CHAPTER THREE

New Faiths—The Philosophy of Necessity, “Force,” and Mesmerism:
Charles Bray and Harriet Martineau

The chain of causes cannot by any force be loosed or broken, nor can nature be commanded except by being obeyed.
—Bacon, Novum Organum
I. NECESSITY: VICTORIAN HEADACHES AND EIGHTEENTH-CENTURY OPTIMISM

They must necessarily reject all Principles of Vertue, who cannot put Morality and Mechanism together; which are not very easy to be reconciled, or made consistent.—Locke, Essay on Human Understanding

On 12 August 1838, young Charles Darwin read Sir David Brewster’s review of the first two books of Auguste Comte’s *Cours de philosophie positive*, the first public notice of Comte’s work in England; the response he recorded in his notebooks was as much visceral as it was cerebral: “At the Athenaeum Club was very much struck with an intense headache . . . which came on from reading (review of) M. Comte Phil.” I suggest that this headache was a product of the considerable mental turmoil that Comte aroused in Darwin. Darwin was both intrigued and appalled by certain implications of M. Comte’s philosophy. He clearly recognized both the theological and the psychological implications of Comte’s universal causality: “Now it is not a little remarkable that the fixed laws of nature should be/universally/thought to be the will of a superior being . . . one suspects that our will may/arise from/as fixed laws of organization.—M. le Comte argues against all contrivance—it is what my views tend to.” Darwin’s logic reluctantly leads him to conclude that, in this godless world of cause and effect, man himself is determined by the “fixed laws of nature,” laws analogous to those that rule both organic and inorganic creation: “Now free will of oyster, one can fancy to be direct effect of organization. . . . If so free will is to mind, what chance is to matter./M. le Comte./” Darwin worries anxiously over these deductions: “Put it so.—Probably some error in argument, should be grateful if it were pointed out.” Such scientific determinism, muses Darwin, bears a strong resemblance to Calvinism, with one very significant difference: “The above views would make a man a predestinarian of a new kind, because he would tend to be an atheist.”

Darwin’s notes on “Mind, Man, and Materialism” were re-
recently published by Howard Gruber and Paul Barrett. Dar­
win’s response to Comte provides a case in support of their the­
sis that the thinking in these early notebooks was to a large
degree suppressed in Darwin’s published work; not because
Darwin doubted the truth of his conclusions, but because he
simply wished to avoid the “headache” of an extremely contro­
versial subject.  

Charles Darwin, of course, was only one of many Victorians
who wrestled with the painful consequences of materialism. I
turn to another case of mental anguish that is much closer to
this particular Victorian circle: James Anthony Froude’s con­
troversial autobiographical novel, The Nemesis of Faith
(1849). “The book after all had been but a cry of pain,” Froude
later apologized, after his youthful skepticism had given way
to self-satisfied orthodoxy; “It might have been better to bear
pain silently, but even with a bad toothache an occasional
groan may be forgiven.” Aside from a rather chaotic and ram­
bling plot, in which the hero of the novel, Markham Suther­
land, an Anglican priest of Tractarian persuasion, loses his
faith, has an affair with a married woman (whose child meets
with a retributive drowning), attempts suicide, and is con­
verted (ambiguously) to Catholicism—all in two hundred
pages!—the novel is primarily an excuse for Froude’s own
musings on the subjects of faith and fate.

George Eliot read the Nemesis in the spring of 1849, and, in
a letter to Sara Sophia Hennell, compared her response to
Froude to that of Keats on first looking into Chapman’s Ho­
mer. She wrote an ecstatic review for Charles Bray’s Coventry
Herald in praise of “a spirit who is transfusing himself into
our souls and so vitalizing them by his superior energy, that
life, both outward and inward, presents itself to us in higher
relief, in colours brightened and deepened. . . . The books
which carry this magic in them are products of genius.” A
warm correspondence between Froude and “the translator of
Strauss” ensued, and Froude soon came to Coventry, to meet
Marian Evans at Charles Bray’s home. Tentative plans were
even made for Froude to travel to Europe with George Eliot
and the Brays after Robert Evans's death; "Was there a faint hope of a match between these two fallen angels?" speculates Gordon Haight.  

Turning to the *Nemesis*, we find a powerful strain of scientific determinism in the darker musings of Markham Sutherland: "But, uniformly, given a particular condition of a man's nature . . . his action is as necessarily determined . . . as a bar of steel suspended between two magnets is determined towards the most powerful." Froude later returns with even greater emphasis to his magnetic metaphor:

I use magnetic illustrations, not because I think the mind magnetic, but because magnetic comparisons are the nearest we have, and the laws are exactly parallel. Minds vary in sensitiveness and in self-power, as bodies do in susceptibility of attraction and repulsion. When, when shall we learn that they are governed by laws as inexorable as physical laws, and that a man can as easily refuse to obey what has power over him as a steel atom can resist the magnet?

Like Darwin, Froude also seizes upon the theological aspects of this necessitarianism. If man has no choice but to act as he is determined, does this not obviate his moral responsibility? "Sin, therefore, as commonly understood, is a chimera," he concludes.

Only two years later, Froude's youthful rebellion was spent. Strong proof of this is provided by placing the *Nemesis of Faith* side-by-side with his April 1851 essay in *Fraser's*, "Materialism: Miss Martineau and Mr. Atkinson," on the subject of their *Letters on the Laws of Man's Nature and Development* (hereafter cited as *Letters*). The landscape of the *Nemesis*, with its colors "bright and deep," has given way to the nightmare topography of Froude's vision of the *Letters*: "We have travelled along a grim, strange road, beset with ghastly figures; and we are coming now towards the sullen land, where no sun shines, and there is no sound of prayer, or any glad song of Thanksgiving, where hope sickens and faith dies, and necessity, with its cold arms, folds us round, and freezes up our veins." Here Froude, like Darwin, sees universal causality as
the direct road to atheism: "Effects following causes and law being as distinctly traceable in moral as in physical phenomena," according to Froude, leads to the deadly conclusion that "matter is all—matter and its functions. There is no God, no Father." But how do Atkinson and Martineau respond to this pestiferous materialism?: "They bid us come to them, orphans as we are, and shake off our terror and be happy in our new freedom."

And indeed, it is only in Froude's eyes that Martineau's necessitarian landscape is a "sullen land, where no sun shines." In her Autobiography Harriet Martineau chronicles her gradual conversion to the doctrine of necessity, her "repose upon eternal and irreversible laws, working in every department of the universe, without any intervention from any random will, human or divine." And, in apparent defiance of all logic, Harriet Martineau is "happy in her new freedom": "With the last link of [her] chain snapped," she finds herself "a free rover on the broad, bright, breezy common of the universe."

If Harriet Martineau calls into question Darwin's and Froude's prognosis for the health of the human will under a sentence of necessity, Charles Bray, author of The Philosophy of Necessity (1841), casts equal doubts upon the necessary conjunction of determinism and atheism: "I am no Agnostic; to me God is not an unknown God. . . . In the flower, in the insect, in the bird, I say here—this is God—His immediate work and presence." In a characteristic passage in his autobiography, Phases of Opinion and Experience During a Long Life, Bray stops in his garden to look at a poppy, with the pantheistic eye of the poet-scientist: "It was white, its fringed edges tipped with scarlet, the other part of the flower was beautifully and symmetrically striped. . . . I could not but think, with wonder, who made this, and who made it so beautiful to me? . . . Professor Tyndall tells us that it takes 477 millions of vibratory waves to produce the sensation of the colour we call red." Bray concludes this discussion with the words of his friend George Eliot, speaking in Adam Bede of "an unfathomable ocean of love and beauty": "Our emotion in its keenest
moment passes from expression into silence—our love at its highest flood rushes beyond its object and loses itself in the sense of Divine mystery.”

Darwin deals with the conflict between new scientific theories and conventional religion by ignoring it (at least in his published work). Froude retreats from youthful heresy into complacent middle-aged orthodoxy. But Charles Bray and Harriet Martineau take the *via media* characteristic of their circle, seeking reconciliation of polarities within a monistic cosmology. If George Combe and Robert Chambers are the scientists of this Victorian circle (albeit with a philosophical intent), Bray and Martineau are its theologians (their creed founded on scientific theory). They preach the gospel of necessity; based upon a positivistic methodology similar to Mill’s and Comte’s, and buttressed by an enthusiastic advocacy of phrenology. Their union of mesmerism with phrenology completes the synthesis of matter and spirit. Yet Darwin and Froude may seem more logically consistent in their anxious and doubtful conclusions than do Bray and Martineau in their sunny optimism.

In order to understand this cheerful necessitarian gospel, we will have to come to terms with two central paradoxes: (1) how can determinism be reconciled with the necessitarian’s claim of freedom and (2) how can religious faith be made congruent with a scientifically determined cosmos? The painful torment that beset Darwin, Froude, and so many other Victorians was simply not present for the Victorians in this circle. I offer Bray and Martineau as two cases in point of the ways in which these Victorians were able to reconcile the ethical values inherited from a Christian tradition with the moral implications of a cosmos ruled by universal causation.

Before attempting to answer these questions, it will be useful to explore the common intellectual heritage of Unitarianism shared by Bray and Martineau, and to look briefly to Joseph Priestley, the eighteenth-century precursor and prototype of their philosophy of necessity.

Young Harriet Martineau has been called “the Unitarian
prophetess." Before she abandoned herself to the philosophy of necessity and the repudiation of all orthodox religious creeds, Martineau was well-known for essays on subjects Unitarian for the *Monthly Repository*. Her beloved brother James—who broke with Harriet over his vituperative review of her *Letters*—was to remain one of the most prominent and prolific Unitarian clergymen of the nineteenth century. And the Unitarian background is important to other members of this circle as well. Charles Bray was rescued from a youthful Evangelical phase by a debate with a Unitarian minister; he later wed and wooed his wife Cara away from her family’s strong Unitarianism. But her brother, Charles Christian Hennell, remained within the sect. In 1838 Hennell published his *Inquiry into the Origins of Christianity*, a critique of Biblical literalism that bore striking resemblance to the “higher criticism” of German scholars (with whom Hennell was at that time unacquainted). George Eliot’s reading of Hennell’s *Inquiry* has been well-documented as the event that precipitated her conversion from Evangelical piety to freethinking rationalism.

The “new” Biblical criticism coming from Germany failed to startle the Unitarians, who had always believed in the application of reason to the study of the Scriptures; it was Unitarian divines who were largely responsible for the introduction of Biblical criticism from England to the continent. George Eliot, of course, went from Hennell to her translations of David Friedrich Strauss’s *Das Leben Jesu* in 1846, and of Ludwig Feuerbach’s *Essence of Christianity* in 1854.

Much attention has been paid to the Higher Criticism and its profound effect on the Victorian consciousness (and conscience). But here I wish to emphasize the other half of the Unitarian legacy to the Victorians: physiological psychology. These two interests are not, in fact, as disparate as they might at first seem. “Let us then study the *Scriptures, Ecclesiastical History*, and the *Theory of the Human Mind* in conjunction; being satisfied, that from the nature of things, they must, in time, throw a great and new light upon each other,” Joseph
Priestley wrote in *The Doctrine of Philosophical Necessity Illustrated* (1777). From its inception Unitarianism allied itself with the "theory of the human mind" as well as with Biblical studies. The conjunction of Biblical criticism and psychology provides another example of the monistic *Weltanschauung* characteristic of this frame of mind. The two fields share not content, but form: a common method.

