Contemplations of nature and of bodies in their simple form break up and distract the understanding, while contemplations of nature and bodies in their composition and configuration overpower and dissolve the understanding: a distinction well seen in the school of Leucippus and Democritus as compared with the other philosophies. For that school is so busied with the particles that it hardly attends to the structure; while the others are so lost in admiration of the structure that they do not penetrate to the simplicity of nature. These kinds of contemplation should therefore be alternated and taken by turns; that so the understanding may be rendered at once penetrating and comprehensive.—Bacon, Novum Organum
Party is Nature too, and you shall see
By force of Logic how they both agree:
The Many in the One, the One in the Many;
All is not Some, nor Some the same as Any:
Genus holds species, both are great or small:
One genus highest, one not high at all:
Each species has its differentia too,
This is not That, and it was never You,
Though this and that are AYES, and you and he,
Are like as one to one, or three to three.—George Eliot, epigraph to chapter 51, Middlemarch

"The only Wisdom is that of Ideas, their correlatives (Laws) being the only important things in the Universe," George Henry Lewes noted in the margin of his copy of Coleridge's "Essays on Method" in The Friend.1 Lewes could not have been more in agreement with Coleridge himself, who wrote in his notebooks of "the incalculable Value of Ideas . . . in all departments of Knowledge . . . to the Naturalist no less than to the Theologian, to the Statesman no less than to the Moralist—in Philosophy, in Organology, in Psychology, as subjective, and in physiological Anatomy as Objective, Analytique, in Chemistry as the constructive Science de Minimis and Astronomy as the correspondent science de Maximis."2 In this vision of the whole, embracing science and religion, subject and object, analysis and synthesis, the smallest molecule ("de Minimis") and the entirety of the cosmos ("de Maximis"), Coleridge provides a characteristically proleptic vantage point on a monistic Victorian Zeitgeist. Whether "subjective" or "objective," Coleridge's Ideas inhabit the realm of Platonic Absolutes. But Lewes wrote an 800-page Biographical History of Philosophy (1845-46) in order to disprove the validity of all metaphysics, proclaiming the inevitable demise of philosophy at the hands of positivism. He staunchly supported the fundamentals of British empiricism: "Modern philosophy stated its pretensions on the one question: Have we any ideas independent of experience? . . . The answer always ends in a nega-
Lewes may thus at first seem an unlikely champion of the Platonic Idea. It is of just such apparent contradictions that the stuff of my history is to be made.

George Henry Lewes and the other thinkers to be introduced in these pages are heirs to the great tradition of British empiricism and its progenitor Francis Bacon. Like Bacon, they found themselves in an exciting new age of scientific exploration: "It will be disgraceful if, while the regions of the material globe . . . have been in our times laid widely open and revealed, the intellectual globe should remain shut up within the narrow limits of old discoveries." These Victorian Columbus were to sail previously uncharted regions: the new sciences of physiological psychology and evolutionary biology, realms intimately (and controversially) linked with a vision of human nature untrammelled by the orthodox identification of mind with spirit, or the creative Deity of Genesis. "How eminently a scientific spirit is shown in Bacon's separation of Science from Theology," Lewes writes in the Biographical History. To effect their scientific expeditions, they eagerly embraced the Baconian method, with its marriage of the empirical and the rational. "A Method is the vital principle of all science," proclaims Lewes; "from Bacon [comes] the whole school of scientific men." Empirical tenets of observation and experience were ideally suited to the new Victorian view of man. In particular, the fascinating new science of physiological psychology was to apply scientific method to the mind, previously exclusively the domain of philosophic introspection. In his "Analysis of the Mental Faculties," Charles Bray writes: "The more perfect becomes our analysis of the mental constitution . . . the more we become struck with the truth of Lord Bacon's celebrated aphorism, as the foundation of all reasoning, that 'Man can only understand and act in proportion as he observes the order of nature.'" Herbert Spencer concurs in his study of The Principles of Psychology: "It was not until Bacon lived, that the generalization of experience was erected into a method. Now, however . . . all educated men are in a sense Bacon's disciples."

