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Aesthetic Evolution: Poetic Practice and Darwinian Theory  
in the Long Nineteenth Century

by

Jhoanna Infante-Abbatantuono

A dissertation submitted in partial satisfaction of the  
requirements for the degree of

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in

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of the

University of California, Berkeley

Committee in charge:

Professor Kevis Goodman, Chair

Professor Ian Duncan

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Aesthetic Evolution: Poetic Practice and Darwinian Theory in the Long Nineteenth Century

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by Jhoanna Infante-Abbatantuono

## Abstract

### Aesthetic Evolution: Poetic Practice and Darwinian Theory in the Long Nineteenth Century

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University of California, Berkeley

Professor Kevis Goodman, Chair

This dissertation identifies the production of a theory of aesthetic evolution—a belief that the higher faculties of taste and sympathy emerged from the feelings of savages and animals—which resulted from the collaborations between evolutionary science and poetic theory and practice in late eighteenth- and nineteenth-century British writing. Even as the theory enabled authors to naturalize taste, sympathy, and social progress, it also permitted them to interrogate the category of the human and to unfold an immanent critique of the physical and psychic violence that attends modern development. Using Wordsworth’s influential definition of poetry not as metered verse but more broadly as the “history or science of feelings,” I find attempts to historicize and restore embodied sensibility in a variety of literary and non-literary texts, from Anna Barbauld’s anti-slavery verse and William Wordsworth’s *Lyrical Ballads* to Charles Darwin’s *The Descent of Man, and Selection in Relation to Sex*, as well as in a variety of genres, from Erasmus Darwin’s scientific poetry, to Charles Darwin’s popular voyage narrative, to the most lyrical of Thomas Hardy’s novels, *Tess of the d’Urbervilles*.

In each chapter, I aim to understand not only particular texts but also the century-long investment in poetic practice by major British authors who linked natural and social history in diverse forms of writing. The first chapter explores the intersection between poetic practice, evolutionary theory, and political engagement in the anti-slavery verse of Erasmus Darwin and Anna Barbauld, who attempted in different ways to activate the reader’s organs of sympathy—the eye and hand—yet, in Barbauld’s case in particular, also acknowledged the limits of sympathy as a form of redress. Chapter Two reads some of Wordsworth’s best-known verse from *Lyrical Ballads* and *The Prelude* within the context of his engagement with the transmutationist writings of Erasmus Darwin and Georges Louis Leclerc, Comte de Buffon, in order to argue that Wordsworth’s proto-evolutionary poetry sought to advance human progress while also registering the costs of development and the threat of regression. Chapter Three argues that Charles Darwin made significant contributions to poetic practice and aesthetic philosophy throughout his career: his *Journal of Researches* promoted natural science as a discipline that inherits poetry’s function of humanizing readers, and his later *Descent of Man* posited that disinterested feeling and aesthetic judgment are products of evolutionary development. Like

other proponents of aesthetic evolution, however, the later Darwin also recognized that modern society degrades, as much as cultivates, human taste and sympathy. The final chapter follows this dialectic of aesthetic evolution into the fiction and poetry of Thomas Hardy. Aesthetic evolution and its immanent critique culminate in Hardy's analysis of civilization's return to savagery and ignorance in *Tess of the d'Urbervilles* and in his poetic practice, which incorporated scientific knowledge toward the "betterment" of the body and the restoration of sympathetic capacity.

For Francis

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## List of Abbreviations

The following abbreviations are used in parenthetical citations throughout the dissertation.

- Autobiography* Darwin, Charles. *The Autobiography of Charles Darwin 1809-1882*. Ed. Nora Barlow. London: Norton, 1969. Print.
- BG* Darwin, Erasmus. *The Botanic Garden; a Poem, in Two Parts. Part I. Containing the Economy of Vegetation. Part II. The Loves of the Plants. With Philosophical Notes*. London: J. Johnson, 1791. *Eighteenth Century Collections Online*. Web. 30 Jan. 2008.
- CPTH* Hardy, Thomas. *The Complete Poems of Thomas Hardy*. Ed. James Gibson. New York: Macmillan, 1976. Print.
- Enquiry* Burke, Edmund. *A Philosophical Enquiry into the Origins of Our Ideas of the Sublime and Beautiful*. Ed. Adam Phillips. Oxford: Oxford UP, 1998. Print.
- EDRP* King-Hele, Desmond. *Erasmus Darwin and the Romantic Poets*. London: Macmillan, 1986. Print.
- Journal* Darwin, Charles. *Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Round the World*. London: John Murray, 1845. *The Complete Work of Charles Darwin Online*. Ed. John van Whye. Web. 15 Nov. 2008.
- LB* Wordsworth, William, and Samuel Taylor Coleridge. *Lyrical Ballads*. Ed. W. J. B. Owen. 2<sup>nd</sup> ed. Oxford: Oxford UP, 1969. Print.
- LED* Darwin, Erasmus. *The Letters of Erasmus Darwin*. Ed. Desmond King-Hele. New York: Cambridge UP, 1981. Print.
- LEY* Wordsworth, William, and Dorothy Wordsworth. *The Early Letters of William and Dorothy Wordsworth (1787-1805)*. Ed. Ernest De Selincourt. Oxford: Clarendon, 1935. Print.
- LP* Darwin, Erasmus. *The Botanic Garden; a Poem, in Two Parts. Part I. Containing the Economy of Vegetation. Part II. The Loves of the Plants. With Philosophical Notes*. London: J. Johnson, 1791. *Eighteenth Century Collections Online*. Web. 30 Jan. 2008.
- LWTH* Hardy, Thomas, Michael Millgate, and Florence Emily Hardy. *The Life and Work of Thomas Hardy*. Athens: U of Georgia P, 1985. Print.



- Notebooks* Darwin, Charles. *Charles Darwin's Notebooks, 1836-1844: Geology, Transmutation of Species, Metaphysical Enquiries*. Eds. Paul H. Barrett, Peter J. Gautrey and Sandra Herbert. Ithaca: Cornell UP, 1987. Print.
- Origin* Darwin, Charles. *On the Origin of Species: A Facsimile of the First Edition*. Cambridge: Harvard UP, 1964. Print.
- Prel.* Wordsworth, William. *The Prelude 1799, 1805, 1850*. Eds. Jonathan Wordsworth, M. H. Abrams and Stephen Gill. New York: Norton, 1979. Print. (Unless otherwise noted, all quotations are from the *1805 Prelude*.)
- STC* Coleridge, Samuel Taylor. *Samuel Taylor Coleridge; The Oxford Authors*. Ed. H. J. Jackson. New York: Oxford UP, 1985. Print.
- Tess* Hardy, Thomas. *Tess of the d'Urbervilles*. Eds. Ross C. Murfin and John Paul Riquelme. New York: Bedford, 1998. Print.
- TN* Darwin, Erasmus. *The Golden Age; the Temple of Nature or, the Origin of Society*. Ed. Donald H. Reiman. New York: Garland, 1978. Print.
- WWP* Wordsworth, William. *The Prose Works of William Wordsworth*. Eds. W. J. B. Owen and Jane Worthington Smyser. Oxford: Clarendon, 1974. Print.
- Zoo.* Darwin, Erasmus. *Zoonomia; or, the Laws of Organic Life*. 1794-96. Vol. 1. London: J. Johnson, 1794-96. *Eighteenth Century Collections Online*. Web. 18 Aug. 2008. 2 vols.

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## Introduction The “History or Science of Feelings”

All the higher processes of evolution are necessarily so complex in character that we can really deal with only a single aspect at a time. Hence, in spite of the rather general title which this paper bears, it proposes to treat of aesthetic evolution in man under one such aspect only—that of its gradual decentralization, its increase in disinterestedness from the simple and narrow feelings of the savage or the child to the full and expansive aesthetic catholicity of the cultivated adult. We have to trace the progress of the sense of beauty from its first starting-point in the primitive sensibilities of the race or the individual to its highest development in the most refined and advanced of European artists.

—Grant Allen, “Aesthetic Evolution in Man”

The title of this dissertation, *Aesthetic Evolution*, carries a double meaning that reflects its double objective. The first objective is to trace the concept of “aesthetic evolution” as it developed within evolutionary theory and aesthetics from the late eighteenth century through the Victorian period. As coined by the socialist writer Grant Allen in 1880, the phrase “aesthetic evolution” refers to the evolution of taste over the course of natural history. Allen did not invent the concept, however: his work recapitulates the aesthetic theory of Charles Darwin, which I present as the culmination of a long exchange between evolutionary science and theories of taste. The equation of aesthetic cultivation and evolutionary transformation was more than an analogy for Allen and his predecessors, who all saw the universal “processes of evolution” at work in nature and society. My second objective is to think about the relevance of this eccentric, politically charged idea to our conception of British aesthetics. My title thus refers also to the development of a materialist British aesthetic tradition across the long nineteenth century; rather than substituting moral and transcendental judgments for the particulars of experience, the works that I study use evolutionary theory to link the higher operations of mind to comparatively primitive sensations and instincts.

As a study of physiological aesthetics, the project examines links between the shifting meanings of “aesthetic.” In his history of the term, Raymond Williams reminds us that “aesthetic” originally referred to “sense perception,” with an emphasis on the sensuous perception of any material object, but that it eventually came to designate judgments of art that seemed to transcend the socio-political realm (*Keywords* 31-32). The title *Aesthetic Evolution* refers to both of these meanings, signaling that my project studies two phenomena: first, the theory that mankind’s distinctive senses have evolved over time, and, second, the centrality of evolution to a socially progressive, physiological strain of British accounts of judgment. Like the historians of literal taste who precede him, Charles Darwin focuses not on the object of contemplation but on the inherent human capacity for recognizing goodness and beauty. Although the etymology of “aesthetic” reflects the historical exclusion of the body from the judgment of art, certain works of eighteenth- and nineteenth-century evolutionary theory and aesthetic philosophy attempt to reconcile body and mind, sensation and thought: in a natural history of taste, taste is acquired over time rather than received transcendently from above.

I proceed by identifying the collaborations between aesthetics as a new science of sensuous perception and evolution as a developing branch of natural history. Emerging in the late eighteenth century, these twin fields commit to the task of poetry as a “history or science of feelings”—the definition is Wordsworth’s (*LB* 140). As aesthetics and evolutionary science explore the progress and regress of human development, they alternately invest and disinvest in art as an agent of cultivation. This dissertation argues that, when poetry travels between natural science and aesthetics, it works against itself, at once constructing ideological concepts and revealing them as provisional. The significance of this argument to the field of late eighteenth- and nineteenth-century British studies is three-fold. First of all, by examining for the first time the centrality of taste in evolutionary narrative, we can better understand the attempt of Romantic poets to generate socio-political change from the internal reading experience of individuals.<sup>1</sup> Second of all, if we identify physical development as a central image of aesthetic cultivation, we can better understand the supposed inconsistency of the British empiricist tradition, which names nature, rather than the divine (as Kant does) or social consensus (as radical thinkers like Paine do) as the source of moral and political ideas, and thereby maintains the status quo by inventing the illusion of internal authority.<sup>2</sup> Thirdly, we find in this convergence a peculiar and early critique of modernity, as authors register the failures of sympathy and ills of modernity as contradictions to the presumed triumphs of enlightenment, industrialization, and imperialism.

As it examines these exchanges, this dissertation offers a counterpoint to the characterization of the British aesthetic tradition in some of our most powerful critiques of aesthetic ideology. Terry Eagleton famously wrote that aesthetics is “born as a discourse of the body” aimed at controlling, rather than liberating, the unruly particular (13). Whereas this function of aesthetics is overt in the German tradition’s “coercive apparatus of absolutism,” it is covert in the British tradition, which inscribes state power on the “minutiae of subjective experience,” so that the subject “bestows on itself . . . a law at one with its immediate experience” (20). Like any inhuman colonizer that requires the consent of the human, British aesthetics faces

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<sup>1</sup>The Romantics made broad claims about the social and political effects of private or intimate reading experiences. In her account of Romantic poetry’s relation to print culture, Maureen McLane writes: Wordsworth and Shelley “dispensed with the governing category of ‘literature’—with its connotations of the letter, literacy, and print technology—and proposed both social and transcendental functions for poetry, functions broadly conceived in opposition to the claims of ‘Science’ but also resistant to the pressures of literary specialization” (17). The Romantic project can be described as an attempt to link the private experience of reading or hearing of poetry to socio-political transformation, but the Romantic legacy becomes, by the time of John Stuart Mill, an emphasis on “solitude” in both poetic production and consumption; or one might say that the possibility for larger social transformation resides with drama, for Mill evokes the performer and the audience when he writes, “All poetry is the nature of soliloquy” (80). In a more recent essay, McLane and co-author Celeste Langan describe the Romantics’ efforts, in theory and practice, to link reading to hearing: “Romantic-era poetry . . . captures the difficulty of deciding what we mean by *reading*. On the one hand, Romantic poets read their own and other poems *aloud*; on the other, they insisted that the ‘poetry’ of Shakespeare could be appreciated only in the silent study. A generative confusion over the phenomenology of the reading experience is a crucial context, we believe, within which to understand Romantic interest in the human sensorium. Note how often, for example, Romantic ‘vision’ is mediated by the ear” (244).

<sup>2</sup>Responding to Edmund Burke’s traditionalist argument, Paine describes the fluidity of the cultural values that should determine the form of government: “The circumstances of the world are continually changing, and the opinions of men change also; and as the government is for the living, and not for the dead, it is the living only that has any right in it. That which may be thought right and found convenient in one age, may be thought wrong and found inconvenient in another” (*Rights of Man* 9). Like Burke, however, Paine naturalizes consensus, such as when he quotes Lafayette: “Call to mind the sentiments to which Nature has engraved in the heart of every citizen, and which take a new force when they are solemnly recognized by all” (*Rights of Man* 9).

a Catch 22: “If the aesthetic is a dangerous, ambiguous affair, it is because ... there is something in the body which can revolt against the power which inscribes it; and that impulse could only be eradicated by extirpating along with it the capacity to authenticate power itself” (Eagleton 28). In contrast to Eagleton, I place the category of aesthetic experience as a tool of self-critique in human hands: even as aesthetic philosophy is complicit in the homogenizing process of cultivating taste, it turns from the self-destructive act of eradicating the body by recognizing its priority. While aesthetic theory and practice make the body an object of improvement, they also reveal (as Blake tells us) the pre-existence of the “doors of perception” and seek the future “improvement of sensual enjoyment” (“The Marriage of Heaven and Hell” Plate 14). Thus, for Wordsworth, writing in 1800, unthinking adherence to prescribed codes or popular taste “blunt[s] the discriminating powers of the mind” (*LB* 160); in that period of intensifying industrial development, external forces threatened to destroy the individual’s freedom and distinctiveness. Despite the murkiness of the subject’s history—the difficulty of determining whether nature or society conferred autonomy on him—poets like Wordsworth give possibility and voice to the body. They imagine that by shaping individual minds and bodies according to Enlightenment principles poets might bring about the egalitarian society that history, so far, has failed to inaugurate; yet they also recognize their own blinders and thus turn to the body as the betrayer of false ideas, which exhibit themselves as wounds, disease, and psychological pain. Mutable, sensing bodies are central to both Romantic poetics and the concept of evolutionary transformation.<sup>3</sup>

I thus offer an alternative way to understand the logical contradictions that seem inherent to the British aesthetic tradition. Like Eagleton, Howard Caygill has traced the role of British aesthetic philosophy in producing the subjects required by the modern capitalist state and has argued that the tradition problematically naturalizes judgment by reference to common sensory experience. Caygill elaborates upon Kant’s critique of empiricist aesthetics, finding in British aesthetics a “chronic equivocation over whether taste was sensible or ideal,” which issued from its failed attempt to link “the rational will of providence and the irrational individual sentiment” (43). In other words, the British tradition illogically attempts to validate its codes by suggesting that the tasteful individual can apprehend providential judgment through his senses. Whereas Caygill, like Eagleton, focuses on the aesthetic project of homogenization, I turn to moments in literature that reflect a scientific curiosity about the heterogeneous human body. For many of the authors that I treat in this dissertation, differences in taste—across species, peoples, and time—are deeply provocative. This attention to difference generates the concept of aesthetic evolution, which moves from Erasmus Darwin’s theory of anatomical and aesthetic development, to Wordsworth’s fascination with the primitive taste of rustics, children, and even animals, and, finally, to Charles Darwin’s evolution-based theory of aesthetics.

As this dissertation reveals that the concept of evolution operates at the center of nineteenth-century aesthetics, it builds upon recent critical efforts to recover the materialist imagination of late eighteenth-century and Romantic writing by calling attention to a different kind of materialism from the one emphasized in the New Historicist attention to political, social,

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<sup>3</sup>I owe this focus on the body in pain to Luke Gibbons’s *Edmund Burke and Ireland* (2003). Finding that Enlightenment and imperialist ideologies exclude physical pain from the realm of sympathy, Gibbons describes Burke’s aesthetics of the body as a humane alternative to the Enlightenment’s code of stoicism and its privileging of the visual.

and economic realities as the suppressed truth of the text.<sup>4</sup> More recent critics have argued that the Romantics were interested in another kind of materiality—physiology. These critical efforts have in some cases identified materialist writings (particularly in science and medicine) as intertexts of major Romantic works. Alan Richardson defines Romanticism—a continuation of eighteenth-century preoccupations with sensibility—by its serious engagement with, not only the spirit and mind, but also the body and brain.<sup>5</sup> Denise Gigante’s recent *Life* places a Romantic “epigenesist poetics” within a “wider context of organicism as an interdisciplinary field responding to the problem of life” (3, 6). In other cases, scholars of eighteenth- and nineteenth-century philosophical materialism have explored the Romantics’ fascination with the sensing, consuming body. An attention to the history of the senses has also inspired a reexamination of the Romantic ambition to address not only the mind but also the changing senses and appetites of the reader. Such studies recognize that Romantic authors were aware and often uneasy with their practice of reconstructing taste. Examples of this scholarship are numerous: in an earlier book, Gigante shows that Romantic poets were fascinated with bodily appetite, even as they participated in the “philosophical construction of taste as a symbolic economy of consumption” (*Taste* 17); Noel Jackson claims that Romantic poetry anticipated contemporary histories of the senses, in that it “aimed to make possible an improved sensuous experience” through the “comparatively abstract media of language and of print” (12).

As my project examines theoretical and literary texts that historicize aesthetic taste and moral judgment, it overlaps with this kind of scholarship on the history of the senses. As we see in Allen’s essay, the natural history of taste often collapses the distinction between pre-historical and modern environments, as writers (for various purposes) imagine that natural laws of transformation operate within contemporary society. Art and technology, which can either depart from or successfully imitate nature, thus become shapers of human perception for good or ill, either “exalt[ing] taste” or inducing “savage torpor” (*LB* 158, 160). The concept of aesthetic evolution is thus aligned with a broader idea that the senses possess an ongoing history traceable in the modern period; the Romantic preoccupation with the physiological effects of *techne* has enabled many scholars to immerse themselves in Romantic inquiries and claims regarding the

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<sup>4</sup>This recovery diverges from the New Historicist criticism that continues to inform but no longer dominates Romantic scholarship. Informed by powerful critiques of aesthetic ideology, critics such as Marjorie Levinson and Jerome McGann once argued that inward-turning poets like Wordsworth attempted to transcend or escape historical realities. Other scholars have examined the institutional contexts of Romantic production, relating the Romantics’ elevation of poetry to competition within a growing literary market, the emergence of professions, and the increasing prominence of science and industry. Examples of the latter group include Thomas Pfau, who reads the poet’s career as a reflection of the anxieties and ambitions of the middle class in *Wordsworth’s Profession* (1997); Mark Schoenfield, who focuses on poetic production as a response to the culture of literary reviews in *The Professional Wordsworth* (1996); and Catherine Ross, who traces Wordsworth’s rivalry with the scientist Humphry Davy within a marketplace changing from one in which scientists and poets shared the “same periodical press and public lecture series” to the marketplace of today, in which the two are perceived as “radically different kinds of workers” (33, 24). Clifford Siskin argues that today’s Romantic discourse and its institutions—“academic departments, publishing houses, foundations, and governmental bureaucracies”—reiterate Romanticism’s turn from the possibilities of social identity to the “myth of individuality” that underlies the concepts of creativity and genius (78, 84).

<sup>5</sup>Richardson has built upon G. S. Rousseau’s “Nerves, Spirits, and Fibres” (1973), which argued that the eighteenth-century culture of sensibility emerged from Willis and Locke’s revolutionary idea that the soul is seated in the brain. Rousseau uses Thomas Kuhn’s definition of a scientific revolution in *The Structure of Scientific Revolutions* (1962) to stress the historical significance of Locke’s *Essay on Human Understanding*, which directed scientific and literary cultures toward bodily sensibility as an object of study (141).

effects of poetry on lived experience. In this regard, histories of the senses that attend to the effects of language and technology on perception have been influential and generative, enabling us to reserve a conceptual space for bodily experience, even as we acknowledge the difficulties of accessing such elusive material. Alain Corbin suggests that cultural artifacts such as literary texts register changes in human perception during the modern period, but he identifies literature as the historian's problematic source material.<sup>6</sup> In any potential source text, a speaker's social background determines his or her accounts of sensory and affective experience. In one example of this epistemological problem, Corbin cites a portrait of a sailor who "had essentially lost the sharpness of his senses" and become "an insensitive being," remarking that the portrait betrays a class prejudice, even as it might record some real environmental effect (187). Literature, as we see in Corbin's account, offers imperfect evidence to a historian of the senses.

Understanding that this epistemological difficulty should not prohibit the effort to historicize an object so important as the human body, scholars have been able to explore, with more openness, the Romantics' attempt to give historical value to individual and shared sensory experience. In different ways, Kevis Goodman and Noel Jackson argue that eighteenth-century and Romantic literature self-consciously registers its two functions to record and to cause sensory change. In *Georgic Modernity and British Romanticism*, Goodman argues that literary and visual media align perception with ideology, yet, as transitional forms, give rise to affective and aural disturbances that register history in process. In *Science and Sensation in British Romantic Poetry*, Jackson argues that Romantic literature itself writes a history of the senses. A history of the senses attentive to its own limitations thus recognizes that, even as language constructs the body, it registers both the act of construction and the "prior" or continuing presence of a material body, whose capacities, pleasures, and suffering should be counted as part of history.<sup>7</sup> This dissertation similarly focuses on writers for whom "sensibility"—as both physical sensation and a capacity for sympathy—is real prior to its linguistic and political construction.

Although it does not systematically examine literary texts through a Marxist lens, my project borrows the insight of Marxist theorist Sebastiano Timpanaro, who locates the flaw of twentieth-century Marxism in its turn away from natural history and attempts to reunite the goal of social transformation with Darwinian theory. Timpanaro argues that the mature Marx, who "admired Darwin and wanted to dedicate the second volume of *Capital* to him," sought to "deepen . . . materialism" by developing a "new conception of the relation between man and nature" (41-42). Inspired by Darwin's radical demonstration of the "historicity of nature" (*contra* Hegel), Marx attempted to claim nature itself as an object of Marxist understanding: "The task was now no longer to counterpose the historicity of human society to the ahistoricity of nature, but to establish both the linkage and the distinction between the two historicities" (Timpanaro 42). Yet Timpanaro must recognize that Charles Darwin was not the first to reveal nature's historicity, for *On Materialism* attempts to reconnect Marxism with the Lucretian tradition, which represents the dynamism of both nature and society.<sup>8</sup> Although Timpanaro is drawn to the

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<sup>6</sup>In addition to Corbin's *Time, Desire, and Horror* (1995), see Don Gifford's *The Farther Shore* (1990).

<sup>7</sup>This critical attempt to give value to lived experience can have contemporary political implications. Using the concept of biorhythms, or what Wordsworth and, before him, Burke thought of as "natural piety," Anne-Lise François critiques the bioengineering industry for its intolerance of the indeterminacy and periods of non-production that characterize natural cycles.

<sup>8</sup>One could say that Romantic authors who engaged with natural science conceived of nature's historicity long before Darwin. For example, Bernhard Kuhn finds in Rousseau's mid-eighteenth-century botanical writing a "focus

idea of material transformation, he uses Darwin to reclaim the body, which possesses relatively more stable psychophysical contours due to the process of evolution: “The constant dimensions . . . of the human condition are not . . . metaphysical or metahistorical,” but they are “long-lasting” and thus have “greater stability than historical or social institutions” (51). Timpanaro effectively reclaims the concept of human nature, echoing Thomas Paine in two regards: the shared experience of living beings should serve as a continual source of socio-political transformation, and humans need to recreate their institutions, rather than only be recreated by them. In Timpanaro’s view, traditional Marxism’s denial of the bodily nature underlying second nature performs the same abstracting of physical reality as Romantic idealism. In his allusion to Darwin, Timpanaro imagines the transformation of humanity, and he draws upon Darwin more broadly to imagine a reclaiming of heterogeneous, yet interwoven, human bodies. The human condition is shared by all, but that condition is also transformable.

Timpanaro no doubt recalls that throughout the long nineteenth century transmutation was associated with the possibility of social transformation, particularly as related to class. This possibility was exciting to advocates of political equality and freedom—from Erasmus Darwin to Grant Allen—but threatening to others. Desmond King-Hele argues that the repressive political climate of late eighteenth-century England extinguished Erasmus Darwin’s poetic career; his “evolutionism was obnoxious in time of war,” as it seemed complicit with French revolutionary politics and natural history (*Erasmus Darwin* 301). According to Adrian Desmond, writing on the later Darwin, polite British society rejected and suppressed evolutionary theory in the decades before *On the Origin of Species*, which served to “ratify[] the change from the eighteenth-century world of nepotism, privilege, and aristocratic patronage to the more openly competitive, upwardly mobile Victorian society” (3). The “political radicals and scientific materialists” of this period drew upon Lamarck’s theory of evolution, which (like Erasmus Darwin’s) imagined immediate change driven by physical or intellectual effort: “Lamarck’s notion that an animal could, through its own exertions, transform itself into a higher being and pass on its gains—all without the aid of a deity—appealed to the insurrectionary working classes” (4). The transmutation of species, it seemed, was threatening for a number of reasons: it provided radicals with a language for depicting and naturalizing social transformation, and the supposed equation of humans with animals threatened both traditional hierarchies and orthodox religious beliefs.

Whereas Desmond describes Charles Darwin’s theory as politically conservative in its representation of “the natural, lawful processes of change in nature and society” that “obviate[e] the need for any sort of violent interruption,” I argue that Darwin’s works—and the poetry that influenced them—unsettle ideas of stability and lawful change (2). As I have studied the “linkages and distinctions” (to borrow Timpanaro’s phrase) between Romantic literary theory and the evolutionary theories of two Darwins, I have used a methodology that enables me to follow their subtle threading across literary-historical periods and genres. Each chapter identifies intersections between poets and scientists; each works through close textual analysis to prove my

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on the dynamic structure of plant forms, his temporalization of nature, and his refusal to organize his findings into a static, atemporal tableau”; thus, these works reveal “a conception of nature that diverges sharply from the timeless and transcendent vision of nature usually ascribed to Rousseau” (1). The developing science of geology also revealed nature’s history. Noah Heringman describes Shelley’s interest in geological history as a way of representing sociopolitical transformation: “Shelley loosely adapts this idea of a rock record in order to represent natural history as a discernible sequence of tyrannies, infestations of the earth finally arrested by a diluvial annihilation of such changes, strikingly represented as organic decay” (73).



larger argument that the intertwining of poetry and evolution enables authors to explore human agency and political transformation in ways that can exceed ideological thought. Using the Romantics' definition of poetry not as metered verse but more broadly as a language that traces and shapes human feeling,<sup>9</sup> I find this emphasis on aesthetic cultivation in a variety of literary and non-literary texts, from Wordsworth's *Lyrical Ballads* to Charles Darwin's *The Descent of Man, and Selection in Relation to Sex*, as well as in a variety of genres (from Erasmus Darwin's scientific poetry, to Charles Darwin's popular voyage narrative, to the "most poetic" of Thomas Hardy's novels, *Tess of the d'Urbervilles*).<sup>10</sup> In each chapter, I aim to understand not only particular texts but also the century-long investment in poetic practice by major British authors not necessarily writing in meter who link natural and social history: Erasmus Darwin, Anna Barbauld, William Wordsworth, Charles Darwin, and Thomas Hardy.

In conducting this project, I have necessarily deployed several key terms—"transmutation," "sensibility," and "aesthetic"—in ways that highlight the histories of these terms across the nineteenth century. While we usually understand "transmutation," in a biological context, as the "conversion or transformation of one species into another," I use the broader definition of the term as "conversion into something different," "alteration," or "transformation," thereby including species transmutation and organ transmutation.<sup>11</sup> Erasmus Darwin marks man's acquisition of a feeling hand as the critical point in his development, as "fine touch" sets him "above the bestial throngs"; the transformation of "claws" into "circling fingers" and "bending thumbs" does not only stand in as a synecdoche for the transmutation of animals into man—it is a pivotal event in that gradual process (*TN* 3.121-24). In both Darwins' versions of evolution, the transformation of species is not a discrete event but rather a process that is invisible, except through the comparison of analogous parts across time and kind. Charles Darwin, too, describes what might seem a sudden and impossible transmutation from one species to another as the effect of modifications in symbolic organs or features; thus, the fact that "the brain of man has its analogy in that of the orang" proves human descent from a lower form (*Descent* 1: 11).<sup>12</sup> The transformation of particular organs continues to be important in contemporary evolutionary science, as researchers describe evolution as the serendipitous development of multiple anatomical features: man rose by gaining not only the opposable thumb but also a smaller jaw (which gives room for a larger brain) and an upright skeleton.<sup>13</sup> It is

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<sup>9</sup>The Romantics' redefinition of poetry as a medium of feeling, rather than metered verse, begins with Wordsworth's objection in the "Preface" to *Lyrical Ballads* to the "contradistinction of Poetry and Prose, instead of the more philosophical one of Poetry and Science," when "the only strict antithesis to Prose is Metre" (*LB* 164*n.*). This view makes possible a broader definition of the poetic as a quality that can exist in many genres or artistic forms. See McLane's account of how the Romantics defined poetry as a special language, resisting the categorization of poetry as printed metrical composition in eighteenth-century criticism (17-20). From Wordsworth to Shelley, McLane argues, the Romantics "refused to restrict poetry to verse, to print, or to a category defined against prose" (17).

<sup>10</sup>John Paul Riquelme identifies in *Tess of the d'Urbervilles* a deconstructive tendency related to its quality of being the "most poetic of Hardy's novels" (Introduction 10).

<sup>11</sup>"transmutation." *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 13, 2010.

<sup>12</sup>Charles Darwin codes the "mind" as a traceable character. Note his reliance on analogy in the following: "In a future chapter I shall make some few remarks on the probable steps and means by which the several mental and moral faculties of man have been gradually evolved. That this at least is possible ought not to be denied, when we daily see their development in every infant; and when we may trace a perfect gradation from the mind of an utter idiot, lower than that of the lowest animal, to the mind of a Newton" (*Descent* 1: 106).

<sup>13</sup>For example, see *Becoming Human*, a documentary and an educational website produced by the Institute of Human Origins. Focusing on the critical feature of the human skeleton, the site presents this key idea: "Human evolution is marked by a mosaic pattern. This means that different parts of the body, and different adaptations,

important to my project to include within the concept of transmutation not only the metamorphic leap from one species into another but also the process of organ transmutation, since the authors discussed imagine modifications of organs (especially the sensory organs) in both pre-historical and modern times.<sup>14</sup>

Like “aesthetic,” which I discussed earlier, “sensibility” undergoes an abstraction from its original, literal meaning. Williams shows that “sensibility” once denoted “physical feeling or sense perception” and through a complex history, which includes some pejorative uses, later came to describe right perception itself, “a whole way of perceiving and responding, not to be reduced to either ‘thought’ or ‘feeling’” (*Keywords* 280-82). Throughout the dissertation, I use “sensibility” in both its physiological and moral registers. It is difficult to extricate these meanings, for in Erasmus Darwin’s theory of evolution, sensibility is represented both as “the readiness of an organ or tissue to respond to sensory stimuli” and as a “capacity for refined emotion; delicate sensitiveness of taste, and readiness to feel compassion for suffering, and to be moved by the pathetic in literature or art.”<sup>15</sup> As I show in the chapters of the dissertation, which I summarize below, it is remarkable that the original meaning of “sensibility”—like that of “aesthetic”—does not become obsolete with the abstraction of taste but rather continues to operate throughout the Romantic period and into the Victorian period.

The first chapter explores the intersection between poetic practice, evolutionary theory, and political engagement in the anti-slavery verse of Erasmus Darwin and Anna Barbauld. Both poets address the abolitionist movement as an index of human progress, although from different directions. In his poem *The Botanic Garden* (1789-92), Erasmus Darwin seeks to educate readers in science and taste by writing “principally to the eye,” already established as the organ of sympathy in eighteenth-century aesthetic and moral philosophy, and proposes the same strategy to the abolitionist movement (*LP* 42n.). In his epic *The Temple of Nature* (1803), the abolitionist movement participates in the evolution of the bodily eye. Whereas *The Temple of Nature* suggests that nature perfects the sympathizing eye, Barbauld starts by recognizing that the abolitionist cause had not yet succeeded and worries that the continuing slave trade reflects a decline of the British moral and physical constitution. In her “Epistle to William Wilberforce,” Barbauld emphasizes the eye’s vulnerability rather than its power to improve mankind, and she connects the reader’s habitual consumption of images to imperial consumption. Expanding upon Darwin’s claim that the habitual use of “spiritous liquors” causes inheritable diseases, Barbauld identifies these liquors as the products of slavery and the source of a disease afflicting individual constitutions and the British body politic (*LP* 110-11n.). Acting on the nation’s organs in a

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evolved at different times and different rates. The anatomical changes associated with bipedalism emerged as among the earliest innovations of the human lineage.”

<sup>14</sup>Like Gigante’s *Life*, my project studies authors who are fascinated with vitalism (the theory that matter is self-directed, rather than preformed), but it differs in emphasis and approach. In both her history of modern epigenesis thought and her formal analysis of “seemingly formless poems and central symbolic figures contained within them as living forms,” Gigante explores Romantic attempts to make real an “analogy between aesthetic and biological form” and recovers the context of the idea that an “authentic work of art must seem alive” (3-4). I am less interested in the Romantic analogy between poetic form and natural form (or with the accompanying analogy of a poet with nature), than I am in the analogy between poetry and nature as forces that shape human beings. I focus less on the shape of poems than on the theory that underlies poetic practice: evolutionary ideas enable Wordsworth and others to theorize poetry as an activity that builds sympathy and that exceeds any particular poet, form, or genre.

<sup>15</sup>“sensibility.” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 13, 2010.

similar way, the “images of woe” distributed by abolitionists have desensitized the eyes and minds of readers, making them incapable of sympathy or critical thought (55). The poem exposes the need to develop new strategies of representation, in order to restore the sympathetic capacity that modern habits of consumption seriously threaten.

Erasmus Darwin’s conception of sensibility as embodied, and therefore capable of improvement or decline, influences Wordsworth as well as Barbauld. In Chapter Two, I argue that an analogy between aesthetic cultivation and evolutionary development lies at the center of Wordsworth’s poetic practice and philosophy. Wordsworth’s famous attack on the “savage torpor” induced by modern life implies that poetry works upon the embodied sensibilities of readers, raising them above their savage and animal kin (*LB* 160). The chapter reads some of Wordsworth’s best-known verse from *Lyrical Ballads* and *The Prelude*, placing in a new context his seemingly ideological claims for poetry: that it produces active readers, that it restores sympathetic capacities, that it mimics the influence of nature, and that its influence endures into the future. To recover this new context, I explore Wordsworth’s engagement with the transmutationist writings of both Erasmus Darwin (whose work describes the transmutation of organs) and Georges Louis Leclerc, Comte de Buffon (whose *Natural History* invites a comparison of human and animal faculties). As Wordsworth alternately accepts and distances himself from the analogy between poetry’s and nature’s effects, he expresses both exhilaration and doubt: as a “history or science of feelings,” poetry is a proto-evolutionary language that advances human progress, but it also registers the costs of development and the threat of regression (*LB* 140).

Chapter Three explores Charles Darwin’s engagements with and contributions to aesthetic philosophy. The first part explores Darwin’s ambition to make natural science “sufficiently habitual [so as] to become poetical” (*Notebooks* 529). Darwin takes up Wordsworth’s “history or science of feelings” in his popular *Journal of Researches*, which presents the naturalist as Wordsworth’s successor and therefore promotes natural history as a discipline that inherits poetry’s function of humanizing readers. Whereas Wordsworth had represented poetry as a language that counteracts a “multitude of causes,” Darwin represents natural science as protection against the evils of British imperial travel, including restless migration, as well as exposure to savage cultures and equally savage slaveholders (*LB* 159). While the *Journal* compares the sensibilities of animals, savages, and civilized readers, the later *Descent of Man* presents an evolution-based theory of aesthetics that simultaneously differentiates and connects this range of figures. Darwin’s theory reconciles differences between primitive and cultivated figures by positing a historical narrative in which human beings become increasingly disinterested—and thus increasingly capable of sympathy and objective judgment. Like previous advocates of aesthetic evolution, Charles Darwin associates evolutionary development with the diffusion of sympathy and the progressive sophistication of aesthetic taste, but he is troubled by the fact of moral regression, evidenced by the continuing slave trade and by his own loss of aesthetic taste in later life.

The final chapter follows complications of the theory of aesthetic evolution into the fiction and poetry of Thomas Hardy. Aesthetic evolution and its immanent critique—which are both apparent in the works of Barbauld, Erasmus Darwin, Wordsworth, and Charles Darwin—seem to culminate in Hardy’s analysis of civilization’s return to “a new Dark Age” (*CPTH* 560). In ways that anticipate Adorno’s critique of modern development in *Dialectic of Enlightenment*, Hardy’s work constitutes a dialectic of evolution, a critical reflection on the paradox of an evolutionary process shadowed by a concomitant devolution. Connecting Hardyan works of

prose, fiction, and poetry, this chapter finds that Hardy explores the deepest causes of modern barbarity and that he seeks a psychophysiological path to renewing human consciousness. I begin by reading *Tess of the d'Urbervilles* as a critique of Charles Darwin's theory of sexual selection—a theory that proposes that society advances through the exercise of advanced taste within the institution of marriage. Hardy queries the premise of human progress that underlies Charles Darwin's account of evolved disinterest by revealing man's inescapable "nescience," or ignorance. Questioning the alignment of the novel with moral and natural science, Hardy fashions not an omniscient but rather a partly nescient narrator who reveals his lack of moral knowledge at the novel's critical moments. This skepticism drives Hardy from writing novels to poetry, which he considered a language of sensation more than a form of moral instruction. The chapter and this dissertation thus close by finding, in Hardy's poetry, representations of overdeveloped sensation (the "woeful fact . . . that the human race is too extremely developed for its corporeal conditions") and of nescience as a primal state: the condition of all organisms before "the disease of feeling germed" (*LWTH* 227; "Before Life and After" 13). By representing the absence of sensation, Hardy attempts to resensitize the reader to life—to sensation, emotion, and consciousness—aligning poetry with "evolutionary meliorism," toward the longer goal of aesthetic evolution: the "betterment" of the body and the improvement of sympathy (*CPTH* 557).

**Chapter One**  
**Evolution and Abolition:**  
**The Anti-Slavery Verse of Erasmus Darwin and Anna Barbauld**

Erasmus Darwin's *The Temple of Nature* represents humankind's acquisition of a "feeling mind" as the descent of the "Seraph, Sympathy," who "liberates the slave" and performs other humanitarian acts (*TN* 3.466-67, 475).<sup>16</sup> Published posthumously in 1803, the epic poem depicts man's ascent from an organism possessing only "rudiments of form and sense" (1.313) to one possessing reason and "intellectual sympathies with the pains and pleasures of others" (123n.). Opposition to the Atlantic slave trade is a key sign of this evolutionary development. Although Darwin's reference to sympathy's heavenly origins constitutes an appeal to Christian morality typical of anti-slavery writing in this period, these lines ultimately deliver a quite different argument for abolition—one based on man and society's natural history. In the terms of that emergent science, sympathy's figurative descent "from Heaven" is an allegory for the development of the bodily eye, described in eighteenth-century aesthetic and moral philosophy as the organ that makes sympathy possible (3.467). Darwin's account of evolved sympathy assimilates earlier discussions of misery's observer, in whom sympathy arises, according to Edmund Burke, "antecedent to any reasoning, by an instinct that works us to its own purposes, without our concurrence" (*Enquiry* 43) or, according to Adam Smith's specular theory of sympathy, "merely from the view of a certain emotion in another person" as if "transfused from one man to another, instantaneously" (13).<sup>17</sup> Like this ideal observer, the Seraph perceives actively—he "Rolls o'er the world his mild benignant eye"; his attuned ear hears even "the lone murmur" and "the whisper'd sigh"—and he acts immediately, as his hand "lifts the closed latch of pale Misfortune's door, / Opes the clench'd hand of Avarice to the poor, / Unbars the prison, [and] liberates the slave" (3.471-75). The hand, as I argue later in more depth, represents both primary touch (man's earliest acquisition) and the capacity for moral action (a late acquisition of civilized man). As a union of busy eyes and hands, the abolitionist movement signifies not only that society has progressed but also that human bodies have evolved.

To celebrate human evolution on such grounds was premature in 1803 since the British Parliament did not abolish the slave trade until 1807 and did not emancipate slaves in the West Indies until the late 1830s. The abolitionists' frequent reference to slavery as a "barbaric" practice speaks to the paradoxes of both modern slavery and enlightened abolitionism; a key argument of the movement is that Britain's participation in slavery belies its claim to the world's and to history's highest morality. William Fox points out this hypocrisy, noting the irony that "we, in an enlightened age, have greatly surpassed, in brutality and injustice, the most ignorant and barbarous ages: and while we are pretending to the finest feelings of humanity, are exercising unprecedented cruelty" (155). In his early writings, Thomas Clarkson describes the

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<sup>16</sup>Paranthetical citations of Darwin's *The Temple of Nature*, *The Loves of the Plants*, and *The Economy of Vegetation* will indicate page numbers of footnotes or canto and line numbers of verse.

<sup>17</sup>Smith qualifies this claim, noting that the sight of suffering arouses sympathy "upon some occasions" but "does not hold universally," as there are "some passions"—such as anger—that "we cannot . . . bring home to ourselves" immediately (13-14). However, this qualification does not override his general argument that sympathy, when it does arise, begins with the sight of someone else's joy or sorrow: every man enjoys the "pleasure of seeing" someone else's "happiness" and can "view" emotion in another person's face (11, 13). Seeing enables the individual to sympathize with another's suffering, since the "imagination" (critical in the function of sympathy) "cop[ies]" the "impressions of our senses" (11-12).

middle passage as a “scene of barbarity” (130). Fox and Clarkson attack Britain’s pretended sensibility, but they also preserve the opposition of the unfeeling savage and the feeling Briton when they call upon the latter to reassert his superiority.

Erasmus Darwin’s concept of aesthetic evolution unsettles such oppositions, for it describes a historical, rather than essential or national, difference between cultivated and uncultivated figures and introduces the possibility that taste can degenerate as well as evolve. This chapter concerns the nexus of evolution and abolitionism in Darwin’s *The Botanic Garden* (1789-92), his *The Temple of Nature*, and Anna Barbauld’s “Epistle to William Wilberforce, Esq. on the Rejection of the Bill for Abolishing the Slave Trade” (1791). While Darwin reads the abolitionist movement as an indication of the progress of human sentiments, Barbauld reads the failure of the abolition bill as a sign of Britain’s moral and physical degeneration, which she attributes to national consumption of the products of slavery and overexposure to suffering. Her insight that abolitionists’ “images of woe” only desensitize readers leads her to develop a representational strategy: she identifies modern forces that degrade readers and then calls forth a language that might humanize them once again (55).<sup>18</sup>

## The Evolving Hand and Eye

The tendency of synecdoche to displace historical particulars makes it useful in Darwin’s conjectural history.<sup>19</sup> In *The Temple of Nature*, body parts that stand in for species advance up the scale of being. Even great scientists and inventors are rendered as organs: “Newton’s eye sublime / Mark’d the bright periods of revolving time; / Explored in Nature’s scenes the effect and cause, / And, charm’d, unravell’d all her latent laws” (4.233-36). The eye, at first passively enthralled, later actively undoes nature’s complex fabric; its susceptibility to “charm” leads to Newton’s discoveries as well as the other social advances described in the poem, including the anticipated abolition of slavery. According to Darwin, progress occurs as nature refines the body’s organs, enabling some (like Newton, Herschel, and Savery) to advance science and technology and their philanthropic colleagues (like Howard, Clarkson, and Wedgwood) to advance humanity. Through synecdoche, Darwin links the body’s progress to social progress: the eye’s development represents the evolution of mankind, and Newton’s eye represents scientific inquiry, which begins with the eye’s instinctive attraction to nature’s charms.<sup>20</sup> The device enables him to value sensuous experience and to equate evolutionary development with aesthetic refinement, as well as to describe the reader as physically, intellectually, and politically active.

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<sup>18</sup>Quotations of Anna Barbauld’s poetry and prose are from *Anna Letitia Barbauld: Selected Poetry and Prose* (2001), edited by Elizabeth Kraft and William McCarthy; parenthetical citations indicate line numbers for poems or page numbers for prose.

<sup>19</sup>Laura Brown links Alexander Pope’s use of synecdoche to imperial abstraction: “In Pope’s poem [‘Windsor-Forest’] the catalogue of attractive commodities, the synecdoche, the uneasy oxymorons of the Eden scenes, the pastoral translation of imperial products, the reversal of vehicle and tenor, and the paradoxical displacement of violence—these interrelated formal structures together produce a vision of imperialism that unconsciously holds the attractions of accumulation in close proximity with the violence of exploitation” (42). Although Darwin, like Pope, uses synecdoche to appeal to the eye of the consumer, he also uses the device to encourage political action.

<sup>20</sup>The association of the pursuit of science with the pursuit of pleasure was well established. For example, Rousseau writes, “It is by the Activity of our Passions, that our Reason improves; we covet knowledge because we covet Enjoyment” (40).

Isolated body parts appear throughout “Of Generation,” the section of *Zoonomia* (1794-96) that contains Darwin’s most extensive discussion of transmutation and his bold speculation that “all warm-blooded animals have arisen from one living filament” (1: 505). The section slips from its titular subject (animal and plant reproduction) into an argument for the transmutation of organic matter and an attack on preformation theory, which “supposed all the numerous progeny to have existed in miniature in the animal originally created; and that these infinitely minute forms are only evolved or distended, as the embryo increases in the womb” (1: 490). Matter is less strictly organized in Darwin’s view, for it grows in response to fluids secreted from various glands; organisms acquire “new parts, new sensations, and new desires, as well as new powers . . . by accretion to the old ones, and not by distention of them” (1: 495). As an organism gains parts, it develops a complex nervous system, which in turn generates “new desires” and the means of fulfilling them. He personifies matter, attributing desire and pleasure even to unthinking forms. Organic pleasure figures as the primitive version of the civilized person’s pleasure in all kinds of consumption, including reading: the organism acts remarkably like the mobile, middle-class consumer, drawn to novelty and sensuality, for whom Darwin writes his poetry.

Darwin often links the desire for sensation and commodities (like drawings, his own books, or the Wedgwood cameo) to sexual desire, which he describes as the force that introduces novelty and progress into the organic world. The separation of the sexes made possible sexual reproduction, which drives species differentiation. The “great similarity of structure” observable between male and female counters the Biblical myth that sexual and species difference existed at the beginning of the world; Darwin even interprets “the curious account in sacred writ of the formation of Eve from a rib of Adam” as an allegory of reproduction from a single “filament,” a word that here refers to semen (*Zoo.* 1: 489). Like the “filament,” Eve is first a part (a rib) and then a separate entity. He describes sexual reproduction as evidence of progress, yet the human breast, as a sign of mankind’s hermaphroditic past, fascinates him: the useless “breasts and teats” of the male (in contrast to the functional ones of the female) lend credence to Plato’s hypothesis “that mankind with all other animals were originally hermaphrodites during the infancy of the world, and were in process of time separated into male and female” (*Zoo.* 1: 508). The sexually ambiguous “eunuchs” of his garden illustrate that the sexes “progress to greater perfection” as they differentiate (*LP* 7n.). However, his argument that such changes entail progress is inconsistent: while the female breast becomes increasingly “perfect,” those of the male degenerate.<sup>21</sup>

Reproduction, driven by pleasure, enables the generation of new, varied organs. Just as the male’s vestigial “teat” evidences the progressive separation of sexes, the variety of animal “hands” evidences the progressive separation of species. The original “living filament” is the progenitor of animal extremities: the filament acquires “hands and fingers, with a fine sense of touch” in the case of humans; it acquires “claws or talons” in the case of tigers and eagles; it acquires “cloven hoofs” in the case of cows and swine (*Zoo.* 1: 502).<sup>22</sup> The “filament” is difficult to visualize: it is both sperm and “microscopic animalcula”; it transforms from a “living ring” to

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<sup>21</sup>Burke’s description of pleasing curves in the *Enquiry* perhaps inspires Darwin to write in *The Temple of Nature* that the infant “learns erelong, the perfect form confess’d, / Ideal Beauty from its Mother’s breast” (3.175-76).

<sup>22</sup>The idea that man’s hands were originally more primitive is not new in this period. Rousseau describes a fascination with man’s material origin that extends back to Aristotle: “I shall not stop to examine in the animal System what he [man] might have been in the beginning, to become at last what he actually is; I shall not inquire, whether, as Aristotle thinks, his neglected Nails were no better at first than crooked Talons” (14).

a “living tube” (*Zoo*. 1: 492); its ability to move leads it to develop parts and thus a nervous system, through which it receives a sensory conditioning. The educability of the senses becomes the foundation for the gradual acquisition of higher intellectual capacities, including aesthetic judgment. Thus his evolutionary narrative produces a developmental hierarchy, privileging complex aesthetic judgments over simple sense perception; this distinction between sensation and aesthetic judgment develops through a different but parallel process in eighteenth- and nineteenth-century criticism, as we see in the etymology of “aesthetic.”

Opponents of transmutation theory ridiculed Darwin’s abstract and often geometrical figures. Ever suspicious of radical abstraction that disregards historical particulars, anti-radicals attacked *The Loves of the Plants* by parodying its use of synecdoche. The authors of “The Loves of the Triangles: A Mathematical and Philosophical Poem,” published in the *Anti-Jacobin* in 1798, satirize the “eternal and absolute perfectability of man”; mockingly presented as the work of William Godwin, the poem “enlist[s] the imagination under the banners of Geometry” (25).<sup>23</sup> Citing these and other works, Desmond King-Hele argues that the anti-radicalism of the later 1790s led the public to turn against Darwin’s poetry. Coleridge and Wordsworth are influenced by Darwin’s popular verse and have not, at the moment of their collaboration, broken from Darwin’s politics, but they present the *Lyrical Ballads* (also published in 1798) as a break from “the gaudiness and inane phraseology of many modern writers,” Darwin chief among them (3).<sup>24</sup> Like the authors of “The Loves of the Triangles,” Wordsworth rejects “personifications of abstract ideas,” although at this stage of his career he objects not principally to Darwin’s radical politics but rather to poetic devices that evacuate “flesh and blood” individuals (*LB* 161).

Although Darwin’s detractors suggest that his abstract figures lack content, his work tells the material history of the human hand. The “first gift of heaven” to mankind is not a reasoning mind but a hand “nerved with fine touch above the bestial throngs” (*TN* 3.121-22). Intellect, like sympathy, functions through imitation: the eye understands immaterial concepts by mimicking the hand’s ability, not only to grasp material objects, but also to develop a tactile knowledge of them. Darwin assembles his history of the hand from George Berkeley’s “Essay on Vision,” in which Berkeley “calls our vision the language of touch,” as well as from the works of Buffon and Helvetius, who propose

that mankind arose from one family of monkeys on the banks of the Mediterranean; who accidentally had learned to use the adductor pollicis, or that strong muscle which constitutes the ball of the thumb, and draws the point of it to meet the points of the fingers; which common monkeys do not; and that this muscle gradually increased in size, strength, and activity, in successive generations; and by this improved use of the sense of touch, that monkeys acquired clear ideas, and gradually became men. (*TN* 54n.)<sup>25</sup>

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<sup>23</sup>The authors modify a phrase from the “Advertisement” of *The Botanic Garden*, in which Darwin describes his purpose “to enlist Imagination under the banner of Science” (6). According to Desmond King-Hele, Canning, as Under Secretary for Foreign Affairs, controlled the pro-war, pro-government *Anti-Jacobin* and “saw that Darwin’s evolutionary ideas were deeply subversive of established religion because Darwin denied God the guiding role he was designed to fill” (*Erasmus Darwin* 315).

<sup>24</sup>Quoted and discussed in King-Hele 316.