In an 1831 essay on the German critics, "The State of Protestantism in Germany," Dr. R. H. Brabant, friend of the Brays and early mentor of George Eliot, defined Biblical rationalism in terms that make clear its affinities with the positivistic cosmos of Mill or Comte: "The fundamental principles of Rationalism we take to be these:—that human reason . . . is the sole arbiter as to what is to be received as truth . . . that facts recognized by sense or consciousness form the materials on which the reasoning faculty is to be exercised . . . that the phenomena of nature are so linked to each other, that the whole . . . constitutes a series invariably uniform." Over thirty years later, George Eliot reviewed W. E. H. Lecky's *History of Rationalism* for the *Fortnightly Review*, and broadened her definition of the term rationalism beyond "the original application of the word to a particular phase of Biblical interpretation," to include scientific as well as religious pursuits; claiming that "The great conception of universal regular sequence, without partiality and without caprice—the conception of which is the most potent force at work in the modification of our faith . . . could only grow out of that patient watching of external fact, and that silencing of preconceived notions, which are urged upon the mind by the problems of physical science."

Eliot's expanded definition has its roots in the eighteenth century. Its prototype is to be found in the philosophy of Joseph Priestley. Priestley (1733-1804) was not the literal founder of Unitarianism, but his intellectual respectability as a scientist lent the authority of leadership to his theological ventures. Although Priestley's influence was less important to nineteenth-century American circles of transcendentalist Unitari-
ans, the theologian-scientist was an ideal inspiration to this particular group of scientifically-minded Victorian intellectuals. A chemist of international reputation, Priestley is probably best known for the discovery of oxygen, and for his experiments with electricity. He also gave a major impetus to association psychology by publishing an abridged version of David Hartley’s *Observations on Man*, under the title *Hartley’s Theory of the Human Mind on the Principle of the Association of Ideas* (1775) (a book that Harriet Martineau claimed to have “studied with a fervour and perseverance which made it perhaps the most important book in the world to [her] except the Bible”).

But Priestley considered himself foremost a philosopher and a theologian. Of his works in these fields, those most relevant here are his *Disquisitions Relating to Matter and Spirit* and *The Doctrine of Philosophical Necessity Illustrated* (both 1777). Although it was a liaison that agnostic Leslie Shephen considered an “unnatural alliance,” Priestley himself found his two careers entirely compatible. “Hereafter, I hope that materialism . . . will be the favourite tenet of rational Christians,” Priestley somewhat surprisingly prefaces his second edition of the *Disquisitions Relating to Matter and Spirit*. Priestley’s scientific researches led him to conclude that “what we call *mind* . . . is not a substance distinct from the body, but the result of corporeal organization.” It is easy to see how Priestley’s Unitarian tradition would prepare the Victorians for phrenology: “The seat of the sentient Principle in Man, is the material substance of the Brain.” Mind is subject to the same laws as matter; Priestley’s scientific beliefs thus entail a philosophy of necessity: “The doctrine of necessity . . . is the immediate result of the doctrine of the materiality of man; for mechanism is the undoubted consequence of materialism,” he asserts. Priestley employs the same magnetic metaphor to picture this necessity that Froude does: our reasoning with respect to the result of “our sensation from organization is exactly similar to our reasoning concerning the attraction of iron by magnetism.”
The Doctrine of Philosophical Necessity Illustrated was written as an "appendix" to Matter and Spirit: it is in this book that Priestley attempts to sort out some of the thornier ideological implications of the materialism of the previous work, in the form of arguments used later by Charles Bray and Harriet Martineau. Let me begin my discussion of Priestley's doctrine of necessity with the first paradox of this philosophy: its fundamental optimism. How could these necessitarians proclaim themselves "free rovers" on the "sullen landscape" of necessity? It is here that Priestley, as an eighteenth-century analogue, becomes particularly useful.

In order to understand the optimism of this philosophy of necessity, one must first understand its relationship to a very different form of necessitarianism, Calvinism. For the dark strand of the Calvinistic doctrine of predestination is woven into the background of all these dissenting Victorian thinkers, as it was for their Unitarian precursor Priestley. In her Autobiography Harriet Martineau goes to the trouble of pointing out that the first English Martineaus were expatriated Huguenots, Calvinists who passed from the "pseudo-Christianity" of Arianism to the truer faith of Unitarianism.20 J. D. Y. Peel dubs Spencer, along with Bray, Combe, and Martineau, "neo-Calvinist[s]."21 Charles Bray's contemporaries considered him the exemplar of the "Calvinist branch of the science," and Bray himself acknowledges Jonathan Edwards's "Inquiry into the Freedom of the Will" as a major inspiration for The Philosophy of Necessity.22 But "neo-Calvinism" is a misleading term unless one emphasizes the way in which these thinkers made careful distinctions between what they accepted and what they emphatically rejected of Calvinistic doctrines. George Eliot wrote in 1842: "Although I cannot rank among my principles of action a fear of vengeance eternal, gratitude for predestined salvation, or a revelation of future glories as a reward, I fully participate in the belief that the only heaven here or hereafter is to be found in conformity with the will of the Supreme."23 Calvinism preached a fatalistic predestination: man was born already saved or damned. This might be a
heartening doctrine for those who believed themselves among the former category of the elect, but the conscience-ridden who numbered themselves among the latter were less satisfied. Young George Combe was one of such poor souls: "The more I believed the more unhappy I became . . . the consequences were appalling! Some persons were elected to everlasting enjoyment in heaven; many more passed over by God's decree, before they were born, to everlasting torments in hell. I included myself at once in this category . . . So severely did these ideas oppress me, that I envied the cattle that had no souls, and ardently wished that I had been as fortunate as they." One has only to open The Constitution of Man to recognize the distance George Combe travelled to arrive at his gospel of phrenology, and the immense liberation of its progressive optimism.

All these Victorian necessitarians retained a Calvinistic predisposition to determinism; but it was their particular modification of Calvinistic doctrines that accounted for the shared sense of relief and optimism that permeates their philosophies. In his Doctrine of Philosophical Necessity, Priestley takes care to devote a section to "The Calvinistic doctrine of PREDESTINATION compared to the philosophic doctrine of NECESSITY." Calvinism, Priestley argues, fails to promote virtue (witness George Combe's depressive inertia), because it claims that man can do nothing to alter his predestined fate ("I do not see what motive a Calvinist can have to give any attention to his moral conduct"). Priestley's necessity, on the other hand, emphasizes the power of man's reason, in this rational world of universal cause and effect, to understand the forces that determine his behavior: "In fact, the system of necessity makes every man the maker of his own fortune."

How can this be? The will, argues Priestley, is "a perfectly mechanical thing," it is "a particular case of the general doctrine of the association of ideas," whereby we will that which we associate with pleasure, reject that which we associate with pain. But such a mechanically predictable will can thus be modified by the understanding; by educating it, altering its
motives: "The doctrine of the necessary influence of motives upon the mind of man makes him the proper subject of discipline, reward and punishment, praise and blame." This doctrine of necessity, unlike its fatalistic Calvinistic sibling, thus promotes an optimistic notion of human development and progress; furthermore, unlike its judgmental Calvinistic counterpart, it encourages a broadly-based sympathy: "absolute evil wholly disappears," since no man is innately damned, but only miseducated: "I cease to blame men for their vices," writes Priestley; "my system cannot help viewing them with a tenderness and compassion." 26

This brief discussion of Priestley's philosophy of necessity, as distinguished from its Calvinistic precursor, helps to explain the essential optimism of this Victorian circle, freed from the gloomy burden of sin and damnation—"the thorough-going Calvinism that holds that the majority of mankind were created simply that the 'smoke of their torment' might serve as a condiment to give piquancy to the bliss of the elect," as George Eliot so colorfully put it! 27 But my second paradox remains unanswered: how is such a system congruent with belief in God: Priestley offers no satisfactory solution here; one is inclined to agree, on this point, with Leslie Stephen's judgment that Priestley's is an unsuccessful "compromise between things incompatible." Priestley never disclaims the orthodox Christian God as First Cause of the universe, and this results in some rather serious inconsistencies in his argument: "The full persuasion that nothing can come to pass without the knowledge and express appointment of the greatest and best of beings, must tend to diffuse a joyful serenity over the mind, producing a conviction that . . . whatever is, is right." 28 This cannot but remind the reader of that optimistic eighteenth-century Deity that George Combe failed to unify with the implications of phrenology in The Constitution of Man. Priestley's "joyful serenity" here may be deceptive: is it not logically the flip-side of gloomy predestination? God's omnipotence seems in direct conflict with his notion of man's self-determination.
It remained for Charles Bray and Harriet Martineau to offer alternative solutions to the problem of God in a non-Calvinistic necessitarian universe. Both Martineau and Bray ultimately jettisoned Unitarianism as a means of reconciling religion and science. Like Joseph Priestley, they sought to retain some form of religious belief within a scientific cosmos; but their solutions to the problem are far less orthodox than his. Bray's God becomes a non-Christian pantheistic "force"; Martineau goes one radical step beyond Bray, to a "force" that apparently eschews God altogether. But I would emphasize that both retain a strong sense of the spiritual, the intuitive. Like Priestley, they are fascinated with the interrelationship of matter and spirit, emphatically rejecting Froude's insinuation that "matter is all."

II. THE RATIONAL ROMANTIC—CHARLES BRAY: THE PHILOSOPHY OF NECESSITY; OR, THE LAW OF CONSEQUENCES; AS APPLICABLE TO MENTAL, MORAL, AND SOCIAL SCIENCE (1841)

On 29 August 1851 George Combe and his wife were met at the Coventry train station by Charles Bray. They traveled to Rosehill, where they were introduced by Bray to his wife Cara, sister-in-law Sara Sophia Hennell, and one "Miss Evans, the daughter of a farmer." At the outset of his friendship with Bray, Combe recognized a kindred spirit: "A ribbon manufacturer about 40; a Phrenologist and a convert to the natural Laws, with an . . . excellent coronal region, but great Comb[ativeness] and Destru[c]tiveness and very deficient Concentrativeness. He is proprietor of the Coventry Herald, which he uses as the organ of the new philosophy and its applications." As we have seen above, Combe was even more favorably impressed with Marian Evans. It is not remarkable that George Combe should have found George Eliot at Rosehill; for during the preceding decade, since meeting the Brays in 1841, "Mr. and Mrs. Bray and Miss Hennell, with their friends, were her world," as she told friend Mary Sibree. The friendship continued long after George Eliot left the provinces for London; "a beautiful and consistent friendship, running
like a thread through the woof of the coming thirty-eight years," according to George Eliot's husband and biographer John Walter Cross.\(^{52}\)

In his autobiography, Bray nostalgically paints a lovely portrait of Rosehill in its freethinking prime:

There was a free-and-easy mental atmosphere, harmonizing with the absence of all pretension and conventionality, which I believe gave a peculiar charm to this modest residence. "When the bear-skin is under the acacia," our friends used to write, "then we will come to you," and the spot is still associated with the flow of talk unrestrained, and the interchange of ideas, varied and peculiar according to the character and mood of the talkers and thinkers assembled there.\(^{53}\)