Bacon, argues Lewes, is "justly . . . entitled the Father of
Positive Science”; “his mind was antipathetic to all metaphysics.” But significantly, the nineteenth-century father of Positive Science, Auguste Comte, took issue with the Baconian method on a central point: “All good intellects have repeated, since Bacon’s time, that there can be no real knowledge but that which is based on observed facts. This is incontestable . . . but . . . it is equally true that facts cannot be observed without the guidance of some theory. Without such guidance, our facts would be desultory and fruitless; we could not retain them: for the most part we could not even perceive them.” Although the positivists would discard the order of conceptions provided by theology and metaphysics, their system was founded upon a monistic cosmology that demanded an intuitive faith of its own. Lewes praises Bacon’s conception of scientific method, but also points to what he considers a “radical defect”: “its being inductive, and not also deductive.” Whether exploring the phrenological organs of the brain or the developmental hierarchy of the natural world, these Victorians unfailingly embraced the theoretical generalization as earnestly as the observed fact. They believed in the importance of reasoning both inductively from the many to the one, and deductively from the one to the many. If they are not purely metaphysical idealists, neither are they simply rational empiricists.

Nineteenth-century thinkers would be surprised to discover that later academicians transformed them overnight from “Romantics” to “Victorians.” The men and women in this study began to shape their ideas in the mid-1830s; the seeds of their synthesizing sensibility were sown within a romantic tradition. I have chosen Samuel Taylor Coleridge as the subject of my “Prelude” to this study of a Victorian world view, for he incarnates a frame of mind that has much in common with that of his Victorian descendents. Although the particular ideologies they espoused—such as positivism, or evolutionary theory—were distinctively Victorian, the sensibility brought to bear upon them within this circle owes much to romantic precursors.

I will devote this introductory chapter to Coleridge’s Hints
**Towards the Formation of a More Comprehensive Theory of Life.** From amidst Coleridge's considerable *opus*, the choice may seem idiosyncratic. It is not my intention to claim the *Theory of Life* as the simple source for a Victorian cosmology; many of its central ideas are also embodied in other romantic epistemologies, both German and English. But it so happens that this small, posthumous volume drew the attention of a number of thinkers in this Victorian circle. It thus provides a direct frame of reference for the discussions of individual thinkers that follow. In addition to introducing a characteristic frame of mind, it serves as an example of the literal links of influence among these Victorians. The history of the *Theory of Life* among them offers a fascinating demonstration of the extent to which their world was a small one indeed. Ultimately, I wish to examine not so much influence as confluence; to ask not what they learned from the *Theory of Life*, but why they were so attracted to it.

Above all, Samuel Taylor Coleridge wanted to make it whole. "Is there no communion between the intellectual and the moral?" he asked,

> Are the distinctions of the schools separate in Nature? Is there no Heart in the Head? No Head in the Heart? Is it not possible to find a practical Reason, a Light of Life, a focal power from the union or harmonious composition of all Faculties? . . . then we shall have a Philosophy, that will unite in itself, the warmth of the mystics, the definiteness of the Dialectician, and the sunny clearness of the Naturalist, the productivity of the Experimenter and the Evidence of the Mathematician.\(^{12}\)

The nineteenth century was endowed with boundless intellectual energy, free from the snobbery of the specialist. In 1831 Coleridge's *hubris* foreshadowed that of the system-making Victorians who would come after him: "My system . . . is the only attempt I know, ever made to reduce all knowledges into harmony. It opposes no other system, but shows what was true in each. . . . I have endeavoured to unite the insulated fragments of truth."\(^{13}\) Unfortunately, Coleridge never wrote his "opus maximum," but his ambition "to reduce all knowledges
into harmony" was more than mere table talk. All of Coleridge's later work can be read as versions of this unifying impulse; none more so than the *Theory of Life*.

Significantly, this little book was written around 1817-18, but published by Reverend Seth B. Watson for an enthusiastic Victorian audience in 1848. Its Victorian history provides a prototypical example of the direct intellectual links that bound this circle of thinkers. Before turning to Coleridge's theory in some detail, I would like to trace its history among them. That history provides my first example of the characteristic manner in which a shared frame of mind unites a diverse range of ideologies into a single cosmology.