<sup>25</sup>Darwin consistently attributed objects with the power to impart moral ideas. See his note on the “Association of Agreeable Sentiments with Visible Objects” in the appendix to *The Temple of Nature*, which is paginated separately from the main text (90app.).



The *Anti-Jacobin* did not subdue Darwin's love of geometry, as we see in this account: the opposable thumb, moving on a pivot, enables the hand to encircle objects. Darwin does not separate fine touch from the ability to grasp or possess, but rather shifts from nerves to muscles, emphasizing the hand's "increased size, strength, and activity." He implicitly links these two qualities of the hand: while sensitive fingertips impart finer sensibility, the hand's muscles impart a more powerful intellect. The improved application of the "sense of touch" brings "clear ideas" into the minds of man's ancestors (here imagined as "monkeys").

Just as this citation of Buffon and Helvetius condenses the evolution of the body, mind, and civilization into a single sentence, *The Temple of Nature* repeatedly condenses that process into a few lines of poetry. The following lines resemble a time-lapse, a technique used by today's filmmakers to present gradual processes to the eye in normal time. Focused on figures of the hand and eye, the reader sees an accelerated version of gradual evolution:

Untipt with claws the circling fingers close,  
With rival points the bending thumbs oppose,  
Trace the nice lines of Form with sense refined,  
And clear ideas charm the thinking mind.  
Whence the fine organs of the touch impart  
Ideal figure, source of every art;  
Time, motion, number, sunshine or the storm,  
But mark varieties in Nature's *form*.

Slow could the tangent organ wander o'er  
The rock-built mountain, and the winding shore;  
No apt ideas could the pigmy mite,  
Or embryo emmet to the touch excite;  
But as each mass the solar ray reflects,  
The eye's clear glass the transient beams collects;  
Bends to their focal point the rays that swerve,  
And paints the living image on the nerve. (3.123-38)

First, touch imparts the idea of solid objects; as the body coordinates touch with vision and memory, man learns to differentiate between objects, physical spaces, and moments in time. The sequence moves toward the eye's advantages over the primitive hand. Although Darwin evokes the hand of the landscape painter (who also commands forms from a distance), the eye "paints" rays instantly on the retina, figured here as a canvas and elsewhere as a screen. Technology further extends the eye's reach: Darwin validates the optical instruments of the telescope and microscope, respectively, when he refers to the eye's access to "distant scenes of earth and heaven" and realms of "microscopic" beings (3.282, 3.100).<sup>26</sup> In contrast to the insectile hand, the eye is built like a "glass" or artificial lens—an organic precursor to optical technology.

This account of the evolution of body, mind, and society quickly leads to a panegyric on empire. Like the eye, the British empire expands by virtually controlling distant objects through

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<sup>26</sup>Darwin's celebration of the microscope and telescope as extensions of the eye suggests less discomfort about those instruments than exists in the discourses of aesthetics and natural science earlier in the eighteenth century. I have taken my understanding of the anxious construction of modern vision as the basis of intellectual and aesthetic perception from Joanna Picciotto's "Optical Instruments and the Eighteenth-Century Observer" (2000) and "Reforming the Garden" (2005), as well as from Kevis Goodman's *Georgic Modernity and British Romanticism* (2004).

art, a term that for Darwin includes technology and aesthetic representation.<sup>27</sup> As technologies of representation advance, art imitates the eye: for example, representation through print enables the empire to reproduce itself in even far-distant realms. The printing press spreads European civilization across geographical space and time: Darwin describes this “most useful of modern inventions” as a manmade “reservoir of human knowledge,” “whose branching streams diffuse sciences, arts, and morality, through all nations and all ages” (*Zoo*. 1: 41). Darwin often evokes the printing press, which represents man’s progressive acquisition of touch, vision, reason, technology, and empire perhaps more than any other invention. Print’s translation of the tactile world into a visible one is essential to mankind’s imperial expansion: “the possession of clear ideas acquired by our superior sense of touch, and afterwards of vision, distinguishes man from brutes, and has given him the empire of the world, with the power of improving nature by the exertions of art” (*TN* 117n.). After the eye appropriates the hand’s power and sensibility, man gains reason, which allows him to dominate the visible world; finer feelings, which validate his domination; and art, which expands the reach of both his reason and feeling. The printing press epitomizes technology, which first marks human supremacy over “brutes” and, at a later point in history, British supremacy over savage nations. At the end of Canto 3, a “wind” behaves like a printing press, conveying Christ’s “sacred law” “wide o’er earth,” to be “obeyed by all nations”—thereby “giv[ing] Society to savage man” (3.489, 124n., 3.484). The “bright characters” of the “sacred law” are inscribed over “Nature’s shrine” and appear on the page in capitalized letters, as if to imprint forcefully those “words divine” on the captivated reader’s “froze[n]” retina (3.485-92).

Darwin thus links reading print to the progress of humankind. Evolution is cultivation: *The Temple of Nature* literalizes the idea that poetry, distributed to eye and ear, humanizes readers. Textual literacy seems less like a learned skill than a biological acquisition: hands “untpit with claws” become “snow-white fingers” that “turn the volant page,” and “soft-rolling eyes” read lines of poetry (3.123, 1.29-30). This process of cultivation is sensual. Launched with an invocation to “Immortal Love,” the poem likens reading to a sexual encounter (1.29). Darwin draws the reader’s attention to the activity of his or her own eyes, which trace letters and link word to word, just as Immortal Love “link[s] sex to sex, or rivet[s] mind to mind” and “connect[s] the whirling world” (1.26, 1.20). Reading a poem, turning a page—such acts link each individual to a larger organism: according to this extended metaphor, the practice of reading creates a unified social body, capable of political action. The hand represents the end, as well as the beginning, of man’s evolution because a feedback system leads him to act: the hand delivers textural information to the eye; the eye sends back information gathered from scenes, faces, texts, and pictures; and the hand performs acts in the social realm. His argument depends on the correspondence of the visual synecdochic figure with the concept or individual it represents. This abstraction would be dangerous without qualification, for Darwin’s emphasis on evolution would seem to downplay the role of education and art in the development of the eye and mind.

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<sup>27</sup>In contrast to Romantic poets who represent the subjectivity of perception, Darwin describes a generic human observer, aligning human perception with the power of science and trade. For a study of “vision and its historical construction” in the nineteenth century, see Jonathan Crary’s *Techniques of the Observer* (2). Crary argues that “the sense of touch had been an integral part of classical theories of vision in the seventeenth and eighteenth centuries” and that the “subsequent dissociation of touch from sight” is part of an “industrial remapping of the body in the nineteenth century” (19). If this contrast between eighteenth- and nineteenth-century models of perception holds, then one can see Erasmus Darwin as a transitional figure, for he both describes a natural-historical link between touch and sight and celebrates the increased power that comes from the abstraction of vision.

For this reason, Darwin acknowledges that the correspondence between the synecdoche and the human it represents is not certain. The gap between the two, he observes, stems from a weakness of the eye—its potential enthrallment to illusion—but he transforms that weakness into an advantage. In a discussion of the “language of the eye,” Darwin describes the virtual nature of the eye’s grasp. Whereas touch produces an “idea of figure” that “exactly resembles in its figure the figure of the body that occasions it; and thus exactly acquaints us with this property of the external world,” the miniaturized images projected or painted on the surface of the retina (figured as a screen or canvas) “serve only as a language, which by acquired associations introduce the tangible ideas of bodies” (TN 93-95n.). Yet the eye’s susceptibility to visual deceptions (such as the camera obscura to which Darwin compares *The Botanic Garden*) allows mankind to benefit from the “amusement and instruction” of art (TN 95n.). His poetry reflects this nuanced understanding of the eye: his verse presents charming illusions, while his copious footnotes instruct in taste and natural science.

Although he recognizes a gap between things and images, Darwin promotes the eye as the organ of sympathy that facilitates society’s progress. By “ap[ing] the outlines of external things,” one individual sympathizes with another, “learn[ing] from other Minds their joys and fears, / Contagious smiles and sympathetic tears” (TN 3.286-92). By mimicking the smile or tear, the observer physiologically and then psychologically experiences the state of another. The mind acquires literacy in the “language of the rolling eye,” becoming able to read smiles and tears as external signs of joy and sorrow. Attuned to scientific, philosophical, and literary representations of sensibility, Darwin understands expressions of emotion as universal (TN 3.281). For example, he quotes Adam Smith on the origin of sympathy from “our aptitude for imitation”; paraphrasing Smith, he writes, “Thus the appearance of a cheerful countenance gives us pleasure, and of a melancholy one makes us sorrowful” (TN 122-23n.).<sup>28</sup> Human beings respond physiologically to the “spectacle of misery”: facial expressions spread feelings of pleasure or sorrow, and violent scenes can make those of “delicate fibres” feel “pain in the same parts of their bodies, that were diseased or mangled in the object they saw” (TN 123n.). The observer’s response is instinctive, rather than learned. Darwin selectively draws upon Smith’s *The Theory of Moral Sentiments*, eliding its emphasis on imagination over bodily sensibility, in order to construct sympathy as a literal instinct, rather than a mysteriously innate capacity.

This natural history of sensibility—which imagines that humans became human when they acquired the visual literacy that underlies sympathy—seems to universalize particular tastes and moral ideas in the manner long associated with the Romantic ideology. Darwin’s “language of the eye” later becomes, in Wordsworth’s more mysterious phrasing, the “language of the sense.”<sup>29</sup> Although Wordsworth also claims knowledge of human taste and morality, he recognizes that a universal language problematically assumes the uniformity of individual and species sensation. Darwin seems less concerned about this consequence, but his work does attempt to reconnect “taste” to its original meaning (touching with the skin or tongue) when he

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<sup>28</sup>Darwin paraphrases the following sentence from Smith’s *Theory of Moral Sentiments*: “A smiling face is, to every body that sees it, a cheerful object; as a sorrowful countenance, on the other hand, is a melancholy one” (13).

<sup>29</sup>It is possible that Wordsworth develops this alternative phrase in response to *Zoonomia*, which he probably read during the time period that he wrote *Lyrical Ballads*. In a 1797 letter to Joseph Cottle, Wordsworth asks for “Dr. Darwin’s *Zoönomia by the first carrier*” (LEY Letter 62). Darwin discusses the “universal language of the eye” in *The Temple of Nature* (see the Additional Note on “Hieroglyphic Characters”) and, before that, in a section of *Zoonomia* entitled “Of Vision” (*Zoo*. 1: 117-18). For a discussion of Wordsworth’s derivation of “inner-body imagery” from *Zoonomia*, see Richard Matlak’s “Wordsworth’s Reading of *Zoonomia* in Early Spring” (1990).

interrelates touch and vision. On the one hand, Darwin subordinates touch to vision, which criticism elevates (along with hearing) above the more bodily senses of touch, taste, and smell; this reading affirms Howard Caygill's observation that the word "taste" over time designates a faculty of judgment, rather than the activity of touching (38).<sup>30</sup> On the other hand, Darwin refers not only to remembered textures but also to the "ceaseless action" of "inquiring hands" that deliver information to active, "rolling" eyes (*TN* 3.279-87). *The Temple of Nature* describes taste as an innate faculty, but it accounts for the acquisition of taste in materialist terms, rather than referring to the *je ne sais quoi*, the elusive aesthetic response of the privileged class. Darwin's account of the evolution of higher mental powers on the one hand constructs familiar hierarchies, setting humans above animals, the mind above the body, and aesthetic taste above mere sensation. On the other hand, his history could potentially upset those hierarchies, revealing that the animal resides in the human, that the body produces the effects of the mind, and that sensation is the ground of higher taste. By attempting to unify evolutionary theory and aesthetic theory, Darwin brings poetry into the realms of material history—that is, both socio-political history and natural history.

### **Abolition and the "Universal Language of the Eye"**

As I indicated at the start, we see the intersection of socio-political and natural history quite vividly in Darwin's attempt to align evolutionary history, art, and the goal of abolition by evoking the power of the sympathetic eye. The anti-slavery verse in *The Temple of Nature* and *The Botanic Garden* reflects the centrality of visual representation in abolitionist strategy. These poems, as I pointed out earlier, read the efforts of abolitionists as signs of mankind's refined sensibility. Darwin further aligns abolitionism with evolutionary progress by emphasizing that the movement uses modern techniques of visual representation to communicate to the eye, which in both ancient and modern times speaks a "universal language."<sup>31</sup> His anti-slavery writing reflects his belief that the "Poet writes principally to the eye" (*LP* 41-42)<sup>32</sup>; his dual ambition in writing *The Temple of Nature* is to exercise readers' sympathy and to instruct them in science by "bringing distinctly to the imagination the beautiful and sublime images of the operations of Nature in the order ... in which the progressive course of time presented them."<sup>33</sup> The abolitionist movement is part of this narrative, as sympathy for the enslaved is a product of nature's operations. Conscious of the effect of his printed poetry on his reader's "rolling eye," Darwin implicitly celebrates abolitionist literature (including his own) and associates the movement with the appreciation of nature and its transformations.

Darwin's celebration of print as a technology of social coordination appears in other

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<sup>30</sup>For an account of the hierarchy of the senses in Romantic literature and of the ways that gastronomy sometimes undermines that hierarchy, see Denise Gigante's *Taste* (2005).

<sup>31</sup>The additional note "Hieroglyphic Characters" indicates that Darwin supports his physiological theory by connecting ancient humans with modern ones. Interpreting Egyptian hieroglyphics, he wishes that "many other universal characters could be introduced into practice, which might either constitute a more comprehensive language for painters, or for other arts" (*TN* 21app.).

<sup>32</sup> From the prose "Interlude" between Cantos 1 and 2.

<sup>33</sup>The latter quotation is from the unpaginated "Preface" of *The Temple of Nature*.

abolitionist writing from this period.<sup>34</sup> Referring to written accounts of West Indian slavery, William Wilberforce emphasizes that England, unlike France, has enough “means of information” to abolish slavery: “Whilst . . . we were ignorant of all these things, our suffering them to continue, might, in some measure, be pardoned; but now, when our eyes are opened, can we tolerate them for a moment, much less sanction them?” (40) England has not been blind, he suggests, but has closed its eyes to slavery; the abolitionist movement “opens” the eyes of the country, forcing the country to acknowledge the acts it has tolerated. Wilberforce suggests that England has witnessed the horrors of slavery as if first hand through the printed accounts and oral reports of abolitionists; his approach presumes that open eyes will lead to active hands.

Darwin attempts to convey the eloquence of such speeches through his poetry. In the following anti-slavery lines from *The Loves of the Plants*, Darwin anticipates Wilberforce’s upcoming speech to the House of Commons; he suggests that such speeches before Parliament give auditors visual and aural access to the distant continent of Africa.<sup>35</sup>

Hark! heard ye not that piercing cry,  
Which shook the waves, and rent the sky!—  
E’en now, e’en now, on yonder Western shores  
Weeps pale Despair, and writhing Anguish roars:  
E’en now in Afric’s groves with hideous yell  
Fierce Slavery stalks, and slips the dogs of hell;  
From vale to vale the gathering cries rebound,  
And sable nations tremble at the sound!—  
—Ye Bands of Senators! whose suffrage sways  
Britannia’s realms, whom either Ind obeys;  
Who right the injured, and reward the brave,  
Stretch your strong arm, for ye have power to save! (3.369-80)

Readers, including the addressed senators, look down from above like the “Seraph”; they read tears of despair and the landscape of slavery. From this vantage point they see external outlines; homogenized yells and cries rise from groves and recessed vales, as these “legible” noises confirm hidden suffering. Distance seems no obstacle to intervention, as Darwin, also taking for granted the coordination of eye and hand, calls upon Parliament to stretch its “long arm” toward Africa by voting for the abolition bill.

In addition to emphasizing print (and its power to convey spoken eloquence), Darwin celebrates the abolitionists’ reproduction and distribution of the seal of the Committee for Effecting the Abolition of the Slave Trade (CEAST) in the media of print and clay. In *The Economy of Vegetation*, published two years after *The Loves of the Plants* as Part 1 of *The Botanic Garden*, Darwin praises Josiah Wedgwood’s cameo of “a Slave in chains, of which he distributed many hundreds, to excite the humane to attend to and to assist in the abolition of the

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<sup>34</sup>The poetic diction of Darwin and others can be read as politically progressive. In a reading of Barbauld’s *Eighteen Hundred and Eleven*, Laura Mandell argues that personification possesses a “contradictory potential,” for it can serve to mystify, performing an “ideological function,” as well as to demystify (28).

<sup>35</sup>Darwin was involved with the Committee for Effecting the Abolition of the Slave Trade (CEAST) during the time that he composed *The Loves of the Plants*: he discusses Wilberforce’s upcoming speech in a letter to Wedgwood dated April 13, 1789; it seems that he wrote the anti-slavery section of the poem for the CEAST, since he sent a pre-publication copy to Wedgwood on February 22, 1789, pointing out “the page on the Slave-trade” and also recommending for use by the CEAST a story by Daniel Defoe that depicts “the generous spirit of black slaves” (*LED* Letters 89B and 89D).

detestable traffic in human creatures” (*BG* 87n.). Joseph Woods designed this iconic image—an enchained slave, kneeling under the motto “Am I not a man and a brother?”—for the CEAST; Wedgwood, who was recruited to be a member, promoted abolition by manufacturing the image as a cameo to be worn as a brooch or hairpin.<sup>36</sup> Celebrating Wedgwood’s artistry, Darwin reproduces the seal on the adjacent page and describes the cameo:

To call the pearly drops from Pity’s eye,  
Or stay Despair’s disanimating sigh,  
Whether, O Friend of art! the gem you mould  
Rich with new taste, with antient virtue bold;  
Form the poor fetter’d Slave on bended knee  
From Britain’s sons imploring to be free.... (2.311-15)

Darwin’s gloss of the cameo suggests that Wedgwood overcomes the challenge of representing suffering with silent images. He praises Wedgwood’s method of producing of “whiter showers” of clay, shinier enamel, and “nicer mould[s]” that produce “softer feature[s]” (2.306, 309); the figure possesses distinct lines and a fleshy texture. Presented with this life-like image, the viewer seems to hear the slave’s “disanimating sigh,” becoming equally inanimate with sorrow. As a realistic and universal representation of a suffering body, the cameo arrests the viewer, creating a space in time for sympathy; frozen in sympathy, the viewer is reanimated, as if by the body, which produces tears. Through this experience, he acquires “new taste” and a renewed capacity for sympathy.

The halted viewer in turn animates the inert image, which seems to participate in its own animation, for it seems to be caught in the middle of speech and movement. The parted lips of the figure suggest “the bold Cameo speaks” (3.310):

—The Slave, in chains, on supplicating knee,  
Spreads his wide arms, and lifts his eye to Thee;  
With hunger pale, with wounds and toil oppress’d,  
“Are we not Brethren?” sorrow choaks the rest;— (4.425-28)

The figure paraphrases but cannot complete Wood’s motto, which suggests firstly that abolitionists speak for slaves accurately and secondly that facial expressions are more poignant than words. The abbreviation aims to produce a virtual interaction, as the reader mentally completes the familiar motto. Darwin praises Wedgwood’s use of the language of postures and symbols (the “bended,” “supplicating knee,” the uplifted eyes, the widespread arms, and the “chains”), which echoes his statement that the painter has the advantage over the poet “in using a universal language, which can be *read* in an instant of time” (*LP* 123)<sup>37</sup>. But through print and literary devices, words become as instantly legible as images. By addressing the eye, poetry and other forms of art could transmit visible human emotions (like “sorrow”) instantly and initiate equally speedy action. As his verse supplements Wedgwood’s image with sound and movement, Darwin celebrates the cameo as a product of both Etrurian and industrial, as well as both symbolic and realistic, methods of representation. According to Darwin’s natural history, the

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<sup>36</sup>The CEAST commissioned the image for the purposes of promoting the cause and identifying itself as a political body; it resolved on July 7, 1787, “that a Seal be engraved for the use of this society” and assigned members Joseph Woods, Dr. Hooper, and Phillip Sansom to a subcommittee for designing the seal; on October 16, 1787, Joseph Woods “brought in a specimen of a Design for the same, expressive of an African in Chains in a supplicating Posture with this Motto ‘Am I not a Man & a Brother’” (CEAST Minutes). For a discussion of women’s purchase of this and other abolitionist commodities, see Kate Davies’s “A Moral Purchase.”

<sup>37</sup>From the prose “Interlude” between Cantos 3 and 4.

abolitionist movement captures and mobilizes followers by distributing universal images, which constituted a language in ancient times and might do so again through advancements in the arts of poetry, print, and pottery.

### Transmutation in Barbauld's "Epistle to William Wilberforce"

Whereas progressive natural history informs Darwin's anti-slavery writing, Barbauld questions the theory that human society advances as vision advances. Her "Epistle to William Wilberforce, Esq. on the Rejection of the Bill for Abolishing the Slave Trade" indicates that she carefully read Darwin's *The Loves of the Plants*.<sup>38</sup> Understanding the failure of Wilberforce's powerful rhetoric, Barbauld refuses to pretend that her country is innocent, exclaiming in the poem, "Thy Country knows the sin, and stands the shame!" (2). In her view, the abolitionist movement, like the specular theory of sympathy on which it is grounded, has been active and unsuccessful for too long to maintain the conceit. English readers must know slavery's horrors given abolitionists' tireless efforts to represent them to Parliament and the public through print and public speech. While the "Epistle" is not original in its critique of luxury or even in its reflection on the limits of representation, it peculiarly intermingles transmutation theory and abolitionist strategy, thereby representing the natural and socio-political histories of sympathy.<sup>39</sup> Barbauld draws upon Darwin's writing for multiple purposes: as I explain shortly, the concept of declining bodily organs provides language and imagery for the poem's support of a contemporary boycott of products of slavery, while it also allows reflections on the limits of sympathy and the effects of environment and practice on the body politic. Rather than representing sympathy as either a present or absent capacity of human nature, Barbauld suggests that the decay of sympathy in the course of modern history could usher in an apocalypse, a post-human period in which amoral nature will rule. Slavery reveals the incongruity between the model of sympathetic man and Britain's political inaction and reveals anew the failure of current forms of aesthetic representation to cultivate sympathy.

I first pursue this argument by examining Barbauld's use of Darwin's discussions of transmutation and inheritable disease. Canto 3 of *The Loves of the Plants*, which describes nighttime predation and competition between species for survival, probably inspired the naturalistic and physiological imagery of the "Epistle." Little has been written on Barbauld's engagement with Darwin, although they shared a number of friends (including Joseph Priestley and Thomas Beddoes) as well as a publisher (Joseph Johnson). A friend of Barbauld's remembered that "strangely enough, in spite of her correct taste, Mrs. Barbauld was quite fascinated by Darwin's *The Botanic Garden*, when it first appeared, and talked of it with rapture; for which I scolded her quite heartily" (Oliver 323).<sup>40</sup> Many considered Darwin's poem improper for displaying not only plant sexuality but also competing and transforming species. Barbauld's

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<sup>38</sup>*The Loves of the Plants* was published first, though it was Part 2 of *The Botanic Garden*; Part 1, *The Economy of Vegetation*, was published (along with a reissue of *The Loves of the Plants*) in 1791.

<sup>39</sup>The "Epistle" is unique in its use of natural history to launch a critique of consumption, but that critique was common in abolitionist literature of the period. For example, in "To the Genius of Africa," Robert Southey associates slavery with the "Daemon Commerce" who "Pours all the horrors of his train" on Africa. Southey's lines are quoted from an excerpt of the poem in Basker's *Amazing Grace* (431).

<sup>40</sup>A Mr. Rogers made this comment, according to Oliver (323).

fascination with the inner life of organisms—the movement of fluids and the accretion of matter—and with the motion of amoral nature emerges in the following lines:

Shall man, proud worm, contemn his fellow-man?  
And injur'd Afric, by herself redrest,  
Darts her own serpents at her Tyrant's breast.  
Each vice, to minds deprav'd by bondage known,  
With sure contagion fastens on his own;  
In sickly languors melts his nerveless frame,  
And blows to rage impetuous Passion's flame:  
Fermenting swift, the fiery venom gains  
The milky innocence of infant veins;  
There swells the stubborn will, damps learning's fire,  
The whirlwind wakes of uncontroul'd desire,  
Sears the young heart to images of woe,  
And blasts the buds of Virtue as they blow (44-56)

While the “Epistle” naturalizes competition between races, it also warns that Africans possess defenses against European predators. Barbauld reduces man to a “proud worm,” translating Darwin’s suggestion that all organic beings share a material nature into a call for human rights. Yet the violation of those rights has produced bilateral contamination instead of fellowship. The image of Africa defending herself by “dart[ing] her own serpents” at Britain both echoes Wilberforce’s reference to the slave trade as a “nest of serpents” and suggests that the continent’s violent, independent resistance is part of natural history (41).<sup>41</sup> The opposition of the feeling British abolitionist almost seems irrelevant in such a scenario. Nature, Darwin informs the reader who ventures into his footnotes, generates her “abundance of poisons” for use: poisons, thorns, and noxious “fragrance” “are given [plants] for their defence from the depredations of animals” (*LP* 102-03n.). In the “Epistle,” impersonal natural laws, rather than a merciful God or conscientious Britons, ensure justice, punishing England, whose “own” vices have returned home, in a version of the process of reverse contamination that Alan Bewell has found at work more broadly throughout the period.<sup>42</sup>

More significantly, Barbauld draws on Darwinian pathology when she envisions the physical and moral degeneration of the British people. Like the “poison” of “spiritous liquors” (*LP* 110-11n.), the “vice” of slavery attacks the “tyrant’s breast” and then rapidly “ferment[s]” into a “venom” that the veins convey throughout the body. This imagery makes poetic and political use of Darwin’s statement that the consumption of liquor causes a range of inheritable diseases:

The swallowing drams cannot be better represented in hieroglyphic language than by taking fire into ones [sic] bosom; and certain it is, that the general effect of drinking fermented or spirituous liquors is an inflamed, schirrous, or paralytic liver, with its various critical or consequential diseases, as leprous eruptions on the face, gout, dropsy, epilepsy, insanity. It is remarkable, that all the diseases from drinking spirituous or fermented liquors are liable to become hereditary,

<sup>41</sup>The serpent also serves as a figure of conscience: “And maddening Conscience darts a thousand stings” (*TN* 4.88).

<sup>42</sup>See Bewell’s discussion of the anxiety of reverse contamination in *Romanticism and Colonial Disease* (1999). For a discussion of reverse contamination in Book 7 of *The Prelude*, see Saree Makdisi’s *Romantic Imperialism* (23-44). Also focusing on disease, Roy Porter discusses the instability of the body as a threat to the contained self in eighteenth- and early nineteenth-century literature and culture in *Flesh in the Age of Reason* (2004).



even to the third generation; gradually increasing, if the cause be continued, till the family becomes extinct. (*LP* 111n.)

Like this passage, the “Epistle” describes a fiery poison that infects at the breast and then spreads to internal organs, resulting in leprosy and mental infirmity. In Darwin’s passage, the concept of extinction links the fates of the individual and that of the race or nation. He elsewhere suggests that individual production and consumption of this poison threatens the public health.<sup>43</sup> In a more extensive discussion of the paralytic liver, he objects to legislation that permits the “manufactory of disease” in the interest of tax revenue (*Zoo*. 1: 353).

Barbauld similarly raises an anxiety that Britain manufactures diseases that devastate first families and then the body politic, but she focuses on overseas production, identifying these liquors as products of slavery. As the poem figures “Afric” and “Augusta” as bodies transformed by disease, it evokes both far-flung parts of the British empire (from Parliament to the East and West Indies) and organic bodies, thereby linking pathology to a critique of empire. She describes the waste of offspring through abstract figures—the “venom” corrupts the “milky innocence of infant veins,” “sears the young heart to images of woe,” and “blasts the buds of virtue”—rendering the epidemic universal: it rages all at once in individual bodies, Africa, England, and the colonies. British empire and British bodies are diseased: a “spreading leprosy taints ev’ry part, / Infects each limb, and sickens at the heart” (98-99).

“Spirituous liquors” were certainly Barbauld’s poison of choice due to the movement to boycott West Indian rum and sugar, which intensified after Wilberforce’s second motion failed. In a 1791 pamphlet that urges the British public to abstain from these two luxuries, William Fox calls sugar-cane that passes through the “medium of slavery” a “loathsome potion” and offers consumers, who are “partners in the crime,” the chance to “exonerate ourselves from guilt, by spurning from us the temptation” (155).<sup>44</sup> Abolitionists targeted sugar and rum believing that their production required a greater number of slaves and entailed particularly brutal labor conditions.<sup>45</sup> Darwin too supports emancipation and domestic production when he hopes that sugar-cane “may soon be cultivated only by the hands of freedom, and may thence give happiness to the labourer, as well as to the merchant and consumer.”<sup>46</sup>

By correlating the nation’s physical and moral diseases with the consumption of West-Indian sugar and rum, Barbauld’s “Epistle” reinforces Fox’s message that consumers of these products maintain slavery, and it warns in addition that this immoral consumption has caused the degeneration of a once moral British people.<sup>48</sup> The poison of plantation rum makes the “manners melt” as “One undistinguish’d blaze / O’erwhelms the sober pomp of elder days” (94-95).

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<sup>43</sup>According to Charles Darwin in *Life of Erasmus Darwin*, Erasmus Darwin opposed the “evils of intemperance” primarily “on the grounds of ill-health, with its inherited consequence” (84).

<sup>44</sup>Whereas my essay focuses on anxieties regarding inheritable disease, Charlotte Sussman links phrases like Fox’s “loathsome potion” to a consumer anxiety, generated in part by abolitionists, that West Indian sugar and rum contained the “contamination of African blood, sweat, and tears” (129).

<sup>45</sup>Explaining why he argues for the boycott of sugar and rum but not of cotton and mahogany, Samuel Taylor Coleridge writes, “The other West-India commodities do not require such intense labor in their growth and preparation, as the Sugar and Rum. They might be raised by European laborers. The Sugar plantations make Africans necessary, and their slavery intolerable” (“On the Slave Trade” 219-20).

<sup>46</sup>From Darwin’s *Phytologia*. Quoted in Charles Darwin’s *Life of Erasmus Darwin* (87)

<sup>48</sup>As Mandell points out, Barbauld uses poetic devices to identify shared guilt and responsibility. In a reading of Barbauld’s “Sins of Government” (1793), Mandell argues that Barbauld counters “gigantism,” or the absorption of the individual into the abstract body of the nation, in her insistence that “individuals are guilty in their passive acquiescence, in allowing government to operate through their limbs” (35).

Whereas Fox refers to a human or divine judge that can “exonerate” Britons from the “crime” of slavery, Barbauld describes an unforgiving punisher, a disease that spreads throughout the empire from Briton to Briton, as well as down generations from parent to child.<sup>49</sup> Critiquing the premise of historical progress underlying abolitionist and imperialist rhetoric, Barbauld imagines that Britain, transformed into a monstrous and infirm nation, will lose reason and feeling and thus the right that Darwin gives to primeval and then civilized man: the “empire of the world.”<sup>50</sup>

When she figures immorality as a disease both contagious and inheritable, Barbauld reproduces a slippage in Darwin’s thought whereby disease inheritance and organ transmutation become the same phenomenon, as both involve the passing on of acquired traits. This slip is most visible in “Of Generation,” in which he argues that organic matter is unstable rather than preformed by citing cases of monstrosity and disease. Diseases, he reasons, produce “new parts or new vessels” such as “wens and cancers, which cannot be supposed to have had a prototype or original miniature in the embryo” (*Zoo*. 1: 490). The fact that matter grows by “accretion,” rather than by extension or unfolding, is also proven by “monstrous births,” such as “chickens with four legs” and vegetable monsters “in which a duplicate or triplicate production of various parts of the flower is observable” (*Zoo*. 1: 496-97). Although Darwin refers to the same types of evidence as Charles Darwin later does in *On the Origin of Species*, he does not describe the selection of traits in the reproductive process but more loosely associates transmutation with inheritance.

If Darwin latches onto inherited diseases and monstrous growths as visible and therefore traceable characters, it is because the process of evolution eludes even the advanced eye. In *Zoonomia*, we find the idea that one can imagine transmutation by examining the products of nature but that the process itself is not directly observable. Whereas preformationists liken the growth of the embryo to optical magnification (the tiny form unfolds until it becomes visible), Darwin describes a process of accretion visible only to the imagination or reasoning mind, which can compare objects from different points of time. The mind that can indentify simple and complex organisms as comparable objects gains a virtual memory, as it seems to recover pre-human history. In this passage, vast tracts of time are condensed into a paragraph, rather than a stanza:

Would it be too bold to imagine, that in the great length of time, since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind, would it be too bold to imagine, that all warm-blooded animals have arisen from one living filament, which the Great First Cause endued with

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<sup>49</sup>In *The Temple of Nature*, published more than a decade after Barbauld’s “Epistle,” Darwin makes more explicit the link between slavery and diseases caused by the consumption of liquor.

And, cursed Slavery! thy iron hand;  
And led by Luxury Disease’s trains,  
Load human life with unextinguish’d pains.

Here laughs Ebriety more fell than arms,  
And thins the nations with her fatal charms,  
With Gout, and Hydrops groaning in her train,  
And cold Debility, and grinning Pain,  
With harlot’s smiles deluded man salutes,  
Revengeing all his cruelties to brutes! (*TN* 4.74-82)

<sup>50</sup>A number of critics have discussed whether or not Barbauld imagines history as progressive or regressive. See Mandell, Rohrbach, and Bradshaw.

animality, with the power of acquiring new parts, attended with new propensities, directed by irritations, sensations, volitions, and associations; and thus possessing the faculty of continuing to improve by its own inherent activity, and of delivering down those improvements by generation to its posterity, world without end! (*Zoo.* 1: 505)

Although this passage appears within a medical and scientific treatise, it resonates with passages of *The Temple of Nature* that connect man's formation with his acquisition of sensibility. The process of biological evolution here, too, sounds strikingly like a program of aesthetic cultivation: organisms acquire new "sensations" and deliver "improvements" down a chain of generations. The "bold" but flattering implication is that mankind has progressed in this manner, inheriting not only physical traits but also improved taste. Although the exact point at which man acquired his distinctive capacities is uncertain, a manifest hierarchy proves that nature has differentiated and ordered the species: man is set above the "bestial throngs" in taste, even although some animals possess sharper senses of vision and smell. How offspring inherit the parent's physical traits and behavioral capacities remains mysterious to him: adapting David Hartley's theory that man's "indissoluble" mind continues into the afterlife, Darwin suggests that organisms live on through reproduction, imparting their "form and propensities" to their offspring (*Zoo.* 1: 480). Mysteriously, cultivation is the work, not of the individual, but of the process of reproduction.

Barbauld imagines a more pessimistic trajectory of natural history: rather than passing down improved sensibility to future generations, the British people spread destructive disease through time, as they do through geographical space. The West Indian mistress of her poem grows by accretion, but, like the empire she represents, she becomes monstrous, rather than refined:

See her, in monstrous fellowship, unite  
At once the Scythian, and the Sybarite;  
Blending repugnant vices, misally'd,  
Which *frugal* nature purpos'd to divide;  
See her, with indolence to fierceness join'd,  
Of body delicate, infirm of mind.  
With languid tones imperious mandates urge;  
With arm recumbent wield the household scourge;  
And with unruffled mien, and placid sounds,  
Contriving torture, and inflicting wounds. (61-70)

Rather than being a symbol of higher civilization, the woman spreads languidly across boundaries, suggesting the collapse of history's progress from savagery to civilization. Zeugma and chiasmus emphasize the contradictions of this figure, which is both modern and "savage," "Scythian" and "Sybarite," "delicate" and cruel, infirm and powerful. Her pleasure in torture contradicts any claim that sympathy for others is built into the human constitution, whether physiologically or transcendently.

This colonial figure is the English consumer's double: each rules a domestic space; each oppresses slaves from a distance. In the first case, the distance is from England to Africa; in the second, it is the length of the "household scourge." Diego Saglia reads the mistress as a "class-specific portrait" that denounces, not lower- or middle-class female consumption, but rather the "parasitical and depleting form of consumption of the higher classes" (659). Barbauld's allegiance to trade and to the middle class is certainly detectable in works such as *Eighteen*

*Hundred and Eleven*, yet in the “Epistle” all Britons (not only old corruption) face “th’ account of vengeance yet to come” (42). The mistress might represent the advanced degeneracy of her class, but the disease threatens middle-class consumers as well. Barbauld thus ties the English consumer with the colonial mistress sympathetically, in the physiological sense of the word, as the pathology of the latter can be spread through the system of empire from one body to another. By depicting inheritable diseases that have already taken hold, Barbauld suggests that this fate is already in progress and thereby seeks to do more than reform consumption. The poem thus qualifies its participation in a tendency of abolitionist poetry, identified by Robert Mitchell, to rely on “habits of perception and structures of circulation intrinsic to the capitalist *habitus*,” such as the concepts of the typical victim, consumer choice, the political effect of affect, the commodity, and fashion (118). Despite its support of the boycott, the “Epistle” suggests that the symbolic refusal of consumption is too little, too late. Rather than figuring sympathy as a national resource, which can dwindle, grow, and be exchanged, Barbauld depicts it as a physical capacity that can be lost.

It is important to note that the “Epistle” focuses on Britons as potential victims of the slave trade rather than on the suffering of slaves.<sup>51</sup> Marcus Wood discusses the “utterly problematic nature” of Anglo-American visual representations of slavery, which unfailingly evacuate or fantasize the lives and experiences of millions of African slaves (4). Equally problematic are Anglo-American textual representations of slavery, including Barbauld’s apparent silencing of the slave whose “dumb sullen looks of woe announce despair” and whose “angry eyes thro’ dusky features glare” (82-83). Yet Barbauld deeply questions abolitionists’ tendency to equate visual observation with sympathetic engagement. The system of visual communication described by Smith and Darwin seems to have broken down: the sympathetic observer has not read the emblems of despair in the slave’s face. Challenging those “averted eyes,” the slave becomes himself an observer whose “glare” demands recognition. Barbauld also acknowledges that poetry seems ill-equipped to represent slavery: “The Muses,” she admits, fly “far from the sounding lash” (84). The “sensual riot” that drowns “finer joy” refers not only to the debauchery of the plantation owners but also to a disturbance in the senses of anyone who observes the plantation’s contrary spectacles of torture and luxury (85). Barbauld critiques pro-slavery literature that attempts to contain such a riot within familiar poetic conventions. She can only proceed by negatives. The fourth stanza of the “Epistle” negates pastoral treatments of plantation life, such as James Boswell’s description of a “cheerful gang” of plantation slaves, who “Ev’n at their labour . . . sing / While time flies quick on downy wing.”<sup>52</sup>

As the “Epistle” engages with the problems inherent in representing slavery, it more particularly queries why the anti-slavery movement’s images have not had their intended effect—why, for example, the story of an African mother forced to throw her child overboard “give[s] birth” not to sympathy but to the “horrid mirth” of some members of Parliament, who reportedly laughed when Wilberforce related that anecdote during his speech (39-40). The

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<sup>51</sup>One might interpret this as an attempt to promote abolition by gathering sympathy for fellow Britons, such as repentant participants in the slave trade. Like Coleridge’s “Rime of the Ancyent Marinere,” Southey’s “The Sailor, Who had Served in the Slave-Trade” hints at the power of the system of slavery over individual human workers. The sailor is ordered by his captain to flog a woman on board a slave ship; tortured by his conscience, he wishes that “the sea had swallow’d [him] / When [he] was innocent.” This quotation was taken from an excerpt of Southey’s poem in Basker’s *Amazing Grace* (432-35).

<sup>52</sup>These lines are quoted from an excerpt of James Boswell’s “No Abolition of Slavery; or the Universal Empire of Love” in Basker’s *Amazing Grace* (238-41).

response indicates to her not only the inhumanity of those members but perhaps more troublingly the harmful effect of representational techniques premised upon the immediacy of the image and the sympathy of the eye.

Abolitionists strategically used the “language of the eye” through a variety of media. In addition to narrating stories of violence against slaves, speakers in Parliament exhibited instruments of capture and torture, as well as a model slave ship aimed at displaying the horrors of the middle passage.<sup>53</sup> In a letter to Wedgwood dated April 13, 1789, Darwin suggests props for Wilberforce’s speech of the following month:

I have just heard that there are muzzles or gags made at Birmingham for the slaves in our islands. If this be true, and such an instrument could be exhibited by a speaker in the House of Commons, it might have great effect. Could not one of their long whips or wire tails be also procured and exhibited? But an instrument of torture of our own manufacture would have a greater effect, I dare say. (*LED* Letter 89D)

Abolitionists aimed to strike consciences through aesthetic effects: the whip and wire tail would stand in synecdochically for the brutal treatment of slaves overseas, while the muzzles and gags from Birmingham would be revealed like the domestic secret of a Gothic novel.

Abolitionists might have worried instead that bringing these horrors out of obscurity would lessen their effect on the conscience. As Burke writes in *A Philosophical Enquiry into the Origins of Our Ideas of the Sublime and Beautiful*, obscure objects are more terrifying than clear ones: “when we accustom our eyes to [the object], a great deal of the apprehension vanishes” (54). Yet because abolitionists understood the slave trade as a catalog of real horrors, rather than as unknowable trauma, they attributed its continued operation to its invisibility. The minutes of the CEAST record this diagnosis: “it is probable that the Establishment of the Trade has been in part derived from the distance of Situation which, together with the Interest of the Parties immediately concerned, has enveloped the Subject in Obscurity” (July 1787). A fog-like medium—the joint product of geographical distance and profiteers—comes between slavery’s horrors and the observer, whose natural capacity for sympathy remains intact. In this same entry, the CEAST records its tactic to “disclos[e] to publick view the horrid Methods which have been taken to scatter amongst [the Nations of Africa] the seeds of discord and War.” Apparently unworried that the public might turn from horrid scenes in disgust, the CEAST is confident that its images and research will bring about abolition.

The problem with this strategy, as Barbauld knows from engaging with Burke, is that one cannot repeatedly disclose the same object without losing the shock of disclosure. The “Epistle” evaluates abolitionism’s tireless delivery of the same units of image and sound to the country’s eyes and ears:

The Preacher, Poet, Senator in vain  
Has rattled in her sight the Negro's chain;  
With his deep groans assailed her startled ear,

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<sup>53</sup>The model used by Wilberforce during his speeches was made of wood, lead, and paper and measured 3.6 by 14.6 by 3.5 inches (Anonymous *Model of a Slave Ship*). Marcus Wood discusses the model ship as a toy (similar to contemporary toy reproductions of Noah’s Ark) that mythologizes the middle passage; Wilberforce’s “miniature boat,” constructed according to a famous illustration (*The Description of a Slave Ship*) of a Liverpool slave boat, was “passed from hand to hand around the House of Commons during a slave-bill debate” (26-28). The model ship is typical of the abolitionist movement’s use of synecdoche across different forms and its fascination with realistic detail.

And rent the veil that hid his constant tear;  
Forced her averted eyes his stripes to scan,  
Beneath the bloody scourge laid bare the man (3-8)

On the one hand, Barbauld applauds the concerted efforts of preachers, poets, and senators to represent the slave trade, as well as the unification of religious, artistic, and political bodies around a set of recognizable anti-slavery images. Members of Parliament, like Wilberforce, and poets, like Darwin, Cowper, and Roscoe, represent slavery with the same visual terms: the repetition of imagery seems to verify the facts of slavery, suggesting a precise correspondence among accounts by different witnesses. Even if this repetition to some extent betrays the conventionality of these images, which circulated among writers who often only knew slavery second-hand, it empowers readers to witness slavery virtually through the media of print and podium. The repetition also demonstrates the coalition of parties (the joining of “Contending chiefs, and hostile virtues”) who “rattle” eyes and “assail” ears (22, 4-5). A “Negro’s chain” exhibited in Parliament corresponds to the chains that bind the Wedgwood figure and to stock phrases like “Submission’s long and goading chain.”<sup>54</sup> Darwin’s *Loves of the Plants* had alluded to the Wedgwood cameo, which itself alludes to the CEAST seal. These works even homogenize sounds. Groans are heard again and again in verse: in “Pity for Poor Africans,” William Cowper had mocked those who continue to consume sugar and rum despite witnessing (through poetry) slaves’ “hardships, tortures and groans” (3). Readers were to scan marks of the scourge in Cowper’s *The Task* (1785), which rebroadcasts a report of the master who “Chains [the slave], and tasks him, and exacts his sweat / With stripes” (2.23).

On the other hand, Barbauld critiques the emphasis on vision within anti-slavery representation. Her poem confronts not only Parliament and British readers but also the inefficacy of dominant theories of sympathy and visual representation, given that Wilberforce’s second motion failed. Barbauld extends Burke’s insight on the sublime by raising a worry, particularly urgent for abolitionists, that assaults on the eye only deaden the feelings of readers. In a 1773 essay entitled “An Enquiry into those Kinds of Distress which Excite agreeable Sensations,” Barbauld had advised writers to limit scenes that represent suffering or else risk desensitizing readers. “Constant suffering,” she observes, “deadens the heart to tender impressions,” making it “highly necessary in a long work to relieve the mind by scenes of pleasure and gaiety” (204-05). If the “awakenings of remorse, virtuous shame and indignation” and “the glow of moral approbation” do not lead a reader to action, these feelings “grow less and less vivid every time they recur, till at length the mind grows absolutely callous” (206). Sentiments are themselves like images (first “vivid,” then faded), indicating the extent to which eighteenth-century culture in its assimilation of brain science conceived of the mind as a receptacle of images. In his discussion of the “association of agreeable sentiments with visible objects,” for example, Darwin had drawn upon Burke’s *Enquiry* when he stated that human beings learn to appreciate beauty disinterestedly from early contact with the gradual curves of the female breast; the eye, according to this view, educates the mind, imparting taste proper to the human being. Opposing these specular theories of taste and sympathy, Barbauld argues that observation does not improve sympathy automatically: “misery has a claim to relief . . . we must not fancy ourselves charitable, when we are only pleasing our imagination” (205-07). Barbauld imagines the consequences of unremitting exposure to suffering in physical terms: the image

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<sup>54</sup>These lines are quoted from an excerpt of Mary Robinson’s “The African” in Basker’s *Amazing Grace* (263-64).

itself seems to fade, becoming less and less vivid on the screen of the reader's mind; the mind grows a protective callus; and the heart is "sear[ed] to images of woe."

Following the disappointing failures of the abolition bill first on May 12, 1789, and then on April 18, 1791, the abolitionist movement faced the necessity of literary innovation.<sup>55</sup> The "Epistle," which attempts to represent slavery without further weakening readers' minds or hearts, moves beyond the anxieties in Wilberforce's speeches, which were reported in newspapers, magazines, and pamphlets.<sup>56</sup> According to a pamphlet summarizing the 1789 debate, Wilberforce expressed that he "thought it his duty to lay the whole of the case and the whole of its guilt before them" and "really believed they were not aware of its enormity and its extent till that moment" (146); this reference to the sight of slavery corresponded to CEAST strategy. In an account of Wilberforce's 1791 speech, we might detect, in contrast, an anxiety that this second speech repeated former revelations. Once again, the speech connected witnessing suffering to ending it. Anticipating the eventual success of abolition, if not by legislators, then by the "people of Great Britain," Wilberforce reportedly said that the slave trade

was a nest of serpents, which would never have endured so long, but for the darkness in which they lay hid. The light of day would now be let in on them, and they would vanish from the sight. (41-42)

Wilberforce projected the movement's confidence in visual representation, yet he carefully limited the audience's exposure to images of slavery. Rather than claiming to reveal the whole of the slave trade, he referred to its incomprehensibility, and he crafted the "nest of serpents" as a sublime image that briefly appeared before it "vanish[ed] from the sight." He called attention to his own restraint, stating that the few horrific anecdotes he related stood in for a thousand others. Although he may not have spoken these precise words, his publications reveal that he was engaged with contemporary aesthetic debates and that, like Barbauld, he distinguished between "exquisite sensibility" and moral sensibility.<sup>57</sup> Finally, his anxiety shows in his anticipation of a second failure: he declared that if members of Parliament rejected the motion, the movement would attempt to mobilize the British people. This is, in fact, what happened. Barbauld's "Epistle" attempts to recoup Wilberforce's failure, and it confronts the insensibility of the nation.

The remainder of this chapter discusses Barbauld's strategies for restoring readers' sensory organs. Her poem supports participation in the boycott, even as it recognizes the limitations of treating the symptom rather than the cause of moral degeneracy. The poem's greater innovation is to define poetry as language that counteracts degeneration, which is caused by the habitual over-consumption of intoxicating, debilitating images. This analogy, in which images have similar harmful effects as liquors, seems to be adapted from Darwin's description of liquor as a stimulus that causes the liver to become "less susceptible of motion" (*Zoo*. 1: 347). Just as the calloused mind or seared heart are consequences of overlong exposure to suffering, the "torpor" of the liver is caused by "being previously habituated to too great stimulus; which in

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<sup>55</sup>The first motion, presented on May 12, 1789, in a lengthy speech calculated to move the audience, was lost when the planters delayed action on the motion until the next legislative session. The second motion on April 18, 1791, failed by a vote of 163 to 88.

<sup>56</sup>Brycchan Carey has pointed out that we cannot determine Wilberforce's style, since the reporters who rendered the speeches "deliberately changed things" to support their own political views and even "saw themselves as literary figures who rendered into fine style the unpolished debates which they heard" (156). However, references to the sight of slavery appear in multiple records of Wilberforce's speeches.

<sup>57</sup>See Carey's discussion of this issue (161).

this country is generally owing to the alcohol contained in ale or wine” (*Zoo*. 1: 352). The liver becomes so dependent on the stimulation of alcohol that it loses the ability to move the body’s vital fluids. The eye and mind are no different from the liver in this respect, Barbauld suggests. Both the mind of the “indolent” West Indian woman and the over-stimulated eye of the reader are paralyzed organs.

With these images of paralyzed sensibility, Barbauld anticipates twentieth-century responses to the problem of maintaining sympathy while representing traumatic historical events. In his study of Holocaust literature and the dangers of realism, Geoffrey Hartman has defended the capacity of certain forms of aesthetic representation that engage in “an alternate and deliberate mode of distancing” to preserve the reader’s capacity to feel (*Longest Shadow* 157). As read by Hartman (a scholar of Wordsworth among other subjects), accounts of the Holocaust inherit Wordsworth’s aesthetic strategy, which attempts to sustain the limited resources of feeling by distancing the reader from reality. The “Epistle” shares some of these techniques: Barbauld reinforces the reader’s memory, conscience, and sense of a continuous, socially integrated self. She also addresses the distrust of representation that results from the distribution of false ideas, exposing her opposition’s propaganda (its false pastoral, as well as its “flimsy sophistry,” “plausible argument,” “daring lye,” and “artful gloss”) and also self-consciously examining the abolitionist movement’s own distribution of stock images (27-29).

The “Epistle” is exceptional, not only because it uses the concepts of disease and transmutation to address the shared aesthetic and political challenges of abolitionist writers, but also because it imagines an apocalyptic sundering of human and natural histories. In the nightmarish vision of nature and Africa’s vengeance, the disease brought on by luxury and “foreign wealth” melts British “manners” and “morals,” melting too the division between civilized and savage societies that marks the work of history. Apocalypse’s alternative, which seems almost unattainable given the public’s continued moral failure, is the restoration of civilization through the abolition of slavery. The final lines of the “Epistle” envision abolition within both a Christian and secular moral order, as God and personified History dispense punishment and reward. Since the abolitionists’ efforts to “urg[e] Conscience’ strong controul” have failed, Barbauld appeals to fear of nature’s destructiveness, reminding readers that the moral laws of God and society are forgiving in contrast to irreversible physiological change (9).<sup>58</sup> The poem presents the path of destruction (the “Nation’s fall”) as more likely than the success of abolition, placing Wilberforce and other reformers in heaven and history, while casting the opponents of abolition out of both. Nature, acting through and beyond former slaves, will destroy the empire that continues to practice slavery, but the laws of disease, rather than of justice, create this effect of punishment. It is as if the imperial system has produced a spiritual and physical torpor, placing the body of the once-moral Briton beyond the positive influence of nature and history.

Whereas Darwin’s work cheerfully expects that nature and human action produce hierarchical and moral order over time, Barbauld comments on the duality of natural development and points to the inadequacy of current strategies of representation, which address themselves to the eye and mind rather than to the whole body. Her strategy seems to be to deprive the eye; images and words that “can be *read* in an instant of time” (*LP* 123n.) might

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<sup>58</sup>Barbauld’s use of fear startled an early reviewer, who remarked, “The muse of benevolent spirit, and of elegant numbers, here assumes the tone of resentment, and lashes, with keen severity, the senatorial opponents of the late unfortunate slave-bill” (226-27).



speed political action, but they also enter the mind too quickly, unfiltered by either critical thought or the mind's mechanisms of self protection. Drawing upon Darwin's account of deadened organs, Barbauld writes a poem that aims to make the eye critical, active, and independent of external visual stimuli. Rejecting Darwin's simpler poetics of the eye, as well his correlation of intellectual perception with the eye's mastery of visible form, she attempts to improve her readers' intellectual perception by presenting ungraspable images. "Diffus'd on sofas" (58), the West Indian woman seems like a vapor; the eye, as described by Darwin, would struggle to match her formlessness with a tactile memory. Barbauld sees beneath empire's beautiful exterior and synecdochic figures into its diseases—invisibly transmitted through reproduction and commerce. Within the imperial system, images can tell lies: in the East Indies, the "marble palaces and rural shades" contain invisible "contagion," and perfumes conceal the "soft luxurious plague" (86-89). The plantation cannot be represented, except through negation of false images: "no form benign of rural pleasure," "no blooming maids, and frolic swains" appear in such a place (72, 77).

