

Renegotiating Science: British Women Novelists and Evolution Controversies, 1826-1876

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## ABSTRACT

LAUREN CAMERON: Renegotiating Science: British Women Novelists and Evolution Controversies, 1826-1876  
(Under the direction of Beverly Taylor)

“Renegotiating Science: British Women Novelists and Evolution Controversies, 1826-1876,” examines the cultural and literary discourses surrounding the publication of controversial evolutionary theories in mid-nineteenth century Britain. This project focuses on the intersection of genre, gender, and interventions in scientific discourse, arguing that the novel offered women an opportunity to act as serious investigators of the social implications of evolutionary theories and to voice their evaluations of the validity and usefulness of such theories alongside male fiction and nonfiction writers. In the nineteenth century, nonscientists could take scientific developments as open to collective negotiation, not as authoritative proclamations to be outright accepted or rejected. The women writers my dissertation focuses on reshaped evolutionary theory to meet social and individual needs from an applied perspective; their arguments forwarded the ethical values that were more salient from their gendered standpoint. While these scientific developments were still new and at their “most fictive”—as Gillian Beer put it in her seminal work, *Darwin’s Plots*—Mary Shelley, Elizabeth Barrett Browning, Elizabeth Gaskell, and George Eliot constructed thought experiments that highlighted the problematics of theorizing evolution as an embodied experience and of failing to consider the concrete nature of evolution’s consequences for all populations, whether privileged or vulnerable. Moving away from a

unidirectional model of influence from science to literature, my project instead draws on the insights of rhetorical theorists to argue that literary and scientific texts are similarly constructed, mutually constitutive, and equally representative of the cultural discourses from which they arose. The novels this dissertation focuses on individualize the lived experience of evolution and consider from multiple perspectives the ethical impulses and failures that arise from evolutionary theories, particularly the struggles of women to have their perspectives validated in a globalizing and modernizing world that was increasingly being shaped by scientific culture.

To CDC, NEC, and TFC,  
without whose love and support this project would not have been possible.

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## Introduction

In January 1874, George Eliot published the first installment of what was to be her final finished novel, *Daniel Deronda*. The opening sentence read: “Was she beautiful or not beautiful? and what was the secret of form or expression which gave the dynamic quality to her glance?” Shortly thereafter, a review in *The Examiner* criticized “her affected use of the ‘slang’ of science”—the word “dynamic” was too technical for this reviewer and many others who objected to the harshness of such scientific jargon.<sup>1</sup> To a twenty-first century audience, the term “dynamic” does not strike the ear as jargon, and it can be difficult for us to recognize the jarring nature of it and similar scientific terms in Victorian novels without such contemporaneous responses. The *Examiner* review is particularly interesting, though, because in its attempt to satirize Eliot’s “increasing tendency” to target an audience “whose culture is scientific,” the reviewer reveals a deep-seated anxiety about the inroads science has made into popular culture: “Our children may sing with rapture such staves as: ‘Her eye was kinetic, her voice was pneumatic, / Her mouth was hydrostatic, sweet Molly Malone’” (125). In the context of the review, this is meant to be a joke, though it rings hollow to a modern reader, especially one who has read such dystopic science fiction as Aldous Huxley’s *Brave New World* (1932). But it raises a number of questions: Why is scientific language such a source of concern to a mid-century Victorian? Why is terminology specifically the target of worries about the influence science wields over broader culture? Why is George Eliot’s

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<sup>1</sup> “A New Novel by ‘George Eliot’,” *The Examiner* (London: 1808), 3548 (1876: Jan. 29), p.125.



scientific language singled out as problematic? And what role did her novel, and novels more generally, play in the cultural negotiation of the meaning of such scientific developments?

#### **ABSTRACT OF ARGUMENT**

My dissertation seeks to answer the preceding and other related questions by considering the interdiscursive relationship of science and literature in the nineteenth century at the sites of four major and controversial developments in evolutionary theory, which combined the insights of multiple emergent sciences and so represents a fusion unparalleled by any other nineteenth-century scientific field. The interpretative possibilities evolutionary theory offered for writers of the time were taken up and hotly debated by scientists, academics, theologians, scientific thinkers and popularizers, and fiction writers in a number of popular outlets. Novels allowed women writers specifically to intervene in this male-dominated discussion by constructing thought experiments that explored the feasibility and validity of such evolutionary schemas in the social world, a move that at once worked within and expanded the bounds of realism. Many of these women writers focused on the ethical implications of societies and individuals embodying evolutionary principles and resisted the traditional teleological movement of “Development Hypotheses” that overlooked individual struggles. Moving away from a unidirectional model of influence from science to literature, my project instead considers the conversational nature of debates over developments in evolutionary theory. Each of my chapters seeks to deepen our understanding of how literary authors—and particularly women novelists—influenced the shape of the scientific project by acting as serious investigators of the social implications of evolutionary theories—as philosophers of science—and to recognize that when science does initiate ideas, it does not necessarily divorce itself from the strategies of narrative, nor does a literary work respond in

a direct and singular way. The dates that I have outlined for this project, 1826 to 1876, not only mark the publication of the earliest literary text under consideration (Mary Shelley's *The Last Man*) and the conclusion of the three-volume text of the latest Victorian novel I focus on (George Eliot's *Daniel Deronda*), but also the emergence and dominance of Victorian women writers and the establishment of evolutionary theory as a cultural and scientific force.<sup>2</sup> In the last quarter of the century, transformations in publication patterns and evolutionary debates (which tended to be more or less centralized under the header of Darwinism) fundamentally changed the cultural landscape.

#### **OVERVIEW OF RELATED HISTORICAL RESEARCH AND LITERARY CRITICISM**

The study of science and literature in the nineteenth century is by no means a new one—Lionel Stevenson's 1932 *Darwin among the Poets* is still a valuable resource, and articles on male canonical poets especially were published in a steady trickle throughout the mid-twentieth century. The creation of the subject as a subfield in its own right, however, can be traced to the 1980s, particularly the seminal works *Darwin's Plots* (1983) by Gillian Beer and *Darwin and the Novelists* (1988) by George Levine. As is evident from the titles mentioned in the past couple of sentences, studies of Darwin's influence in nineteenth-century culture, literary and otherwise, have predominated. Such a trend has only been reinforced by the 2009 celebration of the bicentenary of Darwin's birth, which sparked a series of collections and special issues dedicated to Darwinian studies. The scholarly movement to acknowledge and study the multivocality of nineteenth-century evolutionary theory—which is generally considered the quintessential science of the time because of its controversial nature and its fusion of other emergent scientific disciplines, including botany,

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<sup>2</sup> Even though Mary Shelley is a second-generation Romantic, she wrote well into the Victorian period with the intention of selling to a Victorian audience, and her 1826 text reflects anxiety about cultural belatedness so often attributed to the Victorians

geology, biology, chemistry, anthropology, sociology, archaeology, astronomy, medicine, and psychology—has been slow and halting, but nonetheless growing over the past few decades.

Literary studies has in many ways dominated the study of nineteenth-century science and culture because of its interdisciplinary tendencies to draw on other fields of cultural, historical, and philosophical analysis done on the same subject, and to focus on texts that represent similar fusions or distillations of contemporaneous concerns about the subject. The question of the level of self-awareness of the writers who, as Beer puts it, “assimilated and resisted” evolutionary theory “within the subtle enregisterment of narrative” in order to test “the extent to which it can provide a determining fiction by which to read the world” is an open one.<sup>3</sup> Nonetheless, literary scholars have studied the explicit and implicit engagement of nineteenth-century fiction with evolutionary theory through overt references, formal or structural elements, cultural exchanges, rhetorical figures, and lines of argument or plot shared in common.<sup>4</sup> In so doing, scholars have come to the consensus that literary authors’ personal resolutions to the conflicts sparked by evolutionary controversies can be seen as reflecting larger patterns in their culture that contemporaries likely also shared, and that literature served the important function of addressing cultural concerns and questions about scientific developments that were raised by the general accessibility of scientific prose at the time.<sup>5</sup> Even more substantially, however, the field has been moving away from a unidirectional model of influence in which science makes objective truth claims to which literature responds—a model that, as Levine puts it, “implicitly affirmed the intellectual

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<sup>3</sup> Beer, 2.

<sup>4</sup> See, for example, Beer; Franklin; and Gliserman, “Part I.”

<sup>5</sup> Beer, *Darwin’s Plots*, xxviii; Gliserman, “Part I,” 278.

authority of science over literature.”<sup>6</sup> Instead, the poststructuralist denial of the binarism of categories such as science and literature has been gradually embraced, and the texts produced in each field have been treated as similarly constructed, mutually constitutive, and equally representative of the cultural discourse from which they arose.<sup>7</sup>

The inherent narrativity of much scientific endeavor, especially nineteenth-century evolutionary theory, has been increasingly acknowledged and theorized by literary critics.<sup>8</sup> As Beer influentially stated the idea, “When it is first advanced, theory is at its most fictive.”<sup>9</sup> The explanations provided for such a phenomenon are multiple. Recent psychological studies have demonstrated the persuasiveness of narratives, regardless of whether they are labeled factual or fictional.<sup>10</sup> Evolutionary theory in particular is about growth, development, and change over time—processes that are inherently narrative and unidentifiable in one moment in time or without a retrospective approach.<sup>11</sup> Narratives, especially novels, as Levine puts it, “are often about questions of justifiable belief,” as are the pursuits of philosophy and science.<sup>12</sup> Therefore, scientists in emergent fields in the nineteenth century turned to literary models for evidence in order to express the concerns of their pursuits in compelling and persuasive ways.<sup>13</sup> As a consequence, terms in common use were re-valenced, preexisting narratives (such as the anthropocentric and the Biblical) were displaced, new epistemologies

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<sup>6</sup> Levine, *Realism, Ethics and Secularism*, 168.