Herbert Spencer's *Autobiography* (1904) guaranteed that he would be remembered by posterity as not a little boorish in his unwillingness to acknowledge the wisdom of his predecessors: "I could not bear prolonged reading. . . . It was as though my intellectual digestive system was comparatively small, and would not take in heavy meals. Possibly also the tendency then, as afterwards, towards independent thought, was relatively so dominant that I soon became impatient of the process of taking in ideas set before me." The rich sauces of Kant's *Critique of Pure Reason*, for example, proved thoroughly indigestible: "I commenced reading, but did not go far." The reader cannot but help be somewhat awed by Spencer's honesty (how many, after all, have really chewed and digested Kant?): "Being then, as always, an impatient reader . . . it has always been out of the question for me to go on reading a book the fundamental principles of which I entirely dissent from."

But Spencer's cantankerous disclaimers can be misleading if one draws the conclusion that he was impervious to the ideas of his times. The *Autobiography* also reveals that he read widely if not deeply in major thinkers of his century, and could respond positively to other men's ideas—when they were similar enough to his own. Like a spider, web-spinning followed ingestion: "Material which would be taken in and organized, or re-organized, so as to form part of a coherent structure in course of elaboration, there was always a readiness to receive."
The structure, of course, was Spencer's own grand Synthetic Philosophy: "The fabric of my conclusions had in all cases to be developed from within—refusing to be built, and insisted on growing." One book proved remarkably congenial to his assimilation, woven inextricably into the web of his philosophy for the decades to come: "I may have given attention to some serious books in 1849 and 50, though I do not remember it. One only which I looked into, left an impression. This was Coleridge's *Idea of Life*. . . . The doctrine of individuation struck me; and, as was presently shown, entered as a factor into my thinking."16

The *Theory of Life* figured prominently in Spencer's first book, *Social Statics* (1850). Spencer turns Coleridge's definition of life to his own purposes, as Coleridge's "tendency to individuation" becomes the basis of Spencer's central thesis in that study: the "individuality of each" must be "unfolded without limit" in a free society.17 Spencer returned to the *Theory of Life* in his second book, *The Principles of Psychology* (1855), devoting an entire chapter of his "General Synthesis" to discussion of a "Proximate Definition of Life," along lines very similar to Coleridge's.18 In *Social Statics* Spencer had applied Coleridge's individuation to political economy, to buttress his own general attack on Utilitarianism, which he felt was reductive in its vision of the individual man as a mere cog in the great social machine. In *The Principles of Psychology*, Coleridge's individuation is transformed into a principle of evolutionary biology: "Life is the tendency to individuation . . . as illustrated by the facts of development, or by the contrasts between lower and higher forms of life."19 This transformation provides an example of the manner in which widely-divergent academic disciplines take on common shape, unified by a Victorian sensibility.

In the spring of 1850, Spencer met his lifelong friend, George Henry Lewes. That summer, the pair took frequent country rambles. Spencer claimed that Lewes attributed a newfound interest in "scientific inquiries" to those excursions.20 Though Lewes's interest in Coleridge dates back to the late
1830s or early 1840s, the *Theory of Life* enters his published work in the early years of his friendship with Spencer. In his essay on "Goethe as a Man of Science" in the *Westminster Review* in 1852, we find him writing that "this law of Repetition, which is the first law of organic growth, must be coupled with another law distinctly announced by Goethe in a very remarkable passage, and subsequently taken by Schelling and various other philosophers, including von Baer, whom Dr. Carpenter improperly credits with the discovery: the law we speak of is by Coleridge named the Law of Individuation."

Characteristically, Lewes modestly traces an intellectual genealogy; Spencer engulfs and assimilates. Quite unlike his hubristic friend, Lewes was widely-read, attuned to every new idea, well-versed in the history of ideas, and remarkably content, during those early years, to transmit the ideas of others rather than originate his own (perhaps one basis of a long-lived friendship with the egomaniacal Spencer?).