We see in the "Epistle" that political history (specifically, the failure of Wilberforce's motion for abolition) deforms a progressive natural history, pointing to a fissure between society and natural law. The poem offers a last chance for readers to align their actions with a familiar, Christian moral order, but it reveals dangers and possibilities beyond that framework. In the poem, nature is, on the one hand, a destroyer and, on the other, a model of poetic creativity, as it shapes organic material. That is, the vision of apocalyptic disintegration calls for a repentant return to nature, a claiming of its power to recreate the human body for positive ends. In the "Epistle," we do not find a shift away from the constrained or conventional poetic style that critics like Laura Brown have associated with imperial ideology. Barbauld deploys poetic figures, such as personification and synecdoche, favored by Darwin for their visual effects, but her poem points to the falsity of some figures (Conscience, Pity, Mercy, Freedom) and the invisibility of others (Misery, Contagion, Corruption). Like Darwin, she works within the formal conventions of her time, but in both of their works we find that figures (such as the Hand, for Darwin, or Virtue, for Barbauld) are mobile and changeable, that they stand in for a referent that they are becoming or never were. The historical fact of slavery proves the falsity of surfaces and ideological figures. As the scientist John Walsh phrased it in an "elegy" to Wilberforce's failed bill, the "rude Barbarian Souls" of slavery's supporters are "Enshrin'd in vain Refinement's semblant Form."<sup>59</sup> Romanticism's supposed turn inward might be understood, not as an escape from politics or history, but as an effort to change this trajectory by relinquishing failed forms of representation and restoring the body. In the next chapter, I argue that the idea that poetry might be able to transform the human body—an idea that grows out of Darwin's narrative of aesthetic evolution—underlies Wordsworth's well-known theorization of poetry in the "Preface" to *Lyrical Ballads* as language that counteracts those forces—urbanization, "rapid communication," and the division of labor—that "reduce [the mind] to a state of almost savage torpor" (160). For Wordsworth, a combined host of evils, rather than the slave trade alone, threatens to paralyze the organ of the mind and to transmute the British into "savages" or hibernating animals—but the poet's function to counteract the "degrading thirst after outrageous stimulation" is even more pronounced (160).

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<sup>59</sup>Quoted from "An Elegy Occasioned by the Rejection of Mr. Wilberforce's Motion for the Abolition of the African Slave Trade" (1791), excerpted in Basker's *Amazing Grace* (436).

## Chapter Two

### “Material Revolution”: Darwin, Buffon, and Wordsworth’s Proto-Evolutionary Poetics

Intent on multiplying the functions of our senses, and on enlarging the external bounds of our being, we rarely make use of that internal sense which reduces us to our true dimensions and abstracts us from every other part of the creation. It is, however, by a cultivation of this sense alone that we can form a proper judgment of ourselves. But how shall we give it its full activity and extent?... We have lost the habit of employing this sense; it has remained inactive amidst the tumult of our corporeal sensations, and dried up by the heat of our passions; the heart, the mind, the senses, have all co-operated against it.

–Buffon, *Barr’s Buffon* (1796)

For a multitude of causes unknown to former times are now acting with a combined force to blunt the discriminating powers of the mind, and unfitting it for all voluntary exertion to reduce it to a state of almost savage torpor.

–Wordsworth, “Preface” to *Lyrical Ballads* (1800)

In his *Natural History*, the French natural historian Georges Louis Leclerc, Comte de Buffon, observes that something has dulled human perception and caused the soul to dwindle. In the passage above, we find human development moving in two directions: on the one hand, human beings have progressed by “multiplying” their senses and “enlarging” their being; on the other hand, human beings have declined as a result of neglecting their distinctive “internal sense.” The mysterious spiritual loss has material consequences: it akin to a physical loss, for the “internal sense” is atrophied and “dried up”; it is also an intellectual loss, as the inability to grasp our “true dimensions” has necessitated the study of man and the *Natural History* itself.<sup>60</sup> Buffon specifies neither the cause nor origin of the loss. The internal sense seems constitutionally beset by all other organs of perception—mental, sensory, emotional—yet Buffon alludes to a time when the internal sense was habitually employed and perhaps better able to counter all that “co-operate[] against it.” That period seems to have preceded memory and/or modernity.

Buffon’s possible complaint against modernity is striking, since we usually do not seek such rhetoric in natural histories but rather in literary works like *Lyrical Ballads* that claim to counter a corporeal as well as a cultural crisis.<sup>61</sup> In the “Preface” to *Lyrical Ballads*, Wordsworth

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<sup>60</sup>With passages like this one in mind, Foucault notes that “one has the impression that with Tournefort, with Linnaeus or Buffon, someone has at last taken on the task of stating something that had been visible from the beginning of time, but had remained mute before a sort of invincible distraction of men’s eyes,” when in fact emergent natural history was constituting a “new field of visibility,” privileging visual observation to the exclusion of smell, taste, and touch (132-33). Seeming to invest authority in vision, Buffon claims that undeniable “resemblances” require the naturalist to classify man among animals. Yet Foucault does not note Buffon’s concerns regarding the limitations of visual observation. Buffon admits that comparative anatomy can only determine man’s material nature, and he therefore “retrench[es] from the Natural History of Man the history of his noblest part” (3: 325).

<sup>61</sup>Buffon is not the only natural philosopher who associates the degradation of the soul with the restriction of the senses. In *A Discourse Upon the Origin and Foundation of the Inequality among Mankind*, Rousseau cites the above

refers as assuredly as Buffon does to historical changes that have impacted human taste, perception, and spirituality. The popular *Natural History* may be one source for an apparently widespread concern by the late eighteenth century that man's only distinction has atrophied in recent times. Appealing to this decline in human capacities, Wordsworth implies that the human mind can be cultivated anew, if poetry replaces its preoccupation with the formal dictates of taste with the representation of the "great and permanent objects that act upon" the "human mind"; underlying this argument is a warrant that taste reflects the condition of the individual and of aggregate humanity (*LB* 160).

In addition to a diagnosis of spiritual degeneration, the *Natural History* provided writers like Wordsworth with the insight that the loss of internal sense necessitates a two-pronged inquiry. The first of these is the "Natural History of Man," a project that operates on the periphery of an acknowledged void, ill-equipped to address "metaphysical considerations on the Soul" (Buffon 3: 325). Nevertheless recognizing the importance of metaphysical questions, Buffon calls for a second activity to complement natural science when he asks, "How shall we give [the internal sense] its full activity and extent?" The "Preface" not only echoes Buffon's diagnosis but also complements the *Natural History* by investigating man's nature in the border region between natural history and metaphysics. As if answering Buffon's question, Wordsworth posits that the activity of generating and consuming poetry will cultivate the only sense that (in Buffon's words) enables us to "form a proper judgment of ourselves."

Reading Wordsworth's familiar statements alongside Buffon's less familiar musings, we begin to find that natural history underlies his well-known claim that poetry cultivates readers' ability to think and feel.<sup>62</sup> As readers of Wordsworth well know, the "Preface" defines poetry not as "metrical composition" but more expansively as language that "counteract[s]" the modern forces that degrade taste and other faculties of the mind. Yet something has gone unnoticed in discussions of these familiar claims. When Wordsworth evokes the "savage torpor" of the uncultivated reader, he implicitly compares that reader at once to a savage and a hibernating animal. Even though he critiques the specialized perception of botanists and other "Men of Science," he deploys an image of transmutation that their science generates: driven into thoughtless consumption by a "degrading thirst after outrageous stimulation," such readers suffer a loss of status (*LB* 159-60).<sup>63</sup> Changes in the speed and objects of public consumption cause the vitiation of taste, as well as of the intellectual faculties that taste signifies.

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passage by Buffon and echoes him in noting, "Comparative Anatomy has not as yet been sufficiently improved" (xlv, 186, 4-5). He does not "attempt to trace [man's] Organization thro' its successive approaches to Perfection," but he presents a conjectural history of man's mental qualities that parallels a history of man's bodily organization (4-5). Although he cites the imperfections of comparative anatomy and natural philosophy, Rousseau believes that "changes ... must have happened in the Conformation of the interior and exterior Parts of Man's Body," and only supposes for argument's sake that man "always walked on two Feet, made the same use of his Hands that we do of ours, extended his looks over the whole Face of Nature, and measured with his Eyes the vast Extent of the Heavens" (17). The searching gaze of uncorrupted man encompasses all, but man soon uses his eyes and hands to dominate animals and claim private property, compromising natural liberty, man's "most noble Faculty" (152). Rousseau aims to prove that history, rather than nature, has engendered inequality, yet also suggests that society has "transform[ed] all our natural inclinations," at once civilizing the "coarse and blunt" taste of the savage while also rendering his sight, hearing, and smell less "subtile" (33). In gaining a more delicate taste and discerning eye, civilized man loses some of his original sensory capacity; his body degrades in other ways, too, as luxury makes him weak and diseased.

<sup>62</sup>For a study of Wordsworth's engagement with natural history more broadly, see Bewell's *Wordsworth and the Enlightenment*.

<sup>63</sup>As Wordsworth evokes widespread degradation, he appeals to contemporary anxieties regarding the status of humans in the natural world. The *Encyclopaedia Britannica* (1797) defines "degradation," as well as the related legal

Trends in consumption thus portend something even more alarming than the neglect of Shakespeare and Milton: the devolution of the human mind. Within this modern environment, Wordsworth claims, the mind loses its “auxiliary” power—its ability to make distinctions and to operate independently of immediate external stimuli.<sup>64</sup> The root of the problem does not lie in individual readers or authors but rather in the historical convergence of “causes” that combine blindly, producing an environment that reshapes the body and the mind, thereby reversing a process of humanization once guided by nature.<sup>65</sup> Poetry, he implies, counteracts these pernicious forces by working, like nature, upon the embodied sensibilities of readers, once again raising them above their savage and animal kin. An eighteenth-century concept of evolutionary development, one could say, underlies Wordsworth’s account of the function of poetry.

Although many have found mystification, reactionary politics, and hostility to science behind Wordsworth’s claims for poetry, the picture is more complicated and first requires an understanding of Wordsworth’s view of the intimacy between evolutionary development and aesthetic cultivation. This chapter re-contextualizes and reexamines Wordsworth’s accounts of the natural development of taste, which have generally been taken as a mark of his growing conservatism, his retreat from revolution, or his desire to naturalize or render timeless social inequity. If we understand his engagement with contemporary writers who investigated natural development in the context of natural history and life science—that is, his relationship to thinkers like Erasmus Darwin and Buffon rather than to Burke and Coleridge—we see that the analogy to natural development can cut two ways. The analogy opens up the possibility that all humans can develop higher taste and sympathetic capacity, just as easily as it can justify social difference in terms of a natural order. This chapter shows Wordsworth’s poetics to be as amenable to a radical agenda as a conservative one by examining the poet’s fascination with transmutation in nature: the transmutation of organs (as described by Erasmus Darwin) and the transmutation of species (as alluded to by Buffon).

## Romantic ideology, Romantic science

A longstanding issue in Wordsworthian criticism has been whether an anti-democratic conservatism or a radical critique of modernity motivates his elevation of poetry. Many have maintained that he conveniently blurs distinctions between sensation and idea, nature and art, and representation and action, thereby turning from intellectual rigor to feeling, as well as from

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terms “disgradation” and “deposition,” as “the act of depriving or stripping a person for ever of a dignity or degree of honour, and taking away the title, badge, and privileges thereof” (Bell 714). When Wordsworth links the reader’s “degrading thirst for outrageous stimulation” to a condition of “savage torpor,” he appeals to a value in social rank and at the same time describes dehumanization. The ceremony of degradation (of “stripping a person for ever” of dignity and privilege) seems to figure the process by which unprecedented forces deprive man of his mental powers, stripping him of his status above animals.

<sup>64</sup>In the “Essay Supplementary to the Preface” (1815), Wordsworth refers to the mind’s “auxiliary impulse” (*WWP* 3: 81). The word also appears in *The Prelude*, when Wordsworth describes a power in his mind that intensifies his appreciation of natural scenes: “An auxiliar light / Came from my mind (*Prel.* 2.387-38).

<sup>65</sup>Some critics have suggested that Wordsworth understood “environment” in an ecological sense. Arguing that Wordsworth grasped the impact of human activity on the natural environment, Jonathan Bate observes that he borrows from Erasmus Darwin a “firm belief that nature operated according to a systematic economy” (39). In his study of the “natural history” of perception, Don Gifford suggests that Wordsworth likens the influence of social environments on perception to the influence of natural environments on organisms (46).

action to sympathetic spectatorship. James Chandler, for example, has claimed that Wordsworth turns away from radical politics toward Burke's concept of "second nature," which naturalizes a set of ideas through a metaphorical comparison of moral and aesthetic sense to the bodily senses (Chandler xviii; *Reflections* 185). Chandler's reading is in concert with Eagleton and Caygill's broader ideology critique, which analyzed the problematic analogy between tasteful sentiment and physical sensation in British aesthetics. As my argument explores Wordsworth's engagement with radical science, it runs against a persistent view of Wordsworth as a perfect representative of a contradictory British aesthetics, one who escapes empiricism's vexed attempt to unite mind and body by becoming increasingly transcendental and apolitical in orientation. While doing so, I keep in mind the contradictions that crop up as Wordsworth directs language, which is necessarily abstract, at the physical body and mind: aesthetic taste is akin to but not the same as bodily sense; poetry simultaneously creates and restores human capacities; and the poet restores faith in human progress, even as he encounters the specter of regression in the socio-political realm.

The debate over the ideological consequences of Wordsworth's poetry extends into the study of his relationship to contemporary science. When Wordsworth distinguishes poetry from science in particular in the expanded 1802 "Preface," his argument can be read, on the one hand, as an attempt to homogenize feeling and thought through the newly enhanced media of "Poetry" and the "Poet" or, on the other, as a prescient critique of a science that naturalizes domination and limits human perception. The "multitude of causes" that "blunt the discriminating powers of mind" include not only urbanization and popular culture but also professionalization, to which he associates the specialization of perception.<sup>66</sup> The "Man of Science" pursues the "remotest discoveries" and contemplates "relations" that the bulk of humanity cannot; fixing his eyes upon objects inaccessible to most of mankind, he becomes indifferent to general objects, and a second narrowing occurs as the "the Chemist, the Botanist, or Mineralogist" focus on even more circumscribed categories of objects. Rather than producing knowledge through specialization, the poet reintegrates visual perception with moral feeling by presenting familiar objects and their associated feelings to his reader. Wordsworth returns to this theme in "A Poet's Epitaph," whose speaker bans a series of figures with over-developed or atrophied vision from the poet's grave: the lawyer with his "keen[]" and "practised eye"; the physician who is "all eyes"; the philosopher who would "peep and botanize / Upon his mother's grave"; and the Moralist who "has neither eyes nor ears" (5, 7, 17-20, 25-27).<sup>67</sup> Wordsworth invents the poet as an omniscient figure opposite the myopic man of science, grounding his claims for poetry in the concepts of nature and the body and rejecting the diminishment of human perception that accompanies expertise. Wordsworth empowers the poet to reform public taste and thereby counter the looming ills of modernity, which are evident even in society's efforts to expand moral and scientific knowledge.

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<sup>66</sup>As Maureen McLane points out, the Romantic concept of poetry countered literary specialization: "We could, like Raymond Williams, see the exaggerated claims made for poetry as a distorted recognition of a historical truth: literature had become specialized and restricted; writers were handworkers intent on avoiding the general degradation of 'work' exacerbated by transformations in industry and the professions; in an attempt to maintain power and dignity, apologists for poetry transcendentalized their 'art' and suppressed its basis in composition, in linguistic and social practice. Poets, in this view, experienced the pressure to specialize.... This professionalization forms one historical frame in which to view Wordsworth's and Shelley's strong claims for poetry" (19).

<sup>67</sup>Unless otherwise noted, quotations of verse by Wordsworth not included in *Lyrical Ballads* or *The Prelude* are from *The Poetical Works of Wordsworth*, edited by Thomas Hutchinson.

Given such moments in Wordsworth's writing, it has been common to believe that he primarily bore antagonism for scientific cultures, but more recent criticism has challenged that view. This chapter builds upon previous studies of Wordsworth's engagement with the emerging natural sciences and materialist philosophy of the late eighteenth century. Maureen McLane has established that Romantic poets defined poetry as a rival enterprise to the human sciences; in the late eighteenth century, poetry came to designate not verse but a "discourse of the species" aimed at delineating human nature and recovering the origins of human society (29). In another investigation of the Romantics' participation in the human sciences, Noel Jackson explores their construction of poetry as both the language of sensation and an instrument for articulating political and historical analysis. Other studies, such as that of Alan Richardson, have focused on Wordsworth's engagements with eighteenth-century physiology. These studies have tended to trace Wordsworth's interest in the embodied mind to Enlightenment philosophers who conceptualize a universal human body; they have thus emphasized Wordsworth's investigation of the structure of the human body-mind or his conception of poetic language as medicine.<sup>68</sup> In total these works have produced several possible interpretations of Wordsworth's relationship to science: 1. Wordsworth uses scientific writing as source material for his poetry (Averill, King-Hele, Matlak), 2. his poetry grows out of the eighteenth century's scientific, philosophical, and cultural preoccupation with bodily sensibility (G. S. Rousseau), 3. he contributes to scientific inquiry and anticipates twentieth-century cognitive science (Richardson), 4. he critiques the approaches of eighteenth-century science (Bewell and McLane), and 5. he collaborates with the political critique implicit in radical science (Jackson).<sup>69</sup> This chapter takes up some of these exciting lines of thought: Wordsworth's debts to eighteenth-century materialism, his critique of Enlightenment science, and Romantic poetry's reentry into the socio-political realm through materialism. In particular, I build on Bewell's argument that the Romantics participated in writing a conjectural natural history of man, but I focus on contemporary evolutionary theory, which integrates life science to the anthropological writings that Bewell examines. My unique focus on poetry and early evolutionary thought offers a new view of Wordsworth's materialism: rather than conceiving of the body-mind as a universal, timeless structure, Wordsworth can understand it as transmutable. The threat and possibility of transmutation operates at the center of Wordsworth's otherwise mysterious claim that poetry works upon an embodied sensibility that is both capable of improvement and vulnerable to degradation.

In order to explain my contribution further, I should note that my interests overlap with those of Noel Jackson. In his recent book, Jackson compares Wordsworth's contradictory

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<sup>68</sup>Examples of the latter include James Averill's argument that Wordsworth uses medical case studies from *Zoonomia* in several of the *Lyrical Ballads* (241), as well as Paul Youngquist's claim that Wordsworth "practices a physiological aesthetics" derived from the medical science of Erasmus Darwin and John Brown "that puts bodily health among its main concerns" (152). Studies of Wordsworth's interest in physiology include an article by Richard Matlak, which argues that *Zoonomia* provides Wordsworth with "inner-body imagery" (80). In the most extensive study of the topic, Alan Richardson argues that Wordsworth's interest in rhythm, rhyme, and the language of "naturals" comes out of his engagement with contemporary physiology, which sought to locate the origin of language in the human brain (66-92).

<sup>69</sup>Studies of eighteenth-century influences on Wordsworth often divide an early Wordsworth, still tied to materialism, from a later one, who moves toward early Victorian sentimentality. In this regard, they correspond to Jerome McGann's well-known observation that between 1740 and 1840 "sentimentality," which emphasizes "the body in the mind," "overtakes and subsumes the discourse of sensibility," which emphasizes "the mind in the body" (7). These accounts often suggest that Wordsworth's "sentimental" elevation of the mind over the body is an effect of political conservatism or older age.

periodization of his perceptions (from infant, to misguided radical, to reformed poet) to a contemporary medical definition of “period” as a cycle of disease (74). I share two concerns with Jackson: Wordsworth’s engagement with a “comprehensive late eighteenth-century effort to determine the mutability of the body and its organs of sense” and Wordsworth’s return to social history via bodily history (Jackson 75). However, I am interested—where Jackson, Richardson, and others are not—in places where the medical study of the “mutability of the body” (i.e. its vulnerability to periods of disease) slips into theories of human transmutation.

### **The Influence of Erasmus Darwin**

The analogy between the transmutation of organs through disease and the evolutionary development of organs is most visible in the work of Erasmus Darwin. He was unusual in linking these two kinds of organic transmutation, since the young medical profession sought to reduce the perception of variation across cases. In order to treat disease, medical theorists needed a human body that was more or less uniform across space and time, as we see in physician John Millar’s *Observations on the Prevailing Diseases in Great Britain* (published in 1770 and republished in 1798):

Particular cases are so various, irregular, and unconnected, that it is impossible to reduce them to any standard. . . . If such a diversity doth really obtain, it is impossible that the healing art should ever arrive at any great degree of certainty, since the experience of what may have been useful at one period cannot instruct the physician in how to act at another. . . . But if, upon comparing the popular diseases of different ages, and in various climates, a strong resemblance should be observed, many useless distinctions may be abolished, and the attention being directed to the characteristic signs in which they agree, more certain and extensive practical rules may be established. (Millar 4-5)

Even as he works to legitimize medical science, Millar grants that physicians must ignore some differences between cases and that diseases “of different ages, and in various climates” might only share a “strong resemblance.” Darwin’s nosology is characteristically bold in comparison to Millar’s. In the preface to *Zoonomia*, Darwin echoes Millar’s objective to eliminate quackery and improve the “practice of healing,” but he directs his comparison of cases to “a theory founded upon nature, that should bind together the scattered facts of medical knowledge, and converge into one point of view the laws of organic life” (2). In contrast to Millar, Darwin is curious about variation, for he seeks a theory that will integrate every “scattered fact” rather than a method that excludes “useless distinctions.” The theory would serve a dual purpose: it would improve medical practice and it “would teach mankind in some important situations the *knowledge of themselves*” (2). Coyly alluding with these italicized words to his own long-held belief in organic transmutation, Darwin expresses a double ambition to improve medical treatment and to derive the story of human origins from the body itself.

In the 1802 “Preface,” Wordsworth similarly recognizes the potential significance of natural science to the understanding of human nature. Although the document opposes the poet and the “Man of Science,” Wordsworth admits that science, too, might contribute to the restoration of taste and feeling by producing new knowledge relevant to human experience.

If the labours of men of Science should ever create any material revolution, direct or indirect, in our condition, and in the impressions which we habitually receive,

the Poet ... will be ready to follow the steps of the man of Science ... carrying sensation into the midst of the objects of the Science itself... If the time should ever come when what is now called Science, thus familiarized to men, shall be ready to put on, as it were, a form of flesh and blood, the Poet will lend his divine spirit to aid the transfiguration, and will welcome the Being thus produced, as a dear and genuine inmate of the household of man. (*LB* 168)

His description of “science” as an agent of human development is ambivalent. On the one hand, he attempts to banish scientific subjects from poetry indefinitely and makes the poet an expert on a stubborn, if not unchangeable, “human nature” (168). In this reading, he ungraciously locates the appreciation of scientific verse like *The Botanic Garden* in a barely imaginable future rather than in the 1790s—a decade in which Darwin’s poetry was widely read and acclaimed.<sup>70</sup> On the other hand, he imagines that poets and scientists will collaborate toward a future “transfiguration,” not only of a personified Science, but of aesthetic sensibility: the “impressions which we habitually receive” might one day change, if the “remote discoveries” of men of science become “palpably material to us as enjoying and suffering beings” (168). He seems to imagine specialized scientific knowledge becoming relevant to the human condition. The reference to a “material” (“important” or “physical”) change in the “impressions which we habitually receive” is less easy to understand, except perhaps as an allusion to Darwin’s speculation that “new irritabilities or sensibilities being excited, a change of form corresponding with them will be produced” (*Zoo*. 1: 497). By imagining the corporeal and affective transformations that Darwin describes in *Zoonomia*, Wordsworth engages with a model of the human body-mind as a changeable form. Like Darwin, Wordsworth includes the productions of poets and scientists among nature’s external stimuli, blurring the distinction between social and natural environments. Such moments as this, in which Wordsworth imagines the transformation of sensation and taste, set him apart from the more consistently conservative Burke, who insists that taste is grounded in “the conformation of ... organs” (*Enquiry* 13).

Images of “transfiguration” and “savage torpor” arise in part from Wordsworth’s reading of Darwin, among other early theorists of transmutation. Wordsworth read many of Darwin’s celebrated works soon after they were published: *Zoonomia*, vol. 1 (in 1796), *Zoonomia*, vol. 2 (in 1798), *The Loves of the Plants* (in 1789 and 1791), and the completed *Botanic Garden* (in 1792 and 1800).<sup>71</sup> A number of scholars have explored Wordsworth’s debts to Darwin, but few have argued that Wordsworth did anything but reject the latter’s views regarding transmutation. Darwin’s general influence on Wordsworth is well-established: James Averill and Richard Matlak have traced Wordsworth’s borrowings of case studies from *Zoonomia* for *Lyrical Ballads* (Averill 232-46; Matlak 76-81); W. J. B. Owen has suggested that the first interlude of *The Loves of the Plants* influenced the content of the “Preface” (Wu 70); and Desmond King-Hele has argued that the major Romantics “plundered” Darwin’s poetry for its imagery and that Wordsworth derived the concept of poetic reverie from Darwin’s writings on sleep, dreams, and reverie (*EDRP* 1, 27). Only David Amigoni has made the case that Wordsworth engages seriously with Darwin’s ideas regarding transmutation, partly because scholars have been late to

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<sup>70</sup>When Wordsworth states in the “Preface” that “the remotest discoveries of the Chemist, the Botanist, or the Minerologist” are not yet “proper objects of the Poet’s art,” he aims specifically at *The Botanic Garden* (*EDRP* 71).

<sup>71</sup>See entries on Wordsworth’s reading of Darwin in Duncan Wu’s *Wordsworth’s Reading, 1770-1799* (1993) and *Wordsworth’s Reading, 1800-1815* (1995). Wordsworth’s reading of Darwin is documented in his letters as well: during the period that Wordsworth was writing *Lyrical Ballads*, he requested Joseph Cottle to send him a copy of *Zoonomia* (*LEY* 169).



recognize the poet-doctor as an evolutionary theorist in his own right. Challenging “the common view of Wordsworth, articulated by the philosopher Henry Sidgwick in the late nineteenth century” that “[Wordsworth] was writing at too early a stage to be hit by the main stream of evolutionary speculation that impacted so dramatically on Tennyson” (sic), Amigoni argues that Coleridge conceived of *The Recluse* as a refutation of Darwin’s “transformist speculations” and that *The Excursion*, despite Wordsworth’s aversion to Darwin, carries the word “culture” from the realm of art into discussions of evolution and colonization (60). Taking up Raymond Williams’s history of the word “culture,” Amigoni argues that “culture” migrated first from agriculture to art and then to the fields we now call anthropology and evolutionary biology.

My own project attends less to the historical diversification of the term “culture” than to the ways the meanings of that term cling to each other, particularly in the tradition that Darwin establishes when he presents evolutionary development and aesthetic cultivation as identical, rather than analogous, processes. As Williams observes of “culture” in *Keywords*, the word first referred to the “tending of natural growth” (i.e. land and livestock) and provided philosophers like Hobbes and Bacon a metaphor for the practice of cultivating individual minds; eighteenth-century uses of the word begin to conceal the labor of cultivation, and “culture” refers by the nineteenth century to an abstract process of “intellectual, spiritual, and aesthetic development” or to “the works and practices of intellectual and especially artistic activity” (*Keywords* 89-90). A third sense of “culture”—as a particular or regional way of life at odds with a supposedly universal “Culture”—also appeared in the eighteenth century, particularly in the Romantics’ attempt to preserve folk traditions (*Keywords* 88-90). Cultivation in Darwin’s poetry exceeds the three senses of *culture* that Williams traces. Although Darwin advances the spread of European Culture (for example, by celebrating the printing press), he avoids the usual connotations of the term in two ways. First of all, he highlights, rather than conceals, the work of individual activists (Wedgwood, Howard), artists (Titian, Michelangelo), and scientists (Franklin, Newton) in mimicking nature and thereby cultivating human perception. Secondly, he describes cultivation as a physical process that is akin to nature’s improvement of species, producing an idiosyncratic idea of culture. The evolution of the human mind is described as the progressive discovery of aesthetic categories: the “sublime,” the “poetic Melancholy” of gothic scenes, and the rural picturesque (*TN* 3.230, 3.237, 3.247-58). The physicality of nature and the body is always emphasized: rather than dividing action and thought, and thereby subordinating physical labor to intellectual activity, Darwin describes all human activity—whether physical or intellectual, unconscious or conscious—as an equal expression of nature’s energy. Thus, the liberative raising of Saint Peter’s dome involves “moving muscles” from conception to completion: when an artist works with his hands, he repeats with “another set of fibres . . . what he had just performed by some parts of the retina” (*TN* 109n.). If we usually find an emphasis on culture in the writings of conservatives like Burke or traditionalists like Arnold, who attempt to direct attention away from political change, then we should find it remarkable that Darwin represents cultivation as a visible process, aligned with democratic possibility and human effort rather than divorced from it.<sup>72</sup>

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<sup>72</sup>Darwin’s aesthetic evolution thus participates in the Romantic effort (described by Geoffrey Hartman) to reform “civilization” through a version of “culture” that is (paradoxically) modeled on nature. This inherently contradictory concept of culture emerged from dismay over the modern “fall into division”: “Poetry reinforces nature to prevent what will soon be called ‘overcivilization,’ understood both as an excessive, unbalancing emphasis on practical, philistine, acquisitive, and materialist as against contemplative factors and as an excessive, unbalancing emphasis on cerebral and skeptical analysis: ‘We murder to dissect’ (Wordsworth). By the time of Mill, Arnold, and Ruskin this

Darwin is a counterspirit at work against Wordsworth's Burkean tendencies. That is, he is the source of a radical formulation of culture, in which political and artistic acts imitate biological processes and in which nature and society simultaneously cultivate the human mind. The following sections show that Wordsworth draws upon Darwinian science when he advances three famous—and famously mysterious—claims about poetry: taste signals not only one's education or class but also one's acquisition of humanity; poetry humanizes readers in the same manner as nature does; and poetry transforms the passive consumer into an active reader, or transforms the savage/animal into a human being. In what follows, I establish the concept of evolutionary development, which Erasmus Darwin distills for the English audience, as an inspiration for each of these bold claims; in doing so, I pursue my larger argument that Wordsworth's poetics grows as much out of radical transmutation theory as it does out of Burke's conservative humanism.

### Revisiting Second Nature

When Wordsworth depicts tasteless readers as less than human, he expresses the common yet nevertheless strange view that one's taste in art signifies one's humanity. When we turn to William's entry on "taste" in *Keywords*, we find that "Taste" is "the abstraction of a human faculty [physical taste] to a generalized polite attribute" connected with "rules" and "manners" (314). As sociological readings like Williams's have pointed out to us, to possess "Taste" is merely to conform to conventional views on art and manners, and aesthetic philosophers of various camps have denied the socio-economic determinants of taste, claiming that taste reflects human nature: idealists philosophers link taste with the soul and higher truths; empiricists like Hume attempt to prove "intersubjective agreement," simultaneously acknowledging the subjectivity of taste and grounding it in the "physical constitution ... of all human beings" (Whewell 415).

Darwin departs from other empiricist approaches by producing a narrative in which the acquisition of taste is part of the historical process of becoming human. Recall that in *The Temple of Nature* Darwin describes evolution as a process that humanizes organisms by imparting the ability to judge objects accurately and then tastefully. For Darwin, natural law cultivates visual perception and rational judgment, and thus the sophistication of a species' taste marks its position on the evolutionary scale. Linking the concepts of "human" and "humanity" to support his scientific and political agendas, Darwin suggests that demonstrations of good taste, acts of mercy, and acts of technological domination make visible interior capacities of intelligence, which are more advanced in humans than in animals. As I suggested in Chapter One, Darwin's narrative in turn serves as a model of how a progressing society continues to shape taste. He generates a mobile theory of how external stimulation produces and shapes the embodied human mind and offers these insights to radical activists.

Canto 3 of *The Temple of Nature* presents a scene of infant development as a metonym for the history of the species. The following lines indicate that sympathy and taste in beauty

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anxiety about the superficial and unnatural effects of civilization begins to valorize the word 'culture'" (*Fateful Question* 207).

emerge at the same time as intellect and that they are produced in the same manner—they are developed through early sensual experience and later codified:

As the pure language of the Sight commands  
The clear ideas furnish'd by the hands;  
Beauty's fine forms attract our wondering eyes  
And soft alarms the pausing heart surprise.  
Warm from its cell the tender infant born  
Feels the cold chill of Life's aerial morn;  
Seeks with spread hands the bosoms velvet orbs,  
With closing lips the milky fount absorbs;  
And, as compress'd the dulcet streams distil,  
Drinks warmth and fragrance from the living rill;  
Eyes with mute rapture every waving line,  
Prints with adoring kiss the Paphian shrine,  
And learns erelong, the perfect form confess'd,  
Ideal Beauty from its Mother's breast. (TN 3.163-76)

A representative human infant abstracts the idea of beauty from the universal experience of feeding at his mother's breast. Humans do not receive knowledge of "Ideal Beauty" transcendently but rather construct it from the sensual rapture of infancy. Self-consciously using synaesthesia, Darwin emphasizes the original proximity of the senses. Hand and eye explore beauty together: the hands relay "clear ideas" to the eyes; the "wondering" eyes recognize and are attracted to "fine forms"; the hands find that those forms ("orbs") feel like "velvet." The senses of taste and smell also participate in constructing "Ideal Beauty": the infant seems to "absorb" the mother's milk not only through the lips but through its entire body; as it "drinks warmth and fragrance," it is entirely enveloped by pleasure. Just as synaesthesia offers the pleasures of regression, Darwin comically collapses the perspective of the infant with that of the sexualized adult speaker. With these techniques, Darwin entertains the reader at the same time that he evokes a gradual but certain trajectory from embryo to man, and from "filament" to human. *Zoonomia's* endnotes contain a nearly identical account of the origin of taste, one that probably inspired the "infant babe" passage of *The Prelude*, as I will discuss shortly.

Although one might object that Darwin here describes ontogenesis rather than phylogenesis, he borrows lines 169-76 from a poem that conflates those two processes, Dewhurst Bilsborrow's "To Erasmus Darwin, on his work intitled *Zoonomia*," which highlights the scientific contributions of *Zoonomia*.<sup>73</sup> In Bilsborrow's panegyric, the infant's development at the mother's breast recapitulates the growth of the "first embryon-fibre" (13). Inspired by Darwin's speculations on generation, he understands the human embryo as one of many forms that the primitive organic cell can become; we find, too, a theorist's emphasis on geometry, as the fibre can become a "sphere, or cube" or "—a line,—a ring,—a tube" (13-14). The infant drinks in the mother through its eyes, ears, skin, and mouth, much like the fetus, which

Closed in the womb with limbs unfinish'd laves,  
Sips with rude mouth the salutary waves,

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<sup>73</sup>Bilsborrow's poem prefaces *Zoonomia*, Volume 1. In *The Temple of Nature* (3.169-76), Darwin inserts lines 29-35 of Bilsborrow's poem and cites him in a footnote. According to Anna Seward, Bilsborrow was Darwin's "pupil in infancy, his confidential friend, and frequent companion through ripened youth" and later one of Darwin's biographers (111).

Seeks round its cell the sanguine streams that pass  
And drinks with crimson gills the vital gas.... (15-18)

The fetus is likened to a sea creature and the womb to the ocean, in which “Organic life beneath the shoreless waves / Was born and nurs’d in Ocean’s pearly caves” (*TN* 1.295-96); in the ocean, as in the womb, “minute” forms gradually become visible, as they “New powers acquire, and larger limbs assume” (*TN* 1.297, 300). There is a perhaps comic suggestion that the fetus, with its “rude mouth,” possesses undeveloped taste, seeking blood and “vital gas.” The infant is like the fetus, in that it feeds to survive, but it soon progresses from interested pleasures toward more abstract ones that remain associated with early experiences of being nourished. After birth, the newborn, still “warm from its cell,” enters a second atmosphere of nourishment: the mother’s presence. After this, it is implied, the infant will graduate into a third atmosphere of nourishment: beauty (reminiscent of the mother) in nature and in art.

Darwin and Bilsborrow thus provide idiosyncratic ideas about taste and art: first of all, the acquisition of taste in art is not merely a metaphor for human evolution but, rather, a latter stage in the process of organic development; second of all, the environmental stimuli that drive organic growth and development include society and art, along with nature and the mother. If this naturalization of taste seems oddly reminiscent of Burke, it is because Darwin drew upon the *Enquiry* for a physiological explanation of taste, even though Burke later distanced himself from such potentially egalitarian ideas. According to some critical accounts, the Romantics cut off the physiological aesthetics of the eighteenth-century culture of sensibility because it smacked of French radicalism; British aesthetics seemed to reroute its energies away from an unviable science of historical and natural material into a pseudo-science of morality and judgment. The reception of the *Enquiry* fits that narrative: according to Aris Sarafionos, Burke’s physiological account of taste was “broadly accepted” in the decade following its publication and was praised by Kant, but that aspect of the *Enquiry* fell out of favor after the 1760s and was “rarely developed any further,” largely due to a turn against revolution and materialism during the war with France (58). Just as Sarafionos shows us that the young Burke is not yet an enemy of radical science, so Darwin is not the outlier we have believed him to be, insofar as he here echoes Burke’s claim that taste originates in the human body. In the “Analysis of Taste” appended to *The Temple of Nature*, Darwin cites “Mr. Burke’s Essay on the Sublime and Beautiful” (91app.); he combines Burke’s separate observations on gradual curves and female beauty to state more explicitly that “the sentiment of beauty appears to be attached from our cradles to the easy curvature of lines, and smooth surfaces of visible objects, and to have been derived from the form of the female bosom” (91app.). He categorizes the “sentiment of beauty” as an “instinct,” suggesting that experiences at the breast do not implant but rather unfold a faculty of taste endowed to the species (*Zoo.* 1: xvi).

Burke’s concept of second nature, which is emergent in the *Enquiry*, is influential here. For Burke, taste is built upon a foundation of instinctive responses, such as pleasure in beauty or mixed “delight” in others’ distress; although he grants a certain capacity of taste to all, he refers to a higher taste that comes from “superior knowledge,” “a greater degree or natural sensibility,” or “a closer and longer attention to the object” (19, 21). Nevertheless, sympathy for others, like the appreciation of beauty, is initially and fundamentally a physiological response that arises “antecedent to any reasoning, by an instinct that works us to its own purposes, without our concurrence” (*Enquiry* 43). With this argument, Burke naturalizes social cohesion at the same time that he maintains a hierarchy, granting superior powers of taste and sympathy to some over others. Critiquing Burke’s attempts to confuse bodily responses and learned ideas in later

writings, such as *Reflections on the Revolution in France*, Chandler argues that Burkean second nature, which is “at once metaphorical and metonymous with Nature,” “conveniently collapses” the “troublesome oppositions” between “nature/culture” and “nature/habit” (67, 72).

The political charge of these oppositions also carries into Darwin’s radical natural history, but in different ways. Like Burke, Darwin suggests that society sustains its own best qualities by imitating nature, even as he invests in historical developments that troubled Burke, such as the improvement of “reason,” industrialization, and the expansion of print and commerce.<sup>74</sup> In the following passage, for example, the natural principle of volition nurtures early human civilization and infuses the same vital energy into eighteenth-century political efforts.

Thy acts, Volition, to the world impart  
The plans of Science with the works of art;  
Give to proud Reason her comparing power,  
Warm every clime, and brighten every hour.  
In Life’s first cradle, ere the dawn began  
Of young Society to polish man;  
The staff that propp’d him, and the bow that arm’d,  
The boat that bore him, and the shed that warm’d,  
Fire, raiment, food, the ploughshare, and the sword,  
Arose, Volition, at thy plastic word. (*TN* 4.223-32)

Volition warms early human society as it does the embryo: “Life’s first cradle” refers at once to the cradle of civilization, the mother’s arms, and the womb. Stylistically and ideologically, Darwin refuses to separate his representations: social environments are equated to natural ones, and the politically charged present is juxtaposed to the ancient past. The eternal force of volition drives contemporary political reform:

Ye patriot heroes! in the glorious cause  
Of Justice, Mercy, Liberty, and Laws,  
Who call to Virtue’s shrine the British youth,  
And shake the senate with the voice of Truth;  
Rouse the dull ear, the hoodwink’d eye unbind,  
And give to energy the public mind;  
.....  
Oh save, oh save, in this eventful hour  
The tree of knowledge from the axe of power;  
With fostering peace the suffering nations bless,  
And guard the freedom of the immortal Press! (*TN* 4.273-78, 283-86)

Darwin continues his paean to volition, referring to the motion of bodily organs, and includes not only appendages but also the eye and ear, here roused to action by the orator’s voice. We find

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<sup>74</sup>Darwin celebrated technologies such as the printing press that would usher in enlightenment: “The discovery of the art of printing has had so great influence on human affairs, that from thence may be dated a new aera in the history of mankind. As by the diffusion of general knowledge, both of the arts of taste and of useful sciences, the public mind has become improved to so great a degree, that though new impositions have been perpetually produced, the arts of detecting them have improved with greater rapidity... if the liberty of the press be preserved, mankind will not be liable in this part of the world to sink into such abject slavery as exists at this day in China” (*TN* 151n.). Both opponents and defenders of the free press innovate: the arts of resistance rise up to counter the arts of oppression.

another reference to nurture—as the “patriot heroes,” warmed by nature, in turn “foster” the freedom of the press and peace between nations. He naturalizes political outcomes toward a different end than Burke, celebrating future political developments as part of natural history and recognizing that nature imparts energy to particular actors (like the “patriot heroes”), who either possess auxiliary volition or are moved unconsciously by external forces. Whereas Burke appeals to nature’s stability across time, Darwin appeals to nature as a force that drives organic, individual, and social transformation.

When Darwin argues that the laws of organic life produce society, he figures nature and culture as continuous and therefore goes against the grain of contemporary efforts to expose a division between nature and culture. Rousseau’s *Discourse Upon the Origin and Foundation of Inequality Among Mankind* is often named the source for the concepts of natural equality and social inequality. Rousseau proposes that philosophers differentiate between nature and society, although he admits the difficulty of such an endeavor:

And how shall Man be able to see himself, such as Nature formed him, in spite of all the Alterations which a long Succession of Years and Events must have produced in his original Constitution, and to distinguish what is of his own Essence, from what the Circumstances he has been in, and the Progresses he has made, have added to, or changed in, his primitive Condition? (xlv-xlvi).

The *Discourse* attempts an answer, yet it never escapes the difficulties of distinguishing nature from nurture. The problem of identifying the moment at which natural society became unnatural appears throughout radical writing, as in Thomas Paine’s paired claims that the uncultivated earth is the “common property of the human race” and that the invention of cultivation precedes that of private property, making the former more natural than the latter (*Agrarian Justice* 10). Although *The Temple of Nature* seems born of Rousseau’s and Paine’s efforts to imagine an uncorrupted state of human society, Darwin reworks rather than counters Burkean “second nature,” borrowing its rhetorical force. Indeed, the epic’s two titles—*The Temple of Nature* and *The Origin of Society*—suggest that Darwin saw a relation, rather than an opposition, between origins and constructs. The poem depicts a literal and therefore non-paradoxical process in which society cultivates natural taste and moral feelings.

By examining the reach of Darwin’s version of second nature, we open ourselves to new readings of key moments in Wordsworth’s poetry. Below, I will focus on the “infant babe” passage of *The Prelude* (2.237-303), arguing that it echoes Darwin as much as Burke on the subject of natural taste.<sup>75</sup> The breast-feeding scene in *The Temple of Nature* (1803) could not have influenced the infant babe passage, which was composed by 1799. However, Wordsworth would have encountered the same ideas in *Zoonomia*: in lines 29-35 of Bilsborrow’s poem and in the chapter entitled “Of Instinct” that inspired those lines. In “Of Instinct,” Darwin defends a materialist account of human nature, classing capacities for taste, sympathy, and language with animal instincts: “And this power [to know without experience] has been explained to be a *divine something*, a kind of inspiration; whilst the poor animal, that possesses it, has been thought little better than a *machine!*” (*Zoo*. 1: 136) Darwin mocks the mystification of the *je ne sais quoi* (the

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<sup>75</sup>This critical passage unfolds the philosophical objectives of the autobiographical *Prelude* and links a number of disparate concerns: sensation, taste, sympathy, poetry, and social progress. As readers of *The Prelude* well know, Wordsworth in this passage describes the process by which first nature and then the mother cultivate the infant’s inborn capacity to sympathize with the external world: an early love of mother and nature produces a sensibility that expresses the Enlightenment goals of brotherhood and social transformation, yet rejects the violence associated with political revolution.

“*divine something*” that enables a privileged few to recognize goodness and beauty) and furthermore extends the instinct for beauty to any person and any animal. These “*natural or connate*” capacities “constitute a part of our system, as our *muscles* and *bones* constitute another part”; however, he notes wryly, “neither of them can properly be termed *instinctive*: as the word instinct in its usual acceptation refers only to the *actions* of animals” (*Zoo.* 1: 136). Conventions of language (here the use of the word “instinct”) would restrict the revelations of science, but Darwin proceeds to catalog the human infant like any other “young animal [who] approaches the odiferous rill of its future nourishment, already experienced to swallow [in the womb]” (*Zoo.* 1: 140). The infant body becomes increasingly active and learns how to expand itself by consuming “nourishment”: the reflexes of the throat combine with a searching nose, which finds the “odiferous” stream of milk. Higher taste is derived from the literal taste of the tongue, particularly in the primal experience of breastfeeding.

Numerous critics have commented that Wordsworth naturalizes orthodox tastes and ideas, and one could argue that he departs significantly from Darwin and Bilborrow’s style and content. In a comic mode of adoration, Bilborrow multiplies figurations of the “Mother’s breast”—the “velvet orbs,” “milky fount,” “living rill,” and “Paphian shrine”—only naming the bodily part in the last rhyme. In the “infant babe” passage of *The 1805 Prelude*, Wordsworth replaces their erotic figures with abstract ones like “heart” and “Presence.” Whereas their infant employs its hands and mouth at the mother’s breast, Wordsworth’s infant “by intercourse of touch . . . held mute dialogues with my mother’s heart” (*Prel.* 2.282-83). Rather than worshipping at a pagan “shrine,” Wordsworth appeals to piety when he admires the physical interactions between the “blessed” infant and his mother, identifying these early moments as a foundation for thought, taste, and religious feeling (2.237). One might argue that Wordsworth refutes Darwin’s views by sentimentalizing the scene or by reading the infant’s developing faculties as intimations of providential design.

Despite differences in tone and style, the passage echoes *Zoonomia*’s representation of infant sensibility, as Wordsworth engages with Darwin’s materialist account of taste. I do nothing original here in noting Wordsworth’s materialist preoccupations. In a recent reading of the passage, Noel Jackson suggests that periods of perception constitute time in *The Prelude*, so that an individual or society’s perspective never matures but, rather, cycles from one period to another; a comparison between *The Prelude* and the writings of physician William Cullen further enables Jackson to argue that “Wordsworth’s narrative of the infant babe reflects an understanding of the self as historical from its inception” and to contest a “familiar understanding of this passage as a portrait of an unsullied natural state prior to the subject’s fall into history” (75, 74). If Jackson emphasizes that the infant is already historical, in that its habits of perception are being formed at the mother’s breast, then my project shows the threshold of history being pushed even farther back than infancy—to the womb and even to the genealogy that endows to each human the “birthright” of “sensibility” (2.285-86).

Juxtaposing Wordsworth’s and Darwin’s “infant babe” passages allows us to operate beyond attempts to mark the line between nature and culture, for Darwin understands the “embryon” that will become the newborn as historical. In “Of Generation,” he claims that language falsely designates a “new animal” as an entirely separate animal from its parent, challenging any firm distinction between natural and social history:

Owing to the imperfection of language the offspring is termed a *new* animal, but is in truth a branch or elongation of the parent; since a part of the embryon animal is, or was, a part of the parent; and therefore in strict language it cannot be said to

be entirely *new* at the time of its production; and therefore it may retain some of the habits of the parent-system. (*Zoo.* 1: 480)

A partial reproduction of its parent, the “*new* animal” is already shaped by natural history (past form) and by social history (past “habits”). At birth, the infant is not new, blank, or pure; it is a “branch” of a tree-shaped history, its behavior and form to some extent already formed. Darwin’s theory of reproduction evokes an immense natural history (the “great length of time, since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind”), but it alludes to social transformation rather than stability, since reproduction leads to variation (the animal is neither “entirely *new*” nor an exact imitation) and to “elongation” in new directions (*Zoo.* 1: 505).

Like Darwin, Wordsworth recognizes the human being as a part of a sublime, possibly incomprehensible natural history (he is an “inmate of this *active* universe”), yet nevertheless seeks a law of nature that will improve human bodies and facilitate social change (*Prel.* 2.266; italics in original). A qualification early in *The Prelude* does not seem at odds with Darwin: it is, Wordsworth admits, a

Hard task to analyse a soul, in which  
Not only general habits and desires,  
But each most obvious and particular thought—  
Not in a mystical and idle sense,  
But in the words of reason deeply weighed—  
Hath no beginning. (*Prel.* 2.232-37)

There is a similar sense of infinite influence and of a long chain of inheritance. It is difficult to account for the ambitious objective of *The Prelude*—to “trace” with his “best conjectures” the “progress of our being” (*Prel.* 2.238-39)—without our own recollection that Coleridge urged Wordsworth to write an epic of man to rival Darwin’s. Like Darwin, Wordsworth suggests that the senses automatically produce human capacities for thought and feeling when exposed to the proper stimulus (the mother’s “Presence”). Imagining an infant taste that is immersed in history, yet still agile and flexible, Wordsworth calls “infant sensibility” the “Great birthright of our being” (*Prel.* 2.285-86), and he recalls a scene in which natural forms and the mother unfold the infant’s “connate” faculties:

... Thus, day by day,  
Subjected to the discipline of love,  
His organs and recipient faculties  
Are quickened, are more vigorous, his mind spreads,  
Tenacious of the forms which it receives.  
.....  
From this beloved presence, there exists  
A virtue which irradiates and exalts  
All objects through all intercourse of sense.  
No outcast he, bewildered and depressed;  
Along his infant veins are interfused  
The gravitation and the filial bond  
Of Nature that connect him with the world. (*Prel.* 2.250-54, 258-64)

The passage echoes Darwin’s representation of a nursing infant in several ways. First of all, Wordsworth similarly describes the infant’s progress from tactile sensation to cognition: sensory experience stimulates the mind, which, like a hand, “tenacious[ly]” grasps external forms.



Secondly, he uses a physical metaphor to describe the increased power and range of the mind, which “spreads” itself over the visible world and draws that world into itself. Thirdly, he constructs phrases that represent both the infant’s fused senses and the mysteries of physiology: there is an “intercourse of sense,” rather than discrete sensations, all of his “recipient faculties” (not only his eyes) absorb the external world, and multiple forces (“gravitation,” “the filial bond”) are fused “along” his “infant veins.” The reader seems to observe first-hand a natural process of humanization: the infant interacts with natural forms, which unfold his innate faculties of thought, taste, and sympathy.

### **Imitating Nature**

“Infant sensibility”—the receptiveness of the infant body, born with innate physical, intellectual, and emotional capacities—encapsulates a second major claim that underlies Wordsworth’s theory and practice of poetry: poetry humanizes readers in the same manner as nature. Although Wordsworth groups the science of man among the forces that deform perception, the concept of transmutation enables him to articulate a means of social improvement he considers more attuned to nature than the failed approach of French radicals. Wordsworth’s skeptical attitude toward that “false secondary power by which / In weakness we create distinctions” has long been understood as a critique of rational analysis and therefore a retreat from progressive politics into nature, poetry, and the Burkean habits and feelings that they instill (*Prel.* 2.221-22). Yet a number of critics have recognized that Wordsworth appeals to nature and individual experience in order to critique history’s assault on the senses and psyche. As Geoffrey Hartman observes, “A desensitization of this kind (Robert Lifton calls it ‘psychic numbing’) was already noticed by Wordsworth near the beginning of the Industrial Revolution” (*Longest Shadow* 101). Don Gifford similarly alludes to the insights of *Lyrical Ballads* when he describes the effects of twentieth-century media on the human senses: “In this transformation of the mighty world of eye, our eyes are under siege, overloaded with visual riches until we’re in danger of being distracted into a sort of visual paralysis, our ability to discriminate homogenized and dulled by surfeit” (Gifford 46). Both scholars find that Wordsworth’s poetry offers a still viable critique of modern culture, particularly of rapid and realistic media that disable the viewer’s (possibly innate) sympathetic capacities.