<sup>7</sup> See Levine, *Realism, Ethics and Secularism*, 166-80.

<sup>8</sup> See, for example, Livingstone.

<sup>9</sup> Beer, 1.

<sup>10</sup> See, for example, Green and Brock. For a less empirical approach, see Cunningham.

<sup>11</sup> Beer, 5-6, 99; Graver, 43.

<sup>12</sup> Qtn. from Levine, *Dying to Know*, 11. See also Levine, *Realism, Ethics and Secularism*, 180.

<sup>13</sup> Beer, 84.

emerged, old debates were intensified, and traditional plots of identity, memory, and time were questioned.<sup>14</sup> Cultural moral values also became the center of debates about evolutionary theory and its ability to provide a scientific foundation for behavioral norms of individuals and societies.<sup>15</sup>

Most scientific disciplines as we know them today began to take form in the nineteenth century, and most likewise made significant steps toward defining and answering the questions that still concern their disciplinary descendants.<sup>16</sup> Many of the critiques leveled against science today—such as its privileged status, its level of technicality that prevents laypeople from understanding and critiquing its methodologies and implications, and its pretension to objectivity—would not have been fairly leveled in the nineteenth century because of thinkers’ greater investment in establishing science’s cultural value.<sup>17</sup> Our perspectives on the work of such scientists is also constantly changing; after all, Charles Darwin’s and Charles Lyell’s ideas were widely considered refuted at the beginning of the twentieth century but now are treated as dominating the century’s scientific viewpoints.<sup>18</sup> The view from the ground in the nineteenth century itself, however, was that of multiplicity; as J. Jeffrey Franklin puts it, “there was no single evolution controversy, not least because there was no unified theory of evolution.”<sup>19</sup> Natural history and evolutionary theory went hand-in-hand and were often used as interchangeable terms for the field of study; both are

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<sup>14</sup> Beer, 13-14; Franklin, 141-44; Levine, *Dying to Know*, 17; Zimmerman, 1-4.

<sup>15</sup> Graver, 43; Henson, 13; Levine, *Darwin and the Novelists*, 3 and *Dying to Know*, 26.

<sup>16</sup> Wilson, 95.

<sup>17</sup> Gliserman, “Part I,” 279-81.

<sup>18</sup> Wilson, 95.

<sup>19</sup> Qtn from Franklin, 161. See also Bowler.

also frequently referred to as the “Development Hypothesis,” since they relied on contemporaneous notions of history as a developmental process.<sup>20</sup> In seeing nature as following widely accepted social models of orderly unilateral progress, natural historians were working within preexisting paradigms, which arguably made their work less threatening to the religious establishment; on the other hand, they offered an alternative explanation for the traditional world view, which could have made their theories even more threatening.<sup>21</sup> This emphasis on development also tied evolutionary theory to literary traditions such as the *Bildungsroman*.<sup>22</sup> Those scientific thinkers we might call evolutionary theorists more than natural historians tended to discard Uniformitarian notions and present discontinuous or disordered visions of nature’s “development.” Nonetheless, most natural historians were amateurs and many were even clergymen who had the free time to collect and catalog specimens, like the amiable and nonthreatening Mr. Farebrother of *Middlemarch* (1871-72).<sup>23</sup>

As has been suggested in the preceding paragraphs, nineteenth-century science generally—and evolutionary theory especially—was not a privileged discourse with an entirely distinct community of professionals intent primarily on communicating with one another. In fact, for much of the nineteenth century there were few people who could be called scientific professionals. Very little science was taught in English universities and very little empirical research was conducted by academics; the government’s support for the sciences consisted of little more than small grants to the Royal Society of London, foreign

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<sup>20</sup> Beer, 1; Bowler, 5; Graver, 40; Nisbet, 139-58; Teggart, 77-127.

<sup>21</sup> See Bowler, 5, versus Gliserman, “Part II,” 441.

<sup>22</sup> Beer, 97.

<sup>23</sup> Gates, “Introduction,” 539-41.

specimen hunting expeditions, and the occasional pension fund for a particularly accomplished individual; and scientists lacked “an institutionalized career structure such as that which characterized the legal, medical, and clerical professions.”<sup>24</sup> The independent and loose structure of British scientific networks (compared to the more formalized institutions of the French) and the common educational tracks shared by scientists and other middle- and upper-class men (and here I take the gendered term intentionally) had a number of consequences.<sup>25</sup> Although as the century went on, “specialized scientific disciplines with increasingly technical vocabularies and a developing emphasis on trained experts” developed and consolidated cultural authority, in the early and mid-1800s, it was difficult to identify a “locus of intellectual authority” on the questions tackled by scientists.<sup>26</sup> Even an esteemed institution like the Royal Society, made up of wealthy and powerful members and endorsed in part by government financial support, was not accepted as a clear and sole source of scientific authority.<sup>27</sup> In order to lay claim to authority over certain questions of cultural interest (e.g., what are fossils and where do they come from?), as well as to methods of answering such questions, scientists wrote in a language accessible to a broad, educated readership. These questions carried social and religious implications, and so were of substantial interest to the general public, even if the debates ranged into the minutiae of technical and abstruse details seemingly of interest only to professionals.<sup>28</sup> Moreover, because most scientists with formal educations were trained in a humanistic background,

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<sup>24</sup> Qtn from Yeo, 9. See also Wilson, 99.

<sup>25</sup> Wilson, 103.

<sup>26</sup> Dawson et al., 14; Yeo, 7. See also Kucich.

<sup>27</sup> Sheffield, 4.

<sup>28</sup> Shuttleworth, 16-17.

their writing drew from the style and strategies of literary, historical, and philosophical texts.<sup>29</sup> Thus, Beer claims, to their contemporaries, scientists' "texts could be read very much as literary texts."<sup>30</sup>

Quite a bit of historical and literary scholarship has, in fact, demonstrated that scientific works were not only read as literary texts, but *with* them in the periodical press. Not only were scientific ideas including evolutionary theory often published and debated in non-scientific periodicals, but the strong mid-nineteenth-century periodical culture also provided a common intellectual discourse for general readers to encounter scientific, philosophic, literary, economic, theological, and political ideas.<sup>31</sup> Such ideas did not merely sit side-by-side on the pages of a periodical, but were often intentionally intertextual, as writers and editors alike borrowed from multiple discourses to make their points and to guide readers to make connections between different disciplinary approaches to similar topics.<sup>32</sup> This held true for many of the preeminent literary journals of the mid-century, including *Household Words*, *Cornhill Magazine*, *Westminster Review*, *Fortnightly Review*, *Illustrated London News*, and *Punch*.<sup>33</sup> Even if a reader or a family purchased a literary journal for the latest installment of a serialized novel, it was unlikely that the rest of a magazine would go unread.<sup>34</sup> Popular and well-regarded reviewers would also move freely between disciplinary

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<sup>29</sup> Beer, 5.

<sup>30</sup> Beer, 4.

<sup>31</sup> See Dawson et al.; Ellegård; Shattock and Wolff; Yeo, 9; and Young.

<sup>32</sup> Dawson et al., 2-3; Wynne, 3.

<sup>33</sup> Dawson et al., 2, 18; Kucich, 121.

<sup>34</sup> Wynne, 3.



subjects that would be increasingly specialized as the century reached its end.<sup>35</sup> Many famous and influential scientific works first appeared in periodicals, and even those that were published as books were “often primarily known through their representations in periodicals, whether in reviews, extracts, abstracts, advertisements, correspondence, or passing comments.”<sup>36</sup> Literary and popular science journals alike offered established leisured gentlemen of science as well as up-and-coming young professionals an influential platform to promote the cultural importance and authority of science.<sup>37</sup> Therefore, not only was the periodical an important forum for debating the cultural significance of science and controversial developments, but it also served as a catalyst for public discussion and interest in such subjects.<sup>38</sup>

Periodical culture, like scientific culture generally, was never dominated by female voices in the nineteenth century, though the former was more open to women’s involvement than the latter. While many rhetorical and historical studies consider nineteenth-century women’s importance as popularizers of science or as technicians in husbands’ laboratories, and so argue that women were more involved in science in a greater variety of domains than many people realize, most scholars still admit the limited nature of the opportunities available for women who wanted to publish on science.<sup>39</sup> Levine argues that such gendered problematics arose from cultural notions of women’s excessive self-effacement that tended not to objective observation but to the embodiment of sentiment; as a consequence, women

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<sup>35</sup> Dawson et al., 11-12; Yeo, 9.

<sup>36</sup> Dawson et al., 3.

<sup>37</sup> Barton; Dawson; Dawson et al., 11-20.

<sup>38</sup> Dawson et al., 2; Yeo, 9.