Yet just as Spencer could turn Coleridge to his own ends, so Lewes assimilated Coleridge's *Theory of Life* into preexisting concerns. The shared interests of the two men are again clear in Lewes's study of Comte's *Philosophy of the Sciences* (1853), as he digresses extensively from his explication of Comte's *Cours de philosophie positive* to discuss the "definition of life":

In that very interesting posthumous essay by Coleridge, *Hints Towards a More Comprehensive Theory of Life* there is a definition which though not wholly unobjectionable, gives a point of view the student will find extremely useful if thoroughly appreciated—and the definition is this, "Life is the principle of individuation," or that power which discloses itself from within, combining many qualities into one individual thing. To appreciate this, however, it must be studied in the commentary.

The commentary Lewes provides is that of Herbert Spencer, as Lewes then goes on to quote several pages of *Social Statics* on the *Theory of Life*. In Victorian hands Coleridge's theory accommodates itself not only to political economy (in *Social Statics*) and the development hypothesis (in the *Principles of*
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Psychology); but here, to positivism: "Although wandering from Comte by these remarks," Lewes concludes, "I am still keeping within the necessities of an exposition of the Positive Philosophy."24

George Eliot met Herbert Spencer and George Henry Lewes in the fall of 1851; within the next two years, she was rumored to be engaged to Spencer, and fell in love with Lewes. It was Charles Bray and his wife Cara who had been Eliot's closest friends during the decade prior to those auspicious new acquaintances. The intellectual hostilities between old and new friends began as early as 1854, when Bray defended phrenology against Lewes's attacks on the science in the Leader; the public debate climaxed with Bray's acrimonious counterattack on Lewes's second edition of the Biographical History (1857), in his own revised edition of The Philosophy of Necessity (1863).25 Lewes always considered Bray on the dangerous metaphysical fringe of scientific psychology. Bray himself admitted in his autobiography that he considered himself an idealist of sorts: "The two apparently diverse classes of phenomena, the mental and the physical, are only one. Mind is all, and all things are known to us only as they exist in our consciousness."26 Although Lewes was sympathetic with many of the tenets of phrenology, Bray went entirely beyond the pale of Lewes's positivistic sensibilities with his book On Force, Its Mental and Moral Correlates; and on That Which is Supposed to Underlie All Phenomena; with Speculations on Spiritualism, and other Abnormal Conditions of Mind (1866). Lewes's letter to his spouse's oldest friend was scathing: "While I sympathize with the pleasure you must have felt in weaving these speculations, I cannot but regret that you should have wasted money in printing anything so crude, and am quite sure you will get no man of science to pay the slightest attention to it."27

Bray's "force" is a reformulation of the vitalist theory that can be found in England as early as the first decade of the century.28 Bray's pantheistic universe is ruled by a power variously appearing as "Light, Heat, Electricity, Galvanism, Chemical Affinity, Attraction and Repulsion," but all in reality "one
simple, primordial, absolute Force.” Vitalism offered Bray a promised reconciliation of matter and spirit, a sort of spiritual physics. Force is an objectively quantifiable fact as well as an ethereal inspiration. Bray argues that once mind is “studied as all other forces are . . . then Metaphysics may take the place to which it is entitled at the head of all other Sciences.”

Herein lay the seeds of a major development in nineteenth-century thought, a psychology that would transform the way man regarded mind.

Lewes’s emphatically negative stand on metaphysics in the Biographical History would suggest little common ground between his philosophy and Bray’s. But they share an intellectual genealogy. When reflecting on the genesis of On Force in his autobiography, Bray acknowledged his debt to James Hinton’s essay on “Physiological Riddles” in the Cornhill Magazine (July–December 1860). This little essay seemed to have caused quite a stir in the provinces: Sara Sophia Hennell, Bray’s sister-in-law and a lifelong friend of George Eliot, wrote to Eliot to find out more about its author. “The writer of ‘Physiological Riddles’ is a Mr. Hinton,” she replied, “Our attention was first drawn to [him] by an article in the British and Foreign Medical Review which struck Mr. Lewes as quite marvelously similar in style to Mr. Spencer’s writings, and which Mr. Spencer himself felt to be so alarmingly near to his own publications on Organic Form that he hastened to publish these in the same Review.” And what was Mr. Hinton’s “physiological riddle”? no less than “What is Life?” His answer,