This familiar argument (that poetry corrects an imbalance among the human senses, mind, and “inner faculties”) is an adaptation of ideas that have been less familiar to Romantic scholars until recently: scientific theories of organic development. When we attend to resonances between *Zoonomia* and the “Preface,” we find that the latter—far from merely mystifying poetry’s function—revises Erasmus Darwin’s eccentric science; as Wordsworth alerts his readers to the twin deaths of culture and feeling, he takes issue with a philosophy of man and nature that ignores contemporary historical and cultural phenomena. Whereas Darwin theorizes taste, reason, and sympathy as the inalienable elements of human nature, Wordsworth points to the internal fracture of man in modern times, attempting like Rousseau to access a primal state while also referring to society’s departure from it. Images of bodily degradation imply a social critique: Wordsworth suggests that man’s development has gone awry in modern times, due to the enhanced power of the eye—the most “despotic of our senses” (*Prel.* 12.172); this unequal development has unraveled man, allowing his sympathetic faculties to atrophy, even as his taste and reason become more refined. Deliberately turning from the visual poetics and fascination

with optical technology that characterized the writing of Darwin and others, he brands poetry as a “language of the sense” distinct from Darwin’s “language of the eye” (“Tintern Abbey” 109; *TN* 21app.).<sup>76</sup> For Wordsworth, the “language of the eye” is created or appropriated by specific interests—it is the fashionable language of the picturesque (e.g. *Prel.* 12.152-63), the artificial “distinctions” of moral philosophy, or the blind abstractions of scientific and political theory.

*The Prelude* recounts Wordsworth’s preservation of natural perception: as he rejects sophisticated ways of seeing, he rediscovers the authenticity of sensation and feeling through interactions with the natural world. Having been an object of nature, he grapples with the epistemological challenge of reconstructing his formation. He does not quite explain *how* nature restores sympathy, only evoking a revolt of the senses:

The state to which I now allude was one  
In which the eye was master of the heart,  
When that which is in every stage of life  
The most despotic of our senses gained  
Such strength in me as often held my mind  
In absolute dominion. Gladly here,  
Entering upon abstruser argument,  
Would I endeavour to unfold the means  
Which Nature studiously employs to thwart  
This tyranny, summons all the senses each  
To counteract the other and themselves,  
And makes them all, and the objects with which all  
Are conversant, subservient in their turn  
To the great ends of liberty and power.

But this is matter for another song. (*Prel.* 12.170-84)

Whereas sympathy ascends equally with the eye and the mind in *The Temple of Nature*, Wordsworth recalls his uneven development, likening the revolutions of his consciousness and senses to a political struggle: at every historical “stage,” the “heart” is subject to the “despotic” eye, the organ that enables all forms of domination. Countering a process that Crary describes as the “abstraction of vision” in the eighteenth and nineteenth centuries (19), Wordsworth adverts to nature’s power to “thwart this tyranny” by empowering the senses to counteract each other and thereby producing a self-regulating body. His individual body ultimately represents a harmonized body politic, in which nature has dissolved all interest by rolling the senses into each other. In this ideal body, mutual surrender prevents the domination of any one faculty, as each merges into one “all”: senses begin to correct not just each other but “themselves,” become “conversant” with the same objects, and equally “subservient” to the goal of human liberation. The maturation of his mind-body speaks to nature’s ability to regulate and redirect a self-interest that seems built into the bodily organs. Nature brings the mature body and body politic into what we might call a synaesthetic state, similar to that of infancy: as senses merge into each other, artificial ways of seeing and thinking dissolve, and the body is newly equipped to engage with the external world.

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<sup>76</sup>The editors of the *Prose Works* include this note on Wordsworth’s rejection of poetic diction: “Personification as a means of distinguishing poetry from prose was perhaps rejected as a counterblast to the theory of Erasmus Darwin in the first prose Interlude to his *Loves of the Plants*” (*WWP* 1: 172).

If we understand infancy and synaesthesia as bodily states that allow transformation, we can better understand why Wordsworth longs to recover the sensibility, if not the mute powerlessness, of infancy.<sup>77</sup> Inequality and discord seem born not of the body but of ontogenesis—the “development of the individual organism from the earliest embryonic stage to maturity,” or, in a synecdoche of that process, “the development of a particular (anatomical, behavioral, etc.) feature of an organism.”<sup>78</sup> In the passage cited above, Wordsworth’s development is a version of ontogenesis: as he moves toward adulthood, the organs gain separate and unequal powers, and the production of inequality seems identical with the formation of the subject. Yet this developmental path is not inevitable. He suggests that poetry can reverse, for example, the historical despotism of the eye by borrowing nature’s power to cultivate the organic body. This procedure requires both the reader and poet to recover “infant sensibility”: in the individual, this recovery involves the restoration of all the bodily senses and of the internal sense; in a society, this recovery involves the reconciliation of factions, and the reintegration of poetry, natural science, and moral philosophy into a single pursuit of knowledge. The argument is at once practical and patronizing: on the one hand, the pun of “infant sensibility” insists that anyone born into the world can recover a newborn, unprejudiced sensibility; on the other hand, the argument requires that some privileged individuals (i.e. poets) correct the sensibilities of others. This unresolved problem reveals itself in a parallel between the state of “savage torpor” and the state of the infant, who receives sensations “into his torpid life” (*Prel.* 2.244). “Torpor” is simultaneously a state of degradation and of organic possibility. In some ways, the deterioration of the reader paves the way for his recovery of “infant sensibility.” The poet re-sensitizes the reader, as if recasting his benumbed state into the utterly receptive state of infancy. This belief in restarting ontogenesis and reintegrating human faculties underlies certain elliptical constructions in his poetry, such as his reference to “the primal sympathy / Which having been must ever be” (“Intimations of Immortality” 185-86).

The poet derives his authority, not from a supernatural or divine source, but from a mind that understands and retains human capacities through a process of observing internal and external phenomena. Having retained capacities others have lost, the poet can restore these capacities in others, chiefly by investigating his own development and preservation. At the end of the passage, Wordsworth identifies an originally endowed sensibility, closely associated with infancy itself, as the source of his poetic ability and names *The Prelude*’s objective:

... to display the means  
 Whereby this infant sensibility,  
 Great birthright of our Being, was in me  
 Augmented and sustained.... (*Prel.* 2.284-87)

This idea also appears without reference to infancy, as when he describes the poet’s “more than usual organic sensibility” in *Lyrical Ballads* (157). In *The Prelude*, he places his own *bildung* within the context of natural history: as an infant and unthinking youth, he is an object, shaped by both nature and history; he reaches maturity, as both a man and a poet, when he becomes

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<sup>77</sup>In his reading of “There was a boy,” Geoffrey Hartman discusses the dangers of interrupting the separation from nature apparently critical to the self’s formation: “Both Lucy and the Boy of Winander die before consciousness of self can emerge wholly from consciousness of nature.... It is as if the Boy of Winander were fated to reach a developmental impasse. Growing further into consciousness means a simultaneous development into death (i.e. the loss of a previous, joyfully unselfconscious mode of being), and not growing further also means death (animal tranquillity, absorption by nature)” (*Wordsworth’s Poetry* 21).

<sup>78</sup>“ontogenesis, *n.* *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 12, 2010.

conscious of nature's past and continuing influence. My reading in a sense echoes, in the context of evolutionary science, rather than the contexts of philosophy and psychology, Hartman's well-known argument that Wordsworth progresses from nature to imagination and back to nature in *The Prelude*.<sup>79</sup> By observing himself as a tenant of the natural world, Wordsworth becomes aware of nature's operations and comes to stand outside of nature; consciousness of his own evolutionary development is akin to transcendent knowledge. He thus comes to conceive of poetry not as willful creation but as a reenactment of nature's effects on the human mind and body.

Aligning poetry with evolutionary process as *natura naturans*, or "nature as a creative force or process," he distinguishes organic poetic production from commercial production—the "frantic novels, sickly and stupid German Tragedies, and deluges of idle and extravagant stories in verse" that overwhelm the marketplace—and mechanical reproduction.<sup>80</sup> While it has been common to decode organicism as politically conservative, I argue that Wordsworth inherits from Darwin an analogy between poetic and organic production that, in contrast to Coleridge's organicism, is less easily allied with conservative politics. In Darwin's work, autonomous organs move toward sustenance or ecstasy, rather than toward an ideal form. Yet he maintains a strong analogy between organic development and artistic production: the organs imitate each other, and art in turn imitates organic action. We see this analogy most clearly in *The Temple of Nature*: acts of mimicry follow upon each other, lengthening the distance between original and imitation, while also generating increasingly powerful iterations of taste. Imitation begins as an unconscious organic function, but later becomes the action that produces forms of social organization, technology, and art that are fluid, rather than static.

In Darwin's view, imitation makes possible the extension of capacities, both through the physical body and a virtual, global body. Human beings are distinct from animals in their greater powers of imitation, or their capacity to appropriate the organic principle of imitation to advance art and technology:

But the immediate cause of our propensity to imitation above that of other animals arises from the greater facility, with which by the sense of touch we acquire the ideas of the outlines of objects, and afterwards in consequence by the sense of sight; this seems to have been observed by Aristotle, who calls man 'the imitative animal;' see *Zoonomia*, Vol. I Sect. XXII. (*TN* 106n.).

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<sup>79</sup>Hartman challenged a naïve reading of Wordsworth as a nature poet: "My purpose is to show, via three important episodes of *The Prelude*, that Wordsworth came to realize that Nature itself led him beyond Nature; and how and when the realization was achieved. The poet's sense of a reality in Nature is kept alive by the very fact that Nature itself weans his mind, and especially his poetic mind, from its early dependence on immediate sensuous stimuli" ("Poet's Progress" 214).

<sup>80</sup>"*natura naturans, n.*" *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 12, 2010. It has been noted that the "Preface" labors to distinguish between mechanical and organic reproduction. As Barbara Johnson points out in her reading of the "Preface," Wordsworth defines poetry as the opposite of imitation, which he associates with mechanical production, but then describes poetic composition as a surrender to "a blind, mechanical repetition" (99). In a different vein of criticism, Amigoni argues that this distinction between organic and mechanical imitation does not hold for Wordsworth. Whereas "Erasmus Darwin's 'Muse of Mimicry' was the poetic encoding of the principle of the dissemination of animal action and, alongside sympathy, a building block for civilisation and progress," Wordsworth sensed that "imitation was haunted by the dangers of language's counter-spirit" (Amigoni 77).

Advanced cognition is a product of organic imitations: the human senses possess the unique ability to imitate each other and to produce consensus. In *Zoonomia*, he emphasizes that “our perceptions themselves are copies” and that the “propensity to imitation . . . constitutes all the operations of our minds” (1: 254). On top of this analogy between individual cognitive development and species development, he layers another analogy to socio-political development on a global scale. Technologies of imitation enable the geographical and temporal extension of ideas. Acts of imitation spread “ideas” throughout the organs of an individual body, as well as throughout a progressing human society, whose “arts and sciences . . . continue slowly to extend, and to increase” (*TN* 19n.). His analyses of art reflect his attempt to extend organic imitation to the function of art. In a passage previously discussed, he praises the Wedgwood medallion as a perfect imitation of a slave’s suffering. He also characterizes his own verse as imitative translation: *The Temple of Nature* presents “the operations of Nature” as images; in *The Botanic Garden*, he translates scenes on the Portland vase into word-images; and his footnotes often draw attention to lines that are “taken” or “copied” from other forms (for example, see *TN* 16-17n.). In his poetry, Darwin self-consciously practices “imitation” according to his definition of the word, as “the actions of one sense copying those of another” (*TN* 108n.). Imitation lies at the center of his scientific-poetic project: knowledge of “nature’s operations” develops and travels by relay from one organ to another, from one art form (pottery) to another (verse), and from one medium of knowledge (natural philosophy) to another (poetry). As he imitates nature and extends its transformative energy into the realms of individual experience, art, and society, Darwin associates organicism with the defense of individual freedom, the pursuit of knowledge through science and poetry, and, more problematically, the right of imperial expansion.

## Organic Volition

Darwin’s account of volition informs a third familiar feature of Wordsworth’s aesthetics: an unstable contrast between passive and active states. In the chapter of *Zoonomia* entitled “Of Generation,” Darwin speculates that organisms advance by responding to external stimulation. Four agents enable their progress: irritations (external stimulation), sensations (bodily responses to stimulation), volitions (the physical or intellectual motions of organs without the prompting of sensation), and associations (additional knowledge gathered by the extremities and ordered by the brain). Vitalized by motion, matter largely organizes itself, as we find in Darwin’s most extensive description of organic transmutation:<sup>81</sup>

From thus meditating on the great similarity of structure of the warm-blooded animals, and at the same time of the great changes they undergo both before and after their nativity; and by considering in how minute a portion of time many of the changes of animals above described have been produced; would it be too bold to imagine, that in the great length of time, since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind, would it be

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<sup>81</sup>Gigante’s useful history of vitalism suggests that Romantic organicism admitted both materialist and idealist concepts: William Harvey’s *On Animal Generation* (1651) presented the first modern theory of organic generation and led to a counter-theory of preformation, which held that all living things unfold a predetermined design (*Life* 1-16). According to Gigante, naturalists and poets eventually faced the scientific-aesthetic problem of organic monstrosity, for in the eighteenth century Buffon’s *Natural History* (1749) introduced in the equation of life with power and the recognition that power could not always be controlled.

too bold to imagine, that all warm-blooded animals have arisen from one living filament, which The Great First Cause endued with animality, with the power of acquiring new parts, attended with new propensities, directed by irritations, sensations, volitions, and associations; and thus possessing the faculty of continuing to improve by its own inherent activity, and of delivering down those improvements, by generation, to its posterity, world without end! (*Zoo*. 1: 505)

By endowing “one living filament” with “animality,” “The Great First Cause” sets into action a natural law (of motion and development) whereby matter organizes itself and organisms improve themselves, gaining new organs.<sup>82</sup>

Before I discuss this passage and its teeming analogies, it may be useful to examine briefly the politics of motion in the late eighteenth century. Darwin derives his vision of motion-driven evolution in part from the French natural philosopher Helvetius, who held that motion produced all objects in nature, including man.<sup>83</sup> J. Murdoch published an English translation of Helvetius’s *The True Meaning of the System of Nature* in 1799, not to spread Helvetius’s ideas, but rather to alarm Britons of the “flimsy reasoning” and “atheistical” ideas of radical French philosophers (7). Unworried that “this publication will augment the very evil which [he] wishes to counteract,” Murdoch explains his aim “to put the people of Great Britain upon their guard against those who wish to strip of them their religion and plunge them into the horrors of anarchy and impiety” (7, 5); he here compares the loss of religious belief to the stripping of social status, or to drowning within a mob. Against such a threat, he proposes vigilant reading, for the “exposal of error” is “detection” (sic) (8). But close reading is hardly necessary given the bias of the translation. Although the translation misrepresents Helvetius’s original text, it helps us to identify notions, such as the following, that threatened British conservatives:

The changes, forms, and modification of matter alone proceed from motion. By motion, every body in nature is formed, changed, enlarged, diminished, and destroyed. (15)

Murdoch’s readers would identify as blasphemous the proposition that motion, rather than God, creates and alters the physical universe. Later in the text, Helvetius scandalously holds that motion formed not only matter, but also man, who therefore holds no special status:

It is probable, that he [man] was produced at a particular period of our globe, upon which he, like its other productions, varies according to the difference of climate. He was doubtless produced male and female, and will exist so long as the

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<sup>82</sup>It has been argued that Darwin believed that a creator set organisms into motion. According to Peter Bowler, Darwin “was a deist who believed that God had designed living things to be *self-improving* through time” (82). It is possible that Darwin’s concept of aesthetic evolution is influenced by religious or at least metaphysical ideas. In contrast to Bowler, Desmond King-Hele acknowledges that Darwin is at first satisfied “with the idea that God created the original living filament” but becomes increasingly unorthodox (*Erasmus Darwin* 89).

<sup>83</sup>Murdoch’s translation rightly grasps the political implications of motion. For extensive studies of the relationship between theories of motion and political and moral philosophy, see Thomas A. Spragens’s *The Politics of Motion* (1973) and Simon Oliver’s *Philosophy, God, and Motion* (2005). David Hartley’s associationist philosophy, which emphasized the motion of ideas in the body-mind, was also an influence on Darwin. As Bowler notes, “Curiously, [Darwin] claimed to have developed his idea of transmutation not from natural history but from David Hartley’s account (1749) of how the soul is affected by the habits of life” (82). Bowler has in mind the first paragraph of “Of Generation” (the chapter in *Zoonomia* that contains Darwin’s account of transmutation) and Hartley’s *Observations upon Man* (1749), in which Hartley identifies thought, muscular movement, bodily function, and sensation as types of motion. Motion, Hartley argues, can account for the phenomenon of human ideas: he proposes that “muscular Motion is performed in the same general Manner as Sensation, and the Perception of Ideas” (1: 85).

globe remains in its present state. When that is changed, the human species must give way to new beings, capable of incorporating themselves with the new qualities which the globe will then possess.... Man has no right to believe himself a privileged being in nature. He is subject to the same vicissitudes as its other productions. The idea of human excellence is merely founded on the partiality which man feels for himself. (21-22)

Murdoch expects his readers to bristle at Helvetius's reference to man as a product; his characterization of man as deluded and boastful; his reference to gender difference as an accident of environment; and his unfeeling prediction of man's future disappearance, through extinction or species transmutation, as human beings will have to become (or "give way to") a better-adapted race. Transmutationist theory serves as a metonym for dangerous radicalism, as it seems at once to predict and to invite a cataclysmic transformation of the "globe" and the overturning of all natural hierarchies.

Helvetius seems to deflate every claim to human superiority, reducing imagination, intellect, feeling, and "the soul" to mere products of sensation. These supposed faculties are merely effects of motion, as objects "strike" or "shock" the bodily senses:

Every sensation is a shock given to the organs; a perception, that shock communicated to the brain; an idea, the image of the object which occasioned the sensation and perception. If our organs, therefore, be not moved, we can neither have perception nor ideas.... Memory produces imagination. We form a picture of the things we have seen, and, by imagination, transport ourselves to what we do not see.... The intellectual faculties attributed to the soul, are modifications ascribable to the objects which strike the senses. Hence a trembling in the members, when the brain is affected by the movement called fear. (25-26)

Murdoch's readers were to object to Helvetius's description of a passive human mind that immediately receives and transfers impact.<sup>84</sup> The mind is as vulnerable as its moveable organs: it is helpless against shocks and incapable of independent "perception" and "ideas." Throughout the text, Murdoch suggests that the passive, dehumanized mind is more susceptible to the dangerous impact of radical ideas.

Whereas Murdoch presents a simplistic version of materialist philosophy, Darwin attempts to explain how matter becomes more highly organized. To this end, he distinguishes between different types of motion and represents inherent volition as the agent of both organic and social development. Society's current development continues a process of transformation that began "millions of ages before the commencement of the history of mankind." Humans are composed of the same self-organizing matter as other animals, but in their case one acquired feature (the sensing hand) has enabled them to know the external world and to dominate other animals. Social progress keeps pace with physical progress: human organs extend in response to external stimuli, and this interaction produces greater capacities for thought and feeling. In contrast to philosophers who discredit the body, Darwin includes bodily function, thought, and feeling among actions, no less than voluntary muscular movement; in health, internal organs require moderate, rather than violent stimulation, and in turn support the physical and mental

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<sup>84</sup>For philosophical rather than political reasons, Coleridge objected to Hartley's associationist psychology, which bears similarities to Helvetius's work on motion. In *Biographia Literaria*, Coleridge writes that, if Hartley's theory were true, "our whole life would be divided between the despotism of outward impressions, and that of senseless and passive memory" (STC 215).

wellness that underlies positive social action. In recurrent images of the observing, reading eye and of the active hand, we find the idea that volition drives the progress of human society—a progress already evident in the diffusion of sympathy, commerce, print, technology, and empire.<sup>85</sup>

Although Darwin gives volition a central role in his narrative of society and nature's progress, he complicates any easy correlation of volition with agency in "Diseases of Volition," stressing that volition is not necessarily voluntary.<sup>86</sup> Intentionally using the same term that metaphysicians use in debating "free will and necessity," Darwin insists that volition is motion that originates from the body, voluntarily or not:

Whereas in this work the word volition means simply the active state of the sensorial faculty in producing motion in consequence of desire or aversion; whether we have the power of restraining that action, or not; that is, whether we exert any actions in consequence of opposite desires or aversions, or not. (*Zoo*. 1: 416)

With this definition, Darwin undermines the binary oppositions of passive/active and body/mind, since the body can override the mind's power to restrain or initiate motion. This complication leads to a question regarding his account of organic and social transformation: as he describes nature's operations in *The Temple of Nature*, does he suggest that humans can imitate those operations, accelerating their own progress? Or does change occur regardless of human will, if organic bodies inherently rebel against rational control?

Darwin registers this problem as he doubly attends to evolution and disease—phenomena that yield insights into the behavior of matter yet can also bear an inverse relation to each other. Indeed, degenerative disease shadows evolutionary progress, since volition is double-edged: it can drive the progressive transmutation of organs, but excessive or deficient motion can cause organs to degenerate. In "Diseases of Volition," Darwin cites Helvetius on the consequences of diseased volition for humans:

A late French philosopher, Mr. Helvetius, has deduced almost all our actions from this principle of their relieving us from the ennui or taedium vitae; and true it is, that our desires or aversions are the motives of all our voluntary actions; and human nature seems to excel other animals in the more facil use of this voluntary power, and on that account is more liable to insanity than other animals. (*Zoo*. 1: 433).

It is unclear how "voluntary power" produces insanity in men in Helvetius's view, but Darwin speculates that, in some cases, the mind becomes less responsive to real stimuli and therefore reacts to absent phenomena. For Darwin, the diseases of volition that involve excesses of motion include epileptic convulsions, catatonia, and the "immoderate suspicion" among mad men (1: 433).

It seems that disease is as inevitable as motion itself, yet we also find social commentary intertwined with medical concerns. In Darwin's pathology, matter is active, and disease results when the body's organs lose volition, not only due to natural causes such as advancing age, but

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<sup>85</sup>Maureen McNeil argues that Darwin celebrates industrialization throughout his poetry (10-30). For a discussion of Darwin's leadership of the Lunar Society, which promoted industrial technology, see King Hele's *Erasmus Darwin: A Life of Unequalled Achievement* (1999).

<sup>86</sup>I am indebted to Kevis Goodman for drawing my attention to the complexities of Darwinian volition, as well as to his descriptions of diseases caused by excessive or deficient motion. See Goodman's "'Uncertain Disease': Nostalgia, Pathologies of Motion, Practices of Reading," forthcoming in *Studies in Romanticism* (2010).



also due to excessive stimulation and insufficient exercise. As he catalogues diseases in *Zoonomia*, he repeatedly associates states of inactivity (torpor, *ennui*, and *taedium vitae*, defined as “weariness of life” or “extreme inertia”) with disease.<sup>87</sup> In contrast, healthy organs, which move when stimulated, are essential to social progress, because they communicate energy, information, and feeling.

This complex interrelation of several ideas—organic vitality, external stimulation, and human progress—contributes to Wordsworth’s account of how poetry transforms the passive, animal-like consumer into an active, human reader. In the “Preface,” we find an image of poetry moving fluids through the body, which seems to represent its power to transfer emotional or sensory content from one person to another, or from one generation to another. The “Preface” offers a paradoxical account of man’s distinctive taste and morality: on the one hand, these faculties reflect man’s possession of a “living soul” contrasted to the body; on the other hand, they are developed through bodily sensations (“Tintern Abbey” 47). However, even in “Tintern Abbey,” it remains unclear whether the word “soul” denotes “an entity distinct from the body” or the “principle of life in man or animals.”<sup>88</sup> Throughout his poetry, he deploys both senses of the word, drawing upon Darwin’s explanation of life as motion, while also alluding to man’s transcendent nature. When Wordsworth defines poetry as an entity greater than metrical language, he argues that verse and prose “both speak by and to the same organs” and that “the same human blood circulates through the veins of them both” (*LB* 163-64). This statement refers first to figurative and then to literal organs: verse and prose “speak by” virtual organs (the forms of metrical and non-metrical composition, as well as print), and they “speak to” (and through) physical organs (the eye and the ear). The poet “speak[s] by” his organs to readers possessed of the “same organs.” Although he elsewhere rejects “poetic diction,” he personifies prose and poetry and compares the latter to the eye and heart: “Poetry” sheds “natural and human tears”; it circulates “human blood.”<sup>89</sup>

The concept of organic action appears in Coleridge’s account of human cognition and taste, but, in contrast to Darwin’s work, any analogy to political transformation is muted. With its emphasis on intellectual power, Coleridge’s aesthetics has been read as a conservative reaction to a materialist conception of the mind, yet it can alternatively be read as a revision of straw-man accounts of cognition like Murdoch’s. In the *Biographia Literaria*, Coleridge offers a nuanced model of mind, which acknowledges both acts of repetitive imitation and acts of creation. The “fancy” enables human beings to remember, learn, and repeat (making language possible), while another part (the “secondary imagination”) “echoes” the “primary imagination”—a “living power” that created all things, including human perception (*STC* 313). Coleridge places the “essentially vital” secondary imagination in the body along with fancy, but

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<sup>87</sup>“taedium vitae, n.” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. April 16, 2010.

<sup>88</sup>“soul, n.” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 12, 2010.

<sup>89</sup>Barbara Johnson finds Wordsworth’s renewal of dead language in the return of the poetic diction that *Lyrical Ballads* had set out to suppress: “The strange fit depicted in the poem [“Strange fits of passion have I known”] can in some sense be read, therefore, as the revenge of personification, the return of a poetic principle that Wordsworth had attempted to exclude. The strangeness of the passion arises from the poem’s uncanny encounter with what the theory that produced it had repressed. Indeed, this is perhaps why the *Lyrical Ballads* are so full of ghosts and haunting presences. It is as though poetry could not do without the figures of half-aliveness that the use of personification provides. Or perhaps it is the other way around: that personification gives us conventionalized access to the boundary between life and death” (96).

he distinguishes “fixed and dead” matter from living matter that participates in the “eternal act of creation” (313).

As he discovers the concept of developmental difference, Wordsworth attempts to make stronger distinctions between sensation and cognition than Darwin does. He notes that the tastes of the mind are more exalted than those of the tongue as early as the 1800 “Preface,” when he criticizes “those who will converse with us as gravely about a *taste* for Poetry, as they express it, as if it were a thing as indifferent as a taste for Rope-dancing, or Frontinac or Sherry” (*LB* 166). He is more vehement on the issue in the 1815 “Supplementary to the Preface”:

Taste, I would remind the reader, like Imagination, is a word which has been forced to extend its services far beyond the point to which philosophy would have confined them. It is a metaphor, taken from a *passive* sense of the human body, and transferred to things which are in their essence *not* passive,—to intellectual *acts* and *operations*.... Proportion and congruity, the requisite knowledge being supposed, are subjects upon which taste may be trusted; it is competent to this office;—for in its intercourse with these the mind is *passive*, and is affected painfully or pleurably as by an instinct. But the profound and the exquisite in feeling, the lofty and universal in thought and imagination; or, in ordinary language, the pathetic and the sublime;—are neither of them accurately speaking, objects of a faculty which could ever without a sinking in the spirit of Nations have been designated by the metaphor—*Taste*. And why? Because without the exertion of co-operating *power* in the mind of the Reader, there can be no adequate sympathy with either of these emotions: without this auxiliary impulse, elevated or profound passion cannot exist. (*WWP* 3: 81)

The essay seems to counter Darwin’s shifting, synecdochic representation of human taste, for it insists that simple and complex faculties have only a metaphorical relation to each other. Instead of Darwinian materialism, we seem to find Kant, as Wordsworth emphasizes the disinterestedness of aesthetic judgment, which has nothing to do with bodily needs or desires. Yet Raymond Williams suggests that this passage is more socially conscious, in that it registers the abstraction of “Taste” out of the physical body over the course of the eighteenth and nineteenth centuries (*Keywords* 313-15). If read as a rebuff to Darwin, the passage also registers Wordsworth’s discomfort with the way his natural history of taste coincides with a history of aesthetics still in progress; in other words, it seems dangerous that a history of human sensation might validate “fickle tastes and fickle appetites” (*LB* 157).

Indeed, if we suspend the usual reading of this passage as complicit in the abstraction of taste into Taste, then we witness Wordsworth taking up a problem that Darwin has left behind: the problem that sensory reception alone cannot account for the operations of higher faculties. For conservatives like Murdoch, the difference between sensation and thought is undeniable, and thus Helvetius seems to violate common sense by reducing the mind to a passive organ that “can neither have perception nor ideas” without immediate stimulation. Arguments against human superiority over animals and machines disintegrate, since even the display of logic or emotion confirms human distinctiveness. In response to this debate, Wordsworth emphasizes both the mind’s reserve of power and its periodic need for external stimulation in numerous poems that enact transfers of vitality. The organs themselves must be able to gather energy before discharging it again. He turns to images of physical movement to describe the production of sympathetic feeling and higher cognition: “intellectual *acts* and *operations*” are contrasted with the “passive” or receptive literal taste, and appreciation of “the pathetic and the sublime”

requires a muscular “exertion of a co-operating *power* in the mind of the reader.” The phrase “auxiliary impulse” represents the mind, not as an autonomous power, but as a conduit of energy, since the noun “impulse” could designate both a “force or influence exerted upon the mind by some external stimulus” or “an application of sudden force causing motion.”<sup>90</sup> The mind that conveys impulses first receives them, as we see in this stanza from “The Tables Turned”:

One impulse from a vernal wood  
May teach you more of man;  
Of moral evil and of good,  
Than all the sages can. (21-24)

The same word denotes the power of the mind and the motions of a forest in the midst of springtime transformation. Having begun with the command to rise “Up! Up!,” the poem links physical motions with intellectual insight, presenting the charge of nature’s “impulse” as a substitute for the “dull and endless strife” of books (1, 9).

Furthermore, these transfers of vitality promise to extend sympathy, taste, and thought to the far reaches of humanity. Like the natural forces that Darwin describes, Wordsworth’s poet “create[s] taste” by “widening the sphere of human sensibility, for the delight, honour, and benefit of human nature” (*WWP* 3: 82). From a centralized subject and culture, sympathy extends outward, as poetry lengthens its radius, and the “sphere” projects a global sympathy that encompasses all human beings. This radial expansion resembles and seems to justify imperialism, but poetry spreads not only taste and feeling but also critical judgment. Poetry continues nature’s work of developing the mental faculties by “calling [forth] and bestow[ing] power” (*WWP* 3: 82). Although Wordsworth rejects personification, this moment is analogous to Darwin’s image of volition “lift[ing] the strong arm” of man (*TN* 1.274). This depiction of poetry as a power that in turn bestows power has a long influence, as does the association of poetry with motion. For example, in “The Poetry of Pope,” Thomas De Quincey defines the “literature of power” as a stimulus that parallels the “great phenomena of infancy, or of real life as it moves through chance and change,” describing it as an exercise that prevents human sensibility, “like any animal power or muscular energy,” from “falling into disuse” and thereby “gradually droop[ing] and dwindle[ing]” (56).

In the same year that Wordsworth read Volume 2 of *Zoonomia*, he composed a number of poems that reflect his interest in volition’s stimulation of the body-mind: “Tintern Abbey,” “There is an active principle,” and “Not useless do I deem.” Like *The Temple of Nature*, “Tintern Abbey” extols a force that lends life and animation to all things, as in these climactic lines:

... And I have felt  
A presence that disturbs me with the joy  
Of elevated thoughts; a sense sublime  
Of something far more deeply interfused,  
Whose dwelling is the light of setting suns,  
And the round ocean, and the living air,  
And the blue sky, and in the mind of man,  
A motion and a spirit, that impels  
All thinking things, all objects of all thought,

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<sup>90</sup>“impulse, *n.*” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. March 12, 2010.

And rolls through all things.... (94-103)<sup>91</sup>

The speaker multiplies and links representations of the object he perceives: it is an entity (a “presence”); an invisible thing “interfused” among other things; an inhabitant of light, water, air, sky, and minds; and finally “a motion and a spirit.” Instead of personifying volition, Wordsworth distributes the figure into multiple images, suggesting its infinite extension. A principal character in Darwin’s allegory is dissolved into the atmosphere and horizon, but Wordsworth emphasizes that motion connects subject and object, as well as distant elements. In these lines, the speaker adds on, rather than contrasts, noun phrases, producing no firm opposition between “thinking things” and “objects of all thought”; the “motion and spirit” “impels” and “rolls through all things,” so that even the “thinking things” in turn become objects moved by volition. Also a favorite of Darwin’s, the word “roll” provides an image of objects being overturned and thereby transformed. The use of the word reflects contemporary discussions of evolution, for the image of rolling becomes central to representing both biological and social transformation, as we see in the words “evolution,” which comes from *evolvere* (to roll out, unroll) or *volvere* (to roll), and “revolution,” which comes from *revolvere* (to revolve), as Williams details in *Keywords* (120-23, 270-74).

Wordsworth approaches still closer to the sense of “evolution” as “unfolding” in the fragment “There is an active principle,” which describes organic motion as the force that animates not only natural phenomena but also communication and knowledge. It is no coincidence that Wordsworth composed the fragment in February and March of 1798, the same months that he was reading Volume 2 of *Zoonomia*.<sup>92</sup> Scholars commonly interpret the speaker’s celebration of “an active principle alive / In all things” as an expression of a pantheistic philosophy that Wordsworth ultimately abandons (1-2). Yet the speaker is perhaps more an observer of volition than a Christian worshipper of nature. The speaker meditates that an “active principle” underlies not only visible motion but also communication among all objects and subjects in the natural world. This principle empowers “things”—flowers, trees, stones, rocks, waters, air—to “spread / Beyond themselves” and “make / Some other being conscious of their life” (5-7). The speaker is one of those “other being[s]” who recognizes the properties of these objects, and he reproduces the objects in his poem, participating in the extension of organic life. Poetry, he implies, participates in nature’s circulation and reproduction of objects, as a poem itself is an object and conduit of the volition that drives wind, water, feeling, and thought.

This vital activity is pleasurable in and of itself, but it also produces a potentially useful knowledge of nature’s operations:

This is the freedom of the universe,  
Unfolded still the more, more visible  
The more we know – and yet is revered least,  
And least respected, in the human mind,  
Its most apparent home. (12-16)

With the word “unfolded,” we have images of the embryo or the book: an invisible principle becomes visible through time, close observation, and the accumulation of knowledge. The fragment ends by referring to a collective neglect of volition in the “human mind,” with the

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<sup>91</sup>I am quoting the fragments “There is an active principle” and “Not useless do I deem” as reprinted in Duncan Wu’s *Romanticism: An Anthology* (298-300).

<sup>92</sup>According to Duncan Wu’s *Wordsworth’s Reading, 1770-1799*, Wordsworth read parts of *Zoonomia*, Volume 2 from March 10-13, 1798.

latent claim that social reformers have chosen the wrong object to transform. As he alone recognizes the freedom and permeability of the human mind, the poet undertakes a non-invasive cultivation of mind, one that furthers the long goal of human freedom. This socially directed poetics, derived from observing an “active principle,” appears in *The Prelude* and *The Excursion*, the pieces of his lifelong endeavor to combine moral philosophy with poetry.

At the same time, “Tintern Abbey” offers a more troubled account of volition and its relationship to individual and social development. The contrast between the speaker and his “former self” has been read in a number of ways: New Historicists have argued that Wordsworth distances himself from a past in which he sympathized with and celebrated the revolution in France; others find that the poem draws an unsteady distinction between the fashionable appreciation of landscape and the more deeply felt connection to nature that his poetry provides. The poem, which either evacuates or presumes its biographical and historical contexts, can be read through a natural historical lens—for the speaker’s progress from a primitive self to a mature poet recalls Darwin’s theory of the “progress of the mind.” Like the primitive organism that becomes a human, the speaker first acquires capacities of touch and vision, which serve as the basis for higher faculties of feeling and cognition. Commonly read as an account of transcendence, “Tintern Abbey” is actually an account of development over time: the boyhood self, for whom “the eye” supplied all interest, becomes a mature self, who possesses thoughts and taste corrected by experience. The poem’s multiplication of metaphors even suggests species transformation (as a contrast between former and current states): in this moment of reflection, the speaker is startled to find that he has transformed from something “like a roe” that bounded o’er the mountains” into something “like a man / Flying from something that he dreads” (68-69, 71-72). The dreaded thing is perhaps the knowledge of his own death, which he anticipates in the final stanza, and that knowledge eventually turns the wild, almost inhuman boy into a man.<sup>93</sup>

In becoming fully human, the speaker pays a fee, which is returned to him as a bittersweet reward: he becomes conscious of death as a destination toward which all living things constantly move.<sup>94</sup> The poem is permeated with entropy, a concept available in Darwin’s definition of disease and death as the loss of volition. The speaker imagines death as the total loss of muscular or sensory responsiveness: when the speaker dies, he will “be” in a place where he “no more can hear” nor see. The trajectory of physical existence (toward decomposition and death) is tragically the inverse of his moral and intellectual progress; a sign of his maturity is his acceptance of aging as the diminishment of physical volition and his effort to convey mental volition to others. As many readers have felt, “Tintern Abbey” is metapoetic, as it proposes poetry’s intersubjective and transgenerational language as a compassionate response to the corruption of all things in nature—a corruption that society tragically reenacts. Throughout the final stanza, the speaker describes a relay of motion between himself and Dorothy that will eventually end: in her “voice” he “catch[es] / The language of [his] former heart” and he “read[s]

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<sup>93</sup>“We are Seven” suggests a similar spectrum, as the adult speaker possesses a knowledge of death that makes him, tragically, more human than the “simple child,” initially referred to as “it,” who does not “know of death” (1-4).

<sup>94</sup>See Chapters 2 and 3 of Hartman’s *Wordsworth’s Poetry*. Hartman draws upon Freud, who argues in *Civilization and its Discontents* that normal maturation involves the separation of man from nature: “An infant at the breast does not as yet distinguish his ego from the external world as the source of the sensations flowing upon him. He gradually learns to do so, in response to various promptings.... In this way, then, the ego detaches itself from the external world.... If we may assume that there are many people in whose mental life this primary ego-feeling has persisted to a greater or lesser degree, it would exist in them side by side with the narrower and more sharply demarcated ego-feeling of maturity, like a kind of counterpart to it” (724-25).

/ [his] former pleasures in the shooting lights / Of thy wild eyes" (117-20); one day, he will be "where [he] can no more hear / Thy voice, nor catch from they wild eyes these gleams / Of past existence" (148-50).<sup>95</sup> As he imagines his own death, he represents Dorothy as a reproduction of himself, who carries his memories and "exhortations" into the future. Dorothy herself will proceed toward death: the "wild ecstasies" she has gained from him "shall be matured / Into a sober pleasure"; her mind will be a therapeutic collection of "lovely forms" and "sweet sounds and harmonies." "Tintern Abbey" enacts the work of poetry, for it shows how communication slows entropy alternately by providing necessary stimulation and by countering a dependency on "outrageous stimulation." As the poem enacts a transfer of thought and feeling from Wordsworth to Dorothy, there is a sense that this type of communication maintains the vitality of mortal organisms for long enough to facilitate exchange, reproduction, and transmission. The reader is a double of Dorothy, for he inhabits the same position of an addressee absent during the moment of composition.<sup>96</sup> We find in the poem Darwin's concept of a chain, not as a hierarchical relation, but as a temporal one; there is a relay of thought and vitality, as the poet attempts to pass on a moral and practical knowledge of nature's inherent productivity.

What can we make of these reflections on volition and entropy in relation to the historical context of 1798? Marjorie Levinson once read "Tintern Abbey" as part of Wordsworth's psychic effort to efface place (a Catholic abbey) and a more recent history (the Terror and his separation from his French wife and child), writing that "Wordsworth's displacement of political and poetical interest certainly marks a swerve from an Enlightenment humanitarianism (an engaged, ambitious, practically objectified orientation) and a turn toward a more theoretical, disinterested, and spiritually focused philanthropic mode (roughly Romantic sympathy)" (20). Although the New Historicism in Romantic studies has grown more complex in the decades since Levinson's study, there remains a widespread conviction among scholars that Wordsworth turns to nature's certain, slow processes in order to avoid society's less certain, potentially violent ones. Levinson and others might conclude that the speaker's "evolution" naturalizes the disappearance of British radical energies, as the symbolic vitality of Wordsworth's youth subsides into more "sober" thoughts. Yet, as I hope to have shown, "Tintern Abbey" describes poetry as both an object and an organ of the "active principle" that determines the movement of history. Thus it is worth noting that Wordsworth's turn to natural history can just as well be understood as a way of representing the agency of social transformation and change. He describes the relevance of nature's objects in "Not useless do I deem," written in those same months of 1798, in which the speaker argues that "quiet sympathies with things that hold / An inarticulate language" enable humans to acquire the "habit by which sense is made / Subservient still to moral purposes" (1-3, 30-31). Beginning with the understated double negative of the title, Wordsworth offers the hope that the observation of "things" in nature leads to sympathy for fellow men, producing a "chain

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<sup>95</sup>In "A Slumber Did My Spirit Seal," Wordsworth represents death as the assimilation of individual motion and sensation into the rolling motion of nature: "No motion has she now, no force; / She neither hears nor sees; / Rolled round in earth's diurnal course/ With rocks, and stones, and trees" (5-8).

<sup>96</sup>J. S. Mill described and defended the convention of reading lyrical poetry: "All poetry is of the nature of soliloquy. It may be said that poetry which is printed on hot-pressed paper and sold at a bookseller's shop, is a soliloquy in full dress, and on the stage. It is so; but there is nothing absurd in the idea of such a mode of soliloquizing. What we have said to ourselves, we may tell to others afterwards; what we have said or done in solitude, we may voluntarily reproduce when we know that other eyes are upon us. But no trace of consciousness that any eyes are upon us must be visible in the work itself" (80). The speaker of "Tintern Abbey" seems to reflect in solitude, but in the last stanza addresses another person; this shift perhaps breaks the illusion that the reader is overhearing an expression free of any design.

of good” that would lessen the material “burden of existence.” Wordsworth channels the political engagement of his youth into a study of nature for social purposes. In this small poem, we find the suggestion that observing “things” might produce knowledge: of transformation, as the poem shows new perception emerging “by degrees”; of nature’s power to “stimulate our minds”; and of material “kinship” with all “fellow natures.”

### **Wordsworth, Buffon, and the “Internal Faculties” of Animals**

“Not useless do I deem” compacts several ideas about human nature, the natural world, and poetry: the speaker dialectically constructs human distinctiveness from the concept of the kinship of all things. In other words, the human being’s expression of his superiority to animals and objects is necessarily humble: unlike the “things” of the world, he recognizes both his individual agency and his vulnerability as a material being, and this elevated understanding leads him to “read / Our duties in all forms” (36-37). In the peaceful society that he conjures up, restraint toward the natural world, rather than domination over it, signals humanity. The poem makes its apparently necessary argument for human distinctiveness by defining humans against the mute world of animals and objects, yet the activity of comparison opens up another possibility: material kinship with non-humans. As theorized and practiced by Wordsworth, poetry is at the center of this question, and it performs contradictory functions: it investigates human nature, with the openness of an empirical project, but it also serves as the ultimate expression of humanity. This final section of the chapter explores the risky nature of Wordsworth’s “history or science of feelings,” finding that his project casts significant doubt on any essential difference between human and animal. Ushering in a poetry that (to use Buffon’s words) will give the “internal sense” its full “activity and extent,” Wordsworth faces the problem of studying a “sense” that is invisible, locked within and dispersed throughout the organs of the human body-mind. In what follows, I argue that Wordsworth inherits this problem, as well as a strategy for representing man’s “internal sense,” from Buffon’s reflections on comparative anatomy in the *Natural History*. In his project of aesthetic cultivation, Wordsworth builds upon the work of Buffon, a contributor to theories of species transmutation, to study what natural history cannot: the internal lives of animals.<sup>97</sup>

Wordsworth would have encountered Buffon’s ideas through a number of sources. English translations of Buffon’s *Natural History* were sold in popular editions: W. Kenrick and J. Murdoch published a six-volume edition in 1775-76, and J. S. Barr later lifted much of this translation for his ten-volume *Barr’s Buffon* (1792).<sup>98</sup> Wordsworth himself owned a two-volume edition, entitled *The System of Natural History, Written by the Celebrated Buffon, Carefully Abridged* (1792).<sup>99</sup> In addition to reading the “celebrated Buffon” in translation, Wordsworth would have come across citations of Buffon in *Zoonomia*, as well as summaries of Buffon’s

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<sup>97</sup>Buffon’s theory of generation has been identified as a pre-Darwinian account of organic change (Bowler 72).

<sup>98</sup>The Barr translation might alter Buffon’s ideas to make them more palatable to an English audience. Buffon was inconsistent on the relationship between spirit and matter, and he was more radical than he seems here, where he seems to appeal to a more traditional audience. I acknowledge the limitations of reading Buffon in translation, but I am less interested in determining Buffon’s actual beliefs, than I am in how he was represented in English culture.

<sup>99</sup>This edition was found in Wordsworth’s library (Shaver 155).

theories scattered throughout the *Encyclopaedia Britannica* (1797), which he also owned.<sup>100</sup> An even more likely source is not a book, but Coleridge, whose enthusiasm for natural history partly generated his vision for the *Recluse*.

At the opening of this chapter, I described a bifurcation of the human sciences in Buffon's *Natural History*: comparative anatomy was to study man's external qualities, while another science (later termed aesthetics) was to address man's internal qualities. Buffon presents anatomical comparisons as a valid source of knowledge, yet also acknowledges their limitations:

Man as to the material part of his existence, certainly bears a resemblance to other animals, and in comprehending the circle of natural beings there is a necessity for placing him in the class of animals. . . . In comparing man with the animal we find in both an organized body, senses, flesh, blood, motion, and a multitude of other resemblances. But these resemblances are all external, and not sufficient to justify a decision, that the human and the animal natures are similar. In order to form a proper judgment of the nature of each we ought to have as distinct a knowledge of the internal qualities of an animal as we have of our own. As the knowledge of what passes within animals is impossible to be attained, and as we know not of what order and kind its sensations may be, in relation to those of man, we can only judge from a comparison of the effects which result from the natural operations of both. (3: 326-27)

Buffon seems to defend the concept of human superiority, reasoning that comparative anatomy cannot explain the undeniable difference between human and animal "natures." Yet his focus on the inadequacy of evidence for man's inherent animality is certainly disingenuous, as it calls attention to the need for research on this question. The philosopher who wants to confirm human superiority faces a problem of access. The patent difference between man and animal is ascribed to man's "noblest" but most invisible "part"—"internal qualities" that are not reducible to the internal matter of nerves and brain. It is difficult to say whether Buffon's true motive is to prove human superiority or to pave the way for challenging it, but his rhetoric here presents (even for the reader antagonistic to materialist ideas) the epistemological and moral necessity of comparing the "internal qualities" of humans and animals by studying the "effects" of their operations.

Reading on in the *Natural History*, we find that these "effects" include capacities for taste. Like Kant and other aesthetic philosophers, Buffon identifies taste as a sign of man's distinctive internal qualities, but he does so within a study of natural history. Humans and animals share visible, anatomical similarities, but humans exhibit a metaphysical soul through their aesthetic production and appreciation. Contrasting the "uniformity that is in all the works of animals" to human originality, he writes,

Why, on the other hand, are the productions and performances of men so various and so diversified? Why is a servile imitation more troublesome to us than an

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<sup>100</sup>The Wordsworths owned the third edition of the eighteen-volume *Encyclopaedia Britannica* (1797); the Grasmere Journals indicate that Wordsworth read parts of the *Encyclopaedia* around January 1800 (see Wu's *Wordsworth's Reading, 1800-1815*). John Wyatt points out that Wordsworth "had access to Continental authors, and particularly to major French philosophers who drew no boundaries between political, economic, or Natural History"; even if he did not read Buffon as a primary source, Wordsworth would have encountered summaries of Buffon's work, such as the eight-column summary of Buffon's theory of the earth in the *Encyclopaedia* (58). Alan Bewell has argued that Buffon's human and geological histories influence Wordsworth's poetry (*Wordsworth and the Enlightenment* 242-43, 48-50).



original design? It is because our souls are our own, and independent of any other, and because we have nothing in common with our species but the matter which forms our body, and in which our resemblance to brute animals is confined. . . . Would not those [animals] which were the most happily organized, build their nests and contrive their cells in a manner more solid, elegant, and commodious? . . . Hence may we conclude, that animals have no sensations of this kind; that such sensations have no connection with matter, no dependence, in their nature, on the texture of corporeal organs, and, that of consequence, there must be a substance in man, different from matter, which is the subject and the cause that produces and receives those sensations. (3: 331-32)

“A substance in man, different from matter” (a substance that is equivalent to the “internal sense”) manifests itself in the production and appreciation of original art. The distinctions between man’s diverse “works” (behaviors and productions) and animals’ imitative ones, and between man’s “commodious” dwellings and the merely serviceable “nests” and “cells” of animals, seem simultaneously insistent and whimsical. Buffon gives a particular opinion about art the status of a natural distinction: the dislike of “servile imitation” that he identifies as human is culturally specific, as we see in the contrast between Darwin’s praise of mechanical reproduction and Wordsworth’s attacks against it. Indeed, Darwin comes to an opposite conclusion when he compares the organs, tastes, and behaviors of humans and animals:

If we turn our eyes up on the fabric of our fellow animals, we find they are supported with bones, covered with skins, moved by muscles; that they possess the same senses, acknowledge the same appetites, and are nourished by the same aliment with ourselves; and we should hence concluded from the strongest analogy, that their internal faculties were also in some measure similar to our own. (*Zoo*. 1: 184)

Whereas Buffon infers the great complexity of the human soul from the greater complexity of human art, Darwin relies upon the very analogy between form and internal faculties that Buffon questions: since animals possess similar nervous and motor systems, then they must possess similar cognitive abilities, and since they eat and mate, they must possess similar desires. We find in their work two attempts to access the “internal faculties” of animals: Buffon finds a reflection of these qualities in “works” (artistic labor and production), while Darwin focuses on the body and simple behaviors.

The poem “Hart Leap Well” (1800) revolves upon both types of comparison, as Wordsworth seeks what Buffon describes as “impossible to attain”—“a knowledge of what passes within animals.” On the surface, the poem might not seem remarkable: it belongs to a sentimental tradition in which reflections on mortality bring all classes of beings into sympathy. More particularly, the poem belongs to the sentimental subgenre of anti-cruelty literature, in which sympathy toward hunted or abused animals marks one’s higher sensibility. Concern for animal suffering increased dramatically in late eighteenth-century British culture, according to cultural historian Keith Thomas. Comparing casual records of animal torture in the seventeenth century to the proliferation of anti-cruelty societies in the eighteenth, Thomas suggests that the alienation of city dwellers from the countryside, combined with an increased concern for animals among Christian groups, produced this phenomenon. Those who took up this cause were conscious of their historical difference:

As early as 1795, a writer could attribute [humane feelings toward animals] to ‘the superior humanity of the present over any former period’; and in the mid-nineteenth century the historian Lecky declared that the change had been effected

‘not by any increase in knowledge or by any process of definite reasoning, but simply by the gradual elevation of the moral standard.’ (Thomas 150)

Poems that encourage sympathy toward animals reflect the change that Thomas describes, as they attribute humane sentiments to the refinement of sensibility. This specific type of sympathy marks historical progress in “Hart Leap Well,” as it did in eighteenth- and nineteenth-century culture more broadly: the knight, who gleefully hunts animals for his own entertainment, could only be heroic before the age of Enlightenment. As David Perkins has noted, the poem explicitly depicts the progress of human morality and society, characterizing hunting as a barbaric, pre-modern pastime.<sup>101</sup> This anti-hunting polemic fits within the poem’s broader interest in political and social progress relative to nature and time. Geoffrey Hartman has argued that the poem reflects an attitude about progress ingrained in both the English character and canon: the “internal structure of his poem reflects a historical principle of canon formation”; the poem involves “the reflective encirclement and progressive purification of symbols from Romance” (“False Themes” 30). Using some of the poem’s phrasing, Hartman writes that “the new and milder morality grows organically from the old: there is no apocalyptic or revolutionary change, just due process of time and nature” (“False Themes” 30); the poem, he points out, is self-consciously a modern, naturalistic version of Bürger’s unapologetic “Der Wilde Jäger.” The speaker, gentler than the brutal Sir Walter, demonstrates his humanity by finding a modern moral within the shepherd’s timeless tale: “Never to blend our pleasure or our pride / With sorrow of the meanest thing that feels” (189-90).