<sup>39</sup> See, for example, Baym; Gates and Shteir; Phillips; Neely; and Watts.

could fill the role of mediators but not generators of scientific knowledge.<sup>40</sup> Many female intellectuals, however, were interested in the threat and the promise posed by scientific inquiry and so, I argue in this dissertation project, turned to the novel to participate in cultural debates over scientific developments and their (socially) normative implications; as such, women novelists acted as philosophers of science in popular and influential forums. John Kucich has noted that “fiction was one of the few cultural domains in which women could legitimately express themselves, which meant that the novel was also a medium in which the impact of ideas on private life, or on non-privileged social groups, could be dramatized.”<sup>41</sup> The novel's genre does not detract from the serious and considered response to scientific ideas that it might contain, but rather makes use of its popularity and overt fictionality to grant the female author more creative and even philosophical license than the typical female form of the non-fiction didactic popular science work, while being more commercially successful (given fiction's greater appeal) and thus having a greater effect on the burgeoning scientific discourse of the time. Many female literary authors sought to integrate a moral element into evolutionary discourse, which is consistent with the strategies of female popularizers of science that Barbara T. Gates has demonstrated.<sup>42</sup> Such a concern with morality is also consistent with the tradition of modern science in the Enlightenment period and foundation of the Royal Society, but dropped off in masculine scientific discourse in the nineteenth century; these women are thus participating in and attempting to keep alive an important strand of what had culturally defined science up to the mid-nineteenth century.

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<sup>40</sup> Levine, *Dying to Know*, 126-44.

<sup>41</sup> Kucich, p. 121.

<sup>42</sup> Gates, *Kindred Nature*, 48. See also Cohen on how women's novel writing resembled scientists' work in its ethical imperative and goal of producing social knowledge (331).

## RHETORICAL FRAMEWORK

Although much of this dissertation takes the form of historical research and close readings, it adopts a fundamentally intertextual approach to science and literature that would not be possible without recent influential work from the field of rhetoric of science. By intertextual analysis, I here rely on the Kristevan sense of society and text as being co-constitutive. Or, as Mikhail Bakhtin describes in “Discourse in the Novel,” I approach each novel with the intent of understanding how it “participates both in the ‘unitary language’ [of the text] . . . and at the same time partakes of social and historical heteroglossia.”<sup>43</sup> Rhetorical scholarship offers numerous fine theoretical and practical models for constructing cultural conversations in which texts are situated and which they also construct. Rhetorical analysis likewise provides a valuable tool for understanding the underlying arguments present in literary and nonliterary works alike, as well as for tracing how such lines of argument were developed and altered over the course of cultural debate(s).

Rhetoric of science understands scientific knowledge as the product of argument and conviction, and as not uninvested in suasion.<sup>44</sup> This field, therefore, deprivileges scientific discourse and discovery in order to examine its operations on a social level. Two foundational figures in the study of the persuasive intent of scientific prose writing in the mid-twentieth century were Kenneth Burke and Thomas Kuhn, though the latter achieved more renown on a broad cultural level in bringing attention to the rhetorical and communal

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<sup>43</sup> Bakhtin, 272.

<sup>44</sup> See the definitions of rhetoric of science in Gross, 91; Harris, xii; and Prelli, 89.

construction of scientific paradigms.<sup>45</sup> Nonetheless, it took the field of rhetoric of science some years to establish itself, to recognize that claims of objectivity may strive to protect scientific discourse from interrogation of its motives and to aid in building its cultural power—a recognition that perhaps was clearer in the mid-nineteenth century, but that is of increasing importance in our modern technology-driven world where forms of knowledge are progressively specialized.<sup>46</sup> Rhetoric of science’s methodology thus does not distinguish between the structures, strategies, and argumentative ends of fiction and of science, although it is sensitive to patterns and figures of speech that scientific discourse tends to adopt.<sup>47</sup> It also offers some of the most useful theoretical approaches to considering how genre operates as social action in a communicative system that constructs the expectations of rhetors and readers alike.

As articulated most influentially by Carolyn Miller in 1984, rhetorical studies have come to the consensus that genre is a mode of social action.<sup>48</sup> As James Zappen explains it, “The study of rhetoric and communication since ancient Greece and Rome has been concerned with the relationship of rhetoric to modes of inquiry and to the social community, with the relationship of language to thought and action.”<sup>49</sup> Genre particularly has been viewed in the past few decades as a means of connecting preexisting context, audience expectations, and exigence to take communicative action—all in order to shape a social

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<sup>45</sup> Freedman and Medway, 3. Foucault’s *The Order of Things* (1966) was also influential in the scholarly community for its theoretical and historical approach to the development of the human sciences.

<sup>46</sup> Herrick, 211; Lyne, 272-73.

<sup>47</sup> See, for example, Fahnestock’s analysis of rhetorical figures common in science writing and Gross’s discussion of the strategies of scientific prose (102).

<sup>48</sup> Medway, 123; Russell, 226.

<sup>49</sup> Zappen, 145. He goes on to explain that scientific rhetoric of the nineteenth century witnessed a return to dominance of the concerns of the relationship of language and civilization (145).

moment.<sup>50</sup> Or, put another way, genres negotiate linguistic markets by strategically adapting their preexisting structures to the needs of a cultural moment by creating dynamic patterns of content, form, and style that express and shape ideologies.<sup>51</sup> More culturally privileged genres, such as those used in scientific discourse, “can reproduce forms of symbolic power that can literally shape their receivers’ view of the world.”<sup>52</sup> To Miller, then, genre choice is not just a matter of form but of pragmatism; it responds to exigence, which represents a motive, “an objectified social need” and “provides the rhetor with a socially recognizable way to make his or her intentions known.”<sup>53</sup> Genre must arise from recurrent, and not singular, situations in order to achieve a recognizable and stable form that shapes audience’s expectations; a one-off form is a cypher, whereas a recurrent form is a set of instructions on how to interpret norms and deviations.<sup>54</sup> She thus defines genre as “a rhetorical means for mediating private intentions and social exigence; it motivates by connecting the private with the public, the singular with the recurrent”; furthermore, “genres help constitute the substance of our cultural life” by serving “as an index to cultural patterns and...as keys to understanding how to participate in the actions of a community.”<sup>55</sup> Subsequent rhetorical theorists of genre have taken up Miller’s formulation and expanded it into considerations of

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<sup>50</sup> Yates and Orlikowski, 109.

<sup>51</sup> Schryer, 95.

<sup>52</sup> Schryer, 84.

<sup>53</sup> Qtn. from Miller, 157, 158; see also 153.

<sup>54</sup> Miller, 159.

<sup>55</sup> Miller, 163, 165.

how genre bridges the performative and the textual and links writers to powerful social systems.<sup>56</sup>

Charles Bazerman has been recognized as building on Miller's idea of genre as social action in developing his important notion of genre systems.<sup>57</sup> Bazerman uses the imagery of "a system of a complex societal machine in which genres form important levers" to illustrate his idea that interrelated genres interact with one another in social systems to achieve an endgoal.<sup>58</sup> He argues that "Only a limited range of genres may appropriately follow upon another in particular settings, because the success conditions of the actions of each require various states of affairs to exist....The intervention of each of the follow-up genres with its attendant macro-speech act, if successful, will have consequences for other genres and speech acts to follow."<sup>59</sup> Genres have thus been seen as serving coordinative functions for social actions and understandings, as providing a community with expectations of communicative structures and their consequences.<sup>60</sup> Without this chain of interrelated genres and the expectations it establishes, "others would not know what kind of thing we were doing," much less "understand our act and accept it as valid," according to Bazerman.<sup>61</sup> One of the important implications of this idea of genre systems, David Russell points out, is that "one text might function as more than one genre, if it is used in more than one activity

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<sup>56</sup> Knapp, 290; Russell, 226.

<sup>57</sup> See, for example, Russell, 227.

<sup>58</sup> Qtn. from Bazerman, 79; see also 97.

<sup>59</sup> Bazerman, 98.

<sup>60</sup> Russell, 227; Yates and Orlikowski, 104, 108.

<sup>61</sup> Bazerman, 100.

system”<sup>62</sup>; going back to Bazerman’s image of a series of levers in a machine, we can imagine a pinball machine where the different levers can be arranged in different formations to achieve different trajectories. When understood as part of genre systems, then, individual genres represent not just actions but possible intentions, which can be accurately interpreted in a number of ways but never in isolation.<sup>63</sup>

This notion of a text taking part in multiple genre systems, depending on the intentions and actions attributed to it, is consistent with Kenneth Burke’s understanding of terministic screens, particularly as scientific terminology and poetry interpret aspects of humanity. In a striking metaphor, Burke describes a terministic screen as equivalent to a color filter imposed on a photograph; as he puts it, “something so ‘factual’ as a photograph [can reveal] notable distinctions in texture, and even in form, depending upon which color filter [is] used for the documentary description of the event being recorded,” and these visual differences correspond to “differences in the nature of the event as perceived, recorded, and interpreted.”<sup>64</sup> Terminology operates in the same way. The system of terms in which an idea or observation is described operates as a terministic screen, not necessarily reflecting reality so much as selecting some aspects for our attention while deflecting others.<sup>65</sup> Terministic screens are impossible to avoid since we have to speak within a system of terms in order to be comprehensible to ourselves and others; some terminologies, however, especially in the sciences, are overly selective and fail to give a comprehensive vision of humanity.<sup>66</sup> Burke

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<sup>62</sup> Russell, 228.

<sup>63</sup> Bazerman, 82.

<sup>64</sup> Burke, 45, 46.

<sup>65</sup> Burke, 45.