that of Coleridge, who in his Essay towards the Formulation of a more Comprehensive Theory of Life . . . seems to have anticipated . . . almost the entire advance of physiological knowledge since his day. His idea is, that physical life is a process, or a mode of organization, of the same powers which we recognize under other names, as magnetism, electricity, or chemical affinity. . . . they are grouped in a special way, the various forms of actions being so united as to constitute, out of many parts, a mutually dependent whole.

“Individuation”: “that power which discloses itself from
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within, combining many qualities into one individual thing,” wrote Lewes; “so united as to constitute out of many parts, a mutually dependent whole,” echoes Hinton. In Samuel Taylor Coleridge’s own words:

The unity will be more intense in proportion as it constitutes each particular thing a whole of itself; and yet more again, in proportion to the number and interdependence of the parts, which it unites as a whole. But a whole composed, ab intra, of different parts, so far interdependent that each is reciprocally means and end, is an individual, and the individuality is most intense where the greatest dependence of the parts on the whole is combined with the greatest dependence of the whole on its parts.™

We have no way of establishing exactly when George Eliot read the Theory of Life, or even that she read it at all; though the circumstantial evidence suggested by her proximity to Lewes, Spencer, and Bray, would make her knowledge of the work highly likely. But Eliot’s essay on “Notes on Form in Art” affords suggestive evidence that she was familiar with Coleridge’s theories. Thomas Pinney published this brief manuscript essay from a notebook dated 1868 for the first time in the Essays of George Eliot (1963). Therein, Eliot illustrates once again the way in which these Victorians embodied a diverse variety of content in a single form.

The same principles that Lewes and Spencer adapted to political economy, evolutionary biology, and positivism, could also be transmuted into a formal aesthetic. Throughout this essay, George Eliot defines literary form in terms of biological metaphors: “The highest Form, then, is the highest organism.” She does so in language that echoes unmistakably the cadence as well as the concepts of the Theory of Life. Compare, for example, the following passage from “Notes on Form” to the passage just cited above from the Theory of Life:

And as knowledge continues to grow by its alternating processes of distinction & combination, seeing smaller & smaller unlikelinesses & grouping or associating these under a common likeness, it arrives at the conception of whole composed of parts more & more multiplied & highly differenced, yet more & more absolutely
bound together by various conditions of common likeness or mutual dependence. And the fullest example of such a whole is the highest example of Form: in other words, the relation of multiplex interdependent parts to a whole which is itself in the most varied & therefore the fullest relation to other wholes."

I shall return to "Notes on Form" in the context of George Eliot's fiction at the conclusion of my study, when I discuss *Middlemarch* as a Victorian finale, at the opposite pole of the century from Coleridge's *Theory of Life*. This quintessentially Victorian literary masterpiece is in a number of ways a fictional incarnation—both formally and ethically—of the Coleridgean cosmology.

But let us now look more closely at the *Theory of Life* itself, in order to explain its appeal to these Victorians. Coleridge writes: "I define life as the principle of individuation, or the power which unites a given all into a whole that is presupposed by all its parts. The link that combines the two, and acts through both, will of course, be defined by the tendency to individuation." I begin by asking two questions suggested by the previous discussion: first, how does Coleridge arrive at "individuation" as his definition of life, and in what ways does this definition embody a characteristically British yoking of empiricism and intuition? Second, how is it that Coleridge's theory of life seems to adapt itself so readily to such apparently disparate subjects as social theory, evolutionary biology, and positivism on the one hand, and a quasi-mystical apprehension of pantheistic "force" on the other?