Mary Sibree remembers telling George Eliot, "as we closed the garden door" at Rosehill, "that we seemed to be entering a Paradise." George Eliot concurred: "I do indeed feel that I shut the world out when I shut that door."\(^{54}\)

After she settled in London in the early 1850s, George Eliot was still to return to that Edenic spot, to share the blessings of its seclusion and intellectual stimulation with the weary cosmopolites who now entered her life. During the time of her infatuation with and rumored engagement to Herbert Spencer, she intrigued with Bray to organize his invitations to these new friends to suit her liking: "He [Spencer] will prefer waiting for the pleasure of a visit to you until I am with you—if you will have him then. \textit{Entre nous}, if Mr. Lewes should not accept your invitation now, pray don't ask him when I am with you."\(^{55}\) Long after George Eliot's more desired companion had become George Henry Lewes, Herbert Spencer's friendship with Charles Bray continued autonomously over three decades, as Spencer paid solitary visits to Rosehill: "I hope you are likely to survive the heavy dose of theories you have had," Eliot joked to Cara after one such visit.\(^{56}\)

The emotional bonds between George Eliot and Charles Bray were intense: "You are the dearest, oldest, stupidest, tiresomest, delightfullest, and never-to-be-forgottenest of friends to me," Eliot vowed in 1853; "As a daughter she was the most..."
devoted I ever knew," Bray claimed to George Combe in 1854.37 And the intellectual bonds were equally profound. "I may claim to have laid down the base of that philosophy which she afterwards retained," Bray asserted somewhat hubristically in his autobiography.38 But his voice is unmistakable when George Eliot writes John Chapman in 1852: "I [believe] . . . that the thought which is to mould the Future has for its root a belief in necessity." "In the fundamental doctrine of your book," the Philosophy of Necessity, Eliot writes Bray in 1857, "that mind presents itself under the same condition of invariableness of antecedent and consequent as all other phenomena . . . I think you know that I agree."39

The deepest communion between Bray and Eliot espoused the common ground of emotion and intellect. Far more than rational necessity, the "invariableness of antecedent and consequent," the unity of head and heart in Charles Bray's philosophy provided a strong foundation for Eliot's compatibility with the sage of Rosehill. The first published letter from George Eliot to Charles Bray (dated 1848) suggests this fundamental affinity: "I heartily say amen to your dictum about the cheerfulness of 'large moral regions.' Where thought and love are active, thought the formative power, love the vitalizing, there can be no sadness. They are in themselves a more intense and extended participation of a divine Existence."40 Thought is "formative," love "vitalizing"; intellect and emotion work in tandem. George Eliot moves easily from the language of phrenology—"large moral regions"—to that of faith—"a divine Existence." It also should be emphasized how remote Bray and Eliot are here from the stereotype of the atheistic free-thinker. Although neither remains an orthodox Christian, faith in some very important form still clearly occupies a central position in their cosmos.

The essential statement of Charles Bray's philosophy in these early years can be found in The Philosophy of Necessity; or, The Law of Consequences; as Applicable to Mental, Moral, and Social Science (1841). I offer a reading of this book with two objectives in mind: first, to examine it in light of the fun-
damental paradoxes of necessitarianism that were established in the preceding section; and second, to show how Bray’s philosophy fits squarely within the intellectual contexts defined in previous chapters of this study: the methodology of Mill and Comte, and the applied science of Combe and Chambers. Charles Bray, like so many of the Victorian intellectuals with whom this study deals, is a magpie thinker; he borrows unabashedly and quotes liberally from a host of sources. What is original and striking in the *Philosophy of Necessity* is not to be found in the parts, but in the whole: in Bray’s juxtaposition of his sources. Chapter one began with the meeting of Utilitarianism and Romanticism in John Stuart Mill’s essays on Bentham and Coleridge: his vision of polar opposites as allies, joined in a single progressive force. Written only a year after Mill’s essay on Coleridge, the *Philosophy of Necessity* embodies a similar synthesis of two traditions, as Bray moves with ease from Locke and Bentham to Shelley and Carlyle.

In his introduction Bray acknowledges Bentham as a central source of inspiration. The utilitarian echoes throughout are unmistakable: “Pain and Pleasure [are] . . . the ultimate springs of all our actions”; “Virtue, to the Necessitarian, means that line of conduct which, *all* things considered, shall be productive of the greatest happiness to all.” But Bray makes the transition from utilitarianism to romanticism with remarkable ease: “The happiness of the individual must be subservient to that of the human race, and the human race is again only a part of the great whole of animated existence, and man’s situation and position on this earth must have reference to the whole of God’s plan for the happiness of all.” He then proceeds to quote from that definitive romantic pantheist, Shelley, in “Queen Mab’s” celebration of nature’s unity:

```
Those viewless beings,
Whose mansion is the smallest particle
Of the impassive atmosphere,
Think, feel, and live, like man.
```

Bray sees no conflict between heart and head: “Such, though a
poetical, is yet a logical deduction from the doctrine of necessity," he concludes.\textsuperscript{42}

Of all his sources, Bray returns most frequently and at greatest length to fellow-Victorian Carlyle's \textit{Sartor Resartus} (1833-34). In Carlyle, Bray finds the solution to Priestley's dilemma of God's role in a universe ruled by inexorable cause and effect. He is not a First Cause, but a pantheistic Force, says Bray, "the all-prevading influence which maintains the connexion between all antecedents and consequents."\textsuperscript{43} Bray quotes Carlyle's rhapsodic musings in \textit{Sartor}, which give perfect voice to this idealist faith: "This fair universe . . . is in every deed the star-domed City of God; . . . through every star, through every grass-blade, and most through every living soul, the glory of a present God still beams."\textsuperscript{44} This mystical power is clearly not the Calvinistic Predestinator, nor is it an orthodox Christian God. Bray, the scientist and logician of necessity, admits to the unknowable; his God is an ineluctable force that unifies all: "And thus, in a mode mysterious and incomprehensible to Man, may the Creative Spirit of the Universe form a part of all Nature."\textsuperscript{45} But Bray the pantheist also remains Bray the scientist. \textit{The Philosophy of Necessity} contains the seeds of a philosophy that would mediate between the scientifically demonstrable and the transcendent. By \textit{On Force}, in 1866, Bray finds in the concept of "force" a fully scientific embodiment of this pantheistic power.

For now, I wish to descend from these empyrean heights; to return to Charles Bray the Utilitarian empiricist; and to examine his philosophy of necessity as a product of the scientific cosmology shared by Mill and Comte, Combe and Chambers. Bray's philosophy of necessity is the logical corollary of universal causality.

Mill's \textit{Logic} and \textit{The Philosophy of Necessity} appeared within two years of one another, and the parallels between their views of necessity are striking. In chapter 2 of part 6, "On the Logic of the Social Sciences," John Stuart Mill turns to the subject "Of Liberty and Necessity," in a discussion he himself considered "the best chapter in the two volumes."\textsuperscript{46} \textquoteleft Are hu-
man actions subject to the law of causality?" Mill opens his chapter; "the question, whether the law of causality applies in the same strict sense to human actions as to other phenomena is the celebrated question concerning the freedom of the will." Similarly, Bray writes in his "Introduction": "I would show that the mind of man is not an exception to nature's other works; that like everything else it has received a determinate character; that all our knowledge of it is precisely the same as that of material things, and consists in the observation of its order of action, or the relation of cause and effect."

Because human behavior conforms to the logic of cause and effect, man is scientifically predictable: "If we knew the person thoroughly, and knew all the inducements which are acting upon him, we could fortell his conduct with as much certainty as we can predict any physical event," claims Mill. Again, compare Bray on the same point: "The character of man is the result of the organization he received at birth, and all the various circumstances acted upon it since, and these, if that were possible, being given, a mental philosopher would predict the line of conduct that will be invariably pursued by each individual; as readily as a chemist can predict the exact result of the mixture of any chemical substance." It is thus that there can be, as Mill claims, a "logic of the social sciences"; "The science of Morality is as certain as that of Physiology," asserts Bray.

Like Priestley, Mill and Bray insist that necessitarianism does not doom man to a predestined fate. Mill makes a clear distinction between what he calls "fatalism" and "necessitarianism," a distinction very similar to that made by Priestley between Calvinism and Necessitarianism. Although our actions and characters "follow from our organization, our education, and our circumstances," nonetheless man "has, to a certain extent, power to alter his character," says Mill. Necessity, argues Bray, does not "annihilate the free agency in man." Although man's behavior is determined by his "mental constitution" and his "circumstances," he can reasonably educate himself to understand, and thus potentially to alter, his behavior. It is thus the very logic of inexorable cause and effect
that is the key to man's liberation: "If necessity did not regulate [the world of mind as of matter] . . . man's reasoning power, which depends for its exercise upon the uniformity of events in both, would be of no use," says Bray. Similarly, Mill claims that moral reason comes from self-understanding: we are "able to modify our own character if we wish"; "A person feels morally free who feels that his habits or his temptations are not his masters."

Once the positivist millennium arrives, scientifically enlightened men will be able to experience just such freedom. Significantly, Comte's Cours de philosophie positive preaches the same necessitarianism—and the same optimism—as Bray and Mill. Though Comte states emphatically that "true liberty is nothing else than a rational submission to the preponderance of the laws of nature," he also asserts that "man . . . can modify for his own good . . . the system of phenomena of which he forms a part . . . directed by an accurate knowledge of natural laws." Unlike Mill, Bray had not encountered Comte as early as 1841. But in his autobiography, he acknowledges the essential compatibility of his philosophy of necessity and positivism, quoting positivist Dr. Bridges: "The first and last object of Comte's life was to instill that sense of steady firm conviction which scientific truth establishes in the regions of man's emotions and conduct." Bray replies: "It is this 'new thing' that I have been preaching for the last forty years, but I was not aware that I had so strong an ally in Positivism."

Despite the striking similarity of their arguments, Bray and Mill wrote independently of one another. Both based their Victorian world view on a common tradition of British empiricism. "The importance of the principle of Association cannot be overestimated," Bray avows. John Locke's Essay Concerning Human Understanding claimed, "The liberty Men have . . . [is] that they can suspend their desires, and stop them from determining their will to any action, till they have duly and fairly examin'd the good and evil of it." Bray quotes a similar passage from Locke in The Philosophy of Necessity; he returns to Locke's Essay throughout the book.
was the "idol of the dissenters," and his work would have come to Bray through the Unitarian heritage; as it did to John Stuart Mill in the empiricist patrimony of Jeremy Bentham and his father James Mill.59

However, Bray moves beyond Locke and Mill in two significant ways: first, like Combe and Chambers, he goes beyond mere theory about a science of mind, to claim that in phrenology he has found the scientific embodiment of psychology. Second, the discoveries phrenology yields about the human mind take Bray beyond the boundaries of empiricism. Or rather, they expand the boundaries of traditional empiricism. For Bray does not leave behind the principles of association psychology, but combines them with phrenology to yield a new intuitionism, with significant implications for the fledgling science of evolutionary biology. This newborn hybrid of the empirical and the intuitive is consistent with the intellectual temperament of a man who quotes Shelley and Carlyle side-by-side with Locke and Bentham. It points the way to the more lucidly and explicitly stated organicism of George Henry Lewes and the evolutionary psychology of Herbert Spencer. I will spend the remainder of my discussion of Charles Bray exploring the evidence for the above assertions.