<sup>66</sup> Burke, 50-52. Burke’s ideas here are similar to those of White’s “The Value of Narrativity in the

suggests that the best way to overcome such shortcomings is to borrow from several terminologies to produce a more general “philosophic terminology of motives,” and this is an area in which he sees the literary arts as excelling because of their tendency to cut across disciplines and to carefully and conscientiously read systems of signs.<sup>67</sup> Although the scientist might argue for a greater objectivity to his or her observations—a freedom from ideological terministic screens that allows for an immediate and accurate recording of the biological, physical, psychological, and social phenomena under discussion—Burke argues that we humans are too enmeshed in our symbolic verbal structures to truly treat “words as the signs of things,” and instead inevitably impose an interpretative framework onto the natural world so that our descriptions of them reflect our own social values and order, making “things the signs of words.”<sup>68</sup> On the other hand, Burke describes literary writers as more balanced in using personal and universal terminologies to describe their ideas and in using terministic screens to symbolically resolve social tensions or problems; thus, a literary critic’s job is to analyze a particular terministic screen to determine “*the kinds of observation implicit in the terminology [the author has] chosen,*” regardless of “*whether [the] choice of terms was deliberate or spontaneous.*”<sup>69</sup>

While Burke upholds the role and power of literary artists, he uses the term “poet” to stand in for all such authors (including dramatists and novelists)<sup>70</sup>; Mikhail Bakhtin, on the other hand, theorizes the novel as a unique genre because, as one translator puts it, it

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Representation of Reality,” especially his assertion that narrativity is both inherently selective in its focus and inherently part of human consciousness and so unavoidable in the sciences (1-26).

<sup>67</sup> Qtn from Burke, 51-52; see also 368.

<sup>68</sup> Burke, 378-79.

<sup>69</sup> Qtn. from Burke, 47; original emphasis. See also Burke 28-33.

<sup>70</sup> Burke, 57.



represents “a consciously structured hybrid of languages.”<sup>71</sup> Like Burke, Bakhtin believes that language does not truly reflect an objective reality but rather constructs our understanding of the world and reveals our values.<sup>72</sup> Bakhtin’s theorization of the novel has presented genre theorists with an important model for the complicated tensions inherent in discourses that define cultures and subcultures.<sup>73</sup> For Bakhtin, the novel is unique because it developed as a literary genre in the modern world and is still in the process of developing; as such, the genre itself embodies the notions of open-ended process and heteroglossia.<sup>74</sup> Because modernity is defined by its nature as polyglot—as global, inclusive, and complicated—the novel as a modern genre is able to encompass multiple languages and genres in ways that parody, reformulate, and accentuate them.<sup>75</sup> Bakhtin uses the term “language” roughly as we might use “register” or “terminological system,” and thus his definition of the novel’s generic heteroglossia can embrace scientific language and genres. This is particularly the case because heteroglossia is defined by Bakhtin as “*another’s speech in another’s language*, serving to express authorial intentions but in a refracted way”<sup>76</sup>; the presence of scientific terminology in novels would serve as evidence for the modernity of the genre and for its heteroglot nature. Furthermore, it would be an oversight not to understand science as one of the languages incorporated into the novel’s heteroglossia, since he describes the novel as “assum[ing] leadership in the process of developing and renewing

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<sup>71</sup> Holquist, xxix.

<sup>72</sup> Herrick, 235-36.

<sup>73</sup> Coe et al., 6; Holquist, xxviii.

<sup>74</sup> Bakhtin, 4-12.

<sup>75</sup> Bakhtin, 5, 8-9, 12.

<sup>76</sup> Bakhtin, 324.

literature in its linguistic and stylistic dimension” in a modern setting, one in which “epistemology [became] the dominant discipline.”<sup>77</sup> Any “*living*”—or concrete—literary representation has to be defined by its chronotope, or fusion of time and space, in order to have a relationship to reality.<sup>78</sup> Therefore, for Bakhtin, novels must embody the social discourse of their times and the heteroglossia represented by “stratification present in every language at any given moment of its historical existence.”<sup>79</sup> The novel as a genre, then, “denies the absolutism of a single unitary language—that is, that refuses to acknowledge its own language as the sole verbal and semantic center of the ideological world.”<sup>80</sup> In Bakhtin’s formulation, the novel represents the perfect Burkean acknowledgement of the diversity of terministic screens, an important social function that is inseparable from the other genres with which it interacts in a social system of meaning.

The preceding rhetorical theorists—Miller, Bazerman, Burke, and Bakhtin—have informed this dissertation project in substantial ways. Rather than thinking of the mid-nineteenth-century novel independently as a genre, I approach it as part of a genre system that included scientific publications; reviews of scientific developments published in periodicals; nonfiction pieces debating the cultural significance and relevance of such scientific developments by theologians, scientists, scientific thinkers, and cultural commentators; prose and poetic fiction that theorized, systematized, and explored scientific theories; and public and private responses to such fiction, which include reviews, diaries, salon discussions, and letters. I therefore work to excavate and explicate these genre systems

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<sup>77</sup> Bakhtin, 12, 15.

<sup>78</sup> Bakhtin, 243.

<sup>79</sup> Qtn. from Bakhtin, 263; see also 259.

<sup>80</sup> Bakhtin, 366.

to better understand the social actions undertaken by the women novelists whose work is the focus of my chapters. As Miller argues, though, such genre systems only gain meaning as recurrent exigencies (to form a recognizable pattern that rhetors recognize themselves as acting in), and as social actions that mediate private and public responses. This dissertation is therefore structured around controversies in evolutionary developments that occurred multiple times throughout the century and that consequently built on one another, both in terms of their science and theoretical structure and in terms of the nature of the debates that surrounded them. I also analyze the narrative and rhetorical structures of the scientific works and novels in similar and interdiscursive ways. As Burke argues, although it is commonsensical to state that words are the signs of things, things can also be the signs of words in that there is no observation of the natural world that is unmediated through a sociopolitical framework (i.e. a terministic screen), and so statements about nature reveal such situated perspectives. Fiction and science, then, are both creating narratives that rely on, build systems of, and critically interrogate terminology that constructs the natural world. They do so in the mid-nineteenth century, though, in ways that are more self-aware than scientific discourse in the modern day, in which scientists can critique one another's situated perspectives and failure to attain ideals of objectivity, but lay persons lack the vocabulary and privilege to make such critiques and to point out blind spots in the narrativity of scientific work. I am aware that each of the novels under consideration is heteroglot in ways that exceed my analysis, and that in focusing on my particular terministic screen, I am invariably ignoring and obscuring other important elements of the novels. Nonetheless, the terministic screens I apply in this project have never before been employed in critical

analysis of these novels and so highlight important discourse systems that bring us to a fuller understanding of the social action the novels are participating in.

## CHAPTER OUTLINE

Both Gillian Beer and George Levine have commented that nineteenth-century science, and evolutionary theory especially, brought up more questions than it could contain or address; the novel was able to bring evolutionary theories to fuller meanings and deeper interrogations because of the fluidity and expansiveness of the generic form. Novels allowed women writers specifically to intervene in a male-dominated and ground-changing debate over the status of human identity. By constructing thought experiments that tested the applicability of evolutionary schemas in the social world, a move that at once worked within and expanded the bounds of literary realism, writers like Mary Shelley, Elizabeth Barrett Browning, Elizabeth Gaskell, and George Eliot considered the lived experiences of individuals and ethical implications for society in such a worldview, offering readers argumentative and evaluative messages about the usefulness and validity of evolutionary theories. My dissertation project recognizes the development and dissemination of nineteenth-century evolutionary theory as a conversation in motion, one that was not limited to or even dominated by Darwinism. My research not only recovers and repositions women's voices in scientific and literary endeavors, but also facilitates recognition of the affective and embodied nature of scientific practice.

The first chapter of this dissertation, "Shifting the Center: Mary Shelley's Cuvierian Revolutions in Nature and Time," focuses on how Mary Shelley's *The Last Man* (1826) uses many of Georges Cuvier's topoi, or common rhetorical themes and lines of argument, as heuristics. I argue that she fictionalizes these topoi to interrogate their validity and to apply

them to new contexts. Georges Cuvier is often at best a footnote in modern histories of biology, but he first established that species go extinct, that fossils are a valid way to study previous lifeforms, that various parts of an organism are correlated, that animals are fitted to their ecological niches, and that geological time is not consistent with human time, and in fact occasionally consists of violent breaks with previously steady states. He brought enormous prestige to the European scientific endeavor and in many ways founded the field of paleontology. Cuvier's ideas radically affected cultural views, but such influence is rarely traced in any depth in literary studies, with the exception of the despair of Byron's *Cain* (1821). Shelley's *The Last Man* is more than just a text of despair, however; its presentation of catastrophe provides deep and enduring insights into what it would mean for humans to be aware of their subjection to natural processes, like any other animal species, and of the fact that nature blindly extinguishes species without a larger purpose.

Furthermore, I argue that Shelley tackles issues that Cuvier avoids in his *Discours*; she applies her insights to human culture and to the future, whereas Cuvier looks at the natural world and the past. Traditional notions of temporality are challenged by both Shelley's *The Last Man* and Cuvier's *Discours*; both writers share a sense of time as divided between the human and the global. Shelley clearly invokes Cuvier's model for history—steady states interrupted unexpectedly by violent upheavals—showing that until catastrophe strikes, social problems (including class, race, and nationalistic conflicts) as well as human nature (particularly male and female types and relationship dynamics) do not change in any significant way. Shelley seems here to be pondering the purpose of Cuvier's studies of the past: they fail to provide insight into the present and the future, and so, breaking with the antiquarian model for knowledge building that Cuvier proposes for himself, she instead

proposes a more relativistic and personal—even if objectively flawed—literary approach to understanding civilization.