These closing lines allude to the equality of all mortal things, yet they describe a voluntary restraint of power, a refusal of triumph; this moral self-control contains disturbing revelations of interspecies likeness within a hierarchical ordering of animal and human feeling. In other words, the poem explores the possibility that animals experience equivalent sensations, emotions, and thoughts as humans, only to end with the claim that humans are superior by virtue of their abilities to sympathize with lower beings and to subordinate their own desires. Yet, like the inadequate moral, this display of superior human feeling does not hold. When examined, the poem confuses social history with natural history and jeopardizes the human as an absolute category: it seems that humans were once less than human, and it is unclear whether nature (or man) improves and transmits sensibility from one generation to the next.

It is no coincidence that Charles Darwin packages the same meditation on sympathy as part of his argument for human evolution in *Descent of Man*:

Sympathy beyond the confines of man, that is humanity to the lower animals, seems to be one of the latest moral acquisitions. It is apparently unfelt by savages, except toward their pets. How little the old Romans knew of it is shewn by their abhorrent gladiatorial exhibitions. The very idea of humanity, as far as I could observe, was new to most of the Gauchos of the Pampas. This virtue, one of the noblest with which man is endowed, seems to arise incidentally from our sympathies becoming more tender and more widely diffused, until they are extended to all sentient beings. (2: 101)

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<sup>101</sup>Perkins notes that the anti-hunting polemic suggests a history of sensibility: “Like ‘Tintern Abbey,’ *The Prelude*, and many other poems by Wordsworth, ‘Hart-Leap Well’ presents the continuous development of higher sensibility. The difference is that ‘Hart-Leap Well’ locates this development not in the maturing individual but in mankind through history” (440).

Through a deft substitution, “humanity to the lower animals” stands in for belonging to modern humanity, as Darwin (echoing Wordsworth) represents morality’s historical development as a widening sphere of sensibility: savages and Gauchos, as primitive as ancient Romans, represent a less developed form of humanity, and the diffusion of sentiment through the modern world manifests evolution’s work in the social realm. Countering the idea that natural history reduces mankind to appetite and flesh, Darwin represents historical development as a pleasurable expansion of feeling, not unlike the “sentiment” that Wordsworth describes “of being spread / O’er all that moves, and all that seemeth still” (“The Pedlar” 208-09). The “sentiment” involves two conflicting ideas: the human subject is unified with all things, and the human subject possesses capacities for reflection and sympathy that make him superior to all things. Humanity towards animals constitutes what Empson called a “version of pastoral”—a “trick of thought” whereby the idea of unity coexists with the idea of hierarchical difference.

Although “Hart Leap Well” can be read as a version of pastoral in Empson’s sense, it stages the collapse of several contrasts: between pre-modern and modern, between monument and poem, and between man and animal. The poem first contrasts the gentle speaker with the pre-modern knight, Sir Walter, who savagely chases the hart to its death and, without sorrow, “gaze[s] upon the spoil with silent joy” (36). The modern, humane speaker tastefully refrains from “mention[ing] by what death [the hart] died,” but the comparisons nevertheless produce the impression that the two figures mirror each other: both men commemorate the hart with objects called “Hart Leap Well,” one a monument, the other a poem. As part of its attempt to maintain a contrast between the different characters, the poem contrasts forms of transmission: the architectural monument and the ballad/poem. Unlike Sir Walter, who falsely believes that the monument and mansion will “endure” “Till the foundations of the mountains fail” (73-74), the speaker displays an enlightened recognition of human impermanence, gained from meditating upon relics:

[Nature] leaves these objects to a slow decay,  
That what we are, and have been, may be known;  
But at the coming of the milder day,  
These monuments shall all be overgrown. (173-86)

Decayed and overgrown, the monument requires patient investigation to reveal its meaning, but the rustic’s ballad by chance endures, and the speaker’s poem rescues that ballad from its provincial obscurity. Such transmissions, however, are fortuitous, rather than certain: the speaker happens upon the relics and the shepherd, and the tale just as easily could have been lost to history. Although the modern speaker sees more than the hubristic knight does, there is a melancholy recognition that the poem, like the monument, is produced at a specific moment of history and will decay over time. The speaker is merely the current conveyer of narrative and emotion in history’s ongoing relay.

Through these reflections on history and human productions, the poem works toward an unstable contrast between the internal lives of animals and humans, as manifested in the difference between the poet’s memorial and the hart’s possible attempt to memorialize itself. The hart’s “work” (in the sense used by Buffon) exceeds empty imitation: his effort to return to his birthplace to die bespeaks self-consciousness and individuality. Even the hunter seems to recognize that the hart is exceptional, rather than exchangeable with any other of its species, and thus deserving of a memorial. In the poem, Wordsworth has not yet come to the conclusion that he makes in his later work on the subject of memorials. In “Essay Upon Epitaphs” (1810), he argues that animals do not possess a soul that survives death, a fact exemplified by their inability

to produce memorial art. As Wordsworth attempts to elevate the epitaph as a poetic form, arguing that memorials more broadly signal “consciousness of a principle of immortality in the soul” (*WWP* 2: 50), he depends upon the distinction that animals, in contrast to humans, do not create memorials:

The dog or horse perishes in the field, or in the stall, by the side of his companions, and is incapable of anticipating the sorrow with which his surrounding associates shall bemoan his death, or pine for his loss; he cannot pre-conceive this regret, he can form no thought of it; and therefore cannot possibly have the desire to leave such regret or remembrance behind him. (*WWP* 2: 50)

Remembrances of the dead are closely linked to sympathetic capacity: in contrast to a human being, the animal is incapable of sympathizing with those he leaves behind. Despite this distinction, the language slips into personification, as Wordsworth acknowledges the “sorrow” and “regret” of the dead animal’s companions.

The slip recalls “Hart Leap Well” and its more ambiguous account of animal memorials. The poem mentions several memorials: Sir Walter creates the fountain and pillars as a monument to the hart; after his death, the knight’s own “bones lie in his paternal vale”; and the poem, too, memorializes the hart. The memorials demonstrate the respect for material remains and the sense of the spiritual immortality described in “Essay Upon Epitaphs”; the knight and speaker graciously give a memorial to the hart, since it is incapable of understanding its own death. Yet, as it expresses the physiological inquiries of eighteenth-century culture, the poem also represents the hart as a potential subject. Whereas Part 1 of the poem translates Bürger’s ballad, Part 2 presents a naturalistic version of the formerly allegorical hart, as it reflects on the animal’s internal thoughts, feelings, and motivations. The rustic who explains the desolation of the landscape sympathizes with the dead animal, imagining “what thoughts must through the creature’s brain have past!” (141). In his imagination, animals feel the same sensations and emotions as humans, since they possess homologous sensory organs (nerves and a brain); the untutored sentiments of the rustic match up with those of the enlightened metropolitan reader that Keith Thomas describes. As he imagines the hunt from the hart’s perspective, the rustic humanizes the animal, which suddenly becomes more material than a symbol:

For thirteen hours he ran a desperate race;  
And in my simple mind we cannot tell  
What cause the Hart might have to love this place,  
And come and make his death-bed near the well.

Here on the grass perhaps asleep he sank,  
Lulled by the fountain in the summertide;  
This water was perhaps the first he drank  
When he had wandered from his mother’s side.

In April here beneath the flowering thorn  
He heard the birds their morning carols sing;  
And he perhaps, for aught we know, was born  
Not half a furlong from that self-same spring. (145-56)

In this account, the hart possesses humanlike capacities for aesthetic pleasure, as it enjoys the music of birds; it possesses, too, a personal history—of birth, childhood, and death. Its simplicity mirrors that of the “simple mind[ed]” rustic. Most significantly, the hart “make[s] his death bed

near the well.” For both the rustic and the speaker, the act of selecting a death spot suggests that the hart is worthy of greater respect: it is capable of a humanlike attachment to place and it possesses both memories and the desire to be remembered. Furthermore, the hart’s return to a spot is similar to the attachment to spots and graveyards that Wordsworth often describes as a sign of humanity. The hart possesses something like the power that Wordsworth gives to the human mind in *The Prelude*. Its habitual return to a specific spot echoes the mind’s return to “spots of time.” The hart of “Hart Leap Well,” like the doe of “The White Doe of Rhyllstone,” mysteriously returns to a site related to both water and death, as in *The Prelude*. The speaker of *The Prelude* drinks, not unlike an animal, from the “spots of time”: “All these were spectacles and sounds to which / I often would repair, and thence would drink/ As at a fountain” (11.382-84). Animal and human minds draw upon the same resources, and animal and human lives trace the same return from cradle to grave.

When the rustic imagines “what thoughts must through the creature’s brain have past!” we hear a modified echo of Buffon: the power of imaginative sympathy overrides the naturalist’s observation that “the knowledge of what passes within animals is impossible to be attained.” The poem constitutes such an inquiry, producing both the condescension of human sympathy for animals and the less comfortable idea that humans are not so easily distinguishable from animals. The poem translates Bürger’s supernaturalism into the uncanny—as the human recognizes himself in the hart. If “Hart Leap Well” is a version of pastoral, in Empson’s sense, then it similarly maintains a tension between two contrary ideas—unity and hierarchical difference. This tension, so central to Romantic writing, reappears in Charles Darwin’s comparisons of humans and animals and lies at the heart of his account of evolution.

### Chapter Three

#### Charles Darwin and the Natural History of Taste

Studies of Darwin and literature form a large subset of the so-called “Darwin Industry.”<sup>102</sup> Twenty years have passed since Gillian Beer first analyzed Darwin’s writing as literature in *Darwin’s Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, arguing that the English literary tradition influenced *On the Origin of Species*, which in turn forever altered the British novel by introducing such concepts as open-endedness, scales of being, and, of course, natural and sexual selection. While Beer examined authors known to have read Darwin, George Levine later considered the diffuse influence of Darwinism on the Victorian novel in *Darwin and the Novelists: Patterns of Science in Victorian Fiction*. Characterizing *Origin* as a narrative that begot narrative, Beer and Levine in part sought to explain the particular appeal of Darwinian evolution, which was neither the first nor the only evolutionary theory of the nineteenth century. Countering a persistently dominant “Darwin centered account” of evolution, James Secord argues that Scottish author Robert Chambers scandalized the reading public with his evolutionary narrative, *Vestiges of the Natural History of Creation* (1844), a decade before *Origin*, which bears only the distinction of being the first evolutionary theory assimilated by the scientific establishment and public culture (4).<sup>103</sup> Secord attributes this fact of literary history to institutional practices, pointing to differences in how Chambers’s and Darwin’s works were packaged and distributed and rejecting “the analysis of disembodied ideas” he finds in literary treatments such as those of Beer and Levine (4).

Whether Darwin deserves his status as the “father of evolution” or not, his written works call for textual and inter-textual analysis within a different literary context. Beer’s now classic study on Darwin and the novel has been so generative that little attention has been paid to Darwin and poetry.<sup>104</sup> To remedy this neglect is to find new ways of understanding the afterlife of Romantic poetry, the particular appeal and structure of Darwinian evolution, and Darwin’s contributions to aesthetic philosophy. This chapter argues that Darwin elevates first the naturalist

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<sup>102</sup>See Michael Ruse’s “The Darwin Industry: A Guide” (1996) for a summary of scholarly resources on Darwin.

<sup>103</sup>According to Secord, “the *Origin* was important in resolving a crisis, not in creating one”: “Although publication of the *Origin* is often portrayed as one of the great crises in intellectual history, the response was relatively muted. . . . Uncontroversial respectability was the *Origin*’s great attraction for those eager to see science become a paid career” (514, 511).

<sup>104</sup>Darwin continues to be useful in the study of novel form. Franco Moretti has developed an approach to novelistic form from the Darwinian concepts of selection and divergence. Moretti himself diverges from the analysis of particular texts, as he uses statistical, spatial, and bio-economic models to chart “general structures,” introducing “distant reading” as an alternative to close reading (92, 1). Darwinian theory in particular offers a means of understanding changing generic form, as it recognizes the term “species” as an abstraction of endless but related particulars: “Texts are certainly the real objects of literature . . . but they are not the right objects of knowledge for literary history. Take the concept of genre: usually, literary criticism approaches it in terms of what Ernst Mayr calls ‘typological thinking’: we choose a ‘representative individual,’ and through it define the genre as a whole. . . . it counts as an analysis of the entire genre, because for typological thinking there is really no gap between the real object and the object of knowledge. But once a genre is visualized as a tree, the continuity between the two inevitably disappears: the genre becomes an abstract ‘diversity spectrum’ (Mayr again), whose internal multiplicity no individual text will ever be able to represent” (Moretti 76). Using a more traditional focus on particular texts, Jonathan Smith finds in Ruskin’s “Fiction, Fair and Foul” (1880-81) an early use of Darwin toward the analysis of fiction: “In Darwinian botany, Ruskin thus saw a prurience analogous to that of the modern novel and a celebration of hybridity that the novel itself seemed to embody” (“Domestic Hybrids” 862).

and later his theory of evolution by elaborating upon the theory of aesthetic evolution that Erasmus Darwin promulgated and that Wordsworth quietly assimilated. Throughout his writings—in his transmutation notebooks (1837-44), the *Journal of Researches* (1839), *On the Origin of Species* (1859), *The Descent of Man, and Selection in Relation to Sex* (1871), and, finally, his autobiography (written in 1876)—Darwin compares animal, savage, and civilized tastes in the effort to prove that advanced capacities of thought, morality, and feeling evolved from simpler instincts and sensations. By investigating what Buffon called the “internal faculties” of living things, Darwin worked toward his explanation and defense of evolution. Whereas Beer, Levine, and others have argued that Darwin needed fiction in order to tell the irretrievable story of human origins, I argue that he also needed poetry, which he, like Wordsworth, granted the power to recover knowledge, specifically through the poet’s studied comparisons of simple and complex beings. Darwin envisages natural science as “poetical,” extending the Romantics’ redefinition of poetry as a language, non-identical to meter, that reforms human nature (*Notebooks* 529). As this chapter explores Darwin’s engagement with Wordsworth and other Romantics, it pursues a larger argument that Darwin adapts Romantic aesthetics to advance natural science as a language and activity akin to poetry, transferring to another field and another form poetry’s ability to restore taste and moral feeling.

### **A Taste for Natural History**

Before he constructs the natural history of taste in *Descent of Man*, Darwin elevates its inverse—a taste for natural history—in order to establish his own scientific and moral authority. Building upon Erasmus Darwin’s and Wordsworth’s investments in poetry, he enlists the naturalist in the urgent task of cultivating human capacities of aesthetic perception. In his early writings, Darwin expresses the familiar goal of discovering and celebrating the powers of nature. The notebooks he kept from 1836 to 1844 indicate that he read *The Loves of the Plants*, *The Economy of Vegetation*, *Zoonomia*, and *The Temple of Nature* (Barrett, Gautrey and Herbert 664). In *Notebook D* (1838), he echoes *The Temple of Nature*, exclaiming that changes in organic form offer a “magnificent view” of the world far “grander” than the “cramped” idea of divine creation (*Notebooks* 342-43). Of course, Darwin’s youthful reading of poetry extended far beyond Erasmus Darwin’s works (which fell into obscurity after the 1790s) to that of Romantic poets newly enshrined by the Victorians. In the *Autobiography*, Darwin nostalgically recalls, “up to the age of thirty, or beyond it, poetry of many kinds, such as the works of Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley, gave me great pleasure” (138). Wordsworth was a particularly important figure. During the period in which Darwin formulated his theory of selection, he “read the *Excursion* twice through”; Wordsworth’s philosophical poem at that point replaced his “chief favourite,” *Paradise Lost*, which he had taken with him on land excursions during the *Beagle* voyage (85). Edward Manier has argued that the *Excursion* infused Darwin’s writing with a moral view of nature’s purposefulness, providing him with “a sense of significance and exhilaration to be found in nature,” and that “the young Darwin’s positive theological views were similar to the central theses of the natural religion expressed by Wordsworth’s character, the Wanderer” (196). Citing the influence of German Romanticism broadly and of the voyager-scientist Alexander von Humboldt more particularly, Robert J. Richards has argued that Darwin viewed nature and mind as inherently moral and interconnected; “with the aid” of Humboldt’s famous travel narrative, Darwin experienced nature

not “as a machine, a contrivance of fixed parts grinding out its products with dispassionate consequence,” but rather as a “cosmos, in which organic patterns of land, climate, vegetation, animals, and humans were woven into a vast web pulsating with life” (525).

Struck like Manier and Richards by the resemblance between Darwinian and Romantic responses to nature, I examine more specifically how Darwin affiliates natural science, along with its growing controversies, with the institution of Romantic poetry. Our first clue appears in Darwin’s annotation of a much earlier Wordsworthian text. Entries from the second of Darwin’s notebooks on “metaphysical enquiries,” *Notebook N* (1838), indicate that he read and annotated the expanded 1802 “Preface” (579). He reflects on the “pleasure of imagination” in the overflowing, disjointed notes that follow:

Pleasure of imagination ... connection with poetry, abundance, fertility, rustic life, virtuous happiness.—recall scraps of poetry ... the train of thoughts vary no doubt in different people., an agriculturalist, in whose mind supply of food was evasive & ill defined thought would receive pleasure from thinking of the fertility.—I a geologist have illdefined notion of land covered with ocean, former animals, slow force cracking surface &c truly poetical. (*V. Wordsworth about science being sufficiently habitual to become poetical*)  
the botanist might so view plants & trees.—I am sure I remember my pleasure in Kensington Gardens has often been greatly excited by looking at trees [as] great compound animals united by wonderful & mysterious manner.... if one were admiring one in India. & a tiger stalked across the plains, how ones feelings would be excited, & how the scenery would rise. Deer in Parks ditto. (*Notebooks 529*) [italics added]

The italicized phrase refers to that moment in the “Preface” in which Wordsworth imagines that the “labours of men of Science” will alter the “impressions which we habitually receive” (*LB* 168). Wordsworth envisages such a future with ambivalence: on the one hand, he might sincerely anticipate that readers will respond to “science” as immediately, or “habitually,” as they do to poetry; on the other hand, he labels scientific subjects as indefinitely unworthy of poetry and defines the poet alone as an “upholder and preserver” of “human nature” (*LB* 168). How Darwin reads the passage is unclear. If he contests an opposition of poetry and science installed by Wordsworth, then the sciences, he would claim in this case, yield as much aesthetic pleasure as poetry. Yet it is also possible that Darwin recognizes and embraces Wordsworth’s vision of a future collaboration between the poet and the “Man of Science” (*LB* 168). In this latter, perhaps more complex engagement with Wordsworth, Darwin proposes that knowledge progresses as science mimics poetry: in 1838, science has “become poetical.”

In either case, Darwin connects science with poetry as if for the first time. He suggests that his own study of geological and organic transformation elevates the sciences, whose geographically and intellectually remote discoveries may now be integrated, shedding light on organic life and its origins. Idiosyncratic in their pleasures, the agriculturalist, geologist, and botanist generate different mental images—of cultivable lands, animals, trees, and ocean—but a greater theory related to transformation unifies their private preoccupations. Having studied not only geology but also botany, population theory, and breeding (“artificial selection”), Darwin is all of these figures at once, finding pleasure and potential significance in an array of images. New insights arise from mixing scientific and aesthetic hobbies and gathering various “ill defined” images into one consciousness: keeping in mind the geologist’s images of submerged land and “cracking” surfaces, the botanist “might so view plants & trees” as similarly



transformable.<sup>105</sup> Geological transformation, proven by “hard” evidence, offers a model for imagining transformations of softer vegetable matter. Botanical transformations in turn suggest the possibility of animal transformation, as when Darwin provocatively describes English trees as “great compound animals united by wonderful & mysterious manner.” Just as his mind collapses real time in order to imagine transformation, it collapses geographical distance. Natural science infuses the domestic with the exotic: for the reader trained in observing the world, a walk in Kensington Gardens offers the intensity and significance of an Indian safari. Darwin models a heightened aesthetic sensibility, linking it to scientific inquiry. Engrossed in the pleasures of imagination, he discovers relationships between distant, seemingly opposite things. He reaches toward his theory by dissolving generic boundaries between poetry and science, between the specialized sciences, between far-flung places, and between distinct species.

Darwin understood that such wild, speculative analogies, though linked to empirical observation, would be viewed as laughable or dangerous. The act of observation was to some extent suspect. Natural theology, which promoted observation as a means of understanding and celebrating God’s works, could verge on impiety if not qualified and, historically, it opened a path for secular science.<sup>106</sup> The need to defend empirical enquiry is evident in Darwin’s secret frustration with “the idea from cramped imagination that God created,” which produces the inconsistency of a god “warring against those very laws he established in all . . . organic nature” (*Notebooks* 343). The two epigraphs of *Origin* defend observation via a unification of science and religion that was starting to become untenable: Darwin cites Bacon on the parallelism of studying “the book of God’s word” and “the book of God’s works,” but he also cites William Whewell’s call to explain natural events by “general laws” rather than “interpositions of Divine power.” For Darwin, imagining a ridiculous, “warring” god (a god of pre-Christian caprice that Hardy imagines with the same irony), the “works” contradict the “word.” Along with Whewell, Darwin rejects divine intervention, a clunky mechanism for species variation. Yet the epigraph from Bacon might be more than an appeasement to suspicious readers: throughout *Origin* and other works, he disputes the idea that natural science is hostile or irrelevant in the search for higher knowledge, offering the intricacy and beauty of nature as worthy replacement for lost belief. Despite such efforts to link his research to appreciative observation and inward reflection, the incompatibility of natural theology and natural science was becoming clear by the late 1830s. Adrian Desmond and James Moore observe that in London at that time, “Natural theology was in crisis, and many expected a new life science to arise like a phoenix from its ashes”; Darwin faced the challenge of presenting heretical views as a moral science (*Darwin* 220, 37).

In this charged climate, Darwin wrote and published the travel narrative popularly known as *The Voyage of the Beagle*. The first version appeared as the third volume of *The Narrative of the Voyages of H.M. Ships Adventure and Beagle* (1839), following volumes by Robert Fitzroy and P. Parker King. The most popular of the volumes, it was republished as *The Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Round the World* (1845) in an affordable edition by John Murray’s Colonial and

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<sup>105</sup>We can detect Darwin’s reading of other Romantic poets here. Darwin’s “ill defined” thought recalls Keats’s defense of “half-knowledge”—the ability to appreciate a “fine isolated verisimilitude caught from the penetralium of mystery” rather than “irritabl[y] reaching after fact and reason” (Keats 92).

<sup>106</sup>See Beer’s argument that *Origin* works against the anthropocentrism of the English language (which requires a personal agent) and of natural theology (43-70). Also see Levine’s argument that Darwinian evolution is an adaptation of William Paley’s natural theology (*Darwin and the Novelists* 84-118).

Home Library.<sup>107</sup> Favorable reviews of the *Journal* tended to recount its major events and celebrate its contributions to geology, as well as its accessibility and interest for the general reader. Also founded by John Murray, the *Quarterly Review* assessed the *Journal* as pleasant and morally innocuous: “But it is not to the scientific alone that Mr. Darwin’s volume will prove highly interesting. The general reader will find in it a fund of amusement and instruction. Mr. Darwin is a first-rate landscape-painter with the pen. Even the dreariest solitudes are made to teem with interest” (*Quarterly Review* 233). As this review indicates, Darwin’s “instruction” of the reader bears some relation to his literary talent—his ability to depict landscape “with the pen” rather than the painter’s pencil. The *Journal* does not merely give the reader a sum of scientific facts or views on specific scenes; it instructs them in a whole way of seeing.

Keeping in mind this praise for the *Journal*’s supply of scientific, aesthetic, and moral instruction, we can better understand Darwin’s use of Wordsworth to elevate natural science. If animating “dreariest solitudes” seems akin to “see[ing] into the life of things,” it is because Darwin constructs the necessity of natural science along the lines of the “Preface.” *The Journal* subtly adapts Wordsworth’s argument that unprecedented threats call for an activity that will preserve human nature, defined by the possession of advanced intellectual and sympathetic capacities. Whereas Wordsworth advanced poetry as that activity, Darwin advances a “poetical” natural science, attributing it with the power to humanize readers. His defense of natural science was personal: when he accepted the position of *Beagle* naturalist, natural history was considered a gentleman’s hobby, not a profession, and Darwin’s father at first withheld his consent for the voyage, claiming that the “wild scheme” would be “disreputable to [Charles’s] character as a Clergyman hereafter” and would prevent him from settling into a “steady life” and a valid profession (*Autobiography* 228). He went so far as to say that it would be a “useless undertaking” and only relented after considering appeals by Charles and Josiah Wedgwood (*Autobiography* 228). Throughout the *Journal*, Darwin seems to respond to his father’s concerns, which represent a more widespread opinion that such an adventure would be morally dangerous for young men like Darwin, who belonged to a respectable family and was expected to become a clergyman.

The possibility of moral contamination, so feared by his father and others, is always present in the *Journal*, but Darwin seems to observe what he judges to be immoral behavior without becoming complicit. As a tourist and anthropologist, he notes the condition of taste and morality in figures such as savages and slaveholders, meditating as much on internal differences as external ones. On its surface, the *Journal* attempts to prove the moral superiority of the British, often via comparisons to the Spanish and the natives of South America and the South Pacific. He particularly abhors the inhabitants of Tierra del Fuego, who represent to him “man in his lowest and most savage state” (504). Passages like the following contain a mixture of curiosity and disgust, directed at both the land and the people:

Their country is a broken mass of wild rocks, lofty hills, and useless forests: and these are viewed through mists and endless storms. The habitable land is reduced to the stones on the beach; in search of food they are compelled unceasingly to wander from spot to spot, and so steep is the coast, that they can only move about in their wretched canoes.... How little can the higher powers of mind be brought into play: what is there for imagination to picture, for reason to compare, for judgment to decide upon? to knock a limpet from the rock does not require even

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<sup>107</sup>I am indebted here to R. B. Freeman’s publication history of the *Journal* (31-38).

cunning, that lowest power of mind. Their skill in some respects may be compared to the instinct of animals; for it is not improved by experience: the canoe, their most ingenious work, poor as it is, has remained the same, as we know from Drake, for the last two hundred and fifty years.... What could have tempted, or what change compelled a tribe of men, to leave the fine regions of the north, to travel down the Cordillera or backbone of America, to invent and build canoes ... and then to enter on one of the most inhospitable countries within the limits of the globe? (216)

The influence of environment on racial character fascinates and disturbs him. An inhospitable, uncultivable land located at the “extreme part of South America,” Tierra del Fuego has made these former northerners into creatures barely recognizable as human. In the region where they have stranded themselves, the land is impenetrable, and this geological fact forces them to live spare lives, eked out on a slim margin between land and sea. Cliffs tower over them, inscrutable and inaccessible, and this relentlessly impersonal nature degrades, rather than cultivates, their mental capacities. In this region of aesthetic deprivation, their powers of thought have atrophied, as they seem so little capable of responding to experience that their canoe has remained unimproved for hundreds of years. Worse still, they seem destined to remain ignorant of the historical migration that marooned them thus. Even Darwin cannot imagine their ancestors’ motive in venturing to this far reach of the continent.

As his disgust turns to curiosity, he imagines degeneration as a possible consequence of traveling to the earth’s end: the Fuegians seem to be lesser versions of their northern neighbors. The passage sheds light on Darwin’s particular fascination with the Fuegians: they impress upon him the idea that humans can degenerate.<sup>108</sup> Furthermore, his speculative history of the Fuegians echoes the British naval activities along the same coast; his disgust carries anxieties about the dangers of imperial travel. His own breakaway tribe on board the *Beagle* reenacts that imagined ancient migration; they, too, build sea vessels and are “compelled” by an inexplicable restlessness to leave a fertile northern region and to travel down the “backbone of America.”

This anxiety had a history. The public perception of imperial travel had been remade throughout the eighteenth century, since earlier explorations of distant lands had been considered morally compromising for both British travelers and those at home reading their accounts. Contact with foreign environments and strange peoples seemed to threaten the identity of the British traveler, who supposedly carried particular moral values. In his study of eighteenth-century voyage narratives, Jonathan Lamb comments briefly on Darwin’s theory of evolution, placing it at the end of a long philosophical debate regarding the conflict between the instinct of self-preservation and the social contract—a debate played out in the genre of the voyage narrative. According to Lamb, “the mariner who told a tale of wonders of the terra incognita made explicit the division between private excitements and public standards of truth and

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<sup>108</sup>Ian Duncan describes the contrast in the *Journal* between the savage Fuegian and the Europeanized Jemmy Button as symptomatic of contradictions in Darwin’s writing between monogenesis and polygenesis, subjective experience and empirical observation, and cultural values and reason: “Darwin’s Fuegian encounter recurs throughout his literary career, where it assumes the special status of a moment of truth, the touchstone of an unpleasant reality, embedded in the subsequent stages of theoretical development without itself undergoing rationalization” (Duncan 23). One might say that the sight “of man in his lowest and most savage state” symbolizes an undeniable truth (*Journal* 504). Expanding on Duncan’s insight into Darwin’s use of the Fuegian to establish his moral and scientific authority, Cannon Schmitt describes Darwin’s writing as a “struggle against forgetting” that takes the unforgettable Fuegian as a symbol of the civilized man’s “imperative to remember” (71).

probability” (*Preserving the Self* 6); these mariners’ frequent recourse to the *je ne sais quoi* (the incommunicable) represented a new fissure between the private and the public self. In other words, the physical distance between traveler and reader, and between periphery and center, revealed the social affections as tenuous in comparison to a deep, animalistic desire to survive. Lamb glosses the *Journal* as a late voyage narrative that fully reconciles the individual to empire, in contrast to earlier narratives that register fissures between the private experience of the sailor and the standards of the reader located at the imperial center. By the 1830s, these voyages were becoming respectable and useful in the expansion of British influence overseas. As the *Quarterly Review* put it in a review of Fitzroy, King, and Darwin’s combined accounts, those naval officers “who have given themselves up to nautical surveying and discovery” render a “vast” and “immeasurable value” “to science, to commerce, to their country, and to the whole civilised world” (194).

The *Journal* undeniably participates in the imperial project, and Darwin often signals this by celebrating the spread of British values. For example, in his account of Tahiti, he describes harmonious relations between his party and the Tahitian royalty, who understand “international customs and laws,” and he celebrates the missionaries who preceded him, claiming that “dishonesty, intemperance, and licentiousness have been greatly reduced by the introduction of Christianity” (414). The *Journal* is complicit with a national effort to expand British influence on religious, economic, and political fronts, but as George Basalla points out, Darwin’s seemingly disinterested descriptions of landscape, animals, and manners obscure the purpose of the *Beagle* expedition. In the early nineteenth century, Basalla reminds us, Britain used its naval power to control the emerging markets of South America; to this end, the British government sent several expeditions, of which the *Beagle* was one, to survey the coast of that continent. Historically, British imperialism was moving beyond the slave trade toward the control of global markets, and in this light even Darwin’s statements against slavery seem to display “the philanthropic spirit of the British nation” as a justification for economic colonization (*Journal* 505).

Yet, as the case of the Fuegian (as degenerated northerner) suggests, the *Journal* at times recognizes the threat of imperial expansion to a British character defined by its moral and aesthetic sensibilities. As he concludes his narrative, Darwin suggests that Britain needs something that transcends economic or religious motives to guide its expansion into the new world: a taste for natural science.

If a person asked my advice, before undertaking a long voyage, my answer would depend upon his possessing a decided taste for some branch of knowledge, which could by this means be advanced. No doubt it is a high satisfaction to behold various countries and the many races of mankind, but the pleasures gained at the time do not counterbalance the evils. It is necessary to look forward to a harvest, however distant that may be, when some fruit will be reaped, some good effected. (501)

This passage encapsulates a claim that Darwin’s innumerable landscape descriptions suggest—that natural science, like poetry before it, serves as a cure for modern evils. The traveler who would retrace Darwin’s itinerary (just as he retraced that of Cook) needs to possess a “decided taste” for a specific “branch of knowledge.” Here we can detect the influence of Wordsworth’s “Preface.” The evils of travel echo those of modern life: “want of room, of seclusion, of rest; the jading feeling of constant hurry; the privation of small luxuries, the loss of domestic society and even of music and the other pleasures of the imagination” (*Journal* 501). The ship is a compact city, as the traveler carries with him many of the conditions that Wordsworth deplors in the

“Preface”—crowding, constant motion, aesthetic deprivation. As Marx predicted and Burke feared, the imperatives of profit and consumption have alienated individuals from social beauty, exposing the “naked, shameless, direct, brutal exploitation” once veiled by “religious and political illusions” (Marx and Engels 5). Modernity risks becoming a version of Tierra del Fuego—where individual self-interest has triumphed, where there is nothing to stimulate thought and feeling—but it is more dangerous for being a mobile condition, transplantable to anywhere in the world. This apprehension of modernity as a mimic of primitivity is not new: the modern ship, the vanguard of economic development, threatens to induce a condition Wordsworth called “savage torpor,” a state uncannily similar to that of the naked savage.

Nearly undetected, given the *Journal*'s bounding, youthful enthusiasm, these anxieties speak to a moral purpose. When Darwin advises aspiring naturalists, he also addresses the general reader, who can safely travel along with him, if armed with a taste for nature.<sup>109</sup> Just as poetry lightens the “weary weight / Of all this unintelligible world,” natural science compensates the jaded traveler for the loss of social pleasures, but it does so by substituting nature for art, instead of substituting art for nature (“Tintern Abbey” 40-41). The man at sea is alienated from art, and just as poetry was once cast as nature’s surrogate, natural science here steps in as a restorative activity. The *Journal* either allies natural science with poetry or perhaps more boldly supplants poetry with natural science.

In doing so, the *Journal* appeals to a taste for the countryside and for natural history widespread in England by the nineteenth century. In his history of British attitudes toward nature, Keith Thomas characterizes this taste for the country as nostalgic:

This feeling for the countryside, real or imagined, was not confined to the upper classes, but was common to many members of the first industrial nation. Already in the late eighteenth century it had begun to produce the characteristic homesickness of English travelers abroad. . . . As the factories multiplied, the nostalgia of the town-dweller was reflected in his little bit of garden, his pets, his holidays in Scotland or the Lake District, his taste for wild flowers and bird-watching, and his dream of a weekend cottage in the country. (13-14)

Elizabeth Gaskell’s condition-of-England novel *Mary Barton* offers a good example of this phenomenon: the factory worker Job Legh preserves his simple, rustic values through the hobby of natural history, even while living in a volatile, disease-ridden Manchester. Legh’s curiosity about the New World (to which the protagonists immigrate in the final pages of the novel) is strictly scientific, free of any economic interest. The *Journal* touches on many of the themes apparently dear to British readers: the English seafarer’s homesickness, a love of gardens and dogs, and an appreciation of flowers and birds. A taste for natural history is associated with these simple hobbies and sentiments, all of which seem to ameliorate the ills and inequalities of modern industrial culture.

By elevating a taste for natural science and associating it with a disinterested, seemingly direct observation of nature, Darwin describes moral restoration on the national level—as the sailor, naturalist, and reader at first pursue nature for itself, enjoying the visual pleasures of landscape, yet later recollect those observations in order to advance the larger, nobler goals of

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<sup>109</sup> Adrian Desmond argues that Darwin promoted the democratization of science while protecting the sensibilities of its traditional societies. See Desmond’s discussion of the rise of radical science, which challenged the conservatism of “gentlemanly geology” and “natural history” (18).

empire. In the last paragraphs of the *Journal*, he reports on his representative moral improvement:

In conclusion, it appears to me that nothing can be more improving to a young naturalist, than a journey in distant countries. It both sharpens, and partly allays that want and craving, which, as Sir J. Herschel remarks, a man experiences although every corporeal sense be fully satisfied. The excitement from the novelty of objects, and the chance of success, stimulate him to increased activity. Moreover, as a number of isolated facts soon become uninteresting, the habit of comparison leads to generalization. On the other hand, as the traveller stays but a short time in each place, his descriptions must generally consist of mere sketches, instead of detailed observations. Hence arises, as I have found to my cost, a constant tendency to fill up the wide gaps of knowledge by inaccurate and superficial hypotheses. (505-06)

Moral improvement involves becoming, not only more like a sailor, but also more like the human being described by Erasmus Darwin and Wordsworth: physically and intellectually active, driven by a combination of desire and social conscience.<sup>110</sup> If modern European culture fails to counteract the restlessness and aesthetic deprivation that prevents the “play” of the “higher powers of mind,” the revolution to savagery will be complete. On the ship, as in Tierra del Fuego, there would be nothing “for imagination to picture, for reason to compare, for judgment to decide upon,” unless a traveler cultivated some kind of interest (216).

In the effort to separate the fates of the southward-wandering Briton and his double—the Fuegian who cannot yet “boast of human reason” or even of “the instinct of [domesticated] animals”—Darwin describes natural science as a powerful art through which the Englishman can cultivate human qualities of sympathy, taste, and reason. The *Journal* repeatedly attempts to meet the psychological and physical challenges of null environments, refusing to succumb to a savage numbness induced by nature’s indifference. In contrast to the Fuegian, the civilized man can appreciate the stimulation that nature, when studied, offers, and by pursuing a taste for natural science he preserves his historical gain, maintaining the gap between himself and the savage.

It is no coincidence that the distinctively human exercise of intellect and sympathy seems synonymous with natural science itself. Readers of the “Preface” will be familiar with this rhetorical strategy. In being more human, the naturalist is also like a poet: “stimulate[d]” to “increased activity” by natural novelties, both figures ultimately direct this pleasure toward greater ends. More particularly, sympathy and intellect are closely tied to the act of observation, recalling the tradition of Burke, Erasmus Darwin, and (to a lesser extent) Smith, in which sympathy begins as an act of observation. The *Journal* echoes that tradition and perhaps more particularly Wordsworth’s methods in *Lyrical Ballads* and *The Excursion*. Like an itinerant poet, Darwin observes individuals and natural objects, driven by the idea that comparisons of living varieties might produce a theory that can explain nature and society.

In the context of this greater argument, Darwin models an advanced aesthetic and scientific appreciation of the natural world. The *Journal*’s landscape descriptions suggest that the

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<sup>110</sup>The idea that British sailors embodied a national morality seems to have been a commonplace by this point. In Mary Shelley’s *Frankenstein* (1818), Robert Walton praises his lieutenant, even if he is not cultivated enough to be the friend he seeks: “He is an Englishman, and in the midst of national and professional prejudices, unsoftened by cultivation, retains some of the noblest endowments of humanity” (53). In this quotation and in the novel at large, Shelley alludes to a threat to mankind’s moral endowments.

activity of appreciating and observing landscape cultivates the human capacities of sympathy and reason. Landscape descriptions had been a fad since the early eighteenth century, appearing in travel writing, poetry, and fiction, but Darwin seems to redeploy a more specific thesis from *The Temple of Nature* that landscapes stimulated the intellectual development of primeval man:

Slow could the tangent organ wander o'er  
The rock-built mountain, and the winding shore;  
No apt ideas could the pigmy mite,  
Or embryo emmet to the touch excite;  
But as each mass the solar ray reflects,  
The eye's clear glass the transient beams collects;  
Bends to their focal point the rays that swerve,  
And paints the living image on the nerve

.....  
And the mute language of the touch is sight (3.131-38, 144)

The ability to comprehend large masses with the eye belongs particularly to humans, and there is the additional idea that civilized man (in contrast to the “pygmy”) can appreciate the curves of the shore, as well as understand nature’s construction of the “rock-built” mountain. Distance and steepness pose no obstacles to the evolved, civilized mind. Emphasizing that this kind of observation involves mental skill, the *Journal* opens upon a dull rather than exotic landscape, on which the naturalist applies his ability to recognize what might go unnoticed. “The neighbourhood of Porta Praya, viewed from the sea, wears a desolate aspect,” and though this view would seem uninteresting to most, he finds meaning in its emptiness (1). Like a face scarred by past experience, the landscape is read sympathetically. Its “aspect” shows the effects of the “volcanic fires of a past age, and the scorching heat of a tropical sun” on the soil. Sympathetic engagement is productive, leading to a scientific hypothesis: in one gesture, he demonstrates that he is the “person qualified to examine the land” that Captain Fitzroy required for hydrographic survey, that he can evaluate the land in aesthetic terms, and that he recognizes aesthetic pleasure as a route to scientific knowledge.<sup>111</sup>

Negative scenes and wastelands fascinate Darwin, providing him occasions to display instinctive pleasures, as well as a specialist’s skill. Located north of Tierra del Fuego, the desolate plains of Patagonia enable him to prove civilized man’s ability to generate imaginative pleasures and scientific knowledge from a mere waste. Of the three landscapes that imprint themselves on his memory—the Brazilian forest, Tierra del Fuego, and the plains of Patagonia—the latter “frequently cross[es] before [his] eyes,” despite the fact that “these plains are pronounced by all wretched and useless” (503). Echoing Kant’s concept of the “mathematical

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<sup>111</sup>During the first Beagle expedition to survey the coast of South America, Captain Robert Fitzroy realized that he needed a specialist in geology. He determined “that if ever I left England again on a similar expedition, I would endeavour to carry out a person qualified to examine the land; while the officers and myself would attend to hydrography.” From his *Narrative of the Surveying Voyages of His Majesty’s Ships Adventure and Beagle between the years 1826 and 1836*; quoted in Patrick Armstrong’s *Darwin’s Other Islands* (3). Since he had no training in hydrography and was often seasick, Darwin took little aesthetic or scientific interest in the ocean. For him, the “illimitable ocean” was a “tedious waste, a desert of water” (502).

sublime,” in which the mind is “given a large unit for the measure of the imagination,” Darwin makes the visually endless plains a symbol of infinite geological time (Kant 1: 118).<sup>112</sup>

[The plains] can be described only by negative characters; without habitations, without water, without trees, without mountains, they support merely a few dwarf plants. Why then, and the case is not peculiar to myself, have these arid wastes taken so firm a hold on my memory? Why have not the still more level, the greener and more fertile Pampas, which are serviceable to mankind, produced an equal impression? I can scarcely analyze these feelings: but it must be partly owing to the free scope given to the imagination. The plains of Patagonia are boundless, for they are scarcely passable, and hence unknown: they bear the stamp of having lasted, as they are now, for ages, and there appears no limit to their duration through future time. If, as the ancients supposed, the flat earth was surrounded by an impassable breadth of water, or by deserts heated to an intolerable excess, who would not look at these last boundaries to man’s knowledge with deep but ill-defined sensations? (503-04)

Whereas the Fuegian mind is stultified and emptied by Tierra del Fuego, the naturalist exerts extraordinary sensibility in the face of a hostile environment: he is instinctively drawn to the landscape, whose emptiness gives free play to his powerful imagination, producing sensations experienced by people throughout the ages of humanity.<sup>113</sup> However, the seemingly infinite plains represent less an impassable barrier to knowledge than a site on which to generate possible answers to sublime mysteries. In his earlier account of Patagonia, he reports that while his companions felt “dissatisfied” by their expedition up the Santa Cruz River, to him “the ascent afforded a most interesting section of the great tertiary formation of Patagonia” (188). The expedition bares hundreds of miles of coast as “one great deposit,” enabling him to generate a “history of geological changes” from the odd structure of the plains, which “rise like steps one behind the other” (172). Evidence that this formation is the result of “slow and gradual changes” rather than cataclysmic ones leads him to read the region’s fossils a signs of parallel organic transformations. In one of the lower plains, he finds the fossil of the *Macrauchenia Patachonica*, an extinct, camel-like quadruped, and identifies it as a distant relative of the contemporary guanaco, challenging the idea of divine creation by offering proof of species extinction. The Patagonian plains serve as a rich site for evolutionary speculations:

This wonderful relationship in the same continent between the dead and the living, will, I do not doubt, hereafter throw more light on the appearance of organic beings on our earth, and their disappearance from it, than any other class of facts. (173)

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<sup>112</sup>Kant provides Darwin with a means of representing an immense natural history. Even though Kant privileges the human, he observes that the eternity of nature threatens to overwhelm the human imagination, which struggles to grasp expanses that exceed the human scale: “Nature is therefore sublime in those of its phenomena, whose intuition brings with it the Idea of their infinity. This last can only come by the inadequacy of the greatest effort of our Imagination to estimate the magnitude of an object” (1: 116).

<sup>113</sup>In contrast to voyagers of a previous generation, Darwin utilizes natural science to defuse the existential and epistemological threat of foreign realms. Jonathan Lamb observes that the use of litotes was common in narratives of scientific voyages to the South Seas: “Such negative methods of representation are an index of the profound uncertainty of navigators, travelers, and settlers in the Pacific. Europeans were frequently unsure of where they were, who they were, and what they knew” (Introduction xv). Lamb argues that voyage narratives gradually lose their radical uncertainty, as natural science produces standards of believability. I would add that the *Journal* does not seek to demystify and conquer nature, so much as to open up new areas for aesthetic appreciation.



The plains are sublime, but the naturalist also makes them legible, both as a whole structure and as a detailed fossil record. If the *Journal* at times seems encyclopedic or multi-generic, rather than cohesive, it is because Darwin aims to unearth and collect overlooked connections: between landscapes and fossils, between fossil remains and living animals, and between non-utilitarian aesthetic pleasures and scientific knowledge. With this approach, he suggests that, despite reactions against science, his practices do not rob the natural world of mystery, but rather reinvest it with “wonderful” new questions and thrilling hypotheses.

As he links fossils with origins, and knowledge with feeling, Darwin presents himself as both poet and scientist, particularly equipped to give meaning to a massive collection of objects and anecdotes, or (to use Coleridge’s phrase) to find “unity in multiteity.” He practices this skill when confronted with the overwhelming pleasures of a teeming Brazilian forest. Whereas other “learned naturalists” describe scenes “by naming a multitude of objects, and mentioning some characteristic feature of each,” he describes not the objects themselves, but rather their effect upon the mind, for “epithet after epithet was found too weak to convey to those who have not visited the intertropical regions, the sensation of delight which the mind experiences” (496). He uses non-mimetic language, or poetry, to evoke or generate consensus, following Burke’s observation that poetry “affect[s] rather by sympathy than imitation” and “display[s] rather the effect of things on the mind of the speaker, or of others, than to present a clear idea of the things themselves” (*Enquiry* 157). The passage reproduces not the details of the scene but rather their mental effect, implicitly linking the reader’s consciousness with Darwin’s. The reader also vicariously experiences a moral and intellectual elevation: “It is easy to specify the individual objects of admiration in these grand scenes, but it is not possible to give an adequate idea of the higher feelings of wonder, astonishment, and devotion, which fill and elevate the mind” (24). In Darwin’s hands, natural science is no enemy to wonder and appreciation, but rather a means of their preservation.

In such passages, natural science not only delivers nature to the reader as a territory in which to exercise aesthetic and moral capacities but also defamiliarizes nature, providing novel ways of reading. Although Darwin follows a long tradition of valuing nature as an aesthetic object, he is the first to identify an impersonal force, natural selection, as a creator that makes animals into artists.<sup>114</sup> Freed from the constraints of natural theology, which recognizes only one creator, natural science seems to cultivate a finer appreciation of natural objects, now recognized as products of labor. When understood as the work of “little architects,” coral reefs constitute art:

We feel surprise when travellers tell us of the vast dimensions of the Pyramids and other great ruins, but how utterly insignificant are the greatest of these, when compared to these mountains of stone accumulated by the agency of various minute and tender animals! This is a wonder which does not at first strike the eye of the body, but, after reflection, the eye of reason. (465)

To the untrained eye, the reefs would seem insignificant. The “eye of reason,” instructed in facts of animal behavior, correctly recognizes the reefs as structures on the scale of the ancient Pyramids. With this definition of art, Darwin appeals to an appreciation of Gothic architecture and of organic form more broadly, giving more value to the creative process than to the final product. Although Ruskin later attacks Darwin’s representations of nature as “spiritually, morally, and aesthetically impoverished,” Darwin here praises coral architecture according to the

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<sup>114</sup>For a discussion of nature as art, see Dennis Dutton’s “Aesthetics and Evolutionary Psychology” (693-704).

principles of “On the Nature of Gothic,” as he valorizes the collaboration of nameless artists across multiple generations.<sup>115</sup>

The concept of animal art is not entirely original, as the *Journal* follows Erasmus Darwin’s references to animals’ primitive, small-scale artistry. According to Erasmus Darwin, we can see early stages of mind in the productions of the wasp (a “fine architect” that “surrounds his domes / With paper-foliage, and suspends his combs”), the “cunning Spider” (which “Waves his firm net immeasurably fine”), the Wren (which chooses “soft down” and “cradling moss” for her nest), and the “Silkworm-Nymphs” (which “form their silken beds”). With animals, as well as humans, art manifests mind (*TN* 3.411-22). In contrast to Buffon, he does not reserve for humans the desire and ability to produce comfortable dwellings. In fact, his comparison of these animals’ “fine volitions” to craftsmanship leads him to “link the reasoning reptile to mankind” by the end of the stanza, where he exclaims to his reader: “Stoop, selfish Pride! Survey thy kindred forms / Thy brother Emmets, and thy sister Worms!” (*TN* 3.433-34). Erasmus Darwin, however, veers back and forth between deflating human pride and reaffirming human superiority, as in this gloss of “reason” in *The Temple of Nature*: “The facility of the use of the voluntary power, which is owing to the possession of the clear ideas acquired by our superior sense of touch, and afterwards of vision, distinguishes man from brutes, and has given him the empire of the world, with the power of improving nature by the exertions of art” (117n.).

If artistic production and aesthetic taste serve, quite literally, as measures of humanity in the *Journal* and *The Temple of Nature*, then these texts become meta-poetic, both recording and enacting the process of refinement and differentiation that is natural history. As Charles Darwin places a taste for natural history on the order of a taste for poetry, he adapts Wordsworth’s project and continues that of Erasmus Darwin, who saw little difference between the philosophical objectives and aesthetic pleasures of natural science and poetry. Charles Darwin attempts the same project in a different time, through a different genre: the *Journal* is “poetical” without actually being poetry. Yet resemblances between their projects raise the question of why *Origin* and *Descent of Man* seemed to explain human nature more fully or more consistently than the works of Erasmus Darwin.<sup>116</sup>

### **Some Versions of Pastoral: *On the Origin of Species* and *Descent of Man***

Whereas Erasmus Darwin dizzies and dazzles his reader, alternately representing man as a sibling of worms and as a ruler of animals, Charles Darwin unites those two contrary images.

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<sup>115</sup>A key difference might be that Ruskin seeks to value the labor of the individual, whereas Darwin values labor without emphasis on the individual. For a discussion of Ruskin’s attack on Darwin’s visual aesthetics, see Jonathan Smith’s *Charles Darwin and Victorian Visual Culture* (1-43).

<sup>116</sup>Charles Darwin differentiates his theory from that of Erasmus Darwin in the *Autobiography*: “I had previously read the *Zoönomia* of my grandfather, in which similar views [as Lamarck’s] are maintained, but without producing any effect on me. Nevertheless it is probable that the hearing rather early in life such views maintained and praised may have favoured my upholding them under a different form in my *Origin of Species*. At this time I admired greatly the *Zoönomia*; but on reading it a second time after an interval of ten or fifteen years, I was much disappointed, the proportion of speculation being so large to the facts given” (49). Nora Barlow describes Charles Darwin’s insistence that neither the ideas of Erasmus Darwin nor Lamarck influenced his own work, affirming his claim that his theory, in contrast to theirs, was based on collected facts, rather than speculation. In the appendix to the *Autobiography*, which Barlow edited, she attempts to explain why “Erasmus Darwin, like his grandson, formulated an evolutionary system of world order, yet left no lasting mark on commonly held beliefs” (149).

We see how he resolves this contradiction in the chapter of *Origin* entitled “Struggle for Existence”:

We behold the face of nature bright with gladness, we often see superabundance of food; we do not see, or we forget, that the birds which are idly singing round us mostly live on insects or seeds.... we forget how largely these songsters, or their eggs, or their nestlings, are destroyed by birds and beasts of prey....

It will convince us of our ignorance on the mutual relations of all organic beings; a conviction as necessary, as it seems to be difficult to acquire. All that we can do, is to keep steadily in mind that each organic being is striving to increase at a geometrical ratio; that each at some period of its life, during some season of the year, during each generation or at intervals, has to struggle for life, and to suffer great destruction. When we reflect on this struggle, we may console ourselves with the full belief, that the war of nature is not incessant, that no fear is felt, that death is generally prompt, and that the vigorous, the healthy, and the happy survive and multiply. (*Origin* 62, 78-79)

This passage recalls pastoral poems such as Thomas Gray’s “Elegy Written in a Country Churchyard,” in which the sophisticated speaker imagines and mourns the rustic of “destiny obscure,” comparing him to a gem “in unfathomed cave” and to a flower “born to blush unseen” (30, 54-55). Darwin brings into sympathetic view the obscure organism, whose struggle and role in species development would otherwise remain unknown. The ideas meant to arouse the reader’s sympathy for the “organic being” include the following: that it seeks an uncomplicated happiness; that it must suffer; that it must die; that it does not pity itself; and that innumerable beings like it will be destroyed without even this elegy as a record. In context, Darwin refers to animals and plants, but he conveys the feeling that humans need consolation, as they share the condition of these dispensable beings. Affectively included in these “mutual relations,” the reader is meant to reflect upon mortality and the uncertainty of individual fortunes.