It is important to note at the outset that individuation is only one of two key terms that recur throughout the *Theory of Life*; the other is polarity: "We are now to seek for the highest law, or most general form, under which this tendency [to individuation] acts . . . what is its most general law? I answer—polarity, or the essential dualism of Nature, arising out of its productive unity." In a sense individuation is a misleading term; or rather, it is only half of the Coleridgean equation: individuality is inseparable from unity, the part defines itself in terms of the whole. In his study of *What Coleridge Thought* (1971),
Owen Barfield draws extensively upon the *Theory of Life* as the key to the Coleridgean cosmos. In the course of his investigation, Barfield offers a crucial clarification of the unique and often misunderstood nature of Coleridgean polarity:

Most of the much that has been written, in the last few decades, concerning the "reconciliation of opposites" in literature, and often with express reference to Coleridge as its putative father, betrays a lamentable failure to understand what "opposites" and their "reconciliation" actually signified in Coleridge's vocabulary. . . . Polarity is dynamic, not abstract. It is not a "mere balance or compromise," but "a living and generative interpenetration." Where logical opposites are contradictory, polar opposites are generative of each other—and together generative of a new product.97

Near the beginning of the *Theory of Life*, Coleridge offers a brief yet suggestive summary of the history of Western philosophy of science. In the process two polar schools of scientific method emerge: one we might call, in Coleridge's own terms, "ontological"; the other, "Newtonian." The ontological school is historically prior, but still existent: "In the thirteenth century the first science which roused the intellects of men from the torpor of barbarism, was as in all countries ever has been, and ever must be the case, the science of *Metaphysics* and *Ontology.*" This is a science in which spirit takes supremacy over matter, reason over observation: "Men continued to invoke the oracle of their own spirits. . . . All attempts at philosophical explication were commenced by a mere effort of the understanding, as the power of abstraction; or by the imagination, transferring its own experiences to every object presented from without. . . . Thus physic became a sort of dull poetry." Four centuries later the "sublime discoveries" of Isaac Newton "placed the science of mechanism on the philosophic throne," as matter reigned supreme, giving "almost a religious sanction to the corpuscular system and mechanical theory. It became synonymous with philosophy itself. It was the sole portal at which truth was permitted to enter. The human body was treated of as an hydraulic machine." As in the *Biographia*
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Literaria, with its attacks on Coleridge's early mentor, David Hartley, who combined Newtonian mechanics with Lockean psychology, it is clear from the Theory of Life that Coleridge, convinced of the "untenable nature of Materialism," is no Newtonian mechanist. But neither is he a spiritualist: "I distinctly disclaim all intention of explaining life into an occult quality."™

In the Theory of Life, Coleridge is seeking for a mediating position, one that combines "ontology" and "Newtonianism." It is in his own time, Coleridge believes, that new scientific discoveries were providing the dynamic unification of those two polar opposites, a "living and generative interpenetration" of spirit and matter: "The discovery of electricity . . . has electrified the whole frame of natural philosophy. . . . Henceforward the new path, thus brilliantly opened, became the common road to all departments of knowledge."™ Electricity offered Coleridge a model and a metaphor for a power that was simultaneously both matter and spirit, quantifiable and ethereal, observable yet invisible. But Coleridge does not believe that electricity equals life (though some scientists did); rather, that it provides a vital analogy: "Whether the powers which manifest themselves to us under certain conditions in the forms of electricity, or chemical attraction, have any analogy to the power which manifests itself in growth and organization, is altogether a different question." Ultimately, according to Coleridge, we must only assume this power; the human mind cannot comprehend it. Thus the principle of organic life that is analogous to the inorganic electrical power can only be defined by reducing it "to its simplest and most comprehensive form or mode of attraction; that is, to some characteristic instinct or tendency, evident in all its manifestations."™

Yet as he continues to search for this tendency, Coleridge seems to suggest that the analogy between the power that rules the inorganic world and the organic world at some indefinable point becomes the identity of the two. Coleridge argues for a wider view, one that sees life evolving out of a "ladder" of minute gradations in the natural world: "This wider view . . .
fills up the arbitrary chasm between physics and physiology, and justifies us in using the former as means of insight into the latter, which would be contrary to all sound rules of ratiocination if the powers working in the objects of the two sciences were absolutely and essentially diverse."