Chapter two, “Politics and Metaphysics: Elizabeth Barrett Browning’s Opposition to *The Vestiges of the Natural History of Creation* in *Aurora Leigh*,” focuses on how Elizabeth Barrett Browning took part in the cultural evaluative process of the controversial *Vestiges* in her verse-novel *Aurora Leigh* (1856). Often overlooked in scientific and cultural histories, but wildly popular and widely influential, Robert Chambers’s *Vestiges of the Natural History of Creation* (1844, but with an important and widely reviewed people’s edition of 1853) intentionally crossed disciplinary boundaries in order to establish generalists’ place in the newly important scientific disciplines (and thereby prevent the formation of a dogmatic scientific clerisy) and to establish scientists as the heralds and leaders of social progress. Victorians widely responded to *Vestiges* and coopted its ideas for a number of religious, political, and ideological ends; the work provided a grand theory of the age that claimed humans had evolved from apes (not to mention fish and plants), and that the universe developed materialistically, with no repeated interventions from God. This chapter seeks to reconstruct the literary and non-literary critical conversation over the meaning and value of *Vestiges*’s theories in the decade and a half following its publication. *Aurora Leigh* was famously composed by EBB in part to represent her age—even those components not typically considered appropriate poetical material—and in part to register her “highest convictions upon Life and Art,” many of which conflicted with the worldview presented by *Vestiges*. As I will explore in this chapter, EBB contrasts her poetic and philosophical convictions with the gender, religious, political, and developmental ideologies of *Vestiges* through a number of rhetorical strategies.

*Vestiges* not only presented the first universal evolutionary schema in English, but also was read as a *Bildungsroman* of the Earth, one that suggested an alternative developmental narrative to that of religion or social reformers without being incompatible with either. This evolutionary theory was a major force in the secularization of science and the deprivileging of the human species as uniquely created and endowed with spiritual capacities. *Aurora Leigh*, EBB's own *Bildungsroman* that straddles the female-coded genre of the novel and traditionally male poetic epic, demonstrates that the author thoroughly understands the system that Chambers builds in *Vestiges*, as well as its implications on a number of social, natural, and philosophical levels; unlike Tennyson, however, she finds *Vestiges*'s "bare inference[s]" (a phrase used by Chambers in the 1853 preface to critique the unsatisfying generalities of scriptural geologists, and now turned on him) unconvincing and ultimately irreconcilable with what her "own instinct" and "pure reason" tell her about the world in which she found herself, a world in which progress must proceed on the individual level by incremental steps, not by species-wide leaps; a world in which women's writing needs to be valued as serious thought and art; a world in which the poet provides the clearest and most comprehensive natural and social vision.

Chapter three, "Working through Darwin's *Origin*: Elizabeth Gaskell's *Sylvia's Lovers* as a Novel of Evolutionary Despair," carefully considers how *Sylvia's Lovers* (1863) applies some of the bleakest implications of Darwinian tropes to human society. In November 1859, Charles Darwin's *On the Origin of Species by Means of Natural Selection* was first published; in that same month, Elizabeth Gaskell traveled to the Yorkshire coast to find inspiration for the novel project that ended up becoming *Sylvia's Lovers*. Gaskell's *Wives and Daughters* (1864-65) is often discussed as partially inspired by Darwin, but no

scholars have more than mentioned the possibility that *Sylvia's Lovers* might consider the implications of Darwinian theory. This silence could, in part, be due to *Wives and Daughters's* generally positive take on natural history and those who practice it, whereas *Sylvia's Lovers* is frequently described as "the saddest story [she] ever wrote." I argue that by the time that Gaskell worked through the doubts and depression inspired by Darwin's *Origin*, she was able to write a novel of evolutionary triumph in *Wives and Daughters*; *Sylvia's Lovers*, on the other hand, is the record of Gaskell's evolutionary struggle: of her realization of the inherent unfairness in both natural and social gendering processes, of the Sisyphean nature of human suffering, and of the evacuation of meaning from timescapes.

Although Darwin did try to emphasize a more positive view of evolutionary processes in *Origin*, natural selection can be interpreted pessimistically by focusing on the violence inherent in the theory; selection of only a handful of organisms to survive and reproduce is hardly an uplifting vision of nature. For Gaskell, a Dissenter immersed in intellectual life in the scientific hub of Manchester, Darwin's *Origin* offered generative, if disheartening, narrative possibilities. In particular, I argue in this chapter, Gaskell took to their logical, if nihilistic, conclusions such Darwinian tropes as sexual division and competition, the adaptation of organisms to their often harsh and destructive landscapes, and the nature and shape of time. In these cases, Gaskell demonstrates the bleakness of a Darwinian worldview and the despair Darwin's *Origin* could invoke in its readers by not necessarily endorsing Darwinism, but by applying its consequences to a social vision that emphasizes the minuteness of a human life against the landscape that sustains it. Her note of resistance to *Origin*-induced depression is clearest when Gaskell tackles the issue of death and remembrance in considering what kind of narrative best serves humankind's needs. Darwin's



*Origin* endorses evolutionary narratives in which humans are deprivileged, a single generation's experiences are essentially meaningless, and very few organisms leave any records of their existence behind them. Gaskell, on the other hand, upholds oral tradition and the power of historical, fictional narratives to recover and recognize the value in human experience.

Chapter four, "The Shape and Limits of Mental Development: George Eliot's *Daniel Deronda* and Spencerian Evolutionary Psychology," studies George Eliot's final completed novel, *Daniel Deronda* (1876), in light of Herbert Spencer's evolutionary psychology. Spencer was responsible for persuading his contemporaries that evolution could inform all branches of natural, physical, and social science; he also became a foundational figure in a number of social sciences by transitioning fields like sociology, anthropology, and especially psychology from personal and philosophical reflections to biologized practices informed by standards and statistics. Nonetheless, Spencer has been and remains a deeply unpopular figure in historical, literary, cultural, and scientific studies. Several historians of science and literary critics have outlined the reasons for this neglect, but on the whole the trend can be explained by a tendency to caricature or scapegoat Spencerian political thought as Social Darwinism while simultaneously fearing any association with that disreputable doctrine. When it comes to Eliot, then, literary critics tend to dismiss Spencerian thought as incompatible with Eliot's social vision, treating it as mechanistic, misogynistic, dogmatic, and socially regressive. To her contemporaries, however, Eliot was seen as more Spencerian than Darwinian.

Spencer himself took a Lamarckian approach to evolution, combining the notion of the inheritance of acquired characteristics with human mental capacities to permanently

biologize the study of psychology. He committed throughout his career to a vision of evolution as progressive, continuous, universal, observable in all life forms and societies no matter how small and localized, and tending toward increasing happiness. Eliot was particularly influenced by Spencer's synthesizing of ethics with evolutionary development on both an individual psychological and a global cultural level. Eliot's philosophy, like Spencer's, was deeply enmeshed in the scientific concepts, debates, and methodologies of the day. This chapter first outlines Spencer's evolutionary thought and biography, focusing particularly on his intellectual and personal relationship with Eliot. I then shift into an analysis of *Daniel Deronda* in light of Spencerian evolutionary psychology, ethics, and philosophy. Ultimately, I seek to demonstrate that not only did Eliot both rely upon and critique Spencerian frameworks in a complicated manner, but also that she approached similar topoi—nationality, trauma, experience, inheritance, gender, sympathy, epistemology—informed by a Spencerian synthesis, in which concepts of human development and limitations on both the individual and social level must be informed by evolutionary theory in order to be properly understood. Her main point of distinction from Spencer's ideology is in her focus on the individual gendered case study rather than generalizations at the level of societies, global movements, or philosophical abstraction.

The women novelists I study in this dissertation are prescient in their questioning of the telos inherent in evolutionary models, voicing a skepticism about whose values and experiences are valued in such theories and whether the world as they knew it and as they hoped it might be in fact reflects evolutionary schemas. All four novelists question evolutionary schemas that place British white males at the top of the developmental hierarchy and instead strive to give voice to the struggles of those disenfranchised by

narratives of anthro- and ethno-centrism, crushing secularism, blind chance, and inevitable male dominance that evolutionary theories could reinforce. Thus, the novels this project focuses on expand the potential and explore the implications of evolutionary theories by virtue of the women writers' commitments to real social improvements and to individuating ethical consequences as they would be experienced firsthand. Looking at these women's interventions in moments of potential social crisis can give us pause as we consider the implications for twentieth- and twenty-first-century culture of the rise of scientific privilege and perspective; I explore this issue briefly in the coda focused on Neo-Victorian fiction.

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## Chapter 1:

### “Shifting the Center: Mary Shelley’s Cuvierian Revolutions in Nature and Time”

One of the most prominent scientific paradigms of the early nineteenth century was formulated by Georges Cuvier. Cuvier is often at best a footnote in modern histories of biology, but he first established numerous profoundly influential theories: that species go extinct, that fossils are a valid way to study previous lifeforms, that various parts of an organism are correlated, that animals are fitted to their ecological niches, and that geological time is not consistent with human time, and in fact occasionally consists of violent breaks with previously steady states. He brought enormous prestige to the European scientific endeavor and in many ways founded the field of paleontology. Cuvier’s ideas radically affected cultural views, but such influence is rarely traced in any depth, particularly in literary studies. This chapter undertakes an examination of the topoi, or common rhetorical themes or lines of argument, that Cuvier either initiated or popularized through his *Discours préliminaire* (1812) and British Romantic writers’ conversations about and developments of such topoi, focusing on Mary Shelley’s third novel, *The Last Man* (1826). Although Lord Byron’s *Cain* has probably been discussed in relationship to Cuvier’s ideas more than any other piece of British literature, as I argue, Mary Shelley’s *The Last Man* is in fact the most extended and nuanced treatment of the most popular geological theory in British Romanticism.