This deliberate emphasis on common struggle differentiates his account of human nature from Erasmus Darwin’s. Edward Manier has commented on the significance of the word “struggle,” arguing that Darwin combines with remarkable “linguistic originality” the three metaphors of dependence, chance, and struggle (180).

Robert Stauffer’s edition of the “long version” of Darwin’s account of natural selection throws more light upon the choice of the metaphor of “the struggle for existence.” Stauffer points out that in the original draft of the relevant section, Darwin had used the title “War of Nature” rather than “Struggle of Nature,” and that he had chosen Hobbes’ “all nature is at war” as his topic sentence. Darwin considered but set aside a phrase of Lyell’s, “equilibrium in the number of species.” It was, he wrote, “more correct,” but it expressed “far too much quiescence.” The choice of “struggle,” therefore, was clearly a deliberate selection of a term intermediate between “war” and “equilibrium”.... These uses of “struggle” represent an important move away from the simple conceptions of a direct contest between competing organisms, and toward the more statistical concepts of varying chances of survival and of leaving fertile descendants. (180-81)

“Statistical concepts” acknowledge differences of fortune, while uniting all beings in a common struggle against death. With his word choice, Darwin articulates a distinct and precise

transmutation theory, in which the affect is perfectly balanced: the word “war” would have been incendiary, while the word “equilibrium” would have been abstract or suggested a balance attained without cost. Manier goes on to say that the word “equilibrium” would have indicated a “correct[ly]” acentric view of the system of nature, whereas “struggle” is anthropocentric. The passage is also anthropomorphic, in the sense that Darwin imagines that animals can be “happy,” or pleased with their situation, but it is also acentric, in that both humans and animals are subject to “hap,” or chance.

Building further upon Manier’s observations, I argue that the word “struggle” brings in “poetical” ideas of wasted effort and uncertain fortunes, and that Darwinian evolution—as it evokes struggle and sympathy within a “web of existence”—constitutes a version of pastoral as theorized by William Empson in *Some Versions of Pastoral* (1935). In its various forms, Empson explains, pastoral “gives an impression of dealing with life completely,” as it recognizes “waste and limitation” and represents all figures in the human spectrum: the vulgar and the noble, the obscure and the historical, and the poor and the wealthy (29). To create the effect of total representation, pastoral dramas often combine “the sentiment and the ‘pseudo-parody to disarm criticism’” (57); understood as a trans-generic phenomenon, pastoral unites individuals through mutual sympathy. Like the authors of that tradition, Darwin produces the effect of total representation by refusing “quiescence”: he counts the lives of the obscure and regrets the fact of struggle, avoiding the greater error of ignoring or minimizing it, while also avoiding the idea of constant war. The phrase “Struggle of Nature” depicts nature as both exacting and benevolent, leading the reader to see progress and good overall: he feels that existence is a blessing despite pain, that happiness prevails over suffering, and that death, whenever it comes, offers peace.

Drawing upon this literary convention, Darwin simultaneously unifies and stratifies humans and animals, characterizing the “mutual relations of all organic beings” as sympathetic, rather than primarily competitive.<sup>117</sup> If pastoral is “based on a double attitude of the artist to the worker, of the complex man to the simple one (‘I am in one way better, in another not so good’),” then Darwinian evolution is based on a “double attitude” of the human to the animal (Empson 14). The passage from *Origin* evokes inter-species kinship but at the same time activates the reader’s particularly human reason and sympathy. The reader possesses enough reason to “acquire” an understanding of Malthusian theory through a guided tour of nature, even as he regrets those facts. The sympathy is made more poignant—and the facts of nature more incontrovertible—with the idea of human powerlessness against nature: “all we can do” is accept these conditions and “console ourselves” that nature is merciful, even generous, in her own way. This sympathy quietly does argumentative work. As Darwin exercises his reader’s ability to see and to sympathize, he introduces natural selection—the idea that “that the vigorous, the healthy, and the happy survive and multiply”—as a regrettable truth, evoking a familiar “structure of feeling” (to borrow Raymond Williams’ phrase).<sup>118</sup> As I will show later in this chapter, he gathers

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<sup>117</sup>Of course, Darwin is better known for revealing competitive struggle within and between groups, and he perhaps attempts to deemphasize that aspect of his theory by presenting organic relations in familiar terms. If evolutionary theory naturalized struggle in nature, then it also seemed to naturalize economic struggle in society, an idea taken up by radical Unitarians, according to Desmond and Moore: “Such a view demanded that the trammels be removed, that religious and civil disabilities be lifted, to allow everyone to compete freely to realize their God-given potential—to rise as nature and God intended” (*Darwin* 217).

<sup>118</sup>Williams uses the phrase “structure of feeling” in *Culture and Society* to refer to the dominant values and perceptions of a generation, particularly as relates to class. Of George Eliot, he writes: “Yet it is a fact that when she touches, as she chooses to touch, the lives and problems of working people, her personal observation and conclusion

this structure from conventional images of rustic life and from remembered “scraps of poetry” (*Notebooks* 529).

In comparing *Origin* to Empson’s versions of pastoral, I am not interested in the strict genre of pastoral but rather in the literary strategy that Empson traces within British aesthetics and (more speculatively) equates with literature itself. In its understated way, *Some Versions of Pastoral* contributes to the Marxist literary criticism and ideology critique of the twentieth century, by fixing upon a genre that addresses the social inequalities that attend economic development. As defined by M. H. Abrams, the “deliberately conventional” pastoral poem “express[es] an urban poet’s nostalgic image of the peace and simplicity of the life of shepherds and other rural folk in an idealized natural setting” (141). Empson identifies within the pastoral convention a “trick of thought” that unites the laboring and leisure classes, revealing literature’s function “to reconcile some conflict between parts of society” (19, 23). His book is a compact history of English literature, tracing “the pastoral process of putting the complex into the simple” and its ideological function in the works of Shakespeare, Marvell, Milton, Wordsworth, Lewis Carroll, and others (22). Recognizing the broader reach of that study, Paul De Man describes Empson as a critic who progressed beyond his formalist training, writing that “[u]nder the deceitful title of a genre study, Empson has actually written an ontology of the poetic, but wrapped it, as is his wont, in some extraneous matter that may well conceal the essential” (239). For De Man, “an ontology of the poetic” is a description of the permanent and necessary division between the artist and object, rather than the Marxist idea that poetry arises historically as a way to maintain rigid class divisions—an idea Empson is attracted to, but finds to be not fully explanatory of literary phenomena. Pastoral, Empson writes, could be produced within any political system, even a socialist one, for it is “a queerer business . . . permanent and not dependent on a system of class exploitation” (6). In short, Empson describes pastoral as if it were equivalent to aesthetic representation in the British tradition, and he speculates that it also operates in Eastern literature and philosophy (20-21).

The ideological usefulness of pastoral shows itself in the balanced contradictions of Darwin’s theory. Empson’s study gives us a purchase on understanding how Darwin aestheticizes human descent from animals. The parallel I draw is not disembodied, for in the transmutation notebooks, we find that Darwin is well versed in the comparisons typical of pastoral. In fact, the *Notebooks* suggest that pastoral conventions help him to conceptualize affective and developmental relationships between simple and complex figures. In the following passage, he imagines how primary pleasures—such as amoral delight and “sensual enjoyment”—graduate into the higher secondary ones of “imaginary pleasures” and conscience (534).

A healthy child is <<more>> entirely happy . . . than perhaps well <<regulated>> philosopher—yet the philosopher has a much more intense happiness— so it is . . . when same man is compared to peasant. . . . pleasure of intellect affection excited, pleasure of imagination . . . these pleasures are so very great, that every one who has tasted them, will think the sum total of happiness greater, even if mixed with some pain.—than the happiness of a peasant, with whom sensual enjoyments of the minute make large <parts> portion of daily <happiness> <<pleasure>>.  
(*Notebooks* 549)

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surrender, virtually without a fight, to the general structure of feeling about these matters which was the common property of her generation” (*Culture and Society* 117).

The child and peasant are in one way superior to the philosopher because they are, respectively, more “entirely happy” and “daily” connected to the “sensual enjoyments of the minute”; in another way, they are inferior because the philosopher experiences the more “intense happiness” produced by memory and conscience. Since their minds revolve upon the present rather than the past, the child and peasant enjoy happiness unmarred by thought—though (if educated) each could gain the knowledge, pain, and maturity of the philosopher. Although the child, peasant, and philosopher vary in intellectual capacities and moral expression, the three figures seem to add up to humanity, as their contrasting qualities seem to complement each other.

In this contrast between the complex man and naturals, differences of cognitive ability and emotional depth are the result of developmental difference, and the contrasts (based on class and age) suggest that Darwin understood development in educational, economic, and biological registers. As is common in pastoral, the child and the peasant are naturals, uncorrupted by social influence, and the educated philosopher recognizes the basic traits of humanity in these simpler, former versions of himself. His superiority rests on a distinction between fleeting sensual pleasure and stored intellectual pleasure (memory), but in turn he has become alienated from sensation and unadulterated joy:

*Simple happiness* <<as of a child>> is large proportion of pleasant to unpleasant mental sensations in any given time.... *Entire happiness*. not being so desirable as <broken> *intense* happiness even with some pain.... (*Notebooks* 550)

The philosopher/adult can no longer experience the “entire happiness” of childhood, and he does not want to recover that former state, choosing instead the distinction of “<broken> *intense* happiness even with some pain.” The adult’s situation seems superior since lapses of pleasure and the intermixture of pain produce moments of ecstasy; for the child, memories of unhappiness do not mar the happiness of the present. Development is possible: the child and peasant could become the philosopher through education and maturation, though their “entire happiness” seems enviable in its own way.

*Descent of Man*’s comparison of humans to animals parallels this conventional comparison of stratified human figures. Darwin constructs a “double attitude” toward animals in order to establish that they possess taste, intellect, and sympathy in an “incipient” form (1: 105). Skillfully managing his “Comparison of the Mental Powers of Man and the Lower Animals,” Darwin celebrates the “rudiments” of human faculties in animals, choosing anecdotes from familiar species, such as dogs, or exotic ones, such as monkeys. These “higher animals” exhibit humanlike emotions:

Most of the more complex emotions are common to the higher animals and ourselves. Everyone has seen how jealous a dog is of his master’s affection, if lavished on any other creature; and I have observed the same with monkeys. This shews that animals not only love but have the desire to be loved. Animals manifestly feel emulation. They love approbation or praise; and a dog carrying a basket for his master exhibits in a high degree self-complacency or pride. There can, I think, be no doubt that a dog feels shame, as distinct from fear, and something very like modesty when begging too often for food. (1: 41-42)

The emotional appeals of this passage nearly disguise its scandalous content: on the one hand, a dog exhibits a humanlike understanding of right and wrong; on the other hand, it loyally serves a human master. In the same manner, Darwin describes “the more intellectual emotions and faculties” of animals—such as imagination, reason, taste, and sympathy—in order to prove that these behavioral “rudiments” serve as the “basis for the development of the higher mental

powers” (1: 42). A baboon’s “adoption” of orphaned kittens and monkeys indicates a capacity for sympathy that exceeds intra-species interest (1: 41); the play of “puppies, kittens, and lambs”—a capacity for “happiness” (1: 39); the song of birds—a capacity for language (1: 59); and the “vivid dreams” of a dog, or his reflections on “past pleasures in the chase” (1: 46, 62)—capacities of imagination, self-consciousness, and abstraction. Each of these animals possesses a less-developed version of a human capacity, and repeated examples of this shared trait simultaneously prove human superiority and human descent from animals.

As he unites animals and humans, while maintaining the latter’s superiority, Darwin fixes on memory to explain human development, building upon a common proposition that moral ideas would be impossible without capacities of recollection. Wordsworth’s description of poetic composition as “recollection in tranquility” has been understood in this context, as the poet demonstrates memory’s power to generate conscience and habitual morality. In *Descent of Man*, too, memory is integral to the formation of conscience, which “looks backwards and judges past actions” (1:91); a “moral being” is able to “compar[e] his past and future actions or motives” and to “approv[e] or disapprov[e] them” (1: 88). Animals are not categorically different—even dogs “possess something very like a conscience”—but man possesses a more active intelligence and memory, and, therefore, a greater degree of morality: “Man from the activity of his mental faculties, cannot avoid reflection: past impressions and images are incessantly passing through his mind with distinctness” (1: 78, 89). This model of a mind that “cannot avoid reflection” parallels Wordsworth’s description of “good poetry” as a “spontaneous overflow of powerful feelings,” tranquilized by the act of reflection: if a man is “originally possessed of much organic sensibility,” “continued influxes of feeling are modified and directed by [his] thoughts,” so that he “discover[s] what is really important to men”; through this process, he “must necessarily be in some degree enlightened, his taste exalted, and his affections ameliorated” (*LB* 158-59). Reviewing its experiences and thoughts, the mind cultivates itself but first requires an original endowment of “organic sensibility” from nature, as well as a stimulus to thought. For Wordsworth, poetry mimics the principle of cultivation in nature, purifying man of his grosser feelings by enhancing the power of reflection. Darwin emphasizes the same mental capacity, but he offers a more explicit natural history of reflection.

Darwin’s conjectural history echoes the Wordsworthian appropriation of natural cultivation that I described in Chapter Two. Just as nature endows the poet (as a representative of man) with innate capacities and then further develops those faculties through stimulation, a combination of factors—organic capacity, stimulation, and natural law—developed a man “from some lower form” (1: 10). In *Descent of Man*, we find Wordsworth’s emphasis on reflection and experience, his faith in human improvement, and his belief in the powers of nature. The individual acts freely and judges his own actions, but the argument depends upon the idea that cultivation unfolds autonomously in this manner—that human beings will necessarily construct moral norms that simultaneously serve the individual and common good.

Darwinian evolution is also, to some extent, a Wordsworthian pastoral. Darwin’s narrative of human development includes the same calculus of loss and compensation that we find in “Tintern Abbey” and *The Prelude*; the same contrast of a complex self to a simpler, former self; and finally the same recognition of history as the cause of alienation. I alluded to this calculus in the previous chapter: in acquiring higher, secondary feelings, the human being becomes alienated from primary ones. A sign of human cultivation is thus the melancholy of the sophisticate—the incomplete or “<broken> intense happiness” discussed earlier in this chapter. Thus, Darwin seems to recognize his modern, cultivated reader, as he implicitly associates an

“evolved” taste with a familiar, poignant narrative of social and individual maturation. In exchange for what he loses (youth, innocence, nature, divinity), the reader (like the Wordsworthian subject) receives “abundant recompense”: an experienced self, a memory, maturity, and superior virtue. The brutal disclosures of the first three chapters of *Descent of Man*—that humans and animals share the same basic physical, emotional, and moral-intellectual qualities—carry with them the consolation of human superiority.

### A Natural History of Disinterest

*Descent of Man* elaborates upon *Origin*'s implied comparison of man and animals. As it accounts for human capacities as products of natural history, *Descent of Man* introduces an aesthetics that superimposes the concept of development-over-time onto the aesthetic process of equalizing simple and complex beings. Darwin's histories of taste and sympathy explain the relationship between low and high things: between animals and humans, between survival instincts and sympathy, and between appetites and disinterested taste. Like other moral philosophers (and like Erasmus Darwin), Charles Darwin focuses on mental development and therefore presupposes the parallel developments of sympathy, taste, and morality—all of which require the existence of an advanced mind. In making his argument, Darwin locates the origin of these higher mental faculties (which on the surface do not seem to offer advantages for survival and reproduction) in “incipient” faculties that offer clearer advantages. Human development, he argues, should be understood as the progress from primitive self-interest to civilized disinterest—a selflessness that manifests itself in taste, sympathy, and the moral sense. His attempt to historicize the link between judgment and bodily sensibility follows upon the work of Hume, Macintosh, and Wordsworth, who participate in a general trend of empiricist aesthetics, but *Descent of Man* is undoubtedly the most literal of these attempted histories.<sup>119</sup>

After establishing that there is “no fundamental difference between man and the higher animals in their mental faculties,” Darwin argues that an unflinching comparison of those faculties adumbrates a narrative of evolutionary development (1:35). This explanation of human origins has been hidden in plain sight, he argues, due to an undeniable difference of status:

The greatest difficulty which presents itself, when we are driven to the above conclusion on the origin of man, is the high standard of intellectual power and of moral disposition which he has attained. But every one who admits the general principle of evolution, must see that the mental powers of the higher animals, which are the same in kind with those of mankind, though so different in degree, are capable of advancement. Thus the interval between the mental powers of one of the higher apes and of a fish, or between those of an ant and scale-insect, is immense. The development of these powers in animals does not offer any special difficulty; for with our domesticated animals, the mental faculties are certainly variable, and the variations are inherited.... The same conclusion may be extended to man; the intellect must have been all-important to him, even at a very remote period, enabling him to use language, to invent and make weapons, tools,

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<sup>119</sup>See Manier's discussion of Darwin's engagement with Macintosh, Hume, and Wordsworth on the topic of the moral sense (86-101).



traps, &c.; by which means, in combination with his social habits, he long ago became the most dominant of all living creatures. (2: 390)

As he refers to the wide differences between animal species, he classes humans among comparable species and identifies “intellectual power” and “moral disposition” among traceable characteristics. He acknowledges the “immense” distances between simple and complex organisms, while at the same time converting physical distance into an “interval” of homogenous time. Placing the types of man, fish, bird, etc., into time, he derives a historical narrative from a comparison. The concept of cultivation, in art and agriculture, enables him to make such a move: just as a breeder cultivates domestic species through artificial selection, producing desirable physical and behavioral characteristics, natural selection cultivates organisms, developing the simple organism into the complex one. But man’s rise to prominence requires violence. Cultivation is double-edged, generating the positive elements of society—intellect, beauty, agriculture, and art—as well as the tools and weapons that enable mankind to dominate other animals and war with each other.

While he easily correlates intellect and domination, Darwin finds it more difficult to explain human qualities less directly related to survival and reproduction. “The development of the moral qualities is a more interesting and difficult problem,” he writes, and throughout *Descent of Man* he pursues the argument that these more elusive qualities—related to sympathy and aesthetic taste—have their “foundation” in the “social instincts” (2: 391). He places metaphysical questions of the soul beyond the scope of natural history, but he finds it necessary to explain the origins of moral sense (noting “the impossibility of here passing it over”) and, furthermore, promotes evolutionary theory as a key to human nature: *Descent of Man* “attempt[s] to see how far the study of the lower animals can throw light on one of the highest psychological faculties of man”—his morality (1: 71). Although this proposition seems qualified and humble, he confidently argues that interspecies comparison sheds light on a longstanding philosophical problem. To study animals as naturals (that is, former selves) is to discover the origin of man’s most distinctive qualities. He presents *Descent of Man* not only as an argument for human descent from animals but also as a contribution to aesthetic and moral philosophy, as he approaches the “great question” of the origins of moral sense “from the side of natural history” (1: 71).

### *From Appetite to Aesthetic Taste*

Darwin begins to build his argument that animals possess incipient morality by describing their capacity for pleasure. In the *Notebooks*, he observes that animals and humans enjoy the same simple pleasures: humans share with birds a “taste for musical sound,” with dogs the pleasure of the “smell of Partridge,” and with all fruit-eaters the “taste for smell of flowers” (546). These tastes—for the hunt, for musical pattern, for sweetness, and for beauty—humanize the animals mentioned, as well restore man to innocent bodily pleasures. But common pleasure alone cannot prove kinship. The difference, he imagines, can be quantified: in contrast to animals, humans have multiplied their pleasures: they possess a greater “number of sources of pleasure & innate tastes” (546). More “sources of pleasure” could refer to a taste for luxuries, which could be acquired during an individual organism’s lifetime. For example, he points out that “many kinds of monkeys have a strong taste for tea, coffee, and spirituous liquors” and that they “smoke tobacco with pleasure” (*Descent* 1: 12). But the multiplication has also produced

higher, more abstract pleasures in man. While anecdotes of a common, literal taste prove “how similar the nerves of taste must be in monkeys and man,” the higher tastes resist physiological explanation and demand a more detailed historical account (*Descent* 1:12).

In answer to this problem Darwin lays out a spectrum of aesthetic capacities by drawing upon an aesthetic tradition that orders pleasures hierarchically, elevating secondary pleasures (imagination, moral ideas, etc.) above primary ones (appetites, needs). Darwin reasons that cultivated beings categorize and evaluate their pleasures, whereas lower beings do not:

Nothing shows one how little happiness depends on the senses.; than the <small>fact that no one, looking back to his life, would say how many good dinners ... he had had.... (*Notebooks* 546)

These notes recite a common elevation of moral and aesthetic judgment above literal taste, which Wordsworth had memorably expressed in the distinction he made between a taste for poetry and a taste for “Frontinac or Sherry” and elaborated in his “Essay Supplementary to the Preface” (*LB* 166). As Denise Gigante shows, eighteenth- and nineteenth-century British cultures were preoccupied with creating this distinction as a way to guide and reform consumption in an exploded marketplace: “Above all, what the culture of taste energetically resisted was the idea that human beings were propelled not by natural cravings for virtue, beauty, and truth but by appetites that could not be civilized or distinguished from those of brutes” (*Taste* 4). This culture wanted aesthetic response to be embodied and universal, yet somehow removed from animal needs and desires.

Rather than contradicting these values, Darwin affirms the superiority of civilized taste by arguing that humans have gained refined, disinterested taste over the course of history. In doing so, he addresses a longstanding conflict within aesthetic philosophy between Kantian idealism and British empiricism. In a notebook that he retroactively labels “Old and USELESS notes about the moral sense & some metaphysical points written about the year 1837 and Earlier,” he remarks that the opposition between the “school of Kant. to Coleridge” and the “school of Locke, Bentham, & Hartley” raises the “question whether we have any instincts, or rather the amount of our instincts—surely in animals according to usual definition, there is much knowledge without experience. so there may be in men” (sic) (610). In its review of *Descent of Man*, *The Annual Register* recognized Darwin’s significant contribution to “fertile discussions which may be described as lying on the border-land between scientific and moral speculation” (discussions which garnered a larger audience than usual for men of science) and emphasized Darwin’s attempt to tackle the “old controversy between the utilitarian and intuitional schools” of moral philosophy (*Annual Register* 368). In *Notebook M*, he cites a line from Coleridge’s drama *Zapolya*—“The fledge-dove knows the prowlers of the air”—as an observation of instinctive conscience, as that line compares a dove’s survival instincts to the innate virtue of a gentlewoman (540). This metaphor implies, to Darwin, a likening of instinct to moral sense, and it shows Coleridge’s position on the border between idealists and materialists. Although Darwin labeled the notes “useless,” he later relates these capacities to each other genealogically rather than metaphorically when he argues that the moral sense is an evolved version of social instinct.<sup>120</sup>

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<sup>120</sup>The editors of *Charles Darwin’s Notebooks* write: “Darwin added this title to the notes some years after they were written, almost certainly when writing the *Descent of Man* (1871). The title is misleading in that it reflects the dismissive attitude of an author filing away notes no longer useful” (Barrett, Gautrey and Herbert 597).

*Descent of Man* addresses a second disagreement between these philosophical schools on the question of whether taste is interested or disinterested. Darwin draws from both traditions. He points out that the ability to appreciate beauty is interested, as least at its root, for it expresses sexual desire and furthers species reproduction. The elaborate plumage and song of male birds is the result of sexual selection, understood as the practical application of aesthetic taste:

This sense [of beauty] has been declared to be peculiar to man. But when we behold male birds elaborately displaying their plumes and splendid colours before the females, whilst other birds not thus decorated make no such display, it is impossible to doubt that the females admire the beauty of their male partners.... So with the song of birds, the sweet strains poured forth by the males during the season of love are certainly admired by the females.... (1: 63)

Although the passage describes bird behavior, it implicitly evokes human pleasure: the “sweet strains” please both naturalist and the female bird, but the former listens with disinterest, standing outside the mating ritual.<sup>121</sup> This implicit comparison of human and bird compresses the idea that human taste is as instinctual as that of a bird yet at the same time more evolved. The female bird becomes a key figure in a spectrum of taste—from animal to savage to human:

The taste for the beautiful, at least as far as female beauty is concerned, is not of a special nature in the human mind; for it differs widely in the different races of man, as will hereafter be shewn, and is not quite the same even in the different nations of the same race. Judging from the hideous ornaments and the equally hideous music admired by most savages, it might be urged that their aesthetic faculty was not so highly developed as in certain animals, for instance, in birds. Obviously no animal would be capable of admiring such scenes as the heavens at night, a beautiful landscape, or refined music; but such high tastes, depending as they do on culture and complex associations, are not enjoyed by barbarians or by uneducated persons. (1: 64)

The “aesthetic faculty” of birds pivots between savage and civilized taste, perhaps because birdsong, however functional, is already temporally removed from the act of mating. In the previous passage, the bird’s pleasure is somewhat abstract, in that she remembers and/or anticipates the physical pleasure of mating and even mixes the impressions of taste, sound, and amorous effort: she “admires” the male’s “sweet strains.” This instinctive response to music first mirrors, then transforms into the civilized person’s appreciation of “refined music.”<sup>122</sup> But refined taste in music is not pure but purified, as it has become abstracted from its origin in sexual desire. Bird taste serves as a metonym for civilized taste, and the analogy, when extrapolated into natural history, sets animal and human tastes on the same historical trajectory.

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<sup>121</sup>George Levine comments that this passage in *Descent of Man* demonstrates not Darwin’s tendency toward anthropomorphism so much as his invention of “zoomorphism” as a representational technique: “that is, humans are animals, and therefore one can—as an animal oneself—in fact greatly understand non-human behaviour simply by imagining one’s way into the animal mind” (“And If It Be” 49).

<sup>122</sup>Darwin here admits that taste is relative to “culture and complex associations,” but he makes civilized taste superior to savage taste by virtue of development.

## *Instinctive Sympathy*

As he attempts to reconcile Kant with the empiricists by historicizing aesthetic disinterest, Darwin turns to Edmund Burke's *Enquiry*, which he annotated during the same period that he read Wordsworth's "Preface." Even as Darwin cites Kant's claim that a sense of "duty" operates in man "neither by fond insinuation, flattery, nor by any threat, but by merely holding up thy naked law in the soul" (from "Metaphysics of Ethics"; quoted in *Descent* 1: 70-71), he develops his history of disinterested judgment by way of Burke's physiological aesthetics. Burke argues that it is possible to determine a natural standard of taste in all human beings. "It is probable," he writes in his "Introduction on Taste," that

the standard both of reason and of Taste is the same in all human creatures. For if there were not some principles of judgment as well as of sentiment common to all mankind, no hold could possibly be taken either on their reason or their passions, sufficient to maintain the ordinary correspondence of life. (*Enquiry* 11)

Observing that aesthetic and moral judgments bind isolated individuals to society, Burke locates the origin of this correspondence not in social conventions but in the body itself. Taste (the faculty that "form[s] a judgment of the works of imagination and the elegant arts") operates in a similar way as the literal tastes of the tongue (13). After listing examples of agreement between human tongues (they agree on what is sweet, what sour) and acknowledging that these "natural" tastes do change (as a man can acquire taste for tobacco, or can vitiate his palate through an addiction to opium), he maintains that all men, born with the same bodies, are born with the same tastes: "Thus the pleasure of all the senses, of the sight, and even of the Taste, that most ambiguous of the senses, is the same in all, high and low, learned and unlearned" (16). The "conformation of [men's] organs" corresponds to an original consensus in aesthetic perception, even if some men gain superior judgment "by a steady attention to our object, and by frequent exercise" (13, 25).

*Descent of Man* revives and extends this physiological account of aesthetic taste and moral sense. Although scholars more often cite the influence of Adam Smith's *The Theory of Moral Sentiments* on *Descent of Man*, Darwin indicates in the *Notebooks* that he prefers Burke's account of sympathy to Smith's.<sup>123</sup> In *Notebook M*, he writes:

Adam Smith ... says <sympathy> we can only know what others think by putting ourselves in their situation, & then we feel like them--. Hence sympathy very unsatisfactory because does not like Burke explain pleasure. (546)

Darwin disagrees with Smith publically when he insists in *Descent of Man* that "sympathy is strictly an instinct" that gives "direct pleasure," rather than a product of the imagination (1: 81). In *Enquiry*, Burke describes sympathy as an immediate sensation or instinctive response; sympathetic feelings "merely arise from the mechanical structure of our bodies, or from the natural frame and constitution of our minds" (41). Humans naturally sympathize with others not because it is right to do so but because their bodies compel them to do so:

The delight we have in such things, hinders us from shunning scenes of misery; and the pain we feel, prompts us to relieve ourselves in relieving those who

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<sup>123</sup>Although Adam Smith belongs to the empiricist tradition, he offers neither a physiological nor an idealist account of the moral sentiments. In contrast to Burke, Smith veers away from the literalism of moral sense philosophy and describes sympathy as a an imaginative act, quietly regulated by internalized social norms: "They [our senses] never did, and never can, carry us beyond our own person, and it is by imagination only that we can form any conception of what are [another's] sensations" (11).

suffer; and all of this antecedent to any reasoning, by an instinct that works us to its own purposes, without our concurrence. (*Enquiry* 43)

Invested in naturalizing social unity, Burke makes sympathy antecedent to reason, characterizing it as an instinct that causes an individual to feel delight and subsequently to take interest in another's suffering. According to this theory, pleasure is powerful and immediate, yet it leads only secondarily to social action.<sup>124</sup> Burke accounts for sympathy without recourse to the idea of selflessness. Sympathetic action is a reflex of observation, an after-effect of self-interest: delight "hinders" the observer from moving away, while pain "prompts" him to relieve himself of this immobilization and of the sight of suffering. The body places the Burkean observer in the psychological and physical position of sympathy, and he thus lacks the degree of conscious choice given to Smith's observer, who can withhold sympathy in some cases—for example, from those who are angry or who are in physical pain.

The idea that the body generates a binding sympathy attracts Darwin, for it enables him to theorize an autonomous historical process by which even animals or savages can develop higher feelings. To explain man's anatomical and social evolution, Darwin fixes upon this idea of sympathy as a pre-cognitive, bodily delight that later produces a social network. In many ways a culmination of physiological aesthetics, *Descent of Man* at once naturalizes and historicizes sympathy, describing it as a capacity that has unfolded from primitive self-interest. He begins by identifying the "rudiments" of sympathy in animals: social instincts (commonly seen in ants and dogs) lead them to take pleasure in society, feel sympathy, and aid others. He then stretches the Burkean tableau—in which delight leads instantly to sympathetic aid and in which individual pleasure ultimately coincides with communal interest—over an immense expanse of natural history. Natural selection increases sympathy, he argues, for "those communities, which included the greatest number of the most sympathetic members, would flourish best and rear the greatest number of offspring" (1: 82). Echoes of Burke are strong: man evolves in proportion to his recognition of the overlap between self-interest and the "good of the community." The historical graduation from self interest, to rational communal interest, to noble disinterest requires four capacities: the "instinct" of sympathy; the ability to reflect upon "images of all past actions and motives"; and conventions, such as language and "habit," which would "play a very important part in guiding the conduct of each member" and would "strengthen[]" the "social instincts and impulses" (1: 72-73). Darwin effectively borrows the *Enquiry's* argument that society mimics nature, instilling habits that build upon bodily desires.

Whereas Burke struggles to reconcile social conventions (such as language and class structure) to nature and physiology, Darwin accounts for these conventions in his literal developmental narrative, figuring such constructs as simultaneously natural and artificial agents of evolutionary development. From his argument that instinctive sympathy creates society, Darwin begins to extrapolate a socio-political history. This history depends on an empowered human subject. Agreeing with Alfred Russell Wallace that man is less liable than other animals "to have his bodily structure modified through natural selection or any other means," he allows that modern man is not quite as malleable as his ancestor under the eye of natural selection (1: 158). After a certain point, natural selection operates "only in a tentative manner" and more

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<sup>124</sup>Jonathan Lamb has pointed out that Burke is uneasy with the instability of aesthetic experience and attempts to separate sublimity from beauty, irresponsible delight from social pleasure (*Preserving the Self* 27).

significant transmissions occur through human civilization (1: 178).<sup>125</sup> Shifting from nature to society (while also maneuvering around the implications of eugenics), he writes, “Great lawgivers, the founders of beneficent religions, great philosophers and discoverers in science, aid the progress of mankind in a far higher degree by their works than by leaving numerous progeny” (1: 172). At some remote point in history, he suggests, humans gained consciousness of their powers and now transmit improvements through virtual and social, rather than biological, lines.<sup>126</sup> However, his inquiry into the mental faculties, carried around the globe, also vexes these claims to the necessary morality of humans, as well as to any stable classification of cultures according to moral capacity.

### Reprise: Slavery and the “Retrograde” of the Nation

Looking to future generations, there is no cause to fear that the social instincts will grow weaker, and we may expect that virtuous habits will grow stronger, becoming perhaps fixed by inheritance. In this case the struggle between our higher and lower impulses will be less severe, and virtue will be triumphant. (*Descent* 1: 105)

If the various checks specified in the two last paragraphs, and perhaps others as yet unknown, do not prevent the reckless, the vicious and otherwise inferior members of society from increasing at a quicker rate than the better class of men, the nation will retrograde, as has occurred too often in the history of the world. We must remember that progress is no invariable rule. (*Descent* 1: 177)

In comparing these two statements from *Descent of Man*, we find the text split between progressive and non-progressive views of human history. In the first quotation, Darwin assures his reader that natural selection has endowed man (especially civilized man) with stable anatomical, behavioral, and social structures and that these structures will now, at the apex of this sublime natural history, protect society from moral degradation. A few dozen pages later, he admits that natural selection is not necessarily progressive and names “checks” related to culturally specific practices: for example, intemperate bachelors and criminals rarely marry and produce offspring, and the urban poor die at a faster rate than their rural counterparts, thereby offsetting their tendency to “increase at a quicker rate” (1: 174-75). Despite the cold rationality of such comments, Darwin does not turn in general to eugenics as a means of social improvement and instead defends asylums for the physically and mentally disabled, poor-laws,

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<sup>125</sup>Contradicting his earlier claim, Darwin admits that it is “extremely doubtful” that “sympathetic and benevolent parents” would leave more offspring than “selfish and treacherous parents of the same tribe” (*Descent* 1: 163).

<sup>126</sup>This strategy, too, is borrowed from Burke, whose account of civilization in *Reflections on the Revolution in France* is underpinned by the *Enquiry*’s naturalization of moral and aesthetic judgment. Contrasting reform with revolution, he writes that while Parisians believe that “an unfeeling heart, and an undoubting confidence, are the sole qualifications for a perfect legislator,” Englishmen believe that “the true lawgiver ought to have an heart full of sensibility” (*Reflections* 169).

and medical care, arguing that to do otherwise would result in the “deterioration in the noblest part of our nature” and in a “certain and great present evil” (1: 168-69). As corruptible as any material thing, sympathetic capacity must be maintained through social policy. Overall, he equivocates on whether rational selection should be applied in the social realm.

Doubts about progress and how best to ensure it appear even earlier, as the young Darwin traveling with the *Beagle* meditates on the paradox of modern slavery, much like Erasmus Darwin and Anna Barbauld. The following is a well-known passage, placed near the end of the *Journal* as a culmination of earlier scattered observations on the evils of slavery:

It is often attempted to palliate slavery by comparing the state of slaves with our poorer countrymen: if the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin; but how this bears on slavery, I cannot see; as well might the use of the thumb-screw be defended in one land, by showing that men in another land suffered from some dreadful disease. Those who look tenderly at the slave owner, and with a cold heart at the slave, never seem to put themselves into the position of the latter;—what a cheerless prospect, with not even a hope of change! picture to yourself the chance, ever hanging over you, of your wife and your little children—those objects which nature urges even the slave to call his own—being torn from you and sold like beasts to the first bidder! And these deeds are done and palliated by men, who profess to love their neighbours as themselves, who believe in God, and pray that his Will be done on earth! It makes one’s blood boil, yet heart tremble, to think that we Englishmen and our American descendents, with their boastful cry of liberty, have been and are so guilty: but it is a consolation to reflect, that we at least have made a greater sacrifice, than ever made by any nation, to expiate our sin. (500)

The passage makes its point through a series of contrasts: between looking “tenderly” at the oppressor and “with a cold heart” at the oppressed; between Christian belief and economic motive; between political principles and systems of oppression; and, in a final turn, between past sins and present sacrifices. He draws upon the philosophical and literary tradition of sympathy, asking the reader to imagine himself in the position of the slave, stimulating the imaginative acts described by Adam Smith, as if he recognizes that Burke’s instinctive sympathy fails against the ideology and technology of modern slavery. Although he is developing a Burkean natural history of sympathy and society, Darwin here recognizes the difference between “laws of nature” and “our institutions.” He appeals to the power of sympathy to expose the unnatural institution of slavery: inherent capacities of “tender[ness]” have been misdirected, cast on the slave-owner, rather than the slave. The passage counters the powerful abstractions of slavery—the linguistic, pseudoscientific redefinition of humans as saleable “beasts” and the false argument of paternalism.

Having inherited firm abolitionist views from his family, Darwin hoped that abolition would be one of the fruits of human genealogical research. Adrian Desmond and James Moore suggest that Darwin’s anti-slavery views in part motivate his theorization of evolution: Darwin sought evidence for monogenesis in order to disprove the racist theory of polygenesis then advanced by supporters of slavery (*Darwin* 155). Throughout their biography, Desmond and Moore detail Darwin’s abhorrence of slavery, expressed repeatedly in his *Beagle* diary,

correspondence, and his notebooks.<sup>127</sup> In their more recent book, *Darwin's Sacred Cause*, the two scholars push this argument farther; focusing in particular upon Darwin's notebooks, manuscripts, and correspondence, they argue more strongly that Darwin's "moral anchorage in the noontide of the British anti-slavery movement" is the "key to explain why such a gentleman of wealth and standing should risk all to develop his bestial 'monkey-man' image of our ancestry" (xvii). Darwin's evolutionary science, they argue, was not the inevitable result of facts, but rather was motivated by "a moral passion" (xviii).

Whether or not Desmond and Moore overstate their case, the *Journal* continues in the tradition of abolitionist literature and rhetoric. Following a common rhetorical strategy of abolitionists, Darwin identifies slavery as a mark of primitive culture, citing Fuegian society's subjugation of women as a sign of its barbarity. Recalling Erasmus Darwin and Anna Barbauld's abolitionist poetry, we can understand Darwin's statements against slavery in the *Journal* as key expressions of both his desire to affirm human progress and his need to confront evidence that contradicts moral progress. The *Journal* undoubtedly participates in a decades-long anticipation and celebration of the abolition of slavery. Even before abolition was achieved, authors celebrated the movement as a sign of general progress. As I argued in Chapter One, Erasmus Darwin identified the British anti-slavery movement as a manifestation of the synchronous evolutions of society and the human being in *The Temple of Nature*. One year after British abolition of the trade, Thomas Clarkson wrote *History of the Rise, Progress, and Accomplishment of the Abolition of the African Slave Trade by the British Parliament* (1808), a key artifact in what Marcus Wood calls the "triumphalist narrative" that emerged in Britain in the early nineteenth century (7). The *Journal* participates in Britain's post-1807 construction of this problematic historiography, as it projects a vision of moral progress.

During the period of the *Beagle* voyage (1831-36), slaves in the British West Indies were not yet emancipated. Although Parliament had abolished the slave trade decades earlier, slavery continued as a system of apprenticeship from 1834-38. Since the *Beagle* itinerary did not include the West Indies, the *Journal* comments neither on England's continued toleration of the system nor on the difficulties of extending abolitionist values from the center of the empire to its colonies. As Christer Petley illustrates, the anti-slavery movement originated from the English metropole and attempted to transform distant Creole societies deeply attached to slavery: "by the 1830s, popular support for emancipation was widespread in Britain, where anti-slavery was the centerpiece of a patriotic sense of Christian civilization mission" and these missionaries held that "white West Indians deviated from British standards of civilization" (100). Darwin promotes a second phase of the anti-slavery movement in the *Journal*. As a representative of civilization's center, Darwin reports on the moral debasement of Brazilian, rather than British, plantations. He stresses that Britain, in contrast to other imperial nations, does not spread slavery as it expands. Rather, it extends civilization and Christianity: celebrating the work of British missionaries in Tahiti, he suggests that the introduction of Christianity has made their once primitive society a present-day pastoral, where enlightened doctrine is woven into native custom. By softly Christianizing, but not enslaving the people of the South Seas, the "philanthropic spirit of the

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<sup>127</sup>In his diary, Darwin attacks slave-owners more vehemently than he does in the *Journal*. Quoting the diary, Desmond and Moore write, "He loathed these ill-mannered slave-owners. The men were 'ignorant, cowardly, & indolent in the extreme,' and the 'older women' full of 'cunning, sensuality & pride.' The 'monks' were as bad or worse. All degraded themselves by brutalizing the blacks, whom Darwin admired for their courage. He foresaw the day when the slaves would 'assert their own rights & forget to avenge their wrongs'" (*Darwin* 124).



British nation” has included an entire hemisphere in the universal “march of improvement” (505). Describing British Australia as the emerging imperial center of the southern globe, he writes that “to hoist the British flag seems to draw with it as a certain consequence, wealth, prosperity, and civilization” (505).

Yet the paradox of modern slavery contradicts the narrative that lines up imperialism, liberalism, and human evolution in a trifecta. In Rio de Janeiro and its environs, Darwin contrasts, but also links, two plantations, each owned by friends of his party. The first, located in Socêgo, supplies images of a pastoral lifestyle for slaves, who begin the workday with an inspirational “morning hymn” and seem to “pass happy and contented lives” (24). Evidence of joyful labor and mutual care on the estate seems to confirm the paternalist argument advanced by proponents of slavery like James Boswell. Darwin yields to the pleasures of this unhurried but productive world—where production, both by nature and by slaves, is sustainable and where bells and morning songs set the pace of life. The suspension, however, is brief, for Darwin recognizes that one must read beneath the surface of this secluded plantation and place it within its world-economic context. Even while a guest, he experiences a disjunction between the plantation’s aesthetic pleasures and its moral debasement: “As long as the idea of slavery could be banished, there was something exceedingly fascinating in this simple and patriarchal style of living; it was such a perfect retirement and independence from the rest of the world” (23). Unable to banish the “idea” of the slave’s confinement and subjugation, he then recontextualizes the supposedly humane Socêgo plantation by placing it in the same trade network as a plantation at the Rio Macê where there is no illusion of paternal care. There he encounters one of the most striking figures of the *Journal*: a slave-owner who “owing to a quarrel and a law-suit . . . was on the point of taking all the women and children from the male slaves, and selling them separately at the public auction at Rio” (24). This unfeeling man is one of two figures whom Darwin remembers when he reflects back on his travels at the *Journal*’s close. Darwin is startled, for unlike other owners he encounters, the man seemed “superior to the common run of men” in “humanity and good feeling” yet was insensible to the “inhumanity of separating thirty families, who had lived together for many years” (25). In contrast to the slave-owner, Darwin moves through this world with feeling intact, reporting on “nearly being an eye-witness to one of those atrocious acts which can only take place in a slave country”—the separation of “women and children” from “male slaves” in an auction (24-25). As a property-owning man of influence, the slave-owner belongs to a similar class as Darwin and generally exhibits the same moral values, yet, when it comes to slavery, he performs cruel acts without apparent consciousness of them.

The slave-owner represents the same paradox as the other figure fixed in Darwin’s memory: the Fuegian. Both are visibly human yet seem inhuman in their behavior. Plantation societies, as distant and foreign to Darwin as “primitive” ones, become subject to a similar anthropological analysis and moral critique.<sup>128</sup> Darwin analyzes the slave-owner, implicitly suggesting the shaping influence of this man’s environment, which is a system of slavery sophisticated in its division of morality from economics, its legal rules, and its deactivation of human sympathy. Such a system—in which there is “no limit to the blindness of interest and selfish habit,” no check to the worst impulses—threatens to return society and civilized man back to a primeval age of selfishness (25). The noble disinterest of the civilized man, which he later theorizes as the greatest product of human evolution, has atrophied or disappeared in the

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<sup>128</sup>For a quick view of how the *Journal* identifies slavery as an object for scientific study, consider the subject list of the Rio de Janeiro chapter, which includes “Slavery” alongside “Great Evaporation” and “Musical Frogs” (19).

slave-owner. Despite his outward show of cultivation, the slave-owner is a version of the dull, insatiable Fuegian, who seems unconscious of his cruelty to children, women, and animals and who “never ceased repeating the word ‘yammerschooner,’ which means ‘give me’” (219). Although the slave-owner is cultivated, while the Fuegian utterly lacks taste or feeling, these two figures are similar in that neither sympathizes with others in cases of economic exchange nor honors family ties, which constitute the first alliances in the history of human society. The slave trade, based on greed and the trade of human goods, threatens the moral constitution of those who participate in or condone it. Despite the chauvinism of the *Journal*, the inhumane behaviors of savages and slave-owners alike strain the claims to human superiority and progress that become central to *Descent of Man*. Darwin’s construction of social history is complex. Ian Duncan argues that he relegates the savage Fuegian to the evolutionary past, condemning him to extinction (41); much in the same way, Darwin projects Britain and the abolition of slavery into the future, while he casts non-British slave-owners as backward and remakes British slavery into a distant historical episode. Such techniques—primitivizing the slave-owner and plantation life—were common to abolitionist works, such as Barbauld’s “Epistle.” Yet the persistence of slavery and greed challenges the image of the evolved, disinterested subject so critical to both Darwin’s abolitionism and evolutionary theory.

### “The Loss of These Tastes”

By the time he writes his autobiography near the end of his life, Darwin seems to have forgotten his former objective to make the naturalist’s imagination “poetical.” Loosely retracing the development of his mind and career, he describes a calculus in which the acquisition of scientific knowledge entailed the loss of poetry:

My mind seems to have become a kind of machine for grinding general laws out of large collections of facts, but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive. A man with a mind more highly organised or better constituted than mine, would not I suppose have thus suffered; and if I had to live my life again I would have made a rule to read some poetry and listen to some music at least once every week; for perhaps the parts of my brain now atrophied could thus have been kept active through use. The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature. (139)

In the *Journal* he recognizes the role of pleasure and false speculation in scientific inquiry, but here he compares his mind to an efficient, unfeeling “machine.” With this industrial image, he makes his intellectual advancement part of the larger technological and scientific development of the Victorian period. Surrendering authority on matters of taste and feeling to others, Darwin claims authority for the scientist on matters of fact, helping to invent along with Matthew Arnold the stereotype of the “born naturalist” who lives on “natural knowledge” alone (“Literature and Science” 264). Arnold not only separates the two bodies of knowledge named in his title, but also separates Darwin and poetry. “Mr. Darwin,” Arnold reports, “once owned to a friend that for his part he did not experience the necessity for two things which most men find so necessary to them,—religion and poetry,” for the “sage” but idiosyncratic naturalist had “little time or inclination for thinking about getting [knowledge] related to the desire in man for conduct, the

desire in man for beauty” (264). One would think that Arnold’s audience would recall the aesthetic sensibility evinced in the *Journal*, *Origin*, and *Descent of Man*—Darwin’s descriptions of the sounds of birds and bodies of water, his landscape depictions, his allusions to poetry, his account of human moral conduct—but this later public characterization of Darwin was too powerful.

The *Autobiography* records a loss that caricatures like Arnold’s do not. Even when Darwin claims that he “cannot endure to read a line of poetry,” he returns to Wordsworth’s warning that the senses and mind (and, by extension, morality) degrade without poetry (138). The naturalist has become like the figures of “A Poet’s Epitaph” who see and reason but cannot feel: the lawyer with his “keen[.]” and “practised eye”; the physician who is “all eyes”; and the philosopher who would “peep and botanize / Upon his mother’s grave” (7, 17, 19-20). He imagines that a man with a “more highly organized or better constituted mind” might have retained “the higher aesthetic tastes,” but his reference to “our nature” suggests that most human beings need to stimulate all parts of the brain, in order to preserve a whole mind. By describing the “enfeebling” of his moral nature, Darwin resigns himself to natural science’s loss of poetry, but he affirms other Romantic ideas: that aesthetic experience bears directly on moral nature and that poetry humanizes man. Wordsworth’s claims for poetry are taken as a given.

Whereas the *Descent of Man* offers an Enlightenment vision of simultaneous human advancement in all areas—science, technology, economics, the arts, and morality—the *Autobiography* describes a dialectic in which scientific advancement is accompanied by the loss of art and the decline of morality, necessitating a remedy. The decline is not only behavioral but, more distressingly, physiological: recalling his materialist account of moral sense in *Descent of Man*, we can take quite literally his worry that the “parts of his brain” that house his “moral nature” have “atrophied.” A deep skepticism about human progress appears in a personal register, but the *Autobiography* raises questions related to the science of aesthetic cultivation: whether poetry and music exercise a part of the brain that his other reading (which includes novels, histories, and travel narratives) does not; whether sexual and natural selection can explain “higher tastes” as well as “lower ones”; and perhaps, most deeply, whether civilization can progress if man loses the attraction to beauty and good that nature once instilled. Although he reports he himself has lost those higher tastes that elude explanation, Darwin seems as curious as ever in the possibilities for the civilizing operation of those same tastes in others.<sup>129</sup>

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<sup>129</sup>The most literal application of Darwinian theory to aesthetics is currently being undertaken within the field of evolutionary psychology and its spin-off within literary studies, Literary Darwinism. Evolutionary psychology investigates the relationship between the formal features of art and the structures of the human brain. The human brain, according to evolutionary psychologists, has not undergone meaningful change since its full development ten thousand years ago (Dutton 695). Literary Darwinism, which applies this approach to a study of formal and thematic elements in literary texts, is focused on matching language and cognitive structure. So far, this adaptationist lens on literature tends to produce unsatisfying analyses that could be applied to nearly any text. For example, Joseph Carroll claims that certain texts, such as Hardy’s *Tess of the d’Urbervilles* and Austen’s *Pride and Prejudice*, are rightly canonical because they fulfill the reader’s desire for cognitive order. Carroll, the main promoter of Literary Darwinism, aims to make a “positivist” science out of literary study and reads all literary phenomena as explicable now or in the near future through the models of evolutionary psychology (1-15).

## Chapter Four Hardy's Dialectic of Evolution

... men's minds appear ... to be moving backwards rather than on.  
—Thomas Hardy

In the “Apology” that prefaces *Late Lyrics and Earlier* (1922), Thomas Hardy describes a retrogression of culture that disappoints the evolutionary expectation that men’s minds will move on to a more advanced stage of development. The backward movement consists of two tendencies of public thought: first, dictates of taste suppress the “obstinate questionings” and “blank misgivings” that he, like Wordsworth, whose phrases he quotes, intersperses throughout his poetry; second, the culture is dominated by what Adorno will describe as a reversion to myth, for “belief in witches of Endor is displacing the Darwinian theory” (*CPTH* 557).<sup>130</sup> Filled with allusions to Wordsworth’s “Preface,” the “Apology” is not only a defense of the collection it presents but also an attempt to restore and redefine poetry itself. Going on to cite Matthew Arnold, Hardy reminds his reader that the poet should not merely produce what is “customary and expected” but should more searchingly “apply himself to the real function of poetry, the application of ideas to life” (*CPTH* 558). Rather than cultivating knowledge within “Culture,” men’s minds seem to be turning away from science, poetry, and the moral guidance of religion all at once. To counter this tendency and to “interfuse[]” feeling and rationality, Hardy offers a poetry of “evolutionary meliorism” that retains the aspirations of Wordsworth and Arnold yet also confronts the painful revelations of science, particularly those of Darwin (*CPTH* 557). “Evolutionary meliorism,” a unique phrase that Hardy uses to describe his philosophy, combines the concepts of natural law and of human action, as the word “meliorism” first appeared in the Victorian period to refer to “the doctrine that the world, or society, may be improved and suffering alleviated through rightly directed human effort”; the word offered an alternative to both “optimism” (which suggested a certain blindness) and “pessimism” (of which Hardy was often accused).<sup>131</sup> Based on the idea that social improvement results from a combination of natural law and human action, “evolutionary meliorism” counters the separation of the natural

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<sup>130</sup>Quotations of Hardy’s poetry and from the “Apology” are from *The Complete Poems of Thomas Hardy* (1976), edited by James Gibson; parenthetical citations indicate line numbers for poems or page numbers for prose. From Wordsworth’s “Intimations of Immortality from Recollections of Early Childhood,” Hardy adapts the idea of recovering lost access to higher knowledge. For Wordsworth, both nature (which ages man) and society (which misshapes him) diminish intimations of a spiritual realm. The speaker thus gives “thanks and praise” that he can still perceive that realm despite the “obstinate questionings / Of sense”:

... for those obstinate questionings  
Of sense and outward things,  
Fallings from us, vanishings;  
Blank misgivings of a Creature  
Moving about in worlds not realised,  
High instincts before which our mortal Nature  
Did tremble like a guilty Thing surprised (145-51)

In the “Apology,” Hardy defends the “obstinate questionings” that arise from “sense” (empirical observation), arguing that doubts are necessary in the pursuit of truth.

