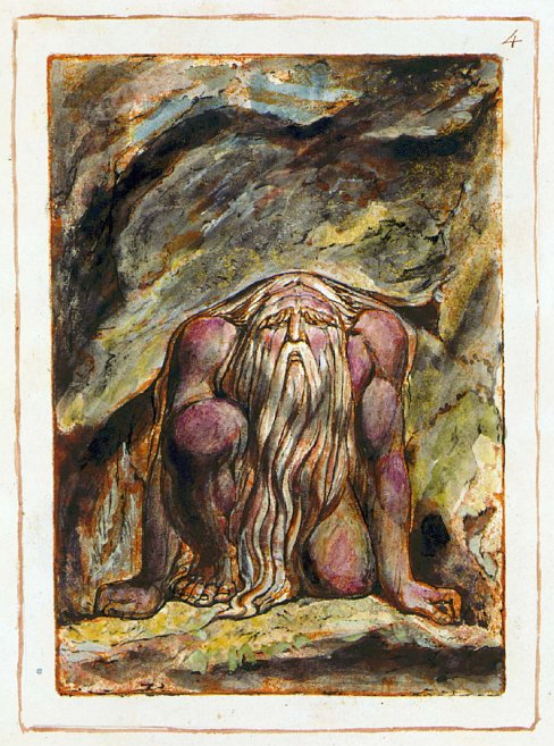


Illus. 60: Basire, engraving for Dicquemare, "An Essay, towards Elucidating the History of the Sea-Anemonies," *Philosophical Transactions* (1773), tab. XVI, p. 402, detail. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection C.144.l.1.

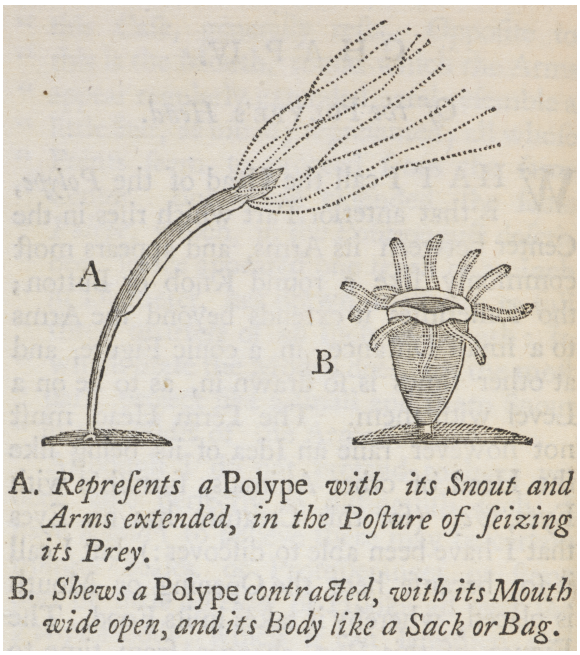


Illus. 61: Basire, engraving for Dicquemare, "An Essay, towards Elucidating the History of the Sea-Anemonies," *Philosophical Transactions* (1773), tab. XVII, p. 403, detail. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection C.144.l.1.

Illus. 62: Basire, engraving for Ellis, "On the Nature of the *Gorgonia*," *Philosophical Transactions*(1776), tab. I, p. 8, detail. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection C.144.l.1.



Illus. 63: *The First Book of Urizen*, copy G, 1794, plate 28. Lessing J. Rosenwald Collection, Library of Congress. Reproduced courtesy of the William Blake Archive.



Illus. 64: Baker, *An Attempt towards a Natural History of the Polype* (1743), p. 32. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection 955.d.21.

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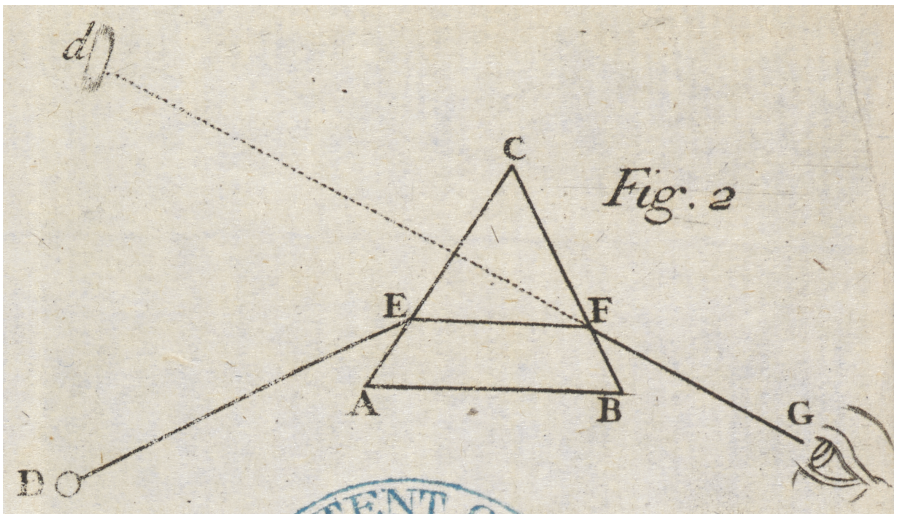
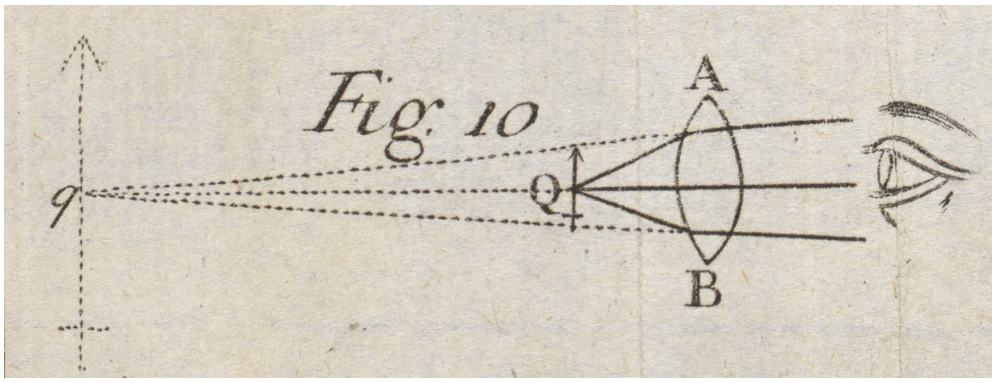


Illus. 66: Newton, *Opticks*, 3rd ed. (1721), book I, par. I, tab. I, fig. 2. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection DRT Digital Store 1609/5551.



Illus. 67: Newton, *Opticks*, 3rd ed. (1721), book I, par. I, tab. II, fig. 10. Reproduced courtesy of the British Library. Image © The British Library Board, General Reference Collection DRT Digital Store 1609/5551.

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