In *The Last Man*, Shelley uses many of Cuvier's topoi—such as fragmentary evidence, disaster, anti-anthropocentrism, and the contrast between human and global time—as heuristics: she fictionalizes these topoi to interrogate their validity and to apply them to new contexts. But Shelley also tackles issues that Cuvier avoids in his *Discours*; she applies her insights to human culture and to the future, whereas Cuvier looks at the natural world and the past. In the *Discours*, Cuvier discusses competing geological systems and uses comparative historiography to date the most recent natural revolution, avoiding considerations of how his ideas might apply to broader cultural concerns. In *The Last Man*, Mary Shelley devotes quite a bit of time to considering what a Cuvierian natural revolution would mean for the individual human psyche as well as for communities and societies.

Mary Shelley's project of considering the implications of Cuvier's topoi for contemporaneous British society is underscored by her narrative structure in *The Last Man*, as she layers time periods upon one another—the narrative is presented as a nineteenth-century translation of a rediscovered ancient Greek text about a late twenty-first century series of events—casting the novel in the mode of prolepsis. Prolepsis is a rhetorical figure of anticipation, even of speculation.<sup>81</sup> That is, Shelley represents a future state as though it has already come to pass through Lionel's narrative, though of course no pandemic or geological revolution threatening the species with extinction has in fact occurred.<sup>82</sup> Shelley clearly invokes Cuvier's model for history—steady states interrupted unexpectedly by violent upheavals—showing that until catastrophe strikes, social problems (including class, race, and nationalistic conflicts) as well as human nature (particularly male and female types and

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<sup>81</sup> Bradshaw, 169.

<sup>82</sup> O'Dea, 294. As Fisch points out, "No one...is dead yet" (279).

relationship dynamics) do not change in any significant way.<sup>83</sup> Shelley seems here to ponder the purpose of Cuvier's studies of the past: they fail to provide insight into the present and the future, and so, breaking with the antiquarian model for knowledge building that Cuvier proposes for himself, she instead proposes a more relativistic and personal—even if objectively flawed—literary approach to understanding civilization.<sup>84</sup>

### GEORGES CUVIER

Georges Cuvier (1769-1832) made his name in 1796 in a famous lecture to the prestigious Institut de France on fossil bones.<sup>85</sup> In this lecture, he essentially established that the Siberian mammoth and American mastodon (also called a “mammoth” at the time) were neither of the same species as each other nor as modern elephants, and were in fact extinct.<sup>86</sup> In so doing, Cuvier proved that extinction was irrefutably real and set the project of inquiry for paleontology for the next twenty years.<sup>87</sup> Throughout the first decades of the nineteenth century, Cuvier continued to expand his scientific prestige, garnering national and international respect in his position at the Muséum d'Histoire Naturelle, “the world's most prominent institution for research in all the sciences—animal, vegetable, and mineral—that were grouped together as natural history,” as he “established a reputation as a patient observer who stuck to the facts.”<sup>88</sup> He was widely known as “the legislator or arbiter of natural history,” acknowledgement of his status as “the greatest naturalist of the age” granted

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<sup>83</sup> Aaron 17; O'Dea, 302; Stafford, 224; Strang, 410; Sunstein 270.

<sup>84</sup> Schierenbeck, par. 18.

<sup>85</sup> Rudwick, *Meaning of Fossils*, 102.

<sup>86</sup> Appel, 43.

<sup>87</sup> Rudwick, *Meaning of Fossils*, 101.

<sup>88</sup> Rudwick, *Worlds before Adam*, 11; Sapp, 11.

even by scientists who disagreed with him professionally.<sup>89</sup> His influence on popular and professional understandings of natural history was felt not only in France, but also in Europe and the United States during the first half of the nineteenth century.<sup>90</sup>

Throughout his professional life, Cuvier proposed a number of different tenets underlying paleontological inquiry, largely through his work with fossils. In so doing, he laid the foundation for later evolutionary work in France and abroad (including for Charles Darwin in England) in a number of important ways, despite not believing in evolution or “transformism” himself. He developed a comparative method of examining fossils that helped him resolve debates about fossil identities, and his fame—including an overstated popular legend (that he in fact encouraged) that he could reconstruct an entire animal from a single bone fragment—cemented his authority.<sup>91</sup> Cuvier’s fossil research was based on the idea that the different parts of an animal are perfectly correlated and not just “a jumble of [independent] characteristics,” as previous taxonomists had treated them.<sup>92</sup> An herbivore, for example, will have teeth designed for grinding; it won’t have teeth designed for puncturing prey or claws for catching or holding prey, which are unnecessary for its lifestyle.<sup>93</sup> Thus, organisms are fitted to their conditions of existence, or ecological niches, “to assure internal harmony as well as harmony with its environment.”<sup>94</sup> Because of this correlation of parts and

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<sup>89</sup> Appel, 40.

<sup>90</sup> Appel, 40.

<sup>91</sup> Appel, 43; Rudwick, *Bursting the Limits of Time*, 381.

<sup>92</sup> Sapp, 12.

<sup>93</sup> Appel further notes that Cuvier’s focus on functional integrity was shared by British natural historians, despite his avoidance of some of the buzzwords of the more religiously influenced British science, including “natural theology,” “design,” and “contrivance” (46).

<sup>94</sup> Appel, 46. Gould observes that this “notion of adaptation” was taken up by Charles Darwin “as a centerpiece for his mechanism of natural selection” (x).

fittedness to conditions of existence, Cuvier believed, evolution cannot happen because the entire animal cannot evolve at once, and changing select parts of the body would throw off the correlation and make the animal unfit.<sup>95</sup> This, of course, we now know to be untrue, but it was consistent with Cuvier's findings of a lack of intermediate fossil forms.

#### *Cuvier's Recherches and Discours*

In 1812, Cuvier gathered together his previously published paleontological articles and sketches of fossils to reissue them in *Recherches sur les ossements fossils des quadrupèdes* (or *Researches on Quadruped Fossil Bones*, hereafter *Recherches*).<sup>96</sup> This four-volume work was intended to be an accessible and organized presentation of Cuvier's body of work and has widely been regarded as Cuvier's professional memoir.<sup>97</sup> *Recherches* marks a milestone in Western science because it popularly "established the fact of extinction and the utility of fossils in providing a framework for geological time."<sup>98</sup> Perhaps the most important part of *Recherches*, however, was its stand-alone introduction, the *Discours préliminaire* (or *Preliminary Discourse*, hereafter *Discours*).<sup>99</sup> The *Discours* was initially published along with the first volume of *Recherches*, but soon was printed separately, as it did not directly review or comment on the material included in the four volumes of

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<sup>95</sup> Rudwick, *Meaning of Fossils*, 104. Gould notes, "Cuvier was correct in his assertion about the impossibility of such concerted change, but wrong in his assumption that 'correlation of parts'—his term for the concept—is so tight. In fact, parts can be dissociated and evolve at different rates—a phenomenon called 'mosaic evolution'" (x).

<sup>96</sup> Reiss, 90.

<sup>97</sup> Rudwick, *Bursting the Limits of Time*, 502-3; Appel, 43; Coleman, 12.

<sup>98</sup> Gould, viii.

<sup>99</sup> This work has been described by historians of science as "famous and widely read," "Cuvier's most popular writing," "concise and eloquent," and "triumphantly successful in crossing the boundary...between 'real science' and works of popularization" (Appel, 43; Coleman, 12; Coleman, 114; Outram, 142).

*Recherches*.<sup>100</sup> The popularity of the *Discours* among professional and lay populations alike led to six French editions between 1812 and Cuvier's death in 1832, and to prompt translations into all major European languages.<sup>101</sup> The *Discours* was written as "a long essay pitched at the general educated public" that appealed "to readers with a general interest in the natural world and its significance for human life."<sup>102</sup> It was a venue for Cuvier to present his interpretations of his own work, and represented his only attempt to write generally about the debates his theories raised.<sup>103</sup> The *Discours*, in particular, popularized Cuvier's idea that extinctions are caused by geological or natural revolutions and that the most recent revolution was a widespread flood; this theory became widely known as catastrophism. For much of the rest of the nineteenth century, natural historians in Europe and America as well as thinkers invested in the implications of his research had to contend in some way with the prestige of this work.<sup>104</sup>

In 1813, the most historically significant translation of Cuvier's work was completed by a joint effort of Robert Kerr and Robert Jameson in Scotland; from the date of its publication until 1830, this translation remained "the most influential popular geology in Britain."<sup>105</sup> Kerr is generally credited with the translation of the body of Cuvier's *Discours*, which was criticized from its first appearance in Britain as inaccurate, a charge that historians

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<sup>100</sup> Coleman, 12. Coleman notes that the *Discours* fails to reflect on the material of the four volumes that followed because he "assumed that the serious reader would refer to the special articles themselves" (126).

<sup>101</sup> Outram, 142. Rudwick notes that the *Discours*'s popularity was due in large part to its being "far more eloquent and readable than the published work of his colleagues" (Rudwick, *Worlds before Adam*, 16).

<sup>102</sup> Rudwick, *Bursting the Limits of Time*, 504, 505.

<sup>103</sup> Reiss, 90; Outram 142.

<sup>104</sup> "They might try to extend and confirm his inferences or use new evidence to try to refute them, but in either case Cuvier could not be ignored" (Rudwick, *Worlds before Adam*, 16).