<sup>131</sup>“meliorism, *n.*” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. April 15, 2010. The first recorded use of the word is by George Eliot in 1877.

world (and the sciences that study it) from an ongoing human history. For Hardy, poetry is a hybrid of feeling and knowledge, and it integrates the institution of poetry with both Darwinian evolution and the scientist's "frank recognition" of material facts in a way that differs from other authors thus far discussed (557). Whereas Darwin modeled natural science on poetry, Hardy models poetry on science, describing it as a tool that enables the "exploration of reality" (557). Poetry is also like religion, for it serves as one of the "visible signs of mental and emotional life," but in contrast to traditional doctrine poetry must "keep moving, becoming" (561). In a world of matter in motion, society and poetry must undergo transformation and move on or else fall backward.

Although Hardy resurrects Wordsworth's argument that poetry counteracts an unprecedented degradation of culture, backward movement serves as a key image in his vision of poetic and social restoration. Again alluding to Wordsworth, in part to associate his own propositions to "orthodox" ideas, he describes the "interfusing effect of poetry," which unites pleasure and knowledge, and he imagines the backward movement as a necessary antecedent to forward movement:

But if it be true, as Comte argued, that advance is never in a straight line, but in a looped orbit, we may, in the aforesaid ominous moving backward, be doing it *pour mieux sauter*, drawing back for a spring. (562)

Since direct forward motion no longer seems possible, and backward motion seems "ominous," Hardy offers a third option: the image of moving backward in order to leap forward.<sup>132</sup> But first the retreat to superstition and myth must be transformed into something else, as the word "spring" suggests both a leap and renewal. At this juncture, his signature gloominess and compassion come into play: for Hardy, critique begins with a compassionate recognition of inescapable suffering, rather than with disinterest. Many of his works conduct a subjective, sympathetic inquiry into the causes of human behavior, as they examine both specific cultural practices and the universal human condition. Hardy's frustration with unfriendly readers and the intellectual stalemate between traditional and modern thinkers is evident in the "Apology"; in other writings, however, he identifies the social environment and existential condition that drive sentient individuals to refuse knowledge and to retreat to a state of "nescience," or ignorance, that was available before the "disease of feeling germed" ("Before Life and After" 13). Just as Wordsworth converts "savage torpor" into organic receptiveness, Hardy converts "nescience" from a deplorable, dangerous ignorance into the possibility of remaking sensation and restarting the process of evolutionary development.

This chapter argues that many of Hardy's best poems, as well as one of his later novels, *Tess of the d'Urbervilles*, are defined by a dialectic of evolution that recognizes both the paradoxical retrogression of an evolved human society and the power of feeling as a tool of "evolutionary meliorism." Hardy presents his redeployment and redefinition of Romantic

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<sup>132</sup>Hardy perhaps has in mind, too, Coleridge's account of how poetry moves the mind backward and forward: "The reader [of a legitimate poem] should be carried forward, not merely or chiefly by the mechanical impulse of curiosity, or by a restless desire to arrive at the final solution; but by the pleasurable activity of the mind excited by the attractions of the journey itself. Like the motion of a serpent, which the Egyptians made the emblem of intellectual power; or like the path of sound through the air; at every step he pauses and half recedes, and from the retrogressive movement collects the force which again carries him onward" (*STC* 318). Like Wordsworth, Coleridge compares the work of poetry to organic motion and to the movement of thought itself: the swimming of a "small water insect" against the flow of a stream is "no unapt emblem of the mind's self-experience in the act of thinking" (222).

aesthetics not as naïve but rather as grounded in a “full look at the Worst” aspects of modern reality (557). Spread throughout Hardy’s career as a novelist and poet, the texts that I explore work through the paradox of evolution that is shadowed by a concomitant devolution, finding a glimmer of hope in the rejection of both divine and modern omniscience and offering a “return” to untutored feelings as man’s main source of moral knowledge. The first section of the chapter establishes Charles Darwin’s theory of sexual selection as a culmination of the concept of aesthetic evolution and Enlightenment claims regarding the progress of taste and civilization. In the next section, I argue that the plot of *Tess* challenges this concept of evolved aesthetic perception and that the narration is uniquely “nescient,” rather than omniscient; the novel challenges positivism, as well as the Victorian period’s alignment of the novel with moral and natural knowledge. In the final section, I argue that the seismic shift of Hardy’s writing career—his turn from novels to poetry in 1898—represents his conviction that poetry offers a way to expose the limits of perception and to re-create it. An agent of dialectical thought, his poetry both records the suffering of life forms and imagines “nescience”—existence without sensation or thought—as a path toward the “betterment” of the body and soul (*CPTH* 557).

### **Sexual Selection and Savage Sexuality**

The theory of sexual selection is intertwined with Darwin’s natural history of taste, which proposes that human taste differs in degree rather than in kind from animal taste and that higher, disinterested tastes derive from primitive sexual desire. The theory of sexual selection is a specific version of the theory of aesthetic evolution, in that instinctive attraction is proposed as the mechanism by which taste continues to advance. In *Descent of Man*, Charles Darwin fills in a history of cultivation that Erasmus Darwin gestures toward when he compares romantic love to the infant’s first sensual experience at its mother’s breast. Like other accounts of aesthetic cultivation and evolutionary development that I discuss in this dissertation, Erasmus Darwin links a refined feeling with its primitive original:

Sentimental love, as distinguished from the animal passion of that name, with which it is frequently accompanied, consists in the desire or sensation of beholding, embracing, and saluting, a beautiful object. (*TN* 91app.)

Sentimental love is “distinguished from” but “frequently accompanied” by “animal passions”: although higher sentiments originate from the experience of the warmth, smell, and taste of the mother’s breast and milk, the adult observer appreciates the beautiful object with greater disinterest—desiring, “beholding,” and “saluting” it from a distance. His taste is more innocent than lust, but originates, not from an ideal sphere, but from the memory of fulfilled bodily needs (for food, protection, and touch).<sup>133</sup> As the individual evolves, higher taste and feeling are abstracted from the sensory education that he first received from the mother. Biological imperatives script the mother and infant’s unconscious exchange. The unfolding of the infant’s innate, human taste stands in metonymically for aesthetic evolution—that is, this Romantic scene foreshadows, without reference to embryos, a later biological theory that ontogeny recapitulates phylogeny. The scene constitutes one of the poem’s many visual displays of evolutionary development.

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<sup>133</sup>Similarly, Wordsworth suggests that “virtue” and “intellect” have grown out of (and have thus become alienated from) “the eagerness of infantine desire” (*Prel.* 2.26).

To persuade readers that humans have progressed through sexual selection like other animal species, Charles Darwin similarly sublimates sexual desire into disinterested taste. The superior taste of civilized man indicates his place at the “summit of the organic scale,” but animals and savages possess a practical appreciation of beauty, which close examination reveals as a kind of taste. In a passage from *Descent of Man* discussed in the previous chapter, Darwin contrasts the “hideous ornaments and the equally hideous music admired by most savages” to the civilized man’s “taste for the beautiful,” but ultimately concludes that the “high tastes” of the latter depend on “culture and complex associations” (1: 64). Registering the offense of “hideous” fetishes to his readers’ sensibilities, he suggests that the art of savages is too literal in its sexuality. These imagined objects are revolting to a refined reader yet nevertheless suggest that each “race” or “nation” possesses a basic taste for “female beauty.” Even with this diversity, it is possible to argue the case that “differences of [moral disposition] between the highest men of the highest races and the lowest savages, are connected by finest gradations” (1: 35). “Virtuous tendencies” are “inherited,” but at some point in history civilized man leaves the savage behind (1: 102). Civilized man has become so refined that open sensuality has become repugnant to him—a response that proves, rather than rules out, evolutionary development.

Before turning to *Tess*, which interrogates this difference in degree between savage sexuality and civilized taste, I should note that marriage practices in particular serve as an important site for theorizing both sexual selection and the progress of taste in *Descent of Man*. In eighteenth- and nineteenth-century British culture more broadly, a tasteful appreciation of the female sex indicates advanced humanity. When Erasmus and Charles Darwin present high taste in “female beauty” as a refined version of sexual appetite, they participate in a larger project of British moral philosophy to reconcile the appetitive individual and civil taste. As Lisa O’Connell argues, the official British male attitude toward female beauty and marriage comes to represent taste itself, particularly in Hume’s “construction of marriage as the social equivalent of the aesthetic sense—that is, as an integrative principle that maps social living onto a mosaic of compound drives and passions that constitute a human nature that is both ‘refined’ and ‘vulgar’” (103). Darwin’s theory of sexual selection, constructed from accounts of animal and savage mating rituals, should be understood as an extension of what O’Connell terms the “marriage-rites genre”; the genre is constituted by pseudo-ethnographic and sometimes erotic accounts of marriage in other cultures, first written by eighteenth-century imperial travelers and reproduced by imitators and translators until the end of the nineteenth century (O’Connell 99).<sup>134</sup> These works of “ethno-philosophy,” O’Connell argues, “conceptualized matrimony and coupling as cornerstones for enlightened knowledge about mankind,” produced “comparisons with other practices” that “seemed to legitimate British superiority,” and gradually become more elevated themselves, as “a new strain of the genre purged of eroticism” appeared as early as 1724 (99, 111, 108).

Like the later specimens of this genre, *Descent of Man* suppresses explicit representations of “hideous” sexuality, codes marriage as a universal practice, and reads the marriage practices of civilized European nations as a sign of their superiority. A culture’s marriage practices serve

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<sup>134</sup>In *Descent of Man*, Darwin cites the following quasi-anthropological accounts of marriage: Sir John Lubbock’s *The Origin of Civilisation and the Primitive Condition of Man* and John McLennan’s *Primitive Marriage; an Inquiry into the Origin of the Form of Capture in Marriage Ceremonies* (1865). In a footnote, he notes that Lubbock and McLennan have “collected much evidence on the extreme licentiousness of savages at the present time” (2: 358).

as an index of its place on the evolutionary spectrum. Like taste itself, marriage practice evolves and then accelerates society's evolution:

As soon, however, as marriage, whether polygamous or monogamous, becomes common, jealousy will lead to the inculcation of female virtue; and this being honoured will tend to spread to the unmarried females. How slowly it spreads to the male sex we see at the present day. Chastity eminently requires self-command: therefore it has been honoured from a very early period in the moral history of civilised man.... The hatred of indecency, which appears to us so natural as to be thought innate, and which is so valuable an aid to chastity, is a modern virtue, appertaining exclusively ... to civilised life. (*Descent* 1: 96)

Female "chastity" serves as the "moral" foundation of "civilised man"; this "modern virtue" arises from an acquired "hatred of indecency." Although Darwin vehemently expresses these Victorian values—values that *Tess* challenges—this passage also registers contradictions to his theory. Curiously, civilized *men* generally do not possess the chastity, self-command, or virtue of civilized women; yet their more visceral "jealousy" or "hatred" diffuses a fear of condemnation throughout society. Despite such contradictions, Darwin identifies civilized practices as refined and virtuous in contrast to savage ones.

The civilized world, he goes on to say, unconsciously already takes advantage of sexual selection, whereas savage cultures do not. Civilizations that promote monogamy and chivalry have achieved superiority, since a male is more likely to reproduce exclusively with a worthy female in such a system. In contrast, primitive cultures do not take advantage of sexual selection:

*On the Causes which prevent or check the Action of Sexual Selection with Savages.*—The chief causes are, firstly, so-called communal marriages or promiscuous intercourse; secondly, infanticide, especially of female infants; thirdly, early betrothals; and lastly, the low estimation in which women are held, as mere slaves. (2: 358)

Promiscuity, infanticide, early marriage, and enslavement of women all reflect a lower form of taste in savage culture, for in such cultures sexual desire has not become refined into a disinterested appreciation of external female beauty and internal "female virtue." Underlying his critique of these practices is his assertion that "in civilized nations women have free or almost free choice, which is not the case with barbarous races" (2: 356).

Female choice is a prerequisite of female chastity and thus operates in superior cultures that have surpassed the barbarism of naked male aggression. When describing primitive human society, Darwin shifts the power of selection from the female to the male. Among lower animals, such as birds, females select male "wooers" for the superior beauty of their plumage or song, but in primitive society males select females using physical force (*Descent* 2: 327, 371, 397). Yet such brutishness could only have advanced humanity to a certain point, since savage practices squander the natural judgment of an entire sex and cultivate lust, rather than judgment. In his miniature "moral history of civilized man," the gradual progress toward mutual selection corresponds to the cultivation of judgment, modeled by the woman with "self command." The integrity of civilization, as a concept, depends on female chastity, since the males remain free to test that chastity, and this hypocrisy is evaded with the concept of aesthetic disinterest. Although Darwin observes that civilized men often choose wives for non-biological traits, such as mental charms, wealth, or social position, he associates civilized male taste in beauty with the natural taste of female birds:



... the male Argus pheasant acquired his beauty gradually, through the females having preferred during many generations the more highly ornamented males; the aesthetic capacity of the females having been advanced through exercise or habit in the same manner as our own taste is gradually improved. (2: 401)

In contrast to the “hideous” ornaments and music of the savage, the “exquisite” and “elegant” “ornaments” of the male Argus are gradually acquired as female taste becomes more refined. Among animals, beauty is a product of sexual selection: the female unconsciously creates beauty by exercising her taste. With the reference in this passage to “our own taste,” the power of aesthetic discrimination and creation quietly shifts back from the female bird to civilized man, who also becomes a creator of beauty. In civilized societies, this allocation of power is neither oppressive nor dangerous, for the male viewer has evolved beyond lust, as nature and culture together produce in him a balance between the capacity of aesthetic appreciation and the capacity to regulate sexual desire. In the effort to explain the progress of civilization, Darwin likens bird courtship to human courtship, and he relies upon an ideal in which men perceive the external beauty and internal moral value of women. Love and marriage serve as a cornerstone of patriarchal civilization, presided over by “man with all his noble qualities, with sympathy which feels for the most debased, with benevolence which extends not only to other men but to the humblest living creature” (2: 405).

### ***Tess of the d’Urbervilles: Questioning Sexual Selection and Disinterested Taste***

We may wonder whether at the acme and summit of the human progress these anachronisms will be corrected by a finer intuition, a closer interaction of the social machinery than that which now jolts us round and along; but such completeness is not be prophesied, or even conceived as possible.

—*Tess of the d’Urbervilles*

Early in *Tess of the d’Urbervilles*, the narrator perceives an event that the fated lovers, Tess and Angel, do not: the “anachronism,” or mistiming, that allows the tragedy to unfold. The two nearly meet at a May-Day dance, when Tess is on the brink of womanhood, but Angel does not observe her in time to select her as a dance partner, accepting “the first [woman] that came to hand” instead (41). Timing is not the only culprit, for male perception also fails here. Surrounded by a bevy of young women, Angel does not recognize Tess’s beauty until he leaves the field and looks back at her distant figure, wishing that he had chosen her or learned her name. The remainder of the novel follows the consequences of this moment of impercipient and shows characters again and again ignoring their instincts and wasting insight.<sup>135</sup> Whereas progress by sexual selection among animals depends on “on ardour in love, courage, and the rivalry of the males, and on the powers of perception, taste, and will of the female” (*Descent* 2: 296), Hardy’s

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<sup>135</sup>“Impercipient,” defined as “lack of perception,” is one of Hardy’s neologisms. See “impercipient, *a. (n.)*” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. April 15, 2010. Hardy uses the word several times in *Tess*; in his poem “The Impercipient,” the speaker named in the title cannot perceive God and is thus isolated from others at a church service.

representation of human courtship and marriage implies that human beings' faulty judgment does not give them accurate or timely knowledge about the external world.

Meditating on romantic possibilities and outcomes, the passage engages with the theory of sexual selection, which gives taste in beauty a significant role in the evolutionary development of a species. In referring to the "summit of human progress," Hardy likely has in mind the last paragraph of *Descent of Man*, in which Darwin optimistically imagines humanity's continuation of the natural process of cultivation: nature has raised man "to the very summit of the organic scale," which "may give him hopes for a still higher destiny in the distant future" (2: 405). The theory of sexual selection projects an autonomous, organic process in which taste raises the morality and beauty of humankind, but in *Tess*, lovers lack a "finer intuition" and are "jolt[ed]" around by a man-made "machinery" rather than matched by nature.

Failed romance symptomizes a deeper problem: the failure of humans to understand each other and their environment accurately. Questioning dominant modes of perception, Hardy challenges the concept of disinterested civilized taste and accurate judgment, which as we have seen is central to British aesthetics and to Darwin's account of human evolutionary history. In *Tess*, Hardy raises two possibilities: that civilized society is actually primitive, or that the opposition between "savage" and "civilized" is itself a problematic construct, since human nature remains unresolved, caught between selfishness and sympathy. For example, in the passage above, he reveals the equal inefficiency of "savage" and "civilized" cultures by juxtaposing images of the body with those of modern technology. He compares the "social machinery"—or the practices that in civilized society moderate sexual desire into proper taste—to a blind industrial technology, which can never be calibrated to an organic, bodily intuition.<sup>136</sup> We can better understand Hardy's complaint against "social machinery" by juxtaposing it to Rousseau's vision of an organic society, in which "the Sovereign and the Subjects could have but one and the same Interest that all the Motions of the Machine might necessarily tend to the welfare of the whole" (vii). Hardy reminds his reader of two sobering possibilities: that society repeats the injustices of an imperfect nature, in which there is no sovereign, no punishing deity, but only an impersonal process, or that society veers away from nature, wasting the harmony it offers.

Hardy's representation of romance and marriage in *Tess* exposes evolved, benevolent patriarchy as illusory, identifying a residual or even enhanced savagery in civilized society's control of female sexuality. Rather than celebrating the mechanism of marriage, Hardy plots *Tess* along the four social practices that theoretically check sexual selection among savages, patterning Tess's experience on that of the subjugated savage woman. First of all, rather than advancing as a result of monogamy, the society represented in *Tess* unofficially practices "promiscuous intercourse." In village and town society alike, there is a tacit agreement to forgive male sexual indiscretions and condemn any type of female pre-marital sexual experience. Tess suffers a "sense of condemnation," but Alec does not, and Angel rejects Tess for her past despite his own pre-marital experience of "eight-and-forty hours' dissipation with a stranger" (43, 230). Hardy expands upon Darwin's casual observation that chastity spreads slowly to the same men who demand chastity of women. Hardy also suggests that the English are little different from "barbarous races" by depicting Tess as an object of male aggression. Forcing Tess to the altar,

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<sup>136</sup>In *Tess*, metal is "uncongenial" to flesh: a train from London, with its "gleaming cranks and wheels" seems to view Tess as a "foreign" object; "a vein of metal" in Angel's character prevents him from forgiving Tess (195-96, 243).

Angel often resembles Alec, who repeatedly attempts to capture her. Both Tess's lovers and oppressors ignore or misinterpret her preferences. She finds man's "gallantry" as oppressive as his "tyranny" and tries to escape objectification, mutilating her appearance in order to repel male advances (278, 88).

Secondly, something like infanticide occurs in *Tess* with the death of Sorrow, Tess's female child. Sorrow's death recalls Darwin's description of barbaric societies who destroy undesired infants, particularly female ones, when resources are scarce (*Descent 2*: 364).<sup>137</sup> The ambivalence that Tess feels for the infant, whom she "dangle[s]" with a "gloomy indifference that was almost dislike," then suddenly kisses violently, speaks of Tess's shame (109, 277). Complicit onlookers pity Tess: a woman remarks that Tess "wishes the baby and her too were in the churchyard" yet does not correct her morbidity (109). The narrator associates Sorrow's death with marriage laws: "So passed away Sorrow the Undesired—that intrusive creature, that bastard gift of shameless Nature who respects not the civil law" (114). The community, offended by Sorrow, buries the unbaptized infant with the other "conjecturally damned" (116). Hardy represents marriage and reproduction as a burden to women: the "Malthusian" Tess reflects that her mother gives her "so many little sisters and brothers, when it was such a trouble to nurse and provide for them" (59); similarly, in *Jude the Obscure*, Jude's son kills himself and his siblings "because we are too menny" (815).

Thirdly, the novel takes up the subject of "early betrothal," a metonym for early sexual experience. Early unions interfere with sexual selection, Darwin reasons, because children lack the knowledge and experience to make an advantageous choice. Hardy describes Tess's first sexual experience not only as a rite of passage but also as the violation of a child, acted out by Alec and permitted by her parents. Tess herself voices this critique, as she accuses her mother of negligence: "I was a child when I left this house four months ago" (102). Yet, the narrator suggests, her own body betrays her as well: on the morning she departs for the d'Urberville mansion, Tess's virginal white dress "imparted to her developing figure an amplitude which belied her age, and might cause her to be estimated as a woman when she was not much more than a child" (70). After Tess becomes pregnant, the narrator refers to Tess as a "girl-mother," not only to show that society failed to classify and protect her but also to indicate a failure of male perception (111). Blame extends beyond Tess's mother, and even beyond Alec, to nature's production of ambiguous signs, which neither uncultivated nor cultivated men can properly read.

Lastly, *Tess* represents the enslavement of women in modern industrial England, where even rural life is beginning to be determined by the greed of rural owners and the desires of metropolitan consumers. One might argue that *Tess* critiques, not the contemporary society of Hardy's readers, but rather the backward culture of a rural England, now a generation past, and that the novel accepts the cost of modernity in exchange for enlightenment and industrial development. However, Hardy neither disparages nor idealizes the countryside, which is linked rather than simply opposed to the city. The extension of the city into the country intensifies the exploitation of the female body—making rural women slaves of the metropole or, as in Gaskell's *Mary Barton*, drawing them away from their homes into factory jobs. Industrialization already shapes rural experience in this novel: agricultural production becomes accelerated and routinized

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<sup>137</sup>*Descent of Man* identifies social pressures as a cause of infanticide. Darwin claims that Polynesian women have been known to commit infanticide to increase their other children's chances for survival, as well as to retain the social status on which their own lives depend: "But the trouble experienced by the women in rearing children, their consequent loss of beauty, the higher estimation set on them and their happier fate, when few in number, are assigned by the women themselves, and by various observers, as additional motives for infanticide" (2: 364).

to meet the demands of the modern city; modern life is represented as a monstrous train, which “stretched out its steam feeler to this point three or four times a day” (195). Frequent descriptions of Tess and other women performing heavy labor appeal to the reader’s sympathy for the “weaker sex” and perhaps echo Marx and Engels’s observation that, in industrial society, “differences of age and sex have no longer any distinctive social validity,” since women and children are treated as “instruments of labour” (10).

Rather than chivalrously protecting “humble living creatures,” the patriarchal society of this novel exploits the bodies of both women and animals for pleasure and economic profit. Tess is associated with beasts of burden; for example, she identifies with her family’s overworked horse, Prince, whose violent death foreshadows her own. By repeatedly comparing Tess to animals, the novel comments on an objectification of women that intensifies with the progress of science and agriculture. The dairyman sees the milkmaids at Talbothays as cows, and Angel, an amateur scholar, sees them as trapped butterflies. The narrator characterizes Tess as a “weaker fellow[]” who lacks the protection of a father or husband (277). Likened to animals entrapped, hunted, and relentlessly observed by men, Tess is a “bird caught in a springe,” a “sunned cat,” one of a “bevy” of “wild animals,” a snake, and a loyal dog or cat (291, 180, 84, 79, 234). Admiration for female beauty—whether sexually interested or aesthetically disinterested, tyrannous or gallant—leads to the treatment of women as animals that serve male interests. They are figured as pets, prey, farm animals, and exotic wild creatures.

As Hardy patterns Tess’s experience on that of the oppressed savage woman, he reveals civilized society to be the double of its primitive other and casts doubt on Darwin’s theory that civilized male taste is more refined than savage male taste.<sup>138</sup> When examined, civilized male perception is savage, since society normatively views women’s bodies as resources to be enjoyed and used by men. Paradoxically, lust and enlightenment originate from the same bodily organ—the eye—as we see in parallels between Alec’s aristocratic gaze and Angel’s scholarly one. As Darwin suggests in *Descent of Man*, the ideals of patriarchy, which supposedly protects women by establishing a cult of chastity, gradually developed from a primitive male jealousy rooted in the desire to control women for the purposes of sex and reproduction. *Tess* eludes a standard marriage plot, even as it yearns for one, revealing that the measures of civilization—chastity and marriage—originate from base instincts. The concept of chastity has failed as an elaborate device by which to restrict male desire, and, for this reason, civilization only intensifies female suffering, adding psychological oppression on top of physical exploitation.

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<sup>138</sup>The tale of the fallen woman is not only cautionary but also a tool of Victorian social critique. In “The Function of Criticism at the Present Time,” Matthew Arnold relates a news story of a “shocking child murder”: a factory worker named Wragg (another “girl-mother”) strangles her “illegitimate child” (226). While Wragg’s story differs from that of Tess in some ways, Arnold similarly suggests that being exploited as factory, field, and sex workers drives women to criminal acts. In her first novel, *Mary Barton* (1848), Elizabeth Gaskell suggests that limited choices and the demeaning nature of factory labor drive lower-class women like Esther into extra-marital affairs with upper-class men and then to fall farther—into prostitution. Gaskell’s second novel, *Ruth* (1853), is a clear predecessor to *Tess*, as it risks a sympathetic treatment of a fallen woman. All of these stories emphasize that these women could have contributed beauty and family values to a society that seemed to be dispensing with such sentiments.

## “A new Dark Age”: Hardy and Adorno

Readers of Hardy have long attempted to understand his representation of socio-economic history. Finding Hegelian teleology at the heart of *The Mayor of Casterbridge* (1886), Michael Valdez Moses has argued that Hardy ultimately aligns modernity with progress, even as he records its erasure of the “distinctive features” of regional communities (30). Similarly referring to Hardy’s archaeology of rural life, Catherine Gallagher suggests that *Tess of the d’Urbervilles* constitutes a bloodless means of activating “primitive sacrificial impulses,” as “the novel implicitly anthropologizes itself” (436). Both scholars observe that Hardy’s work produces a backward gaze upon history that oscillates between self-affirming and troubling comparisons: as Gallagher points out, the society that reads *Tess* performs a virtual, rather than literal, sacrifice of a woman, but the novel—as the genre of modernity—nevertheless performs a similar function as sacrifice, indicating the residence of savagery in civilized society. In the case of Hardy, it has been difficult to determine whether his novels precipitate tragedies that purge the nation of a mixed past and promote surrender to modernity, or whether they are at odds with the historical work of the novel form, which is to reconcile heterogeneities of region, history, class, and gender to a homogeneous identity.<sup>139</sup>

Finding that Hardy escapes both of these positions, I argue that his work observes a simultaneous forward and backward movement in modern society and that his reflection upon this phenomenon constitutes a dialectic of evolution. In the “Apology,” Hardy describes a degradation of culture that demands attention and analysis:

... whether owing to the barbarizing of taste in the younger minds by the dark madness of the late war, the unabashed cultivation of selfishness in all classes, the plethoric growth of knowledge simultaneously with the stunting of wisdom, ‘a degrading thirst after outrageous stimulation’ (to quote Wordsworth again), or from any other cause, we seem threatened with a new Dark Age. (560)

The threat of backward movement seems unchanged since Wordsworth wrote the “Preface”: taste is becoming barbaric, selfishness dominates over sympathy, and appetite overpowers both pleasure and thought. Paradoxically, the “stunting of wisdom” by the disempowerment of poetry occurs “simultaneously” with the “plethoric growth of knowledge” in the areas of science and technology.

With these reflections on social development, Hardy thereby anticipates by two decades several of Adorno and Horkheimer’s insights in *Dialectic of Enlightenment*, as his work addresses itself to the same phenomena of modern society: the alignment of technology and power, the objectification and oppression of the other, and the turn away from the insight offered by enlightenment toward “blindness.” Considered together, Hardy works suggest the kind of cultural critique and philosophical inquiry offered by Adorno and Horkheimer, who set out “to explain why humanity, instead of entering a truly human state, is sinking into a new kind of barbarism” (xiv). Although the chapters of their book address “concrete historical forms” that

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<sup>139</sup>Benedict Anderson argued that print (specifically, the newspaper and the novel) was integral to the invention of national identities: “[The nation] is imagined as a *community*, because, regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship” (7). The conventions of the novel and the newspaper produce “the idea of a sociological organism moving calendrically through homogenous, empty time,” which is a “precise analogue of the idea of the nation, which also is conceived as a solid community moving steadily down (or up) history” (26). In the nationalist novel, the particular person is a general representative who can be sacrificed for the progress of the whole.

Hardy never encountered himself (the Holocaust, the film industry, the homogenization of culture through radio), Adorno and Horkheimer recognize the same double movement of human history and the fact that enlightenment thinking “already contains the germ of the regression which is taking place everywhere today” (xvi).

To some extent, Adorno’s critique of modernity is useful toward understanding a style and project that Hardy’s detractors labored “queer” for its pessimism, sudden shifts of mood, and resistance to clarity.<sup>140</sup> In both his poetic and novelistic practice, Hardy maintains a radical doubt, refusing to reconcile the loss of the individual to the progress of the whole nation or species. Modernity’s paradoxical regression to savage violence cannot be ignored or contained within an overall sense of progress. In critiquing modernity’s savage control of sexuality, Hardy critiques social codes while at the same time distancing himself from his tool—the supposed objectivity of the psychological or realist novel. In his practice, Hardy seems to anticipate Adorno’s concept of immanent critique—the urgent call for enlightenment to “assimilate reflection on this regressive moment” in history (xvi). The reflection is a critical examination, which involves becoming conscious of the manifestation and origins of the double tendencies of modern society. Hardy’s refusal of didacticism relates to his interest in aligning the novel with critique rather than with a failed project of moral instruction. As he represents characters (especially Tess), moral questions, and even landscapes as blurred, he attempts to break free from dominant modes of seeing and categorizing people and objects. Put simply, Hardy thinks dialectically, if we take Adorno’s definition of dialectics as “the consistent sense of nonidentity,” the refusal of a “standpoint” (“Negative Dialectics” 57). Dialectical thought attempts to come at enlightenment indirectly, by knowing the external world through the negation of prescribed identity, by keeping in mind “the untruth of identity, the fact that the concept does not exhaust the thing conceived” (57).

A dialectic of evolution can be understood as a version of a dialectic of enlightenment, not only through analogy, but also by recalling the intimate relationship between the concepts of evolution and enlightenment. Charles Darwin presented evolutionary theory as enlightenment—as a final illumination of nature itself. Analyzing a passage from *Origin* in which Darwin describes the ignorance of a culture that would “look at an organic being as a savage looks at a ship, as at something wholly beyond his comprehension,” Cannon Schmitt points out that Darwin implicitly compares “anti-evolutionists” to savages, attributing a pre-modern ignorance to “anyone who would deny the workings of natural selection or claim that evolutionary theory drains the biological world of mystery or interest” (*Origin* 485; Schmitt 66). In Darwin’s case, evolutionary theory becomes doubly synonymous with the advance of knowledge and civilization: it details a history of that advancement, and it is also the crowning achievement of enlightenment science, offering a new paradigm for viewing society and the natural world. The reader who accepts Darwin’s theory escapes not only the ignorance of the savage (as Schmitt illustrates), but also his insensibility—for evolution illuminates nature’s untold stories and overlooked intricacy. It is in this context that Charles Darwin demonstrates enlightened vision in the *Journal*, looking on the natural world with the clear “eye of reason”—a scientifically informed, but also tasteful eye.

Neither rejecting nor entirely trusting the enlightened eye, Hardy attempts to recuperate and combine the possibilities of poetry and science. As Hardy, like Wordsworth, knows, feeble

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<sup>140</sup>In the “Apology,” Hardy responds to critics who reduce his poems to a “queer” philosophy, claiming that his poems are a “series of fugitive impressions” that offer no single “view of life” (*CPTH* 558-59).

would be any poetic attempt to counter on its own the problem of a modern society psychically bound to destroy itself. “Looking down the future,” he imagines no utopia but rather the extinction of “human and kindred animals races” and the “exhaustion or destruction of the globe.” At the same time he envisions an entirely transformed society that provides relief from pain, through “loving-kindness, operating through scientific knowledge” (557-58). Yet it is easy to overlook the significance of his leap from a cold look at the facts to the language of the heart. The solution, or what he calls “amendment,” is not explicitly articulated but rather lies within a representational practice that works against modernity’s insistence on concepts and identities. Throughout his works, he interrogates the oppositions that enable domination: the strict opposition of human and animal, society and nature, male and female, and reason and feeling.<sup>141</sup> Hardy’s brand of “loving-kindness” adapts the sense of the term used in translations of the Old Testament to designate divine love, for he emphasizes “loving-kindness” informed by “scientific knowledge” (rather than divine knowledge) and refers to animals and humans as “kindred races,” all deserving of love-of-kind.<sup>142</sup>

Hardy’s emphasis on compassion is deeply connected to his dialectical approach, as he repeatedly refrains from destroying a thing by the act of perception. We see this approach most vividly in *Tess*, as Hardy works against the tendency of the realist novel to represent, reform, or judge its heroines. As Virginia Woolf observes of Hardy, Hardy’s genius is “uneven in accomplishment” but entirely original: “there is always about them [his novels] a little blur of unconsciousness, that halo of freshness and margin of the unexpressed which often produce the most profound sense of satisfaction” (401). Tess’s particular appeal as a character lies in her blurred identity: she is neither fallen nor pure and (at one point) neither girl nor woman. To classify her (as Angel and Alec do, and as the reader would do) is to become blind to her human exceptionality, which, perhaps more than anything else, drives her to escape the available identities of ruined woman, victim, and wife. Attachment to identities makes Angel unable to accept her, and he forces them toward their brutal future crying, “You were one person; now you are another” (232). As I will explain further in the next section, the reader’s potential experience of Tess as a fluid being, who escapes any single identity, stems from Hardy’s exploration of the limitations of modern perception.

## Nescient Narration

The narrator of *Tess* does not transcend human ignorance through the conventions of the novel. Although he perceives, as most omniscient narrators do, critical moments that his characters do not, he also displays human impercipient, admitting his lack of knowledge at a critical moment. A fog creeps onto the scene of Tess’s seduction, creating an atmosphere of moral obscurity that envelops first the characters and then the narrator:

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<sup>141</sup>Some might argue that Hardy objectifies women by equating them with nature itself, as in the following quotation from *Tess*: “A field man is a personality afield; a field-woman is a portion of the field; she has somehow lost her own margin, imbibed the essence of her surrounding, and assimilated herself with it” (107). However, such passages also suggest a critique of male dominance, as well as describe a subtler mode of perception. The woman comprehends her environment in a way her male equivalent does not—through feeling, understood as a type of thought.

<sup>142</sup>“loving-kindness, *n.*” *The Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford UP. April 20, 2010.

The obscurity was now so great that [Alec] could see absolutely nothing but a pale nebulousness at his feet, which represented the white muslin figure he had left up on the dead leaves. Everything else was blackness alike.... Darkness and silence ruled everywhere around. Above them rose the primeval yews and oaks of The Chase, in which were poised gentle roosting birds in their last nap; and about them stole the hopping rabbits and hares. But, might some say, where was Tess's guardian angel? where was the providence of her simple faith?... Why it was that upon this beautiful feminine tissue, sensitive as gossamer, and practically blank as snow as yet, there should have been traced such a coarse pattern as it was doomed to receive; why so often the coarse appropriates the finer thus, the wrong man the woman, the wrong woman the man, many thousand years of analytical philosophy have failed to explain to our sense of order. One may, indeed, admit the possibility of retribution lurking in the present catastrophe. Doubtless some of Tess d'Urberville's mailed ancestors rollicking home from a fray had dealt the same measure even more ruthlessly towards peasant girls of their time. But though to visit the sins of the fathers upon the children may be a morality good enough for divinities, it is scorned by average human nature; and it therefore does not mend the matter. (94)

Compared here and elsewhere to the shape-changing Satan of *Paradise Lost*, Alec nevertheless lacks the intention of a villain.<sup>144</sup> Nearly as confused as Tess, he admits himself lost “owing to this fog, which so disguises everything” (92). A “pale nebulousness,” Tess has become part of the fog. The reader sees nothing more than Alec pressing his cheek against Tess's before the narrator launches into a series of passive sentences and unanswerable questions. Neither narrator nor reader knows who traces the “pattern” and why, nor which divinities (pagan gods, the Old Testament God, or the New Testament God) might be punishing Tess for her ancestors' sins. The narrator can only object to the inscrutable morality of divinities and associate himself with the perspective of “average human nature.” The passage resurrects ancient equations of violence with justice: the narrator refers to Exodus and Kings, to Tess's twelfth-century “mailed ancestors,” and to the “primeval yews and Oaks of the Chase,” which “grew as they had grown when they were pollarded for bows” by Druids. As if struggling to understand the event, the narrator multiplies causes, producing a density of explanations typical of Hardy's novels. He surrenders any knowledge of justice to beings watching from above: the primeval trees that might provide Tess with her own defense or perhaps the gods that punish Tess to compensate for centuries of aristocratic cruelty.

At the close of his reflections, the narrator identifies himself with provincial folk. Rather than claiming a higher vantage point, he places himself in low-lying Marlott: “As Tess's own people down in those retreats are never tired of saying among each other in their fatalistic way: ‘It was to be.’ There lay the pity of it” (95). Although declarative in form, the statement “It was to be” confesses to human ignorance and powerlessness: unable to identify causes, the villagers turn to fatalism, surrendering the idea of free will. Rather than elevating his perspective over that of the villager, the narrator indicates that their different resources have led them to the same point—the recognition of human ignorance. If Tess's people arrive at this point through gossip

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<sup>144</sup>The mist in this scene signals the coming of Tess's fall, as it alludes to Satan's “return[] as a mist by night into Paradise,” where he “enters into the serpent sleeping” (see the “Argument” that precedes Book 9 of *Paradise Lost*). Many thanks to Kevis Goodman for pointing out to me the allusion in this passage.



and a fatalism born of class suffering and the human condition, then the narrator only takes a more circuitous route—through Darwin, Malthus, Milton, the Bible, and Greek tragedy, among other sources of knowledge.<sup>145</sup>

When vision and omniscience lapse, the narrator gives up the role of male protector, depicting himself as a helpless, pitying observer. Tess's "guardian Angel" and the "providence of her simple faith" fail her—male protections are either absent (in the case of God, angels, or Angel) or powerless (in the case of the narrator). Critics like Ellen Rooney, who approaches modernity's systems of oppression from a feminist standpoint, have found complicity in Hardy, arguing that the narrator obscures the scene on the Chase, participating in a patriarchal culture that cannot or will not represent rape. However, representing the scene would in some ways confirm the power of male vision. By questioning the construction of the eye as the organ of sympathy and reason, Hardy separates his critique of female oppression from the male mode of visual observation that he finds troubling. The fog withholds knowledge of rape but also spreads responsibility from Alec alone to a more pervasive culprit. Wrapped in obscurity, both the male narrator and the female victim lose power. The eyes of the narrator and of the onlooking reader are organs of sympathy but not of knowledge.

The narrator never determines the reasons for Tess's suffering but rather closes the novel with a similar passage:

'Justice' was done, and the President of the Immortals, in Aeschylean phrase, had ended his sport with Tess. And the d'Urberville knights and dames slept on in their tombs unknowingly. The two speechless gazers [Angel and 'Liza-Lu] bent themselves down to the earth, as if in prayer, and remained thus a long time, absolutely motionless: the flag continued to wave silently. As soon as they had strength they arose, joined hands again, and went on. (384)

The passive construction "'Justice' was done" again obscures the agent and cause; the narrator mourns Tess's execution but offers no final analysis of the characters' moral decisions. He again refers to an inscrutable, ancient deity. Even if Tess has been punished for the sins of her race, her ancestors lie insensible, unpunished. On the question of Tess's innocence in the eyes of heaven, Angel remains silent. Lacking knowledge of absolute morality, neither he, 'Liza-Lu, nor the narrator possesses the authority to judge Tess.

Although the Victorian novel is known for invisibly aligning the perspectives of the narrator and reader, Hardy emphasizes contradictions between these perspectives when he refuses to generate a homogenous judgment of Tess. He suspends Tess, who is neither chaste nor unchaste, in a state of non-identity. Looking back on the early reception of *Tess*, he writes in 1912 that the novel's subtitle, "A Pure Woman," was "disputed more than anything else in the book" (28). Readers denied the label of "pure" to a character who "rises through seduction to adultery, murder, and the gallows," as Mowbray Morris sarcastically put it.<sup>146</sup> Reviewing the novel in *Blackwood's Magazine*, Margaret Oliphant also objected to the phrase "pure woman,"

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<sup>145</sup>References to the conflicting belief systems represented by a range of authors accumulate throughout the novel, for a modern, scientific view never quite eliminates them.

<sup>146</sup>A reader for *Macmillan's Magazine*, Morris rejected the manuscript of *Tess*. The reviews of *Tess* quoted here are reprinted in Scott McEathron's *Tess of the d'Urbervilles: A Sourcebook* (58-63). Morris's review was originally published in the *Quarterly Review* 174 (April 1892), 317-26; Oliphant's review was originally published in *Blackwood's Magazine* 151 (March 1892), 464-74.

calling it Hardy's "flag or trumpet ... of defiance upon certain matters, to the ordinary world."<sup>147</sup> Hardy responds to negative reviews in his 1892 preface by stating that *Tess* was "intended to be neither didactic nor aggressive" and by insisting "a novel is an impression, not an argument" (26). However, as he associates the novel with an open exploration of moral ambiguities, rather than didacticism, he certainly expects controversy. It is often noted of Hardy that he clashed with publishers concerned about the morality of his novels, which feature extramarital sexual relationships (in *Mayor of Casterbridge*, *Jude*, and *Tess*) and infant death (in *Jude* and *Tess*); these details were often censored in the periodical versions of the novels and later restored in book versions. Readers often perceived his novels to be objectionable attacks on Victorian marriage and femininity. By sustaining the conflict between narrator and reader, Hardy tries to make readers conscious of the fact that, when they consume novels, they conform to subjective moral judgments.

Rather than featuring an omniscient narrator who serves as a moral authority, *Tess* contains breaks in conventional omniscient narration, thereby working against the nineteenth-century consolidation of science and the novel, which Ian Watt has found in the eighteenth century.<sup>148</sup> George Levine has argued that the objective, providential perspective of late eighteenth-century and early nineteenth-century novels stems from natural theology, which treats observation of the natural world as a pious act; in continuation of this trend, he claims, post-Darwinian narration establishes authority by attending to the history and development of individuals. Gillian Beer similarly argues that Darwin's theory of evolution bolsters omniscience in George Eliot's *Middlemarch*, whose author, "exempted from the partiality and subjectivity of her personages," reassures the reader by creating "an infinitely knowable world" (169). In *Middlemarch*, Beer writes, "causal sequence [is] the organising principle both of [Eliot's] morality and of her practice as a novelist" (169).<sup>149</sup> I would argue, by contrast, that Hardy's novels present an exception or challenge to the pattern by which novelistic omniscience draws authority from Darwinism, for *Tess* in particular refuses the enhanced omniscience that evolutionary science and the novel form offer.

*Tess* operates in suspension between omniscient narration (reliable, third-person) and a subjective first-person narration, which manifests in the narrator's sympathy for both Tess's suffering and her beauty. Throughout the novel, the narrator regrets her suffering, chiding society for failing to protect her. Without being technically unreliable, he seems half in love with Tess. From the earliest reviewers to Virginia Woolf and Irving Howe, readers have noted Hardy's special sympathy for his female characters.<sup>150</sup> And he seems far from disinterested: as Rooney

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<sup>147</sup>Like many of his readers, Oliphant equates Hardy with his narrator. If the fusion of author and narrator in the mind of the reader is central to reliable omniscient narration, Hardy separates himself from his narrator without quite making him unreliable. Abstract locutions often effect this, as when he anticipates in his 1891 preface that a "too genteel reader" might find offense with the "*book's* opinions and sentiments," rather than his own (25; emphasis added).

<sup>148</sup>We have tended to associate the nineteenth-century realist novel with scientific observation. In *The Rise of the Novel* (1957), Ian Watt argued that realism is empiricist, as it "begins from the position that truth can be discovered by the individual through his senses" and that realist novels attempt a "dispassionate and scientific scrutiny of life" (11-12).

<sup>149</sup>Beer points out that George Elliot's *Daniel Deronda* expresses more uncertainty, as its plot focuses on chance and the future (169-95).

<sup>150</sup>In "The Novels of Thomas Hardy," Woolf writes of Hardy after his death: "His characters, both men and women, were creatures to him of an infinite attraction. For the women he shows a more tender solicitude than for the men, and in them, perhaps, he takes a keener interest" (403). Howe notes Hardy's unusual ability, as a male author, to

has argued, Hardy seems to be caught between his advocacy for women's sexual freedom and his implication as a male author and voyeur.<sup>151</sup> Along with her male suitors and pursuers, the narrator relentlessly watches Tess, emphasizing that the act of observation precedes the attempt to possess the female body.<sup>152</sup> Alec's eyes "rivet themselves upon her," and even the gentlemanly Angel observes her so intensely that she feels "the constraint of a domestic animal that perceives itself to be watched" (64, 137). The narrator, too, frequently betrays an excessive pleasure in Tess's beauty, as in this moment when he describes Tess's face from his privileged vantage point.

She then became conscious that [Angel] was observing her; but she would not show it by any change of position, though the curious dream-like fixity disappeared, and a close eye might easily have discerned that the rosiness of her face slowly deepened, and then faded till only a tinge of it was left. (163)

In this private scene, the "close eye" belongs not to Angel or any other character, but to the narrator, who sees what her lover does not. The narrator can see behind Tess's subtle performance of naiveté, following the rise and disappearance of her blush. At once a voyeur and a critic of female oppression, the narrator breaks the illusion of the omniscient, disinterested observer.

## Nescience and Poetry

The great principle of human improvement is at work in poetry as well as everywhere else.

—William Johnson Fox

Reviewing Tennyson's *Poems, Chiefly Lyrical* in 1830, the literary critic and social reformer William Johnson Fox describes a relationship between society's production of poetry and the constitution of the human body.

So far as poetry is dependent upon physical organization; and doubtless it is to some extent so dependent; there is no reason why it should deteriorate. Eyes and ears are organs which nature finishes off with very different gradations of excellence. Nervous systems vary from the finest degree of susceptibility down to the toughness of a coil of hempen cable. *Poeta nascitur* in a frame the most favourable to acute perception and intense enjoyment of the objects of sense; and

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enter the minds of women: "As a writer of novels Thomas Hardy was endowed with a precious gift: he liked women.... Throughout Hardy's fiction, even in his lesser novels, there is a curious power of sexual insinuation, almost as if he were not locked into the limits of masculine perception but could shuttle between, or for moments yoke together, the responses of the two sexes" (108-09).

<sup>151</sup>Rooney argues that Hardy attempts to redefine "purity" by making ambiguous whether Alec seduces or rapes Tess, but that this attempt inevitably leads him back to the "patriarchal dichotomies [he] hoped to escape" (463).

<sup>152</sup>Critics have frequently commented on the male gaze in *Tess*. James Krasner reviews previous commentary on this topic and himself argues that, in *Tess*, "Hardy represents sexual selection through social spectacles," repeatedly lining up comparable female characters as in a beauty pageant (159). Hardy and his readers are complicit: "Both the novel and its illustrations place the reader in the position of a male spectator, participating in the process of sexual selection" (Krasner 159).

it would be difficult to show that poets are not, and will not continue to be, produced as excellent as they have been, and as frequently. (532)

The imagery used here derives from a physiological aesthetics that continues from the literature of sensibility, through Romantic poetry, and into a brand of Victorian aesthetics that links bodily and social improvement even more closely together.<sup>153</sup> As he envisions a social and industrial advancement extending from the human body, Fox also echoes Erasmus Darwin—perhaps intentionally, as he shares his investment in social and political transformation. The passage certainly shares Erasmus Darwin’s imaginative and rhetorical investment in analogy.<sup>154</sup> Analogy enables progressives like Fox to represent universal improvement at work in every corner of human and natural activity: from technology, to poetry, to the mind itself. Holding that “the machinery of a poem is not less susceptible of improvement than the machinery of a cotton-mill,” Fox suggests that even human perception, represented by the body/mind of the poet, is subject to the “great principle of human improvement” (531).

Hardy is drawn to the idea that poets are not made but rather born into a bodily frame equipped to perceive and represent reality uniquely—an idea, of course, that was established in the literature of sensibility and taken up by Wordsworth, who defined the poet as a man of “more than usual organic sensibility” (*LB* 157). Musing in his journal that Wordsworth “might have seen me in [my cradle],” and that Gray might have seen Wordsworth in his, Hardy imagines himself as part of a genealogy of English poets (*LWTH* 417). Because he began to publish poetry later in life and therefore did not appear to be a prodigy on the order of Shelley and Keats, he writes that the “poetic spark must always have been latent” in him and likens himself to Homer, who “sang as a blind old man” (414). In this attempt to present himself to the public as a born poet who wrote novels out of financial necessity, he encountered a largely unreceptive audience; to quote one unsympathetic reviewer, “Thomas Hardy is a realistic novelist who ... has a grim determination to go down to posterity wearing the laurels of a poet” (*LWTH* 415).

Unlike the laurel-crowned poets whom he aspires to join, however, Hardy describes an overbalance of pain, rather than of pleasure, in the poet’s body. If modern times have seen the unprecedented transformation of the human senses, then the poet experiences this double-edged heightening of sensation more acutely than most. In the poem “In Tenebris II” (1895-96), he represents the speaker/poet as “one shaped awry,” whose eyes contain a “blot,” making him incapable of sharing the general view that “things are all as they best may be, save a few to be

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<sup>153</sup>Isobel Armstrong describes two schools of early Victorian aesthetics: the socially progressive Monthly Repository Group and the socially conservative Cambridge Apostles. Fox was a leading figure among progressives, attempting to unite Benthamism with the diminished radicalism of the Romantics: “When W. J. Fox took over the *Monthly Repository* in the early 1830s (he became editor in 1828 and bought it in 1831) it is clear that its project changed. From being a sectarian and Unitarian organ with radical traditions it became a more overtly political journal with the aim of forging a Utilitarian, Benthamite aesthetic. Fox’s aim was to deepen and enrich the Benthamite tradition by correcting misapprehensions of it and associating it above all with literature. His reading of Benthamism meant in the first place, the dissemination of pleasure in its widest sense, the democratisation of literature and the exploration of the links between literature and politics.... [For Fox,] Wordsworth and Coleridge had reneged on radical principles and he could only accept them by arguing that they were unintentionally radical and Benthamite” (29-30).

<sup>154</sup>In the “Advertisement” to the *Botanical Garden*, Darwin describes analogy as a tool with which to develop and promote scientific knowledge; the poem aims “to inlist Imagination under the banner of Science; and to lead her votaries from the looser analogies, which dress out the imagery of poetry, to the stricter, ones which form the ratiocination of philosophy” (v). In “The Science and Poetry of Animation,” Catherine Packham examines the contrast and link between the “looser analogies” of poetry and the “stricter” ones of natural philosophy in *Loves of the Plants*, and she suggests that analogy and personification “enabled Darwin to voice something in poetry which could not yet be said in science” (204).

right ere long”; possessing misshapen ears and eyes, he fails to “discern what to [others] is so clear” (16, 4, 2-3). But he also sees something that others do not: “that delight is a delicate growth cramped by crookedness, custom, and fear” (15). The poet, as instrument, has been reshaped by nature and culture, and this deformation has simultaneously isolated him and granted him extraordinary insight. Tracing Hardy’s interest in the workings of perception, Tom Paulin argues that the poet is caught between idealism and the “despotism of the eye,” a condition which produces “that radical unhappiness” that “permeates all his work” (14, 36). Of course, poets had long meditated on the dangers of observing and sympathizing with suffering, and a large body of scholarship addresses this basic problem of aesthetic representation. In primary texts, such meta-poetic moments are numerous: Keats represents the poet as a sacrificial figure who perceives and experiences the human condition so intensely that he longs to “cease upon the midnight with no pain” (56); like the wedding-guest, the reader of Coleridge’s “The Rime of the Ancyent Marinere” “cannot chuse but hear” and becomes, by the end of the mariner’s tale, “of sense forlorn” (22, 656); and Wordsworth depicts the poet as a wanderer who must move on from scenes of suffering or else be engulfed by them. As Jerome McGann shows, these self-conscious meditations on poetic sympathy lead Charlotte Smith and Byron, among others, to both capitalize upon and ironize the figure of the suffering poet.<sup>155</sup>

To these contemplations upon and representations of the poet, Hardy adds a dimension of environmental critique, observing that a simultaneous natural-technological evolution has intensified human perception and that the poet—a bird in a mine, or, in his case, a pessimist in a sea of optimists—first experiences the advantages and pains of this transformation.<sup>156</sup> We thus find in one of his best-known poems, “Hap,” a speaker crushed, not by physical and emotional

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<sup>155</sup>McGann describes two Romantic models for transvaluing loss: in Wordsworth’s poetry, loss ultimately yields compensation (spiritual redemption); for Keats and Shelley, loss yields the compensation of ecstasy, rather than wisdom. In contrast to these poets is Byron, for whom “sorrow signifies a loss from which there is no redemption” and who draws upon women’s suffering—as Hardy also does (156).