Although Locke laid the foundations for a scientific psychology in the Essay on Human Understanding, he had stopped short of what he called "physical considerations."60 The science of the day, he argued, was not yet capable of such activities. A century and a half later, Bray believed that he could fill in the Lockean lacunae, establish the "first principles" of a science of psychology on the basis of a "clear chart of the mental faculties," "by a method strictly inductive": "Such a chart, the necessity for which Locke so clearly expressed his conviction . . . seems to have been furnished by the new philosophy of Phrenology."61 As we have seen, Bray was an early disciple of George Combe, and a sizable portion of The Philosophy of Necessity is devoted to a straight exposition of the tenets of phrenology. Bray acknowledges that he takes his phrenological charts directly from The Constitution
of *Man*; when discussing the physical, organic, and moral laws (in a section allusively titled "Man Considered in Relation to External Objects"), he is able to abbreviate his discussion: "The whole of this subject has been so clearly illustrated in Mr. Combe's well-known work . . . that it is unnecessary to pursue it here to any length."  

Taken in conjunction with the philosophy of necessity, phrenology provides the bridge from Bray's empiricism to his intuitionism. John Stuart Mill stated in *Auguste Comte* that "the phrenological study of Mind thus supposes as its necessary preparation the whole of the Association psychology."  

We have already seen that Bray continues to assert the importance of associationism in *The Philosophy of Necessity*. But significantly, Bray writes in his autobiography that he initially thought phrenology and association psychology to be less than compatible: "Now I had at that time a most supreme contempt for Phrenology. . . . I thought I knew how our Feelings had been gradually formed by Association, and that they did not therefore exist as primitive instincts as the Phrenologists asserted."  

The fundamental optimism of this necessitarianism—the belief that man can modify his desires, alter his character—depends upon the principles of associationism: man changes himself by forming new associations, new patterns of cause and effect. Yet Bray is outspokenly a phrenologist in *The Philosophy of Necessity*. How did he reconcile the old philosophy with the new science?  

I believe that Bray found a satisfying method of reconciling the two within phrenology itself; a way in which he could claim both that feelings are "gradually formed by association" and that they "exist as primitive instincts." This method contained within it the germ of an evolutionary biology, which would come to full fruition in the thought of Herbert Spencer. It is not only an ingenious stratagem to reconcile antitheses, but a major contribution to the history of ideas in the nineteenth century. On the simplest level, phrenology would seem unequivocally to substantiate the notion of innate mental characteristics ("primitive instincts"): if each man is born with
a certain brain, is not his character thus predetermined at birth? Accordingly, George Henry Lewes writes in the *Biographical History* that "Gall may be said to have definitively settled the dispute between the partisans of innate ideas and the partisans of Sensationalism, by establishing the connate tendencies both affective and intellectual, which belong to the organic structure of man." Yet this position, logically pursued, would lead to a sort of secular Calvinistic predestination (as Darwin, for example, realized), entailing the fatalism that these necessitarians so clearly rejected.

Their solution to this dilemma is an ingenious one: association can modify brain structure; this new brain structure descends to the next generation, which is thus born with "innate" tendencies that are, nonetheless, acquired by "experience." "Associations do not always originate with the individual," writes Bray, "but . . . the state of the brain, on which they depend, is transmissable to offspring." Innate mental capacities are thus formed by ancestral "experience," and this experience is passed on from parent to child. On one level Bray departs radically from the empiricism of Locke and his followers: "'Nihil est in intellectum quod non prius fuerit in sensu' is not true," he states; "the Phrenologists have discovered the connexion between the primitive faculties of the mind and certain parts of the brain. . . . The indications that such faculties give us . . . must be received as first truths, upon which all reasoning is founded." But he nonetheless is able to remain true to the fundamental utilitarian principles of association psychology by claiming that these innate "first truths" are products of sense experience: "All moral rules are derived from utility, but the pleasures and pains . . . on which they are based are transmitted to offspring and thus become intuitions."

Thus Charles Bray bridges the romantic and the rational, the intuitive and the empirical: "Kant's *categories* are his mode of arriving by Reflection or consciousness at the list of Intellectual Faculties or modes of thought which Gall and his followers have arrived at by observation," he writes in *On Force*. It
was Herbert Spencer who was to make explicit the extraordinary evolutionary implications of this new psychology, implications that should be tantalizingly apparent in what I have said above. But I would argue that what has been considered Spencer's most original contribution to scientific psychology, the concept of racial heredity as the source of innate ideas that Spencer formulated in *The Principles of Psychology* in 1855, was already present, less systematically, in earlier phrenological theory.

Phrenology provided Charles Bray with both a solution to the dilemma of determinism and a scientific basis upon which to reconcile empiricism with intuition. But Bray himself was ultimately less interested in scientific theory than he was in spiritual truths. In good Victorian fashion, Bray would evolve beyond phrenology to the even more radical tenets of mesmerism and "force."

III. MIND OVER MATTER: "FORCE" AND THE MESMERIC MANIA

Like Robert Chambers, Charles Bray turned emphatically to the metaphysical in the latter portion of his career. The process culminated in 1866 with the publication of 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*. Bray's concept of force is a logical next step from his philosophy of necessity, an epitome of the monistic impulse that animates all of these Victorians.

If Bray's *Philosophy of Necessity* contains many parallels to Joseph Priestley's *Doctrine of Philosophical Necessity*, *On Force* can be read as the successor to Priestley's *Disquisitions on Matter and Spirit*. But with a revealing difference: Priestley begins with *Matter and Spirit*, whose "principal object is to prove the uniform composition of man, or that what we call mind . . . is not a substance distinct from the body"; he follows this with what he calls an "appendix" volume on philosophical necessity: "The doctrine of necessity . . . is the im-
mediate result of the doctrine of the materiality of man." Here again, the familiar idea: if mind is matter, it is thus subject to the necessity of physical laws. But Charles Bray reverses Priestley's order, following his study of necessity with *On Force*. Herein lies the clue to his radical divergence from this eighteenth-century predecessor. Bray begins his career as an advocate of phrenology; like Priestley, he emphasizes the materiality of mind—and the attendant philosophy of necessity. But in *On Force*, Bray completes a circle: "Thus physical force creates the mind and the mind creates the world." Though the thesis of *On Force* may at first appear similar to Priestley's claim that spirit is really matter, in fact, Bray reverses Priestley, to argue that all matter is ultimately spirit.

Before demonstrating this claim, let me begin by insisting that Bray's interests were not simply from the lunatic fringe, notwithstanding George Henry Lewes's scathing condemnation of his later work as unworthy of serious attention. In fact, some highly respectable Victorian scientists were fascinated with the concept of force. For example, Bray writes that he was inspired by W. R. Grove's *Correlation of the Physical Forces* (1846). Grove was "the first to give complete and systematic expression to the new views"; but by 1865 his work could be collected in an omnibus on *The Correlation and Conservation of Forces: A Series of Expositions*, containing works on the subject by such outstanding scientific names as Helmholtz, Mayer, Faraday, Liebig, and Carpenter. At least two of our Victorians other than Bray were familiar with Grove's work. An 1855 edition of the *Correlation* in George Henry Lewes's library is covered with his marginalia and markings. In her *Journal* for 3 May 1870, George Eliot writes: "I began Grove on the 'Correlation of the Physical Forces'—needing to read it again—with new interest, after the lapse of years."

The controversial aspect of Bray's work lies in his extension of the concept of force from physics to metaphysics. In his *Correlation* Grove announced that he had "purposely avoided" claiming that the concept of force "might be applied to the organic as well as the inorganic world." It is just this larger cor-
relation that Bray will claim: "I could not see why correlation should stop at the physical forces, and why it should not be extended to mental force."

Bray, however, was not alone in this notion; a leading physiological psychologist had undertaken a similar path. Scientist W. B. Carpenter (who was, interestingly, the son of a Unitarian minister) wrote in 1865:

In a memoir of my own, "On the Mutual Relations of the Vital and Physical Forces" [1850] . . . I aimed to show that the general doctrine of the "Correlation of the Physical Forces" proposed by Mr. Grove, was equally applicable to those vital forces which must be assumed as the moving powers in the production of purely physiological phenomena . . . This memoir attracted but little attention at the time, being regarded, I believe, as too speculative; but I have since had abundant evidence that the minds of thoughtful Physiologists as well as Physicists, are moving in the same direction.

For Bray, as for Grove and Carpenter, the concept of force originates in the physical sciences: "Light, Heat, Electricity, Galvanism, Chemical Affinity, Attraction and Repulsion." Since like Carpenter, Bray continues to believe in a science of mind, he can logically extend this concept from physical science to mental science. Thus, Bray opens On Force with the claim that "Life and Mind" are forces analogous to, or rather, identical with, electricity or chemical affinity: "There is but One simple, primordial, absolute Force."

"Matter and Spirit the same in Essence," proclaims Bray in Priestleyan tones. But one would be gravely mistaken if he concluded from this that Bray was a materialist. "Force and mind . . . are . . . really identical, and the material order probably exists, as the Idealists say, only as mental." Bray offers what seems a startling pronouncement, coming from a physiological psychologist: "The two apparently diverse classes of phenomena may be only one, and . . . the material order may exist only as mental." In On Force Bray is even more conversant with what might loosely be called German idealist philosophies than he was in The Philosophy of Necessity. "Force," he writes, is "the true doctrine of 'Absolute Identity,'
taught in another form by Schelling, Hegel and Cousin.” He goes on to quote Fichte and Spinoza: “There is but one infinite Substance, and that is God.” He even draws on the Hindu and Buddhist philosophies. In On Force Bray reiterates the pantheism of The Philosophy of Necessity: “All we see is but the vesture of God, and what we call laws of Nature are attributes of Deity.”

But again, it should be emphasized that Bray in no way considers this belief incompatible with a scientific world view: “Science, then, proves the Unity of Force.” In fact, the very appeal of the concept of force for Bray is its origin in the realm of the physical sciences. Electricity offered the prototype of force (note Priestley’s fame as an electrical experimenter); electrical force was both invisible and measurable, spiritual and yet material. One cannot, finally—despite his assertion that “mind is all”—simply type Bray as an idealist or a metaphysician. The concept of force incarnates a dynamic unification of the polarities of matter and spirit, physiological science and the pantheistic oversoul. “A new class of beings or entities was thus made known, which seem to exist between the opposite confines of matter and spirit, and to partake in a degree of the nature of both,” wrote J. C. Prichard in 1829, in his Review of the Doctrine of the Vital Principle. Like the Comtean hierarchy of the sciences, or the development hypothesis, force is one more formulation of a monistic cosmology.

Appropriately, Samuel Taylor Coleridge was an early believer in force, writing in his “Essays on Method” that “the masses act by a force, which cannot be conceived to result from the component parts. In the phenomena of magnetism, electricity, galvanism, and in chemistry generally, the mind is led to regard the working powers as conducted, transmitted, or accumulated by the sensible bodies, and not as inherent.” He continues: “This Fact has, at all times, been the stronghold alike of the materialists and the spiritualists, equally solvable by the two contrary hypotheses, and fairly solved by neither.” Coleridge, like Bray, asserts that both hypotheses must cooperate for the full truth to emerge: “Religion
therefore is the ultimate aim of philosophy, in consequence of which philosophy itself becomes the supplement of the sciences . . . as supplying the copula, which modified in each in the comprehension of its parts to one whole . . . as integral parts of one system."