<sup>105</sup> Dean, *ONDB*.

continue to levy at the 1813 translation today.<sup>106</sup> Kerr died as the translation was being completed, however, after which point Jameson took complete control of the work. Jameson studied geology and mineralogy in Germany with Abraham Gottlob Werner before returning to Edinburgh, where he became the chair of natural history at the University. Jameson, like his mentor Werner, adopted a Neptunist position in the geological debates raging at the time, especially in Scotland.<sup>107</sup> James Hutton was the most prominent proponent of the opposing position, Plutonism, which argued that volcanoes were the primary geological forces responsible for shaping the earth's surface;<sup>108</sup> his *Theory of the Earth* (1788) was still being widely discussed in the early nineteenth century.<sup>109</sup> Neptunists, on the other hand, argued that waters, particularly oceans, were the primary geological force.<sup>110</sup> Jameson was drawn to Cuvier's ideas because his portrayal of the most recent revolution as a major flood could bring his significant intellectual prestige to the Neptunist theory, if only the ideas were translated into that context. To accomplish this goal, Jameson appended a preface and a number of editorial notes that doubled or tripled the length of the *Discours*, which he published as a volume independent from the rest of *Recherches* entitled *Essay on the Theory*

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<sup>106</sup> Seccombe, *ONDB*; Rudwick, *Bursting the Limits of Time*, 510, 597.

<sup>107</sup> Dean, *ONDB*.

<sup>108</sup> Coleman, 111.

<sup>109</sup> Rudwick, *Meaning of Fossils*, 119; Jones, *ONDB*; Dean, *ONDB*.

<sup>110</sup> Coleman, 111.

of the Earth.<sup>111</sup> The new (and inaccurate) title clearly placed Cuvier's translation in conversation with Hutton's famous text.<sup>112</sup>

Jameson and Kerr highlighted elements of Cuvier's theory that were consistent with the theological debates occurring in British geology at the time but that were generally of little concern to Cuvier or continental scientists.<sup>113</sup> British reception of the work was "particularly enthusiastic," especially among those thinkers who "were eager to find support for the authority of religion—and hence also support for the social order—from the authority of science."<sup>114</sup> Jameson's notes also made explicit the link between the most recent geological revolution and the Biblical Flood, thus enlisting Cuvier's "scientific evidence of the highest respectability" to support the historicity of Christian "traditional biblical interpretation" and Neptunist claims.<sup>115</sup> But Cuvier, like most French natural historians, "rarely mentioned God or Providence in his work, nor did he attempt to correlate Genesis with the evidence of geology"—natural theology, or the attempt to find evidence for religious claims in nature, was a specifically British phenomenon.<sup>116</sup> Cuvier was nominally a Protestant, which might have facilitated British science's adoption of his ideas,<sup>117</sup> but, as Rudwick has noted, "he was also a child of the Enlightenment, and he considered that

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<sup>111</sup> Outram, 142. Cuvier himself called the separately published work *Discours sur les revolutions de la surface du globe*, or *Discourse on the Revolutions at the Earth's Surface* (Coleman, 12; Rudwick, *Worlds before Adam*, 22).

<sup>112</sup> Rudwick, *Bursting the Limits of Time*, 510-11.

<sup>113</sup> Rudwick, *Meaning of Fossils*, 133-34. Furthermore, Jameson downplayed the originality of Cuvier's work, presenting it as part of the Wernerian tradition of geological inquiry (Rudwick, *Bursting the Limits of Time*, 510).

<sup>114</sup> Outram, 142; Rudwick, *Meaning of Fossils*, 134-35.

<sup>115</sup> Rudwick, *Meaning of Fossils*, 133; Rudwick, *Bursting the Limits of Time*, 596.

<sup>116</sup> Appel, 56.

<sup>117</sup> Appel, 57.



science and religion should not interfere in each other's affairs, but should, for the good of both, be kept apart."<sup>118</sup> Cuvier did draw upon Hebrew accounts as evidence of "a major catastrophic event early in human history. But...the Genesis story featured as just one of many ancient multicultural records of the same kind, all equally garbled and unreliable unless treated with rigorous caution."<sup>119</sup> These nuances were undermined by Jameson's edition of Cuvier's work. Jameson and Kerr's misrepresentations of Cuvier's project inevitably influenced how his work was understood in Britain and other Anglophone countries throughout the nineteenth and twentieth centuries.<sup>120</sup>

### **THE ROMANTICS' RESPONSES TO CUVIER**

Cuvier's career (1792-1832) coincides with the literary period that we now identify as Romanticism, as well as with a number of dramatic social revolutions in Europe. The Romantics "were the first generation to know that they lived in a world of fossils," and this mindset fed into a deep interest in searching for and negotiating the dynamics of "origins, originality, authenticity, [and] authority."<sup>121</sup> Cuvier responded to such cultural narratives, and in turn Cuvier's retellings of these aforementioned social scripts appealed to literary and visual artists alike.<sup>122</sup> Balzac thought of Cuvier as "the greatest poet of our century," while Goethe "considered Cuvier to be one of the giant intellects of his time...and Cuvier returned

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<sup>118</sup> Rudwick *Meaning of Fossils*, 134.

<sup>119</sup> Rudwick, *Bursting the Limits of Time*, 597.

<sup>120</sup> Rudwick, *Bursting the Limits of Time*, 510.

<sup>121</sup> Gaull, 78.

<sup>122</sup> Gaull writes, "Cuvier's catastrophism held great literary and artistic appeal: the narrative was familiar, biblically and politically, and sequential, with an author, agents, good and evil, and a reconciliation...at the end" (79).

the compliment.”<sup>123</sup> Prominent pre-Cuvierian Romantic thinkers, such as Volney,<sup>124</sup> Coleridge,<sup>125</sup> Goethe, and Godwin,<sup>126</sup> are uniformitarian in their approach to history,<sup>127</sup> whereas post-Cuvierian Romantics, such as Byron and the Shelleys, adopt the catastrophist vision of sudden breaks in geohistorical time, a scale of planetary time that does not necessarily map onto time as humans understand and measure it.

There is no direct evidence that either of the Shelleys read Cuvier: the reading list compiled by Paula Feldman from Mary and P. B. Shelley’s at-times shared journal (dating from 1814-22) does not list Cuvier in either the Jameson translation or French original.<sup>128</sup> But P. B. Shelley did read the works of Erasmus Darwin, and Cuvier influenced Darwin.<sup>129</sup> (And P. B. Shelley, in turn, influenced both his wife and Byron.) There is a possibility that P. B. Shelley directly read Cuvier’s *Discours*: “An 1822 letter from a Paris library to Shelley reveals that just before his death he had ordered the two available volumes of Cuvier’s palaeontological researches,” and these books were delivered to the Shelleys in April of that year.<sup>130</sup> Cuvier was a household name in Britain by 1816, and it is likely that P. B. Shelley’s

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<sup>123</sup> Jeffrey, 149. Jeffrey goes on to speculate that “it is possible that [Cuvier’s] views on morphology owed something to Goethe’s” (149).

<sup>124</sup> Volney, 10, 20, 40, 177, 179.

<sup>125</sup> Sha, 44. For the influence of Cuvier on Keats, see De Almeida, *Romantic Medicine*, 225-49, 283-84.

<sup>126</sup> Marshall, 115-16.

<sup>127</sup> Uniformitarianism influenced such prominent historians as Bolingbroke, Hume, Gibbon, Kant, and Hegel (O’Dea, 292).

<sup>128</sup> *Journal*, II, 631. Feldman herself admits that the list is partial, however; the list, for example, also doesn’t include Erasmus Darwin, who was immensely influential on P. B. Shelley’s vision of contemporaneous science and its implications (Wilson, 54, 56 n19. See, for example, Grabo, 30-79). For Shelley’s scientific practices and readings, see King-Hele, 158-68. Cuvier isn’t mentioned in Shelley’s letters, as edited by either Bennett or Jones.

<sup>129</sup> O’Connor, “Mammoths and Maggots,” 30-31; King-Hele, 158.

<sup>130</sup> Jeffrey, 150; *Letters of P. B. Shelley*, II, 458-59, 472. Qtn. from O’Connor, “Mammoths and Maggots,” 30.

order of two volumes of *Recherches* in 1822 did not reflect his first encounter with the ideas, directly or indirectly.<sup>131</sup> His engagement with Cuvier's ideas has been traced by critics to a number of his works: Cuvier's theories of functional integrity underlay P. B. Shelley's argument for vegetarianism in *A Vindication of Natural Diet* (1813); he likewise used Cuvier's geological theories for images of changes in the earth's climate in *Queen Mab* (1813) and anatomical theories in *A Refutation of Deism* (1814).<sup>132</sup> It is striking that these three works follow so closely after Jameson's 1813 translation of Cuvier's *Essay. Mont Blanc* (1816) also demonstrates P. B. Shelley's familiarity with Cuvier's catastrophist ideas in both its portrayal of the indifferent destructive and creative powers of glaciers, especially in lines 94-117, and its contemplation of the mountain's prehistory.<sup>133</sup> *Prometheus Unbound* (1820), too, shows the influence of Cuvier, especially in Act IV's images of fossils and concomitant vision of apocalypse, extinction, and despair (lines 274-318).<sup>134</sup>

#### *Byron's Cain and Its Cuvierian Framework*

Lord Byron's *Cain: A Mystery* (1821) represents the best-known, and most studied, application of Cuvier's ideas to British literature.<sup>135</sup> Byron overtly cited Cuvier in the Preface to *Cain*, a play which constituted "one of the most celebrated literary scandals of the nineteenth century."<sup>136</sup> Again, Cuvier was an established name in Britain by this time. Not

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<sup>131</sup> Jeffrey, 150; Holmes, 622-23.

<sup>132</sup> Cameron, 253, 428 n54, 275.

<sup>133</sup> Jeffrey, 151; Wilson, 54; Hitt, 147.

<sup>134</sup> Hungerford, 208-11, 213-14; Jeffrey, 151; O'Connor, "Mammoths and Maggots," 31.