<sup>156</sup>An anecdote from Hardy’s autobiography regarding a telescope indicates his uneasiness with the idea that the poet and poetry progress through the enhancement of vision. Writing in the third person, Hardy describes his use of a telescope, inherited from “an ancestor who had been captain of a merchant craft,” to witness a hanging.

One summer morning at Bockhampton, just before he sat down to breakfast, he remembered that a man was to be hanged at eight o’clock at Dorchester. He took up the big brass telescope that had been handed on in the family, and hastened to a hill on the heath a quarter of a mile from the house, whence he looked towards the town. The sun behind his back shone straight on the white stone façade of the gaol, the gallows upon it, and the form of the murderer in white fustian, the executioner and officials in dark clothing, and the crowd below, being invisible at this distance of three miles. At the moment of his placing the glass to his eye the white figure dropped downwards, and the faint note of the town clock struck eight.

The whole thing had been so sudden that the glass nearly fell from Hardy’s hands. He seemed alone on the heath with the hanged man; and he crept homeward wishing he had not been so curious. It was the second and last execution he witnessed, the first having been that of a woman two or three years earlier, when he stood close to the gallows. (*LWTH* 32-33)

The telescope in this scene might represent the imagination, in that it theoretically enables sympathetic observation from a distance; yet it brings the image too close to the eye. His account of the experience registers his skepticism of the benefits of enhanced perception. Adam Smith had established that the imagination shrinks or enlarges, as necessary, images received into the eye: “As to the eye of the body, objects appear great or small, not so much according to their real dimensions, as according to the nearness or distance of their situation” (156-57); an individual is thus able to size large physical objects (like distant landscapes) or events (like a devastating earthquake in another country), which makes possible both sympathy and the routine operations of life. Smith thereby links this ability of the mind to “remedy” the “defects” of the eye to man’s intellectual and sympathetic capacities (156).

suffering, but by his recognition that “Crass Casualty,” rather than a god of any kind, rules the universe; the absence of even a “vengeful god” introduces comfortless pain of an entirely new order. The speaker is mentally stuck: he wants to find intention but finds that no god has “willed and meted” his tears, and, in the last lines, he must personify random sequences of events as “purlblind Doomsters,” as if, despite his privileged view of exploded belief systems, he cannot imagine an entirely impersonal universe. The “great principle of human improvement” has produced an unwelcome effect—the acceleration of human knowledge and perception to the point that pain, unremitting and unendurable, cannot be translated into ecstatic vision, satisfying meaning, or even poetic success.

This new representation of the poet emerges from his fascination with Darwinian science. When Hardy associates intellectual advancement with both the evolution of bodily sense and the acceleration of science and technology, he likely has in mind Darwin’s comparison of the evolution of the eye to the improvement of the telescope, an “instrument” that advanced through the “long-continued efforts of the highest human intellects” (*Origin* 188). Hardy found a triple analogy between evolutionary, technological, and intellectual improvement in William Kingdon Clifford’s *Lectures and Essays*, from which he transcribed a passage in his commonplace book:

Clifford’s Theory of the Intellectual growth of mankind: ‘as the physical senses (e.g. the eyes of the first animals with eyes) have been gradually developed out of confused & uncertain impressions, so a set of intellectual senses or *insights* are still in course of development, the operation of which may ultimately be expected to be as certain and imme<sup>le</sup> as ordinary sense perceptions.’ (qtd in Paulin 48)

Likening evolutionary development to the focusing of a lens, Clifford describes the heightening of both vision and intellectual perception over time. In his view, science continues the process of evolution, as mankind works toward positive knowledge and will one day apprehend higher realities—ones still clouded by the underdeveloped state of perception—as immediately as it now does physical objects.

Rather than celebrating the further development of sensation and intellect, Hardy doubts that nature and society tend toward progress and identifies a problem of overdevelopment.<sup>157</sup>

A woeful fact—that the human race is too extremely developed for its corporeal conditions, the nerves being evolved to an activity abnormal in such an environment.... It may be questioned if Nature, or what we call Nature, so far back as when she crossed the line from invertebrates to vertebrates, did not exceed her mission. This planet does not supply the materials for happiness to higher existences. Other planets may, though one can hardly see how. (*LWTH* 227)

Steeped in Clifford and other contemporary philosophers influenced by Darwin, Hardy recasts an age-old complaint about the condition of human beings, who long for immortality yet are as mortal as any other animal.<sup>158</sup> Here Hardy complains against nature itself, identifying the origin

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<sup>157</sup>Concerns about the effects of sensory overextension had a long history. See Goodman’s account of eighteenth-century concerns that the “increased power” of optical technology also brought “increased vulnerability” to the viewing subject: the topos of the “microscopic eye” is “not only (or even primarily) an eye for detail but also the fantasy-nightmare of what it would be like if we were to live in such a state of enhanced sensation that our eyes could not help but function as acute, and non-detachable, microscopes, with our ears and sense of touch simultaneously amplified” (48, 40).

<sup>158</sup>Hardy was also acquainted with Grant Allen. A socialist, Allen advanced physiological aesthetics, which extended the capacity of taste to all. As I noted in the Introduction, Allen’s essay “Aesthetic Evolution” summarizes

of overdevelopment as the point in natural history when vertebrates and thus nervous systems first appeared on earth. Nature “exceed[ed] her mission” by creating sensate creatures, if one can attribute the thing called nature with an originally benevolent intention. In the moment that nature set out to advance pleasure and knowledge, she created pain. The trajectory toward overdeveloped man thus began before his appearance on earth with the birth of sensation itself.

This natural history of sensibility leads Hardy to understand the modern regression from knowledge as a retreat from pain. The revelations of natural history enable him to recognize anew that the development of sensibility has involved the simultaneous increase of knowledge and suffering. His poems represent in scientific terms the Biblical lesson that knowledge increases sorrow, but he unites all sensate organisms, rather than humans alone, in a history of suffering. In the poem “Before Life and After” (1909), quoted here in full, the speaker yearns to recover the “nescience” of pre-sensate life:

A time there was—as one may guess  
And as, indeed, earth’s testimonies tell—  
Before the birth of consciousness,  
When all went well.

None suffered sickness, love, or loss,  
None knew regret, starved hope, or heart-burnings;  
None cared whatever crash or cross  
Brought wrack to things.

If something ceased, no tongue bewailed,  
If something winced and waned, no heart was wrung;  
If brightness dimmed, and dark prevailed,  
No sense was stung.

But the disease of feeling germed,  
And primal rightness took the tinct of wrong;  
Ere nescience shall be reaffirmed  
How long, how long?

The speaker reads the geological record (which Lyell in *Principles of Geology* called “a symbolic language, in which the earth’s autobiography is written”) as a history (5). This history shows a layering of time—recording or rather entombing life prior to vertebrate sensation. Unlike a human autobiography, however, it lacks affect. An anaesthetic, the geological record is the opposite of poetry, which is traditionally associated with sorrow itself, particularly in sensibility literature. For example, Anna Barbauld defines poetry as a comfort for suffering, born of mankind’s fall from the golden age, and closely associated with the figure of Pity, who

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Darwin’s aesthetic theory, recapitulating key points from *Descent of Man*, as in the following: “When professors of fine art discuss the principles of beauty, they are too fond of confining themselves to the very highest feelings of the most cultivated classes in the most civilised nations.... But the psychological aesthete cannot confine his attention to such exceptional and highest developments of the love for beauty.... He must look rather to those simpler and more universal feelings which are common to all the race, and which form the groundwork for every higher mode of aesthetic sensibility” (Allen 446). Like Fox, Allen alludes to Wordsworth’s “Preface.” As I have argued, Wordsworth paved the way for Darwin and Allen to base standards of aesthetic judgment on the feelings and expressions of naturals—savages, children, rustics, and animals.

“follow[s] the steps of her mother [Sorrow] through the world, dropping balm into the wounds she made, and binding up the hearts she had broken” (208-09). Fulfilling this role, “Before Life and After” records universal suffering: from the physical pain of simple organisms to the psychological pain of higher creatures, who know “regret, starved hope, or heart-burnings.” If we read Hardy’s poem as purely ironic, we find a futile complaint against the earth itself: un pitying, the earth does not register suffering, concealing with its stoic testimony—“all went well”—the destruction of millions. This irony is familiar to readers of Hardy’s poems, but the unusual reference to “nescience” is provocative. If we take seriously the speaker’s desire to see “nescience” “reaffirmed” and explore what this might mean, we uncover a complex meditation on poetry. Poetry seems to offer two powerful possibilities for human action: it sympathetically records and responds to organic suffering and/or it enables a moment like this one, in which poet and reader can turn away from knowledge, feeling, and consciousness itself. Even as he recognizes the dangers of “moving backwards,” Hardy explores the possible value of a kind of regression by imagining a state of complete aesthetic deprivation. For lying on the other side of a return to “nescience” is either numbness or a reconfiguration of sensation and thought.

An elusive word and concept, “nescience” also appears in the poem “A Sign Seeker” (1898), a lyric that represents its speaker’s experience of ignorance. The realization of ignorance is the poem’s antecedent scenario, but the speaker first describes modes of seeing and knowing:

I mark the months in liveries dank and dry,  
                   The noontides many-shaped and hued;  
                   I see the nightfall shades subtrude,  
 And hear the monotonous hours clang negligently by.

I have seen the lightning-blade, the leaping star,  
                   The cauldrons of the sea in storm,  
                   Have felt the earthquake’s lifting arm,  
 And trodden where abysmal fires and snow-cones are.

I learn to prophesy the hid eclipse,  
                   The coming of eccentric orbs;  
                   To mete the dust the sky absorbs,  
 To weigh the sun, and fix the hour each planet dips.

I witness fellow earth-men surge and strive;  
                   Assemblies meet, and throb, and part;  
                   Death’s sudden finger, sorrow’s smart;  
 All the vast various moils that mean a world alive. (1-20)

The speaker’s perception grows increasingly powerful in the first four stanzas. In the first stanza, the speaker constructs knowledge of time through the primary senses, noticing ordinary marks of the seasons. In the second stanza, his eye ranges high and low and to extremes of the globe, as if he sees these events through a telescope or, like Keats in “On Looking into Chapman’s Homer,” through the mediation of a text. The third stanza turns from observation to astronomical prediction and measurement, and the fourth stanza describes the speaker’s witnessing of political



events (perhaps as seen through the technology of a newspaper).<sup>159</sup> These four declarative sentences and active verbs project a confidence about vision: we seem to witness a gradual integration of the visionary poet with the observing scientist, as the poet's sensitivity to the slightest natural phenomena (seasons, shades, hues) graduates into the enhanced perception of the scientifically trained reader. The implied technologies—printed voyage narratives, ships, the newspaper, telescope—seem to make the modern poet, at last, into a prophet.<sup>160</sup>

But a volta occurs at the fifth stanza, as the speaker indicates the insufficiency of these modes and begins to unfold the poem's central insight. Although the speaker possesses enhanced powers of perception, he does not possess knowledge, for "that I fain would wot of shuns my sense." A would-be "prophet," he is eager to witness supernatural phenomena, or some sign of life after death, but neither his receptivity nor his direct solicitation of communication from the dead produces a sign. The antecedent scenario turns out to be not an event but the absence of an event, as the speaker describes what he does not find: a "glimpse [of] a phantom parent, friend," a "print" of his dead lover's "spirit-kisses," and an angelic "plume" to signal that "Heaven inscrolls the wrong" of violence (25-36). The absence of visions leads him to muse:

—There are who, rapt to heights of trancelike trust,  
    These tokens claim to feel and see,  
    Read radiant hints of times to be—  
Of heart to heart returning after dust to dust.

Such scope is granted not to lives like mine ...  
    I have lain in dead men's beds, have walked  
    The tombs of those with whom I had talked,  
Called many a gone and goodly one to shape a sign,

And panted for response. But none replies;  
    No warnings loom, nor whisperings  
    To open out my limitings,

And Nescience mutely muses: When a man falls he lies. (46-48)

The poem closes with panting, anticipation, and then a strangely enriched silence. The silence produces no insight or cautionary advice from beyond the grave, yet provides a "mute" musing that exceeds ordinary thought, in that it exceeds language. In this moment of blankness, the speaker encounters death in the only way the living can, finding that it lies beyond thought and representation. The moment produces nothing except itself, as the circular logic of the final line

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<sup>159</sup>As Kevis Goodman has shown, William Cowper perhaps best exemplifies the poet's use of the newspaper to access political events from a distance. Cowper avidly read *The Morning Chronicle* daily, and its reported events appear in his correspondence and in *The Task*; Goodman writes, "It is the newspaper, after all, that ... provides the 'loophole,' but unlike the twentieth-century critics, Cowper is using the word in its original sense, as an "opening" or passageway, useful for both communication with and fortification against the outer world. The place of retirement has an 'out,' it seems; that 'of' is possessive, too. A 'sensible path' ... the newspaper linked the bodily and phenomenological life of the individual reader with the expanding imperial system" (69).

<sup>160</sup>A debate over whether Hardy's poetry is empirical or visionary (and escapist) parallels debates regarding Wordsworth's poetry, which at times seeks to transcend mere sensation and to achieve the status of visionary work. Critics of Wordsworth—from Keats and Coleridge to Hartman, McGann, Levinson, and Liu—have addressed the contradiction between *The Preface*'s inauguration of a poetry that represents nature and the lives of real men and his practice, in the poetry, of transcending sensations (his own and those of others), ventriloquizing voices, and overcoming what nurtured him.

offers either a riddle or a reduction of man to a body, destined to become inert matter. The fall of man is a fall into a grave, rather than a fall into knowledge and the hope of future salvation.

Yet by “refusing consolation” (to the irritation of his critics), Hardy attempts to make way for a deep transformation of both the human condition and human society. Such transformation begins with the intense pain of losing the comforting idea, not only of divine benevolence, but also divine omniscience. In “Doom and She” (1901), he depicts the parents of man as blind Nature, who “work[s] by touch alone,” and Doom, who is “vacant of feeling” and therefore cannot explain to his co-parent the sound of man’s “multitudinous groan” (25, 10). Having “eyelessly” created “shapings,” Nature can only wonder if she should now “undo” them (20). In this poem, the greatest possible mercy is to un-create man. In “By the Earth’s Corpse” (1901), the Judeo-Christian God is not omniscient, but rather “repenteth” having “made Earth, and Life, and man” with a “too oft unconscious hand” (31-32, 21). These lesser-known poems express a similar idea as “Hap”: that man’s recognition of divine nescience intensifies physical and emotional suffering, for he now feels the absence of consolation.

These poems should not be understood as Hardy’s final view on the matter, but rather as impressions that enable him “to open out” from the “limitings” of prior systems of belief, if through the misshapen, rather than ecstatic, forms of his poetry. Like “By the Earth’s Corpse,” “A Plaint to Man” (1909-10) imagines the creator speaking to man and admitting his shortcomings. Reversing a common situation of his other poems, in which a human speaker complains to a god for creating him, Hardy personifies the concept of God, who complains to man for inventing him.<sup>161</sup>

When you slowly emerged from the den of Time,  
And gained percipience as you grew,  
And fleshed you fair out of shapeless slime,

Wherefore, O Man, did there come to you  
The unhappy need of creating me –  
A form like your own – for praying to? (1-6)

In the first stanza, we see the evolution of the human body-mind: “slime” is slowly transformed into a “fair” being, and “percipience” emerges from a dark “den” of ignorance and nothingness. The second stanza turns to man’s invention of God, which is not the continuation of this organic process through “percipience,” but rather a sudden, unexplained break from natural creation to empty artifice. The break prompts the question from the thing created. Here it is God who complains of his own mortality. God is only a visual deception, a “phasm on a lantern-slide / Shown forth in the dark upon some dim sheet,” which “dwindle[s] day by day / Beneath the

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<sup>161</sup>In representing the mortality of God as a manmade concept, Hardy also reverses the fallen Adam’s complaint in *Paradise Lost*:

Did I request thee, Maker, from my clay  
To mold me man, did I solicit thee  
From darkness to promote me[?]... (Milton 10.743-45)

These lines from *Paradise Lost* are also the epigraph of Mary Shelley’s *Frankenstein*. Hardy’s allusion considers the language of sin and salvation in a natural historical context, evoking at once the futility of creation, as well as the as-yet-unseen possibility of renewal, since both Adam and Frankenstein’s creature are misguided in their anger. Hardy seems to secularize Milton, who, drawing upon the story of Job, attempts to make earthly suffering meaningful not by evoking blind faith in God but rather by depicting future salvation through Christ. Many thanks to Ian Duncan for reminding me of these lines from *Paradise Lost*.

deicide eyes of seers / In a light that will not let [it] stay” (10-11, 22-24). As in “Hap,” the loss of the concept of God seems to be a greater source of unhappiness than the suffering that originated the illusion. In this poem, the irony is multiplied, since man, in one age, invented the “device” of a merciful God (in order to “bear / The irk no local hope beguiles”) and then, in the current age, is committing “deicide” on his own invention, destroying his only source of comfort (13, 17-18). Yet the fading of the illusion makes it possible for man to recognize, for the first time, a “local hope”—that is, earthly possibility:

And to-morrow the whole of me [God] disappears,  
The truth should be told, and the fact be faced  
That had best been faced in earlier years:

The fact of life with dependence placed  
On the human heart’s resource alone,  
In brotherhood bonded close and graced

With loving-kindness fully blown,  
And visioned help unsought, unknown. (25-32)

Hardy not only refuses consolation but also rejects its logic, turning away from the Biblical narrative in which man falls into knowledge in order one day to rise into salvation. According to this secular morality, when a man falls, he lies upon the earth. If “percipience” has only produced more suffering, then the hope for renewal lies in a far humbler organ than the seeing eye and the knowing mind: the “human heart” at last abloom with “loving-kindness.”

Just as Nature’s most merciful act would be to “undo” man, man might liberate himself by undoing his own creation—God—and returning to feeling, rather than vision, as a mode of knowledge. The phrase “visioned help” can refer to both the image of God, “visioned” by man, and to the lie of an all-seeing, all-knowing God. Man must unlearn the knowledge produced by the “device” of God, and he must now recognize “local” truths, rather than seek distant ones. The argument seems to typify a sentimental Victorian poetics, one supposedly stuck between Romantic exuberance and modernist self-consciousness. In both his poems and novels, Hardy seems to layer the discrete tropes and concerns of pre-Romantic, Romantic, and Victorian poetry: he revives tropes from the literature of sensibility; he evokes Christian sentiment with the reference to “brotherhood” and “grace”; he grapples with the loss of faith; and he represents the creative power of the human imagination. His work melts down these heterogeneous elements into a poetry capable of responding to the present crisis: as a virtual extension of the human body, poetry records (rather than denies) physical and psychological suffering; rather than advancing knowledge, poetry creates, un-creates, and recreates it. In “A Plaint to Man,” complaint against the visible facts leads to the realization that vision has the power to create physical and social realities. Vision has created God, vision can “undo” God, and vision can create something else in God’s place, while being wary of its own powers of self-deception.

It is this insight that enables Hardy to turn, with a little-understood suddenness, from morbid reflections to visions of human transformation:

And what is to-day, in allusions to the present author’s pages, alleged to be  
‘pessimism’ is, in truth, only such ‘questionings’ in the exploration of reality, and  
is the first step towards the soul’s betterment, and the body’s also. (*CPTH* 557)

Poetry questions reality—its effect on diverse bodies and minds, and its construction—and thus works toward the “betterment” of man’s body and soul. Unlike Clifford, Hardy does not project

the advance of human vision and intellect, but rather an improvement in the quality of experience—“loving-kindness, operating through scientific knowledge” would reduce suffering and increase the pleasures of sympathy. As Blake recognized in the “Marriage of Heaven and Hell,” the bodily senses are both the victims of false reality and its creators: “If the doors of perception were cleansed every thing would appear to man as it is, infinite. / For man has closed himself up, till he sees all things thro' narrow chinks of his cavern” (Plate 14). Post-Darwinian natural history provides Hardy a means of representing nature’s construction of human perception, man’s appropriation of that creative power, and, finally, the possibility of recreating perception continually and thereby working toward enlightenment. Such work might be possible, he suggests, through the poet who observes reality like a scientist, yet emphasizes his human limitations and the limits of knowledge.

The poems thus continue the method of *Tess*, whose narrator confesses a lack of moral knowledge, offering the reader a fluid access to—but no classification of—its heroine. This quality of *Tess* leads John Paul Riquelme to call it the “most poetic of Hardy’s novels” (Introduction 10): “The blurring of determinate distinctions through style and action involving chiasmus, doubling, and reversal goes against the grain of realism. In *Tess*, the displacing of determinacies by doubling and uncertainty offers a challenge to views of human experience as fated, determined, prescribed, or narrowly limited in advance, even while the story confirms those views in some important regards” (“Echoic Language” 508). For Hardy, religion and science alike seem to narrow human possibility: Christianity denies the body, restricts sympathy, and offers only empty compensation; natural history reveals the simultaneous birth of life and pain; and social history has only invented new means of physical and psychological suffering. Hardy’s poetry offers a way outside the Christian and Darwinian narratives, but it does so by way of Darwin and Lyell’s own discoveries. It imagines restarting development, returning to that moment when organisms first gained sensation. What if evolutionary narrative were based not on the development of hand, eye, and then mind, but on the blooming of “loving-kindness”? Hardy leaves us with this sentimental thought, which, like his poetry, “operat[es] through scientific knowledge” and through layers of previous thought.

## Bibliography

- Abrams, M. H. *A Glossary of Literary Terms*. 6<sup>th</sup> ed. New York: Harcourt Brace, 1957. Print.
- Adorno, Theodor W. "Negative Dialectics and the Possibility of Philosophy." *The Adorno Reader*. Ed. Brian O'Connor. Oxford: Blackwell, 2000. Print.
- Adorno, Theodor W. and Max Horkheimer. *Dialectic of Enlightenment: Philosophical Fragments*. Ed. Gunzelin Schmid Noerr. Trans. Edmund Jephcott. Stanford: Stanford UP, 2002. Print.
- Allen, Grant. "Aesthetic Evolution in Man." *Mind* 5.20 (1880): 445-64. *JSTOR*. Web. 6 May 2008.
- Amigoni, David. *Colonies, Cults and Evolution: Literature, Science and Culture in Nineteenth-Century Writing*. New York: Cambridge UP, 2007. Print.
- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. 2<sup>nd</sup> ed. New York: Verso, 1991. Print.
- Anonymous. *Model of a Slave Ship with Removable Decks beneath Which Are Revealed Painted Figures of African Slaves Stowed for the Middle Passage*. Photograph. W.E.B. Du Bois Institute for African and African American Research, Cambridge. *ARTstor*. Web. 22 Jan. 2008.
- Anonymous. "Review of the *Descent of Man*." *The Annual Register*. (1871): 368. 1 Nov. 2009.
- Anonymous. "Review of *Epistle to William Wilberforce, Esq. On the Rejection of the Bill for Abolishing the Slave Trade*." *Monthly Review* 1791: 226-27. Microform.
- Anonymous. "[Review of] *Journal of Researches into the Geology and Natural History of the Various Countries Visited by H.M.S. Beagle, under the Command of Captain Fitz-Roy, R.N., from 1832 to 1836*." *Quarterly Review* 65.129 (1839): 194-234. *The Complete Work of Charles Darwin Online*. Ed. John van Whye. Web. 1 Nov. 2009.
- Armstrong, Isobel. *Victorian Poetry: Poetry, Poetics, and Politics*. New York: Routledge, 1993. Print.
- Armstrong, Patrick. *Darwin's Other Islands*. New York: Continuum, 2004. Print.
- Arnold, Matthew. "The Function of Criticism at the Present Time." *Victorian Prose and Poetry*. Eds. Lionel Trilling and Harold Bloom. New York: Oxford UP, 1973. Print.
- . "Literature and Science." *Victorian Prose and Poetry*. Eds. Lionel Trilling and Harold Bloom. New York: Oxford UP, 1973. Print.
- Averill, James H. "Wordsworth and 'Natural Science': The Poetry of 1798." *Journal of English and Germanic Philology*. 77 (1978): 232-46. Print.
- Barbauld, Anna. *Anna Letitia Barbauld: Selected Poetry and Prose*. Eds. Elizabeth Kraft and William McCarthy. New York: Broadview, 2001. Print.
- Barlow, Nora. "On Charles Darwin and His Grandfather Dr. Erasmus Darwin." *The Autobiography of Charles Darwin 1809-1882*. Ed. Nora Barlow. London: Norton, 1969. Print.
- Barrett, Paul H., Peter J. Gautrey, and Sandra Herbert, eds. *Charles Darwin's Notebooks, 1836-1844: Geology, Transmutation of Species, Metaphysical Enquiries*. Ithaca: Cornell UP, 1987. Print.
- Basker, James G. *Amazing Grace: An Anthology of Poems About Slavery, 1660-1810*. New Haven: Yale UP, 2002. Print.

- Bate, Jonathan. *Romantic Ecology: Wordsworth and the Environmental Tradition*. New York: Routledge, 1991. Print.
- Beer, Gillian. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*. 2<sup>nd</sup> ed. Cambridge: Cambridge UP, 2000. Print.
- Bell, Andrew, and Colin Macfarquhar. *Encyclopædia Britannica; or, a Dictionary of Arts, Sciences, and Miscellaneous Literature*. 3<sup>rd</sup> ed. 18 vols. Edinburgh: A. Bell and C. Macfarquhar, 1797. Print.
- Bewell, Alan. *Romanticism and Colonial Disease*. Baltimore: Johns Hopkins UP, 1999. Print.
- . *Wordsworth and the Enlightenment: Nature, Man, and Society in the Experimental Poetry*. New Haven: Yale UP, 1989. Print.
- Bilsborrow, Dewhurst. "To Erasmus Darwin, on His Work Intituled *Zoonomia*." *Zoonomia; or, the Laws of Organic Life*. 1794-96. Vol. 1. London: J. Johnson, 1794-96. *Eighteenth Century Collections Online*. Web. 18 Aug. 2008. 2 vols.
- Blake, William. *The Poetry and Prose of William Blake*. Ed. David V. Erdman. Garden City: Doubleday, 1965. Print.
- Bowler, Peter J. *Evolution: The History of an Idea*. 2<sup>nd</sup> ed. Berkeley: U of California P, 1989. Print.
- Bradshaw, Penny. "Dystopian Futures: Time-Travel and Millenarian Visions in the Poetry of Anna Barbauld and Charlotte Smith." *Romanticism on the Net*. 21 (2001): n. pag. Web. 15 Mar. 2009.
- . "Gendering the Enlightenment: Conflicting Images of Progress in the Poetry of Anna Laetitia Barbauld." *Women's Writing* 5.3 (1998): 353-71. Print.
- Brown, Laura. *Alexander Pope*. New York: Blackwell, 1985. Print.
- Buffon, Georges Louis Leclerc, Comte de. *Barr's Buffon. Buffon's Natural History, Containing a Theory of the Earth, a General History of Man, of the Brute Creation, and of Vegetables*. Vol. 3. London: J. S. Barr, 1792. *Eighteenth Century Collections Online*. Web. 30 Jan. 2009. 10 vols.
- Burke, Edmund. *A Philosophical Enquiry into the Origins of Our Ideas of the Sublime and Beautiful*. Ed. Adam Phillips. Oxford: Oxford UP, 1998. Print.
- . *Reflections on the Revolution in France*. Ed. L. G. Mitchell. New York: Oxford UP, 1999. Print.
- Canning, George, et al. *Poetry of the Anti-Jacobin: Comprising the Celebrated Political and Satirical Poems, of the Rt. Hons. G. Canning, John Hookham Frere, W. Pitt, the Marquis Wellesley, G. Ellis, W. Gifford, the Earl of Carlisle, and Others*. 3<sup>rd</sup> ed. London: G. P. Putnam and S. Low, 1890. Print.
- Carey, Brycchan. *British Abolitionism and the Rhetoric of Sensibility: Writing, Sentiment, and Slavery, 1760-1807*. New York: Palgrave MacMillan, 2005. Print.
- Carroll, Joseph. *Literary Darwinism: Evolution, Human Nature, and Literature*. New York: Routledge, 2004. Print.
- Caygill, Howard. *Art of Judgement*. New York: Blackwell, 1989. Print.
- Chandler, James K. *Wordsworth's Second Nature: A Study of the Poetry and Politics*. Chicago: Chicago UP, 1984. Print.
- Clarkson, Thomas. *An Essay on the Slavery and Commerce of the Human Species, Particularly the African*. Philadelphia: Joseph Crukshank, 1786. *Eighteenth Century Collections Online*. Web. 12 May 2007.

- Coleridge, Samuel Taylor. "On the Slave Trade." *Slavery, Abolition, and Emancipation: Writings in the British Romantic Period*. Vol. 2. Ed. Peter Kitson. London: Pickering & Chatto, 1999. Print. 8 vols.
- . *Samuel Taylor Coleridge; The Oxford Authors*. Ed. H. J. Jackson. New York: Oxford UP, 1985. Print.
- Committee for the Abolition of the African Slave Trade. *Minute Books of the Committee for the Abolition of the Slave-Trade 22 May, 1787 – 9 July, 1819*. Microform.
- Corbin, Alain. *Time, Desire, and Horror: Towards a History of the Senses*. Trans. Jean Birrell. Cambridge: Polity, 1995. Print.
- Cowper, William. *The Poetical Works of William Cowper*. Ed. H. S. Milford. 3<sup>rd</sup> ed. London: Oxford UP, 1926. Print.
- Crary, Jonathan. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Cambridge: MIT P, 1990. Print.
- Darwin, Charles. *The Autobiography of Charles Darwin 1809-1882*. Ed. Nora Barlow. London: Norton, 1969. Print.
- . *Charles Darwin's the Life of Erasmus Darwin*. Ed. Desmond King-Hele. 1<sup>st</sup> unabridged ed. New York: Cambridge UP, 2003. Print.
- . *Charles Darwin's Notebooks, 1836-1844: Geology, Transmutation of Species, Metaphysical Enquiries*. Eds. Paul H. Barrett, Peter J. Gautrey and Sandra Herbert. Ithaca: Cornell UP, 1987. Print.
- . *The Descent of Man, and Selection in Relation to Sex*. 2 vols. Princeton: Princeton UP, 1981. Print.
- . *Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Round the World*. London: John Murray, 1845. *The Complete Work of Charles Darwin Online*. Ed. John van Whye. Web. 15 Jan. 2009.
- . *On the Origin of Species: A Facsimile of the First Edition*. Cambridge: Harvard UP, 1964. Print.
- Darwin, Erasmus. *The Botanic Garden, Part II. Containing the Loves of the Plants, a Poem. With Philosophical Notes*. Lichfield: J. Johnson, 1789. *Eighteenth Century Collections Online*. Web. 30 Jan. 2008.
- . *The Botanic Garden; a Poem, in Two Parts. Part I. Containing the Economy of Vegetation. Part II. The Loves of the Plants. With Philosophical Notes*. London: J. Johnson, 1791. *Eighteenth Century Collections Online*. Web. 30 Jan. 2008.
- . *The Golden Age; the Temple of Nature or, the Origin of Society*. Ed. Donald H. Reiman. New York: Garland, 1978. Print.
- . *The Letters of Erasmus Darwin*. Ed. Desmond King-Hele. New York: Cambridge UP, 1981. Print.
- . *Zoonomia; or, the Laws of Organic Life*. Vol. 1. London: J. Johnson, 1794-96. *Eighteenth Century Collections Online*. Web. 18 Aug. 2008. 2 vols.
- Davies, Kate. "A Moral Purchase: Femininity, Commerce, and Abolition, 1788-1792." *Women, Writing and the Public Sphere, 1700-1830*. Eds. Elizabeth Eger, Charlotte Grant and Penny Warburton. Cambridge: UP, 2001. Print.
- De Man, Paul. "The Dead-End of Formalist Criticism." *Blindness and Insight: Essays in the Rhetoric of Contemporary Criticism*. 2<sup>nd</sup> ed. Minneapolis: U of Minnesota P, 1983. Print.
- De Quincey, Thomas. *The Collected Writings of Thomas De Quincey*. Ed. David Masson. Vol. 11. London: A. & C. Black, 1897. Print. 14 vols.

- Desmond, Adrian J. *The Politics of Evolution: Morphology, Medicine, and Reform in Radical London*. Chicago: U of Chicago P, 1989. Print.
- Desmond, Adrian J., and James R. Moore. *Darwin*. New York: Warner Books, 1992. Print.
- . *Darwin's Sacred Cause: How a Hatred of Slavery Shaped Darwin's Views on Human Evolution*. New York: Houghton Mifflin Harcourt, 2009. Print.
- Duncan, Ian. "Darwin and the Savages." *Yale Journal of Criticism*.4 (1991): 13-45. Print.
- Dutton, Denis. "Aesthetics and Evolutionary Psychology." *Oxford Handbook of Aesthetics*. Ed. Jerrold Levinson. New York: Oxford UP, 2003. Print.
- Eagleton, Terry. *The Ideology of the Aesthetic*. Cambridge: Blackwell, 1990. Print.
- Empson, William. *Some Versions of Pastoral*. London: Hogarth, 1986. Print.
- Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Random House, 1994. Print.
- Fox, William. "An Address to the People of Great Britain, on the Propriety of Abstaining from West India Sugar and Rum." *Slavery, Abolition, and Emancipation: Writings in the British Romantic Period*. Ed. Peter J. Kitson. Vol. 2. London: Pickering and Chatto, 1999. Print. 8 vols.
- Fox, William Johnson. "Tennyson—Poems, Chiefly Lyrical—1830." *Victorian Poetry and Poetic Theory*. Eds. Thomas J. Collins and Vivienne J. Rundle. Ontario: Broadview, 1999. Print.
- François, Anne-Lise. "'O Happy Living Things': Frankenfoods and the Bounds of Wordsworthian Natural Piety." *Diacritics* 33.2 (2003): 42-70. Print.
- Freeman, R. B. *The Works of Charles Darwin: An Annotated Bibliographical Handlist*. 2<sup>nd</sup> ed. Dawson: Archon Books, 1977. Print.
- Freud, Sigmund. *The Freud Reader*. Ed. Peter Gay. New York: Norton, 1989. Print.
- Gallagher, Catherine. "Tess of the d'Urbervilles: Hardy's Anthropology of the Novel." *Tess of the d'Urbervilles*. Eds. Ross C. Murfin and John Paul Riquelme. New York: Bedford, 1998. Print.
- Gaskell, Elizabeth. *Mary Barton*. Ed. Shirley Foster. New York: Oxford UP, 2006. Print.
- Gibbons, Luke. *Edmund Burke and Ireland: Aesthetics, Politics and the Colonial Sublime*. New York: Cambridge UP, 2003. Print.
- Gifford, Don. *The Farther Shore: A Natural History of Perception, 1798-1984*. New York: Atlantic Monthly P, 1990. Print.
- Gigante, Denise. *Life: Organic Form and Romanticism*. New Haven: Yale UP, 2009. Print.
- . *Taste: A Literary History*. New Haven: Yale UP, 2005. Print.
- Goodman, Kevis. *Georgic Modernity and British Romanticism: Poetry and the Mediation of History*. Cambridge: Cambridge UP, 2004. Print.
- Gray, Thomas. "Elegy Written in a Country Churchyard." *The Norton Anthology of English Literature*. Ed. M. H. Abrams. 6<sup>th</sup> ed. New York: Norton, 1996. Print.
- Hardy, Thomas. *The Complete Poems of Thomas Hardy*. Ed. James Gibson. New York: Macmillan, 1976. Print.
- . *Jude the Obscure*. New York: Random House, 1994. Print.
- . *Tess of the d'Urbervilles*. Eds. Ross C. Murfin and John Paul Riquelme. New York: Bedford, 1998. Print.
- Hardy, Thomas, Michael Millgate, and Florence Emily Hardy. *The Life and Work of Thomas Hardy*. Athens: U of Georgia P, 1985. Print.



- Hartley, David. *Observations on Man, His Frame, His Duty, and His Expectations*. Vol. 1. London: S. Richardson, 1749. *Eighteenth Century Collections Online*. Web. 16 Jan. 2010. 2 vols.
- Hartman, Geoffrey H. "False Themes and Gentle Minds." *Poets of Sensibility and the Sublime*. Ed. Harold Bloom. New York: Chelsea House, 1986. Print.
- . *The Fateful Question of Culture*. New York: Columbia UP, 1997. Print.
- . *The Longest Shadow: In the Aftermath of the Holocaust*. Bloomington: Indiana UP, 1996. Print.
- . "A Poet's Progress: Wordsworth and the *Via Naturaliter Negativa*." *Modern Philology* 59.2 (1962): 214-24. *JSTOR*. Web. 3 Nov. 2009.
- . *Wordsworth's Poetry, 1787-1814*. New Haven: Yale UP, 1964. Print.
- Helvetius. *The True Meaning of the System of Nature. Translated from the French of Helvetius. With Notes*. Edinburgh: J. Murdoch, 1799. *Eighteenth Century Collections Online*. Web. 24 Apr. 2009.
- Heringman, Noah. "The Rock Record and Romantic Narratives of the Earth." *Romantic Science: The Literary Forms of Natural History*. Albany: SUNY P, 2003. Print.
- Howe, Irving. *Thomas Hardy*. New York: Macmillan, 1967. Print.
- Institute of Human Origins. *Becoming Human*. February 2009. Web. 22 Mar. 2010.
- Jackson, Noel. *Science and Sensation in Romantic Poetry*. New York: Cambridge UP, 2008. Print.
- Johnson, Barbara. *A World of Difference*. Baltimore: Johns Hopkins UP, 1987. Print.
- Kant, Immanuel. *Critique of Judgement*. Trans. John Henry Bernard. London: Macmillan, 1914. Print.
- Keats, John. *The Complete Poems*. Eds. John Barnard and Christopher Ricks. 2<sup>nd</sup> ed. New York: Penguin, 1973. Print.
- King-Hele, Desmond. *Erasmus Darwin: A Life of Unequalled Achievement*. London: DLM, 1999. Print.
- . *Erasmus Darwin and the Romantic Poets*. London: Macmillan, 1986. Print.
- Krasner, James. "'One of a Long Row Only': Sexual Selection and the Male Gaze in Thomas Hardy's *Tess of the d'Urbervilles*." *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*. Eds. Barbara Larson and Fae Brauer. Hanover: UP of New England, 2009. Print.
- Kuhn, Bernhard. "'A Chain of Marvels': Botany and Autobiography in Rousseau." *European Romantic Review* 17.1 (2006): 1-20. Print.
- Lamb, Jonathan. Introduction. *Exploration and Exchange: A South Seas Anthology, 1680-1900*. Eds. Jonathan Lamb, Vanessa Smith and Nicholas Thomas. Chicago: U of Chicago Press, 2000. Print.
- . *Preserving the Self in the South Seas, 1680-1840*. Chicago: Chicago UP, 2001. Print.
- Langan, Celeste, and Maureen N. McLane. "The Medium of Romantic Poetry." *The Cambridge Companion to British Romantic Poetry*. Eds. James Chandler and Maureen N. McLane. New York: Cambridge UP, 2008. Print.
- Levine, George. "'And If It Be a Pretty Woman All the Better': Darwin and Sexual Selection." *Literature, Science, Psychoanalysis, 1830-1970*. Eds. George Levine, Helen Small and Trudi Tate. Oxford: Oxford UP, 2003. Print.
- . *Darwin and the Novelists: Patterns of Science in Victorian Fiction*. Cambridge: Harvard UP, 1988. Print.

- Levinson, Marjorie. *Wordsworth's Great Period Poems: Four Essays*. New York: Cambridge UP, 1986. Print.
- Lyell, Charles. *Principles of Geology, or, the Modern Changes of the Earth and Its Inhabitants Considered as Illustrative of Geology*. 9<sup>th</sup> ed. London: J. Murray, 1853. Print.
- Makdisi, Saree. *Romantic Imperialism: Universal Empire and the Culture of Modernity*. New York: Cambridge UP, 1998. Print.
- Mandell, Laura. "‘Those Limbs Disjointed of Gigantic Power’: Barbauld’s Personifications and the (Mis)Attribution of Political Agency." *Studies in Romanticism* 37.1: 27-41. Print.
- Manier, Edward. *The Young Darwin and His Cultural Circle: A Study of Influences Which Helped Shape the Language and Logic of the First Drafts of the Theory of Natural Selection*. Holland: D. Reidel, 1978. Print.
- Marx, Karl, and Friedrich Engels. *The Communist Manifesto*. Ed. David McLellan. Oxford: Oxford UP, 1992. Print.
- Matlak, Richard. "Wordsworth’s Reading of *Zoonomia* in Early Spring." *Wordsworth Circle* 21.3 (1990): 76-81. Print.
- McEathron, Scott, ed. *Thomas Hardy’s Tess of the d’Urbervilles: A Sourcebook*. New York: Routledge, 2005. Print.
- McGann, Jerome J. *The Poetics of Sensibility: A Revolution in Literary Style*. New York: Clarendon, 1996. Print.
- McLane, Maureen. *Romanticism and the Human Sciences: Poetry, Population and the Discourse of the Species*. New York: Cambridge UP, 2000. Print.
- McNeil, Maureen. *Under the Banner of Science: Erasmus Darwin and His Age*. Manchester: Manchester UP, 1987. Print.
- Mill, John Stuart. "What is Poetry?" *Victorian Prose and Poetry*. Eds. Lionel Trilling and Harold Bloom. New York: Oxford UP, 1973. Print.
- Millar, John. *Observations on the Prevailing Diseases in Great Britain: Together with a Review of the History of Those Former Periods, and in Other Countries*. London: T. Cadell, 1770. *Eighteenth Century Collections Online*. Web. 7 Oct. 2009.
- Milton, John. *Paradise Lost*. Ed. Scott Elledge. New York: Norton, 1993. Print.
- Mitchell, Robert. *Sympathy and the State in the Romantic Era: Systems, State Finance, and the Shadows of Futurity*. New York: Routledge, 2007. Print.
- Moretti, Franco. *Graphs, Maps, Trees: Abstract Models for a Literary History*. New York: Verso, 2005. Print.
- Moses, Michael Valdez. *The Novel and the Globalization of Culture*. New York: Oxford UP, 1995. Print.
- Murdoch, J. "The Translator’s Preface." *The True Meaning of the System of Nature. Translated from the French of Helvetius. With Notes*. Edinburgh: J. Murdoch, 1799. *Eighteenth Century Collections Online*. Web. 4 Apr. 2009.
- O’Connell, Lisa. "‘Matrimonial Ceremonies Displayed’: Popular Ethnography and Enlightened Imperialism." *Eighteenth-Century Life* 26.3 (2002): 98-116. *Project Muse*. Web. 15 Mar. 2009.
- Oliver, Grace Atkinson. *Memoir, Letters, and a Selection from the Poems and Prose Writings of Anna Laetitia Barbauld*. Boston: J. R. Osgood, 1874. Print.
- Oliver, Simon. *Philosophy, God and Motion*. New York: Routledge, 2005. Print.
- Oxford English Dictionary*. 2<sup>nd</sup> ed. 1989. *OED Online*. Oxford University Press. Web.

- Packham, Catherine. "The Science and Poetry of Animation: Personification, Analogy, and Erasmus Darwin's *Loves of the Plants*." *Romanticism: The Journal of Romantic Culture and Criticism* 10.2 (2004): 191-208. Print.
- Paine, Thomas. *Agrarian Justice Opposed to Agrarian Law, and to Agrarian Monopoly; Being a Plan for Meliorating the Condition of Man, by Creating in Every Nation a National Fund*. Paris, London: W. Adlard, 1797. *Eighteenth Century Collections Online*. Web. 10 Feb. 2009.
- . *Rights of Man: Being an Answer to Mr. Burke's Attack on the French Revolution*. Boston: I. Thomas and E. T. Andrews, 1791. *Eighteenth Century Collections Online*. Web. 10 Feb. 2009.
- Parliament. *Debate on a Motion for the Abolition of the Slave-Trade in the House of Commons on Monday and Tuesday, April 18 and 19, 1791*. London: W. Woodfall, 1791. Print.
- Paulin, Tom. *Thomas Hardy: The Poetry of Perception*. 2<sup>nd</sup> ed. London: Macmillan, 1986. Print.
- Perkins, David. "Wordsworth and the Polemic against Hunting: 'Hart-Leap Well'." *Nineteenth-Century Literature* 52.4 (1998): 421-45. *JSTOR*. Web. 15 Mar. 2009.
- Petley, Christer. "Slavery, Emancipation and the Creole World View of Jamaican Colonists." *Slavery and Abolition* 26.1 (2005): 93-114. Print.
- Pfau, Thomas. *Wordsworth's Profession: Form, Class, and the Logic of Early Romantic Cultural Production*. Stanford: Stanford UP, 1997. Print.
- Picciotto, Joanna. "Optical Instruments and the Eighteenth-Century Observer." *Studies in Eighteenth-Century Culture*.29 (2000): 123-53. Print.
- . "Reforming the Garden: The Experimentalist Eden and *Paradise Lost*." *ELH* 72 (2005): 23-78. Print.
- Porter, Roy. *Flesh in the Age of Reason*. New York: Norton, 2004. Print.
- Richards, Robert J. *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe*. Chicago: U of Chicago P, 2002. Print.
- Richardson, Alan. *British Romanticism and the Science of the Mind*. Cambridge: Cambridge UP, 2001. Print.
- Riquelme, John Paul. "Echoic Language, Uncertainty, and Freedom in *Tess of the d'Urbervilles*." *Tess of the d'Urbervilles*. Eds. John Paul Riquelme and Ross C. Murfin. New York: Bedford, 1998. Print.
- . Introduction. *Tess of the d'Urbervilles*. Eds. John Paul Riquelme and Ross C. Murfin. New York: Bedford, 1998. Print.
- Rohrbach, Emily. "Anna Barbauld's History of the Future: A Deviant Way to Poetic Agency." *European Romantic Review* 17.2 (2006): 179-87. Print.
- Rooney, Ellen. "Tess and the Subject of Sexual Violence: Reading, Rape, Seduction." *Tess of the d'Urbervilles*. Eds. Ross C. Murfin and John Paul Riquelme. New York: Bedford, 1998. Print.
- Ross, Catherine. "'Twin Labourers and Heirs of the Same Hopes': The Professional Rivalry of Humphry Davy and William Wordsworth." *Romantic Science: The Literary Forms of Natural History*. Ed. Noah Heringman. Albany: SUNY P, 2003. Print.
- Rousseau, G. S. "Nerves, Spirits, and Fibres: Towards Defining the Origins of Sensibility." *Studies in the Eighteenth Century III*. Toronto: U of Toronto P, 1973. Print.
- Rousseau, Jean-Jacques. *A Discourse Upon the Origin and Foundation of the Inequality among Mankind*. London: R. and J. Dodsley, 1761. *Eighteenth Century Collections Online*. Web. 23 Nov. 2008.

- Ruse, Michael. "The Darwin Industry: A Guide." *Victorian Studies* 39.2 (1996): 217-35. Print.
- Saglia, Diego. "The Dangers of Over-Refinement: The Language of Luxury in Romantic Poetry by Women, 1793-1811." *Studies in Romanticism* 38.4 (1999): 641-72. Print.
- Sarafianos, Aris. "Pain, Labor, and the Sublime: Medical Gymnastics and Burke's Aesthetics." *Representations* 91 (2005): 58-83. Print.
- Schmitt, Cannon. "Darwin's Savage Mnemonics." *Representations* 88 (2004): 55-80. Print.
- Schoenfield, Mark K. *The Professional Wordsworth: Law, Labor, and the Poet's Contract*. Athens: U of Georgia P, 1996. Print.
- Secord, James A. *Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation*. Chicago: U of Chicago P, 2003. Print.
- Seward, Anna. *Memoirs of the Life of Dr. Darwin, Chiefly During His Residence in Lichfield, with Anecdotes of His Friends, and Criticisms on His Writings*. Philadelphia: W. Poyntell, 1804. Print.
- Shaver, Chester L. *Wordsworth's Library: A Catalogue, Including a List of Books Housed by Wordsworth for Coleridge from c. 1810 to c. 1830*. New York: Garland, 1979. Print.
- Shelley, Mary Wollstonecraft. *Frankenstein, or, the Modern Prometheus*. Eds. David Lorne Macdonald and Kathleen Dorothy Scherf. 2<sup>nd</sup> ed. Peterborough: Broadview, 1999. Print.
- Siskin, Clifford. *The Historicity of Romantic Discourse*. New York: Oxford UP, 1988. Print.
- Smith, Adam. *The Theory of Moral Sentiments*. Eds. Knud Haakonssen, Karl Ameriks and Desmond M. Clarke. New York: Cambridge UP, 2002. Print.
- Smith, Jonathan. *Charles Darwin and Victorian Visual Culture*. New York: Cambridge UP, 2006. Print.
- . "Domestic Hybrids: Ruskin, Victorian Fiction, and Darwin's Botany." *SEL* 48.4 (2008): 861-70. *Project Muse*. Web. 15 Mar. 2010.
- Spragens, Thomas A. *The Politics of Motion: The World of Thomas Hobbes*. Lexington: UP of Kentucky, 1973. Print.
- Sussman, Charlotte. *Consuming Anxieties: Consumer Protest, Gender, and British Slavery, 1713-1833*. Stanford: Stanford UP, 2000. Print.
- Thomas, Keith. *Man and the Natural World: Changing Attitudes in England, 1500-1800*. New York: Oxford UP, 1996. Print.
- Timpanaro, Sebastiano. *On Materialism*. New Jersey: NLB Humanities P, 1975. Print.
- Watt, Ian. *The Rise of the Novel: Studies in Defoe, Richardson and Fielding*. Berkeley: U of California P, 1967. Print.
- Whewell, David A. "Taste." *Oxford Handbook of Aesthetics*. Ed. Jerrold Levinson. New York: Oxford UP, 2003. Print.
- Wilberforce, William. "Speech on the Motion for the Abolition of the Slave Trade, 12 May 1789." *Slavery, Abolition, and Emancipation: Writings in the British Romantic Period*. Ed. Peter Kitson. Vol. 2. London: Pickering & Chatto, 1999. Print. 8 vols.
- Williams, Raymond. *Culture and Society 1780-1950*. New York: Anchor Books, 1960. Print.
- . *Keywords: A Vocabulary of Culture and Society*. Rev. ed. New York: Oxford UP, 1985. Print.
- Wood, Marcus. *Blind Memory: Visual Representations of Slavery in England and America*. New York: Routledge, 2000. Print.
- Woolf, Virginia. "The Novels of Thomas Hardy." *Norton Critical Edition of Tess of the d'Urbervilles*. Ed. Scott Elledge. New York: Norton, 1991. Print.

- Wordsworth, William. *The Poetical Works of Wordsworth*. Ed. Thomas Hutchinson. 2<sup>nd</sup> ed. New York: Oxford UP, 1933. Print.
- . *The Prelude 1799, 1805, 1850*. Eds. Jonathan Wordsworth, M. H. Abrams and Stephen Gill. New York: Norton, 1979. Print.
- . *The Prose Works of William Wordsworth*. Eds. W. J. B. Owen and Jane Worthington Smyser. Oxford: Clarendon, 1974. Print.
- Wordsworth, William, and Samuel Taylor Coleridge. *Lyrical Ballads*. Ed. W. J. B. Owen. 2<sup>nd</sup> ed. Oxford: Oxford UP, 1969. Print.
- Wordsworth, William, and Dorothy Wordsworth. *The Early Letters of William and Dorothy Wordsworth (1787-1805)*. Ed. Ernest De Selincourt. Oxford: Clarendon, 1935. Print.
- Wu, Duncan, ed. *Romanticism: An Anthology*. 2<sup>nd</sup> ed. Oxford: Blackwell, 1998. Print.
- . *Wordsworth's Reading, 1770-1799*. New York: Cambridge UP, 1993. Print.
- . *Wordsworth's Reading, 1800-1815*. New York: Cambridge UP, 1995. Print.
- Wyatt, John Frederick. *Wordsworth and the Geologists*. New York: Cambridge UP, 1995. Print.
- Youngquist, Paul. "Lyrical Bodies: Wordsworth's Physiological Aesthetics." *European Romantic Review* 10.2 (1999): 152-62. Print.