My reader will remember that Coleridge's *Theory of Life* provided a major inspiration for *On Force*, via its explication in James Hinton's essay on "Physiological Riddles" in the *Cornhill* in 1860.

"Why should not gravity afford the conditions requisite for an organic relation of the masses of which the universe consists?" queries Hinton. And does not this force of gravity, he continues, constitute "a true analogue to the vital force?" Force, like the development hypothesis, predicates the vital unity of man and the natural world. Hinton rhapsodizes:

To feel the subtle links that tie together the diverse forms of Nature's energy, and recognize, in the sportive youth or vigorous maturity of bird or beast, tokens of the same powers that make firm the earth beneath their tread, give fluence to the waves, and cunningest chemistry to the all-embracing, all-purifying air, opens to the lover of the animated tribes a new delight. . . . Each thrilling wave of life flows warm and fresh, from fountains which the sunbeams feed, which roll through every fibre of the solid globe, and spring up glowing from the central fires.

Where the *Vestiges* avowed the unity of the created cosmos, from the nebular hypothesis to the mind of man, the pantheistic priests of force embraced an even grander monistic faith: "This wondrous dynamic chain [of force] binds into living unity the realms of matter and mind, through the measureless amplitudes of space and time."

Where, one might gasp, does one go from here? Let me shift from the macrocosm to the microcosm, to the specific manifestation of force that most interested this Victorian circle: "Brain force, the result of cerebration, also exists in excess in some nervous constitutions; it then forms a sphere or atmosphere around individuals by which one brain is brought into direct communication with others and mind becomes a unity. Individual will-power can act through this medium beyond the range of individual body. In this way may be explained
... the Phenomena of Mesmerism, and the Curative Power of individuals." This statement comes from Charles Bray's autobiography, part of his summary of On Force. Henry George Atkinson's and Harriet Martineau's Letters on the Laws of Man's Nature and Development is predicated on the same theory: "What is mind but an evolved condition or form of the powers of nature, like light, heat, magnetism?—a form of the phenomena of the fundamental power which is acting throughout nature, and may, perhaps, be said to constitute nature." The laws of mental force might be fully analogous to the laws of gravitation, but they had yet to find a satisfying scientific exposition: "We have discovered the law of gravitation, and we now want a Newton in the department of mind," exhorts Bray in On Force; "mesmerism, clairvoyance, and the 'modern spiritual manifestations,' ... are now pressing for explanation and reduction to law, and when that is accomplished ... the power of mind will be as greatly and rapidly increased as physical power has been by recent discoveries in steam and electricity."

Franz Anton Mesmer first propagated his theories of "animal magnetism" in pre-Revolutionary France. In his study of "The Mesmeric Mania: the Early Victorians and Animal Magnetism," Fred Kaplan summarizes Mesmer's twenty-seven key propositions from the Mémoire sur La Découverte Du Magnetism Animal (1779):

1. Mechanical laws working in an alternate ebb and flow control "a mutual influence between the Heavenly bodies, the Earth, and Animate Bodies which exist as a universally distributed and continuous fluid ... of an incomparably rarefied nature."
2. Since all "the properties of matter and the organic body depend upon this operation" whose influence or force may be communicated to animate and inanimate bodies, it is possible to create a new theory about the nature of influence and power relationships between people, and between people and the objects in their environment.

In "'The Mesmeric Mania,'" Kaplan divides Victorian respondents to mesmerism into three camps: its spiritual defenders, its scientific defenders, and its opponents. Characteristi-
cally, the advocates of mesmerism in this Victorian circle belong in both of the first two categories. In his study of *Dickens and Mesmerism*, Kaplan astutely observes that mesmerism was a child of the Enlightenment that flourished in revolutionary times, a genealogy that produced a peculiar hybrid: a romantic heritage of "intuition, spontaneity, man as God, the role of mystery and magic in the cosmos" in conjunction with the eighteenth-century values of "order, social norms, centralized reform, progress and science."\(^88\) And so, in mesmerism, "Coleridge" and "Bentham" meet again. Mesmerism was ideally suited to a Victorian temperament seeking the bridge between spirit and science.

Charles Bray dates his introduction to mesmerism from 1841, the same year he met George Eliot.\(^89\) By 1866 he remained a strong believer: "My own opinion is that there is an emanation from all brains, the result of both conscious and unconscious cerebration, forming, not spirits, but a mental or spiritual atmosphere, by means of which peculiar constitutions— mediums and others, are put *en rapport* with other brains or minds, and become conscious of whatever is going on there."\(^90\) In 1844, shortly after her journey to London with Bray for a phrenological reading, young Marian Evans ("M. A.") was mesmerized at a dinner party she attended with the Brays: "He nearly succeeded in mesmerising M. A. to the degree that she could not open her eyes, and begged him most piteously to do it for her, which he did immediately by passes," wrote Bray's wife, Cara.\(^91\)

The vocabulary of mesmerism, like that of phrenology, colors George Eliot's metaphors during the 1840s: "It is like a diffusion or expansion of one's own life to be assured that its vibrations are repeated in another, and words are the media of those vibrations"; the atmosphere of Geneva has "the effect of mesmerism or chloroform."\(^92\) In her first published fiction, "The Notebook of an Eccentric," in Charles Bray's *Coventry Herald* (1846-47), Eliot's hero suffers from "alleged states of mesmeric lucidity, in which the patient obtains an unenviable cognizance of irregularities, happily imperceptible to us in the
ordinary state of our consciousness." Eliot describes her early hero in the terms of electrobiology: "Any who were capable of a more discriminating estimate and refined analysis of his character, must have had a foreboding that it contained elements which would too probably operate as non-conductors, interposed between his highly-charged mind and the negatively electrified souls around him."95

As with phrenology George Eliot became more rigorously critical but no less interested in mesmerism once she left the provinces for the Westminster and George Henry Lewes. "Thank you very much for the facts about Dr. Gregory's patient," she writes to George Combe in 1852; "we get impatient of phenomena which do not link on to our previous knowledge.... This and the great mass of loose statement and credulity which surround the whole subject of mesmerism repel many minds from it.... But indications of claire-voyance witnessed by a competent observer are of thrilling interest and give me a restless desire to get more extensive and satisfactory evidence."94 Eliot had little patience with faddish spiritualistic mediums: "Better be occupied exclusively with the intestinal worms of tortoises than with that!" (i.e., better be a pure materialist) she scornfully announced.95 Lewes's skepticism would have guaranteed Eliot's intellectual rigor on the subject. He was eager to expose "A Mesmeric Quack" in the Saturday Review in 1856: "Throughout this pretentious volume, we have seen no acquaintance with physiology—hence the supreme confidence of its dogmatism," he wrote in review of William Neilson's Mesmerism in its Relation to Health and Disease.96

Mesmer himself was no charlatan, and many of his earliest advocates in Victorian England were reputable medical practitioners (at least until they began to advocate mesmerism). But as the vogue for mesmerism grew during the 1840s, mesmerism became a fad as well as a science. In the midst of what contemporaries called the "mesmeric mania of 1851," an anonymous essayist in the Westminster turned to the subject of "Electro-Biology" (the name scientists often gave to mesmerism or ani-
mal magnetism), and painted an amusing portrait of Victorian society entranced with its new plaything:

In a fashionable assembly, experiments on the mental functions take the place of quadrilles. Ladies of sensitive and “susceptible” organization, gratify a drawingroom with the exhibition of “involuntary emotions,” instead of a fantasia on the piano-forte. Students at Universities excite them in each other till they find themselves incapacitated for attendance upon their classes; and boys at school forsake marbles to play tickles with the nervous system of their companions; for which the most serious consequences have sometimes ensued.97

However, mesmerism, like phrenology, was subject to serious scientific investigation as well as party games. In his “Science” column for the Westminster Review in January 1854, T. H. Huxley bemoaned the “New Demonology” of mesmerism and its related occult sciences: “What . . . is our educated Englishman to do?” Huxley recommended as an antidote to this “Witch’s Sabbat” a thorough study of “the chapters on the Physiology of the Mind in Dr. Carpenter’s excellent ‘Human Physiology.’” Yet Carpenter himself had proposed “the correlation of the physical and vital forces” in 1850. Not coincidentally, Dr. Carpenter took a strong scientific interest in “Electro-biology and Mesmerism,” publishing an essay by that title in the Quarterly Review in 1853. There, he attempts to being the phenomena of mesmerism into accord with scientific truth, by examining mesmerism as a biological phenomenon in light of such theories as unconscious cerebral function.99 George Eliot and George Henry Lewes responded with enthusiasm to such a genuinely scientific approach: “You should read the article in the Quarterly on Electro-Biology,” Eliot writes to Bray in October 1853; “It is by Dr. Carpenter—a ‘naked neddy’ in your esteem, but still the first physiologist in England.”100

It should be noted that scientific mesmerists were often likely to be phrenologists as well. After 1838 phrenology wed animal magnetism, and its offspring was the new science of phrenomesmerism, or phrenomesmerism.101 In 1843 George Combe added a chapter on “mesmeric phrenology” to his textbook,
The System of Phrenology; and two years earlier, Charles Bray had noted his mesmeric interests amidst the phrenological philosophy of The Philosophy of Necessity. Every mesmerizer should understand phrenology and phreno-magnetism,” write Atkinson and Martineau in their Letters on the Laws of Man’s Nature and Development.

Why was this so? On the crudest popular level, mesmerism was used to substantiate the claims of phrenology, as subjects in a mesmeric trance enacted the appropriate behavior in correspondence to the touch on a given “organ” of their brain. In a broader sense, it is easy to see the compatibility of these two ostensibly materialist ideologies, both of which claimed that psychology was a physical science. But finally, and most important, mesmerism provided a temperamentally necessary complement to phrenology. Mesmerism is “the mind of phrenology,” write Atkinson and Martineau. They might more appropriately have called it the heart of phrenology. Mesmerism provided a spiritual complement to phrenology that transcended the materiality of the brain, yet still claimed to remain scientifically quantifiable.

Contemporary critics of mesmerism were quick to note the apparent paradox of this spiritual materialism. W. R. Grove himself wrote skeptically on mesmerism for Blackwood’s in 1845, and called it a “transcendental philosophy.” Asking “What Is Mesmerism?” in the same journal six years later, John Eagles drew attention to what he called a “wonderful inconsistency in some advocates of mesmerism, who . . . deny that there is any such thing as spirit at all, showing at the same time phenomena that cannot belong to matter.” But such “wonderful inconsistency” is the stuff of this Victorian frame of mind. Within that context it becomes a fully logical and necessary synthesis of polar antitheses.