Thus Coleridge arrives at his definition of life: "The power which discloses itself from the principle of unity in the many"; "the principle of individuation, or the power which unites a given all into a whole." But one might question the exact role of this power in creating life. However enthusiastically Coleridge may embrace the "physics" of nature, he remains an ontologist as well. Coleridge was a devout Christian at the time that the Theory of Life was written; but his theory contains no Butlerian analogies—Coleridge has virtually nothing to say about God here. In another sense the Theory of Life is about nothing but God, God active throughout the cosmos, embodied in his creation, the One in the many, the immaterial principle that unifies the material world. Yet it must be stressed that it is fundamentally untrue to Coleridge to deny that the Theory of Life is not equally "about" science, the Coleridgean polar opposite of God.

"I cannot separate God from Nature," preaches pantheist Charles Bray in On Force, "our Priests must be one with our men of science, our Prophets are the Poets." Likewise, neither can we separate man from nature: "In Man the centripetal and individualizing tendency of all Nature is itself concentrated and individualized—he is a revelation of Nature," proclaims Coleridge. Similarly, Spencer argues that man, at the apex of creation, represents the highest manifestation of individuation: "By virtue of his complexity of structure, he is furthest removed from the inorganic world in which there is least individuality." But man's individuality is inseparable from his unity with all natural creation. Spencer continues: "Yet must this highest individuation be joined with the greatest mutual dependence. Paradoxical though the assertion looks, the progress is at once toward complete separateness and complete union." Spencer here echoes Coleridge, who writes:
In social and political life this acme is inter-dependence; in moral life it is independence, in intellectual life it is genius. Nor does the form of polarity, which has accompanied the law of individuation up its whole ascent, desert it here. As the height, so the depth. The intensities must be at once opposite and equal. As the liberty, so must be the reverence for law. As the independence, so must be the service and the submission to the Supreme Will!

Despite their differences of opinion, Charles Bray approvingly quotes George Henry Lewes's *Biographical History of Philosophy* in *On Force*: "The simplest germination of a lichen is, if we apprehend it rightly, directly linked with the grandest astronomical phenomena. ... Plato had some forecast of this when he taught that the world was a great animal; and others, since Plato, when they considered the universe the manifestation of some transcendent life, with which every separate individual life was related, as parts are to a whole."

In the pages that follow, I will explore some of the practical implications of these starry generalizations for a circle of Victorian thinkers, the ways in which Mill, Comte, Combe, Chambers, Martineau, though they may not have made direct reference to Coleridge's cosmology, share with Spencer, Lewes, Bray, and Eliot in a larger confluence of views. Auguste Comte organizes the universe into a hierarchy of sciences, from mathematics and astronomy up to biology and "social physics," claiming as his goal the representation of "all phenomena as particular aspects of a single general fact." Once the "chasm between physics and physiology" has been bridged, the universality of causality and law established throughout the organic as well as the inorganic creation, the doors have been opened to a new scientific view of man. "The doctrine of the Correlation and Persistence of Forces," writes Bray, "gives us a Science of Psychology based on Physiology, by which alone we can attain to the same command over mind, as we already have over physical force." For this circle of Victorians, phrenology embodied just such a would-be science of psychology: Combe, Chambers, Bray, and Martineau were lifelong believers; Eliot, Spencer, and Comte youthful advo-
cates; Mill and Lewes offered qualified praise for the system.

And the physiological psychologist who could view the created world as a grand whole in which the mind of man was as much a part of nature as the "simplest germination of a lichen" or "the grandest astronomical phenomenon" was intellectually prepared for the evolutionary theories that were to culminate with Darwin's *Origin of Species*. It was Robert Chambers's proclamation of the "development hypothesis" fifteen years prior to the *Origin* that made the grand synthesis. Through his close friendship with leading British phrenologist George Combe, phrenology taught Chambers how to unify physics and physiology, and he carried the analogy to the whole of the created universe, claiming that the same fundamental laws could be found at work everywhere, from the macrocosm of the formation of the solar system to the microcosm of embryological growth.