IV. MATERIALISM AND SPIRITUALISM—HARRIET MARTINEAU AND HENRY GEORGE ATKINSON: LETTERS ON THE LAWS OF MAN’S NATURE AND DEVELOPMENT (1851)

The Letters on the Laws of Man’s Nature and Development differs from the other texts selected for this study. It adds no
new elements to the Victorian frame of mind shared by this circle. Martineau is perhaps the least intellectually gifted thinker among them; her Letters often seem close to the lunatic fringe, light-years away from the logical rigors of John Stuart Mill, or even the respectable Victorian system-making of Herbert Spencer. But if I had to select, from among the kindred minds that this study depicts, a prototypical expression of their Victorian world-view, it would be Martineau's. The Letters on the Laws of Man's Nature and Development has been relegated to dusty obscurity, unread and seemingly unreadable in the twentieth century. But a survey of Victorian periodicals reveals that it aroused remarkable furor upon its publication, and merited considerable attention from highly-respected journals and critics. Why?

The context of the preceding chapters of my study should make this forgotten Victorian essay on man more accessible, and help to account for the amazing amount of controversy it engendered in its own time. The Letters contains a synthesis of every interrelated Victorian ideology I have discussed: universal causality, positivism, phrenology, the development hypothesis, the philosophy of necessity, force. It epitomizes the Victorian monist's conception of the universe, the union of head and heart, empiricism and intuition. The issues this book raises were central to the Victorian age. Letters on the Laws of Man's Nature and Development is thus a fascinating case study of the way in which lesser Victorian minds seized upon seminal ideas of the period. It provides a fine example of the symbiotic interrelationships among the Victorian ideologies shared by this circle of thinkers.

Like her book, Harriet Martineau's fame in her own day was far more considerable than her subsequent reputation. Until recently, if she was remembered at all, it was often as Carlyle's "too happy and too noisy distinguished female," a probable model for Dickens's Mrs. Jellaby and Mrs. Pardiggle; an appallingly energetic spinster with an ear-trumpet, who was capable of producing, in one two-and-a-half year period alone, three series of tales on political economy, taxation, and the
poor laws—a total of some thirty-four volumes!—for earnest Victorian readers. Even at age three, lisping out “Never ky for tyfles!” and “Dooty fust and pleasure afterwards!”—the child was the mother of the woman.\textsuperscript{107}

Martineau, as I have already noted, began her productive career as the “Unitarian prophetess.” But by the late 1830s, this famous woman of letters experienced something of a mid-life crisis. On 16 March 1840, at the peak of her fame, she was stricken with a mysterious ailment, a malaise as much spiritual as it was physical: “Here closed the anxious period during which my reputation, and my industry, and my social intercourses were at their height of prosperity; but which was so charged with troubles that when I lay down on my couch of pain in my Tynemouth lodging, for a confinement of nearly six years, I felt myself comparatively happy in my release from responsibility, anxiety and suspense.” It might justly be said that Harriet Martineau took to her bed a doubting Unitarian, and rose up a believing atheist: “A large portion of the transition from religious inconsistency and irrationality to free-thinking strength and liberty was gone over during that period.”\textsuperscript{108} Here is yet another Victorian paradox: Martineau found a necessary emotional fulfillment in the passionate rationality of mesmerism and the philosophy of necessity that she could not find in the too-reasonable dogma of Unitarian faith.

The agent of Martineau’s salvation, her miraculous cure by the powers of mesmerism, was young Henry George Atkinson, an intellectual gadfly and amateur mesmerist of considerable seductive charms (apparently of a Platonic nature) for older women.\textsuperscript{109} Though the voluminous letters Atkinson left behind (and Martineau herself sent him over 1000) have condemned him to posterity as “a bore of the first quality,” many of Atkinson’s contemporaries were charmed: “The noblest man I have ever known,” pronounced Dr. Samuel Brown; “Powerful and sagacious,” concurred Margaret Fuller.\textsuperscript{110} Closer to this Victorian circle, Atkinson claimed a long friendship with Charles Bray: “For more than twenty years I
corresponded with Mr. H. G. Atkinson. . . . He was very fond of writing, I suppose, as I generally received two or three letters a month," Bray comments. Lest we think that Bray did not take this deluge of correspondence seriously, I point out that he quotes extensively from these letters in his autobiography, and prints a great many of them in full in a lengthy appendix devoted entirely to that purpose in *On Force*.

"The firm of Atkinson and Martineau" (as Eliot dubbed them) came to call on George Eliot in March 1852, a year after the publication of the *Letters*: "I can't help liking him," Eliot confessed of Atkinson on June 5; again, two months later: "pleasant and intelligent and one can't help liking him." George Eliot claims Atkinson an "agreeable addition" to her visit at Martineau's Ambleside home in October 1852; "I am quite straight with good, clear-eyed Mr. Atkinson," she avows in July 1853.

But Unitarian brother Reverend James Martineau was less favorably impressed: "Harriet's exceptional submission to an inferior was mortifying to me. It seemed a kind of fascination—part of the contemporaneous disturbance of judgment which . . . was conspicuous in her reports of mesmeric phenomena." For Atkinson had raised Harriet Martineau from her Unitarian bed of pain by the powers of mesmerism. Preliminary reports in a series of "Letters on Mesmerism" from Martineau to the *Athenaeum* in November and December of 1844 prepared the way for the public outrage that would greet the more extensive *Letters on the Laws of Man's Nature and Development* in 1851. "The explicit announcement, by the most influential woman-writer of her day, that she had abandoned the whole religious system in which she had been educated . . . was a portentous thing in English life," writes J. M. Robertson in the *History of Freethought in the Nineteenth Century*.

Harriet Martineau abandoned Unitarianism to make way for a new faith. She wrote ecstatically to the *Athenaeum*: "If I had been a very pious and very ignorant catholic, I could not have escaped the persuasion that I had seen heavenly visions.
Every glorified object before my open eyes would have been a revelation; and my Mesmerist, with the white halo round her head . . . would have been a saint or angel.” But Martineau’s emotional response deifies Reason, not God: “Such a state of repose, of calm, translucent intellectuality, I had never conceived of.” Or to put it another way: Martineau was converted to Reason by the powers of Intuition: “It is a deep philosophic truth . . . that simple faith is as necessary to the perception of truth as sound reason.”

Many of Martineau’s previous admirers were aghast; the editor of the Athenaeum himself offered “A Few Words by Way of Comment on Miss Martineau’s Statement” on 28 December 1844, repudiating what he called “the prevailing humbug of the hour,” lest any of his readers think his journal supported all that it printed. But other Victorians were intrigued: Martineau writes that Robert Chambers, for example, came to call on her at Tynemouth to investigate her mesmeric recovery. And just four months after the infamous letters were published in the Athenaeum, the Brays and George Eliot first met the new convert at a dinner party: “M. A. [Marian] and I both felt that we admire Miss M[artineau] much more for having seen her. C[harles] was disappointed with her small ordinary-looking woman’s head. . . . Her conversation is delightful. . . . She talked much with me about her brother James . . . and of course very much about mesmerism,” Cara Bray wrote to Sara Sophia Hennell.

George Eliot described the same party to Martha Jackson: “She is a charming person—quite one of those great people whom one does not venerate the less for having seen. Full of mesmerism and its marvels, you may suppose.”

There is no record of any further acquaintance between Martineau and George Eliot for the next six years. Significantly, the “considerable intimacy” that John Walter Cross claims between the two women did not begin until Martineau again came to Eliot’s attention, as the author of the notorious Letters on the Laws of Man’s Nature and Development. As fledgling assistant to John Chapman, editor of the Westminster Review,
Eliot naturally took an interest in his other publishing ventures: "Miss Martineau’s book is come out, but there was not so great a sale the first day as was anticipated," she writes to the Brays on 28 January 1851. Conservative Henry Crab Robinson reported in his journal of March 1851 that Eliot "spoke of Harriet Martineau’s and Atkinson’s letters as studiously offensive. It seems as if this book is absolutely atheistic!" But that August the more freethinking George Combe was to begin his friendship with George Eliot on the note of her "instinctive soundness of judgment" on the phrenology of the *Letters*. And Eliot recognized the favorable audience the book would receive at Rosehill, asking Chapman to send Charles Bray a copy in October 1851 and recommending it for his review in the *Coventry Herald*.

The following spring George Eliot’s friendship with Harriet Martineau blossomed, and if Eliot did have reservations about the *Letters*, she must also have been in fundamental sympathy with Martineau’s cause, at a time when so many of the mesmeric advocate’s old friends were closing their doors. The admiration was mutual. Martineau entrusted Eliot with her fund for Comte’s publication. Eliot writes: "She is a trump—the only English woman that possesses thoroughly the art of writing."

The next fall George Eliot made an extended visit to the north to spend time with both the Combes at Edinburgh and Martineau at Ambleside. Martineau’s "simple, energetic life" proved a "tonic" to the urban fatigue of the *Westminster*’s assistant editor. She described her arrival at the Lake Country retreat in glowing terms: "The coach brought me to Miss Martineau’s gate at ½ past six yesterday evening and she was there with a beaming face to welcome me. . . . Miss M. is quite charming in her own home—quite handsome from her animation and intelligence. She came behind me, put her hands round me and kissed me in the prettiest way this evening."

This fond sisterhood ceased abruptly when Eliot eloped to Germany with Lewes in 1854. Harriet Martineau, like many of Eliot’s acquaintances, was overwhelmed with moral indignation, and not above some rather vicious rumor-mongering at
Eliot's expense.\textsuperscript{127} Clearly, Martineau's heterodoxy did not extend beyond the intellectual realm; nor was she willing to repay Eliot's tolerance in kind. Nonetheless, George Eliot writes to John Chapman in 1856 with what she realizes as an "odd request" (in light of their publicly broken friendship) that upon Martineau's death—which Harriet herself was incorrectly advertising as imminent at that time—"I should like to write an article upon her. I need hardly say that mine would be an admiring appreciation of her."\textsuperscript{128}

There were many, after 1851, whose response to Harriet Martineau was a far cry from admiring appreciation. Martineau's heretical intellectual crimes were as shocking to proper Victorians as George Eliot's sexual transgressions would prove to be. Martineau was prepared for the worst when she published the jointly-authored \textit{Letters}: "I anticipated excommunication from the world of literature, if not from society." However divergent their \textit{mores}, one can see clearly the basis for George Eliot's admiration of this fellow strong-minded woman: "This book is, I believe, the greatest effort of courage, I ever made," Martineau wrote in her \textit{Autobiography}.\textsuperscript{129} This was not hyperbole.

George Henry Lewes opened his "Literature" column in the \textit{Leader} of 22 February 1851 with the announcement of his intention to review this controversial book in the next issue: "Perhaps of all the new books we hear seriously discussed, just now, the \textit{Letters} . . . is the most prominent. People seem uneasy—when they are not alarmed—at it; and this is explicable." Lewes admitted that he himself was made uneasy by the book's "atheism," but applauded Martineau's bold expression of her convictions: "What has reputation to do with truth?" "We hope next week to treat it with the gravity it deserves," he concludes, before going on to his review of Herbert Spencer's \textit{Social Statics} in that same issue.\textsuperscript{130} I wish to reserve my discussion of Lewes's subsequent review until the next chapter, for the light I believe it sheds on Lewes himself six months prior to his first meeting with George Eliot. But let me touch here upon other contemporary response, to substantiate the serious
and uneasy manner in which the Letters was read.

Although the conflict between Judeo-Christian orthodoxy and the new science is incipient in Combe or Bray, Harriet Martineau was the first member of this Victorian circle brazenly and unequivocally to assert that God was dead: "Uninformed and misdirected, we personify, humanize, materialize, the object of this sense [of infinite and abstract power]."181 "After the publication of the 'Atkinson letters,' " Martineau writes somewhat acerbically, "anonymous notes came in elegant clerical handwriting, informing me that prayers would be offered up throughout the kingdom, for my rescue from my awful condition."182 Martineau's friend Charlotte Bronte's response was typical: "It is the first exposition of avowed atheism and materialism I have ever read; the first unequivocal declaration of disbelief in the existence of a God . . . I have ever seen. . . . The strangest thing is, that we are called on to rejoice over this helpless blank . . . to welcome this unutterable desolation as a state of pleasant freedom."183 Reviewers in the popular press could be considerably more hostile.

John Eagles fumed in Blackwood's:

Miss Martineau's atheistical publication has passed through my hands. It professes to be a joint work by herself and a Mr. Atkinson, one of the clique of infidel phrenological mesmerizers; but it is manifestly the doing of Miss Martineau herself. . . . The female atheist ("and here the female atheist talks you dead") must have manufactured and cooked most of his philosophy. . . . A work more thoroughly degrading to character, whether moral or intellectual, has never come from the press.184

Even the Westminster Review had difficulty in living up to its usual freethinking standards, as W. R. Hickson, in a lengthy essay entitled "Life and Immortality," struggled painfully at the upper limits of his liberal sensibility: "Mr. Atkinson belongs to a class of writers of whom we wish to speak with respect, from the moral courage they evince in giving expression to an opinion which they know exposes them to obloquy. We differ with them, but would rather be supposed to hold the
same views, than join in an outcry against any form of ultra skepticism."\textsuperscript{135}

Charles Bray's enthusiastic response to the \textit{Letters} is striking, because it differs markedly from others, in its emphasis on the psychological rather than the theological aspects of the book: "I consider this work the most valuable contribution towards Psychology based on Physiology which we have had since Gall and Spurzheim's works on Cerebral Physiology, or Phrenology," he writes in \textit{On Force} (going on to quote liberally from the \textit{Letters} throughout that book).\textsuperscript{136} Bray found in Martineau an ardent fellow-convert to phrenology; indeed, she was among the first of the phrenological faithful. As early as 1832, she records talks with the Combes about phrenology and education. She had phrenological casts of her head taken in 1833 and 1853, and bequeathed her skull and brain "to the ablest phrenologist I know of."\textsuperscript{137} In her \textit{Autobiography} Martineau recounts at amusing length the comedy of errors she experienced during an anonymous head-reading by two eminent professionals: one concluded that her problem was "constant failure through timidity"; the other "pronounced my genius to be for millinery"! But Martineau, like other phrenological intellectuals, drew a careful distinction between popular practice and scientific theory: "The proceedings of the fortune-telling oracles, are no more like those of true and philosophical students of the brain than the shows of itinerant chemical lecturers . . . are like the achievements of a Davy or a Faraday."\textsuperscript{138}

Interestingly (and somewhat inconsistently, due to their obvious interrelationship), reviewers of the \textit{Letters} took less umbrage at the book's physiological psychology than they did at its religious heterodoxy. The anonymous author of a lengthy review article in the \textit{Westminster}, after condemning the "absolute predestination" of the authors' philosophy of necessity, went on to praise its chapters on the brain: "Since the discoveries of Gall, physiologists have for the most part abused and misrepresented phrenology; but they have been compelled to
admit its truth, at least so far as the broad principle that different parts of the brain have different functions to fulfill." Even such an unsympathetic reader as James Anthony Froude praised the discussion of phreno-mesmerism as "the really important part of the book."  

As with other Victorians in this circle, phrenology was but one thread in a matrix of interrelated beliefs. The book begins with Martineau's claim that she is a true Baconian in her application of scientific method to psychology: "My wonder is,—not that there are few so-called Mental philosophers who use or even advocate any experimental method of inquiry into the science of mind; but that there seem to me to be none." The tenets of Mill's universal causality are quite at home in Atkinson and Martineau. "The whole aim of science is a search into . . . those general laws which link the phenomenon together in the eternal and universal chain of existence and the uniform rule," Atkinson wrote to Charles Bray. A passage from the Logic is presented between quotations from Bacon and Newton: "I do not believe that there is now one object or event in all our experience of nature . . . which has not . . . been ascertained by direct observation to follow laws of its own." These general laws are operative in all branches of knowledge. Independently of Comte, Atkinson and Martineau argue for the interconnectedness of the sciences and their hierarchical structure: "Chemistry, Geology, Astronomy, Optics &c., are now freed from superstition, and have become true sciences. It remains for philosophers to place Physiology and Mental and Moral Philosophy in the same position as positive science reached by induction." The grounds for Martineau's later rapturous discovery of the Cours are readily apparent in her Letters. 

A direct link can be traced between universal causality, phrenological tenets, and the seeds of an evolutionary biology: 

Man has his place in natural history . . . his nature does not differ essentially from that of the lower animals . . . he is but a fuller development and varied condition of the same fundamental nature or cause. . . . Mind is the consequence or product of the
MATERIALISM AND SPIRITUALISM

material man, its existence depending on the action of the brain. Mental Philosophy is, therefore, the *physiology of the brain*, as Gall termed it. Spurzheim called it Phrenology.¹⁴⁵

Man's place in the natural world makes him part of a continually evolving cosmos: "Nature never rests; but all is action, change and growth." The phrenologist does not limit himself to pure physiology; mind is shaped by the external world. Both environment and heredity determine the development of the individual:

The true physiologist studies the laws of matter, and the whole process of development, disentangling himself from all spiritual and metaphysical dogma, and will take into consideration all the circumstances which influence the man from childhood to the grave. He will observe the conditions of the parents before the child is born, or even conceived; and back through many generations, noting these conditions which more particularly descend, and are impressed on the constitution. . . . After the child is born, he will watch the treatment of the infant, and the gradual development of its instincts and powers. . . . He will note how the child is trained to good or evil how its passions are stimulated and directed.¹⁴⁶

What are the moral implications of this disentanglement from spiritual and metaphysical dogma, the psychologist as natural historian? Initially, Atkinson's and Martineau's liberated view of moral man seems to substantiate their critics' worst fears: "As a part of Nature, as a creature of necessity, as governed by law, Man is . . . neither good nor evil . . . but simply nature, and what is possible to nature, and could not be otherwise."¹⁴⁷ They have two solutions to this potentially enervating fatalism: one borrows from a heritage of eighteenth-century rationalism; the other is distinctly nineteenth century. First, this pair offer the familiar argument that it is paradoxically because of universal causality in the realm of mind that man can improve his fatalistic lot. He has the intellectual power to reason his way to an altered future: "Without determining laws there could be no hope, and no regenerating
principle; and all teaching, preaching, and training would be useless."

But Atkinson and Martineau were more than mere necessitarians; they appeared to many to be full-fledged materialists. In an essay on Joseph Priestley, T. H. Huxley drew a witty distinction between the epithet "necessitarian" and the far graver calumny, "materialist":

A man may be a necessarian without incurring graver reproach than that in being called a gloomy fanatic, necessarianism, though very shocking, having a note of Calvinistic orthodoxy; but, if a man is a materialist; or, if good authorities say he is . . . respectable folks look upon him as an unsafe neighbour of a cashbox, as an actual or potential sensualist, the more virtuous in outward seeming, the more certainly loaded with secret "grave personal sins."

James Anthony Froude unequivocally entitled his condemnatory essay "Materialism: Miss Martineau and Mr. Atkinson." Other reviewers concurred in a literal-minded application of the concept. The Westminster reviewer writes: "Here we have two clever, well-informed people, persuading themselves that they experience extraordinary raptures mingled with the most exquisite philosophic calm, from believing that unconscious matter is the cause of conscious thought, that the truest human affection is nothing worthier than the love of a spoonful of nitric acid for a copper penny. . . . From such views both the intellect and the heart of man recoil with well-founded disgust." Even Charles Bray, recounting his friendship with Atkinson, takes care to differentiate himself (as a mere "necessarian") from the more dreaded denomination: "We had some fundamental agreements, as he was a Phrenologist and Mesmerist, and so was I, but I leaned towards Idealism, and he decidedly towards Materialism."

A careful reading of the Letters, however, reveals that Atkinson and Martineau themselves emphatically deny these charges. "Men's minds are so beset with 'gross materialism,' with their concrete and mechanical notions, that they shrink from the obscure, imponderable agents, and the study of vital
MATERIALISM AND SPIRITUALISM

action, and the real powers of nature.'" Mesmerism, not rationalism, is ultimately the key to Atkinson's and Martineau's optimism, the primary source of their cheerful liberation from the darker moral implications of materialism.

To give them their due, even the unsympathetic critics recognized in Atkinson and Martineau something beyond the reductionistic tenets of atheistic "materialism." "In spite of all that we have said," confesses Froude, "there is a tone in Mr. Atkinson's thoughts far above those of most of us who live in slavery to daily experience. The world is awful to him—truth is sacred." W. R. Hickson quotes a lengthy passage of Atkinson's autobiographical reminiscence from the Letters, in which Atkinson sits "on the marble rocks of Devonshire," looking out upon the landscape andimagining his own inevitable transformation into the earth: "Nature is one, and all things varieties of the same material." Yet Hickson recognizes that this "material" is in some very important way not equivalent to "materialism": "These reflections . . . carry us far beyond the bounded views implied in the proposition with which he sets out, of mind being a product of the brain. We now learn, that the brain is but one of the forms or manifestations of an infinite being,—a being,—the essence of all substance,—working throughout nature by general laws." 

Truth is to be found neither (or rather, not entirely) in idealist imaginings nor in materialist experiments: "Mind was fashioned into fanciful forms by the metaphysicians, while the physiologists were, on the other hand, slicing up the brain as they would a turnip" Atkinson and Martineau do deny that the spiritual is opposed to or separable from the material. But if there is no spirit apart from matter, there is, equally, no matter apart from spirit. Like Charles Bray, Atkinson and Martineau found in the combination of phrenology with mesmerism what they considered the perfect synthesis: a science that is also a religion; an empirical explanation for the realm of intuitive truths; the union of positivist law with phenomena beyond the ordinary powers of the senses.

The scientific inadequacies of this solution must not blind
us to its ideological significance for a Victorian frame of mind. “Christ, the prophets, the oracles, all exhibit features of the same great fact,—the existence of faculties in Man beyond sense, experience, and reason,” assert Atkinson and Martineau. And they mean “faculties” in the most literal phrenological sense: “Beneath the central organ of Comparison, lying under Benevolence, is what has been termed by a somnambule the Eye of the Mind. This seems to be power of judgment:—we might call it the Intuitive faculty; for it is this which is chiefly concerned in clairvoyance.” Clairvoyance is that state of mystical insight reached in a mesmeric trance: “All time seems to be as one duration; space seems as nothing; all passions and desires become hushed; truth becomes an insight, or through sight; and life a law.” The mesmerist transcends traditional definitions of empiricism: “Rejecting the dogmas of metaphysicians, and disbelieving that Ideas are the relics of Sensations”; yet his insight comes through the “energy of the senses” in the form of a “higher sense,—of divination.” Only in the mesmeric state, believes Harriet Martineau, can man experience a direct apprehension of that monistic, cosmic force that is hidden from the eye of sense: “Nothing in the experience of my life can at all compare with that of seeing the melting away of forms, aspects and arrangements under which we ordinarily view nature, and its fusion into the system of forces which is presented to the intellect in the magnetic state.”