Harriet Martineau's *Letters on the Laws of Man's Nature and Development* continues these variations on the theme of "the true cosmical view of Nature": "All properties of matter are but various conditions of the same: . . . light, heat, electricity, magnetism, chemical affinity, &c., are convertible, or evolved one by the other." Martineau too provides evidence of the long shadow cast by Coleridge's *Theory of Life* over the Victorian age, when she asserts "the sense of variety in unity, and unity in variety; the whole in the parts, and the parts in the whole; all of one growth and origin . . . exhibiting the same law under various aspects, and all evolved . . . each symbolical of all, and all of each." 51

In my preface to this study, I suggested that this Victorian circle provides a case in point of a characteristically British intermingling of intuition and empiricism. Halevy's wedding of the evangelical and the utilitarian spirit can be reformulated in terms of the Coleridgean polarities of "ontology" and "Newtonianism," a view that imaginatively connects the parts within the vision of the whole, and one that reasons inductively from the particulars of empirical observation. In the broadest sense, we might simply call these polarities religion and science.
With a few notable exceptions, the works of this group have not become classics of religious, scientific, or philosophic thought. As a result they have not been given their due by intellectual historians. But I believe that the frame of mind they embody is highly significant for the history of ideas in nineteenth-century England. The conflict between religion and science is a truism of Victorian intellectual history. Yet the biographies and writings of these men and women do not reveal a pattern of anguished conflict; but instead, offer repeated evidence of genuinely optimistic conciliation, a true Coleridgean unification of polarities.

In his otherwise splendid chapter on "Coleridge and the Cosmology of Science," Owen Barfield speaks incorrectly when he categorically claims a "major collision between [Coleridge's] cosmology and the cosmology of science." Barfield is certainly correct when he says that "if Coleridge is right, then for cognition . . . physical process cannot be isolated from mental process, nor natural science from human and ethical psychology." ("Is there no communion between the intellectual and the moral? Are the distinctions of the schools separate in Nature? Is there no Heart in the Head? No Head in the Heart?" Coleridge asks.) Barfield's error comes from the vantage-point of disenchanted twentieth-century man, light-years away from any possibility of belief in a Coleridgean synthesis of natural science and ethical psychology: "The contrary assumption is of course implicit today in every observation, every choice of experiment, every laboratory, every scientific textbook on which the young are reared," he writes in 1971.52 Quite the contrary was true for this Victorian circle. When the reader opens their books, he will find abundant evidence of and faith in (and for them, evidence and faith went hand-in-hand) the harmony of heart and head, and the complex ethical implications of that harmony. "There is not a more pernicious fallacy afloat in common parlance," wrote George Eliot in 1855, "than the wide distinction made between intellect and morality. Amiable impulses without intellect, man may have in common with dogs and horses; but morality, which is specifically human, is dependent on the regulation of
feeling by intellect." Eliot's beliefs on this subject remained consistent throughout her lifetime; twenty years later she offered the other half of the equation, copying into her notebooks a phrase from her first full-length novel, Adam Bede (1859): "Feeling is a sort of knowledge." "What seems eminently wanted is a closer comparison between the knowledge which we call rational and the experience which we call emotional," she goes on to say. Samuel Taylor Coleridge would surely have agreed.

2. Samuel Taylor Coleridge, quoted in Alice D. Snyder, Coleridge on Logic and Learning (New Haven, 1929), pp. 135-36.
5. Lewes, Biographical History, p. 412.
11. Lewes, Biographical History, p. 429. Lewes also quotes liberally from Mill's Logic at this point in the Biographical History.
13. Samuel Taylor Coleridge, Specimens of the Table Talk (Edinburgh, 1905), 12 September 1831.


38. Coleridge, *Theory of Life*, pp. 564-65, 569, 567. This "ontological" state, wherein "men continued to invoke the oracle of their own spirits," has much in common with Auguste Comte's "theological" and "metaphysical" stages of development (see chapter 1), or Ludwig Feuerbach's theory of religion as a subjective psychological projection in *The Essence Of Christianity* (translated by Eliot in 1854).


46. Spencer, *Social Statics*, pp. 481, 482.