It is not necessary to belabor the point that what Martineau is describing seems to be a religious experience. I will simply reiterate that mesmerism, for Atkinson and Martineau, was intended to be a fully scientific phenomenon. Not only is intuition, or instinct, a phrenological organ, it is also the product of evolutionary biology. Atkinson queries Bray: “What we call inspiration, or intuition, or genius . . . are all to be reduced to a general and uniform law. It is clear that many of the lower animals . . . are so guided, as we may be, by instinct. . . . is it hard to suppose that more highly-developed man should under all circumstances be wholly free from such so-called instinct?”
This visionary "fusion" experienced during the mesmeric trance becomes a perfect metaphor for that monistic conception of the universe after which all of these Victorians strive: "Thus we draw the circle of facts closer and closer to the centre, which is Unity," conclude Atkinson and Martineau. This pair become fully representative not only in their striving for that visionary moment of Unity—or even in their achievement of that moment—but also in their refusal to take that achievement as an end in itself. They continue: "While we dilate the sight in the sense of the unity of Nature, and the relations of the sciences, we must not forget to contract the sight to every particular and circumstance; that nothing may be omitted, and Nature may be searched for truth." Man must look outward as well as inward, to the particular as well as to the general; the key to the cosmos lies in the smallest scientific detail as well as in the visionary religious synthesis.

In mesmerism Bray and Martineau both found satisfying personal solutions to their need for a faith consistent with a scientific world view. Although mesmerism had much to offer as a new religion, it was unfortunately less successful in correctly accounting for scientific detail. It was in another guise altogether that this circle would most accurately find the one in the many: the development hypothesis. We have seen how the groundwork for an evolutionary cosmology was laid by Robert Chambers. George Henry Lewes and Herbert Spencer would give it a substantive incarnation, with particular significance for the history of psychology.


2. See Howard Gruber, "A Psychological Study of Scientific Creativity," in Darwin, *Darwin on Man*, pp. 5-257. "From all these documents we can conclude that Darwin first worked out a thoroughgoing materialist approach to the evolution of mind and brain, man included. . . . In writing the *Origin*, however, he withdrew to
a more cautious position, making only the briefest allusions to higher mental processes" (p. 31). "In the M and N notebooks we see Darwin's growing awareness that his evolutionary theorizing opened the way for a thoroughgoing materialism, with all its painful consequences" (p. 180).

In a recent essay, Robert J. Richards argues that Darwin did not publish the ideas in these early notebooks, not because he "feared suspicions of materialism," but rather because he had "several conceptual obstacles . . . to overcome if his theory of evolution by natural selection were to be made scientifically acceptable" ("Instinct and Intelligence in British Natural Theology: Some Contributions to Darwin's Theory of Evolution of Behavior," Journal of the History of Biology 14 [1981]:229).


6. Bray, Phases of Opinion, pp. 77, 75; Haight, George Eliot: A Biography, p. 69. Froude was one of nine (including Dickens, Thackeray, Tennyson, Ruskin, and Mrs. Carlyle) to whom the new novelist George Eliot sent copies of Scenes of Clerical Life (George Eliot Letters, 2:418); and likewise, Adam Bede (George Eliot Letters, 3:6). Froude contributed frequently to the Westminster under Eliot's editorship. Their admiration was mutual: Adam Bede "gave no pleasure, it gave a palpitation of the heart," writes Froude; "That was not pleasure; but it was passionate interest" (quoted in Haight, George Eliot: A Biography, p. 275).


8. James Anthony Froude, "Materialism: Miss Martineau and Mr. Atkinson," Fraser's 43 (1851):430. Froude's biographer writes: "He had thrown off hindering speculations . . . and had chosen a positive faith. . . . Henceforth his progress was straightforward and rapid. Within nine years he had established himself as a distinguished historian" (Dunn, Froude, 1:141).


13. In his History of English Rationalism, Benn emphasizes "the action of Unitarianism as a rationalistic ferment" (1:397); the "Unitarian spirit is more than a transition point, it is a leaven" (2:62-63). See Willey's Nineteenth Century Studies, pp. 207-20 for the best discussion of Eliot's conversion from Evangelicalism to rationalism.


29. In her *Autobiography* Martineau criticizes the intellectually dishonest compromises of Unitarianism: "a mere clinging, from association and habit, to the old privilege of faith in a divine revelation, under an actual forfeiture of all its essential conditions" (1:40). This position was shared by the Coventry circle. Bray's sister-in-law, Sara Sophia Hennell, writes: "However agreeable the panacea that Unitarianism affords, and even temporarily beneficial, as a reactionary solace, a cordial tonic to restore the healthy cheerfulness after Calvinist gloom, the doctrine furnishes no satisfactory resting-place for a consistently thoughtful mind" ("Essay on the Sceptical Tendency of Butler's 'Analogy'" [London, 1859], p. 13).


44. Thomas Carlyle, *Sartor Resartus*, quoted in Bray, *Philosophy of Necessity*, 1:114. In his autobiography Bray compares his own youthful religious conflicts to Carlyle's (*Phases of Opinion*, p. 16). He made a phrenological reading of his mentor based on a photograph (pp. 26-27), and quotes Carlyle at several points (see pp. 157, 191, 199).


51. Mill, *Logic*, in *Collected Works*, 8:840. By the second edition of the *Philosophy of Necessity* (1863), Bray had read the *Logic* and had altered his discussion to suggest strong echoes of Mill, differentiating between "necessity" and "fatalism": "The fatalist believes that everything is written in the book of fate. . . . On the other hand, the necessarian believes that for every effect there is a cause" (*Philosophy of Necessity*, 2d ed., p. 419).


58. Bray quotes Locke: "In this lies the liberty that a man has. He has the power to suspend the execution of this or that desire" (*Philosophy of Necessity*, 1:171); see also 1:95-96, 97, 99, 100, 104, 171, 215 for references to Locke. See Locke's *Essay*, pp. 237 ff., "Liberty and Necessity," for a pertinent discussion of necessitarianism. Joseph Priestley was also strongly influenced by Locke, and it is often difficult to separate Priestley's influence on Bray from Locke's. For example: Locke writes, "Voluntary then is not opposed to Necessary; but to Involuntary" (*Essay*, p. 259); Priestley, "Voluntary is not opposed to necessary, but only to involuntary, and that nothing can be opposed to necessary, but contingent" (*Philosophical Necessity*, p. 15); Bray, "True necessity is not opposed to that which is voluntary, but to that which is contingent" (*Philosophy of Necessity*, 1:170). Priestley does not acknowledge Locke as his source; nor does Bray mention either Locke or Priestley.
59. Mineka, *Dissidence of Dissent*, p. 15. Mill writes in his *Autobiography* that he read Locke's *Essay* around 1822, "and wrote out an account of it, consisting of a complete abstract of every chapter, with such remarks as occurred to me: which was read by, or (I think) to, my father, and discussed throughout" (p. 43).


70. Bray, *Phases of Opinion*, p. 98 (summarizing his arguments in *On Force*).


92. George Eliot to John Sibree, Jr., *George Eliot Letters*, 1:225 (note the future novelist's shift to *language* as the medium of communication); George Eliot to Mr. and Mrs. Charles Bray, *George Eliot Letters*, 1:302.
101. See Kaplan, "Mesmeric Mania," 687. In "The Lifted Veil" Eliot depicts the characteristic juxtaposition of phrenology, education, and electrobiology in her hero, Latimer: "'The deficiency is there, sir,—there; and here,' he added, touching the upper sides of my head,—'here is the excess. That must be brought out, sir, and this must be laid to sleep.' . . . natural history, science, and the modern languages were the appliances by which the defects in my organization were to be remedied. . . . I was to be plentifully crammed with the mechanical powers; the elementary bodies, and the phenomena of electricity and magnetism" (1859; rpt. *Complete Works*, St. James Edition [London, 1908] 1:372-73.
104. Martineau and Atkinson, *Letters*, p. 34.
R. W. Webb's *Harriet Martineau: A Victorian Radical* (New York, 1960) places Martineau within the rich intellectual background of early Victorian England (including the Unitarian tradition and the influence of Priestley and Hartley). Though Webb quickly dismisses the "fourth or fifth-rate philosophizing" of the *Letters* (p. 21), call-
ing it "one of the strangest books to carry the name of a reputable writer" (p. 293), he recognizes its centrality for Martineau's intellectual development: "Anti-clericalism, scientific method, materialism, necessitarianism, radicalism, education, humanity, and martyrdom—every major concern of Harriet Martineau's life was caught up in this new crusade" (p. 253). Valerie Kossew Pichanick's more recent *Harriet Martineau* (Ann Arbor, 1980) dismisses the *Letters* as "not intrinsically important. It does not deserve a special place in the hierarchy of Victorian literature of philosophy. It is long-winded, often illogical, and sometimes even arrant nonsense" (p. 187).

108. Martineau, *Autobiography*, 1:146, 182. Was Martineau's illness psychosomatic? She did, in fact, have an ovarian cyst, which finally killed her (see Webb, p. 194; Pichanick, p. 13).

109. Webb speculates that Atkinson was homosexual, in light of frequent mysterious trips to the continent and the absence of any visible romantic attachments (*Harriet Martineau*, p. 20).


117. Martineau, *Autobiography*, 1:140. There was a considerable audience for Martineau's preachings: her *Athenaeum* letters were printed in six issues, through three editions, and then reprinted as a pamphlet, which sold out in three days (Webb, *Martineau*, p. 230).


121. George Eliot to Mr. and Mrs. Charles Bray, *George Eliot Letters*, 1:343-44.


127. False rumors of a letter from Eliot to Martineau (postmarked Weimar) circulated, and Eliot indulged in a rare moment of vituperative recrimination in a letter to John Chapman: “Amongst her good qualities we certainly cannot reckon zeal for other people’s reputation. She is sure to caricature any information for the amusement of the next person to whom she turns her ear trumpet” (George Eliot to John Chapman, *George Eliot Letters*, 2:180). But yet a year later, Eliot “think[s] of her with deep respect and admiration” (2:230).


131. Martineau and Atkinson, *Letters*, p. 79. The book takes the form of letters between the pair; but it is safe to attribute the ideas therein to both authors (see *Autobiography*, 2:336-37). Alfred Benn singles out Martineau and Eliot from their less controversial male counterparts: “More fearless consistency” was displayed by the women of their circle than by the men (*History of Rationalism*, 2:67).


134. Eagles, “What Is Mesmerism?”, 76 n. Brother James Martineau’s venomous attack was the unkindest cut of all. Once James’s ardent disciple, Harriet’s radical conversion aroused both his sexual and his intellectual jealousies: “We remember nothing in history more melancholy than that Harriet Martineau should be prostrated at the feet of such a master; should lay down at his bidding her early faith in moral obligation, in the living God, in the immortal sanctities” (“Mesmeric Atheism,” *Prospective Review* 7 [1851]:234). George Eliot, later to suffer an equally painful break with her brother, Isaac, clearly found more in common with Harriet than with James. In 1852 she writes to Chapman in disparagement of James Martineau and his “‘School of thought’” as potential contributors to the *Westminster* (*George Eliot Letters*, 2:48-49).


NOTES