<sup>135</sup> *Cain* does not, however, represent Byron's first or only engagement with Cuvier's theories. O'Connor observes that Byron drew on Cuvier for the Neptunism inherent in the ending to *Childe Harold IV*, 1643-44; throughout *The Deformed Transformed*; and in *Don Juan*, especially Cantos IX and X ("Mammoths and Maggots" 40, 36, 29, 30). Stafford also notes the influence of Cuvier in Byron's *Heaven and Earth* (192).

<sup>136</sup> Brunner, 1. One critic noted that Byron seems to have been "rather hurt at its reception and somewhat

only did his fame and respect abroad bolster his reputation, but Jameson's project of enlisting Cuvier's (distorted) claims for religious conservatism had been continued in Britain by William Buckland, an ordained Anglican priest, a Cambridge professor in mineralogy and geology, and a prominent natural theologian.<sup>137</sup> Natural theology, in essence, is the project of confirming religious claims through scientific study—or, alternatively put, of searching in the composition and processes of the natural world for evidence of divinity as presented in religious doctrine.<sup>138</sup> Buckland became particularly famous after his discovery in the Kirkdale Caverns, Yorkshire, of a group of fossils that he termed an antediluvian hyena den, becoming “nearly as celebrated as Cuvier” as a consequence.<sup>139</sup> His discoveries were printed in *Reliquiae Diluviana* (1823), which John Murray might have accepted in part to make up for the controversy of publishing *Cain*; this work was the culmination of Buckland's efforts to reaffirm the Scriptural orthodoxy of Cuvier's theories in light of *Cain*'s supposed blasphemies.<sup>140</sup> Buckland's vivid depictions of his fossil cave “brought a whole pre-human ‘world,’ or ecosystem, into sharp focus.”<sup>141</sup> Byron, like Buckland, tried to bring life to a “pre-human world” in his work, having Lucifer guide *Cain*'s title character through a tour of

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withdrew from his English public in response” (Dennis, 137).

<sup>137</sup> Haile, *ONDB*; O'Connor, “Mammoths and Maggots,” 32.

<sup>138</sup> Ratzsch, *Stanford Encyclopedia of Philosophy*.

<sup>139</sup> O'Connor, “Mammoths and Maggots,” 34; Haile, *ONDB*.

<sup>140</sup> O'Connor, “Byron's Afterlife,” 151; Stafford notes that “Despite its overtly orthodox purpose...Buckland's beautiful quarto with its fine engravings of mysterious ancient skeletons served to stimulate the growing interest in paleontology and the idea of extinction” (209).

<sup>141</sup> O'Connor, “Byron's Afterlife,” 149.

extinct species, including the mammoth—a species that Cuvier used to scientifically establish the very notion of extinction.<sup>142</sup>

The Preface to *Cain* consists mostly of “a series of defenses” of the play that are



Figure 1: “The first-ever published illustration of a ‘scene from deep time’ was a contemporary cartoon of the Kirkdale hyenas by William Conybeare...with Buckland himself magically watching, bridging the chronological chasm between human and pre-human” (O’Connor, “Byron’s Afterlife,” 149).

evaluated by modern critics as ranging from “deeply ironic” to “wickedly disingenuous.”<sup>143</sup>

One such disingenuous moment is the “Note” at the end of the Preface,

which Byron presents as “appended...as a heavily affected

afterthought.”<sup>144</sup> It reads:

*Note.*—The reader will perceive that the author has partly adopted in this poem the notion of Cuvier, that the world had been destroyed several times before the creation of man. This speculation, derived from the different strata and the bones of enormous and unknown animals found in them, is not contrary to the Mosaic account, but rather confirms it; as no human bones have yet been discovered in those strata, although those of many known animals are to be found near the remains of the unknown.”<sup>145</sup>

<sup>142</sup> See *Cain*, II.i.153-59.

<sup>143</sup> Karkoulis, 274.

<sup>144</sup> Karkoulis, 274.

<sup>145</sup> Byron, Preface to *Cain*, Lines 48-54. This Preface is consistent with Byron’s letters prior to *Cain*’s publication, discussing his plan behind the work (Letters to Murray and Moore, Sept. 19, 1821, *BLJ*, V,

In this Note, Byron makes explicit to his readers that he drew on Cuvier for source material for his own play, but more interestingly, he summarizes Cuvier's work in such a way as to present it as religiously orthodox—"not contrary to the Mosaic account"—highlighting the recent creation of humankind even while positing an older history for the Earth.<sup>146</sup> We could assume here that Byron is being subversive, but he also might be presenting the facts as he understood them: even though one Byron scholar has suggested that he might have learned about Cuvier's ideas (and Buckland's work) through conversations with P. B. Shelley,<sup>147</sup> and one contemporaneous reviewer accused Byron of having learned about Cuvier solely through a dictionary, Byron in fact probably read Cuvier's *Discours* in Kerr and Jameson's 1813 translation.<sup>148</sup>

The pessimism inherent in Cuvier's theories of extinction and geological revolutions seems to have appealed to Byron's skepticism and sense of history.<sup>149</sup> In *Cain*, the effects of Cuvier's theories of life and history are thoroughly depressing and diminishing: the human species takes on an insignificant role in the universe—displaced from its role as sole sovereign of the Earth—as does the act of Creation and the Fall; the Judeo-Christian God becomes "a sort of local deity rather than...[the] revered and immutable Almighty Lord who is the source of all Life"; and human time is placed in the perspective of planetary or

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<sup>146</sup> O'Connor notes that although "it was common enough for Romantic poets to make use of scientific theories," "this kind of explicit link was rare, at least among the English poets" ("Mammoths and Maggots," 28).

<sup>147</sup> O'Connor, "Mammoths and Maggots," 29, 34. Coleridge was also interested in Buckland's work.

<sup>148</sup> Steffan, 381, 263.

<sup>149</sup> McVeigh, 299. Quinones notes that the violence of Cuvier's theory, in particular, appealed to Byron (104).

universal time scales, making it shrink into near nothingness.<sup>150</sup> These conflicting timescales anger and frighten Cain,<sup>151</sup> but more importantly they drain the “Romantic vision of apocalypse” of any sense of personal or universal meaning.<sup>152</sup> Lucifer, a Cuvierian devotee, reinforces Cain’s sense of nothingness: this is the “human sum of knowledge, to know mortal nature’s nothingness” (2.2.417-24).<sup>153</sup> The acquisition of knowledge, including scientific and geohistorical knowledge, is “exhilarating but ultimately soul-destroying,” as “Cain’s understanding of how the Earth is wrecked leads to the wreckage of his own soul.”<sup>154</sup> The nihilistic implications of Cuvierian theory for humanity’s sense of itself were thus dramatized by Byron, and so the closet drama—never really intended for performance, but rather for private readings—was largely rejected by critics of the time.

Byron’s invocation of Cuvier’s orthodoxy “did not soothe his publisher or anyone who was disturbed by radical notions,” though the play did serve to popularize the new and struggling fields of geology and paleontology in Britain.<sup>155</sup> Byron was accused of atheism—often traced to P. B. Shelley’s influence by hostile reviewers—because of the play’s thoroughgoing skepticism.<sup>156</sup> Byron’s correspondent, Thomas Moore, thought that Cuvier’s

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<sup>150</sup> Eggenschweiler, 242; McGann, 260; Karkoulis, 278. In *Cain*, Lucifer draws the title character’s attention to this disjuncture, saying, “such things / Though rare in time, are frequent in eternity” (2.2.83-84).

<sup>151</sup> Davies, 128.

<sup>152</sup> Cantor, “Byron’s *Cain*,” 64. Quinones comments on how this reflects the Romantics’ sense of the end of Enlightenment projects (93, 105).

<sup>153</sup> Eggenschweiler, 242.

<sup>154</sup> O’Connor, “Mammoths and Maggots,” 27, 28.

<sup>155</sup> Steffan, 9; O’Connor, “Byron’s Afterlife,” 147.

<sup>156</sup> Hoagwood, 103. O’Connor sees Byron not as atheistic, but as warning that “if your idea of God comes straight from the Old Testament, modern science will wreck your faith” (“Byron’s Afterlife,” 155).

presence in *Cain* gave the play a “desolating...deadly chill.”<sup>157</sup> One reviewer claimed that the play was “‘propagating’ a deadly moral ‘plague’, calculated to ‘spread desolation’ by virtue of its aesthetic appeal.”<sup>158</sup> At least one suicide was attributed to reading the drama.<sup>159</sup> Even King George IV publicly registered his objections to *Cain*’s blasphemies (derived, remember, from Cuvier’s geological theories).<sup>160</sup> Many attacks were mounted from the pulpit, as the Anglican clergy denounced *Cain* and sought to regain authority as the interpreters of the Bible’s relevance to the modern age;<sup>161</sup> *Cain* was perceived as such a threat, after all, because Byron was so popular and his work so widely read.<sup>162</sup>

But there were a number of positive reactions to Byron’s *Cain* as well, including those of the Shelleys and Leigh Hunt.<sup>163</sup> Both of the Shelleys were greatly impressed by Byron’s play.<sup>164</sup> Mary Shelley wrote both before and after the publication of *Cain* that it struck her as “a revelation”: on 30 November she commented in a letter that the work “made a great impression upon me...from its power and beauty”; on 20 December, she said that both she and her husband saw *Cain* as Byron’s “finest production....one has thought of such things though one could not have expressed it so well....one has perhaps stood on the extreme verge of such ideas...[in] the midst of...darkness”<sup>165</sup> It is striking, then, not only that

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<sup>157</sup> March 16, 1822, Moore, V, 321-22, *BLJ*.

<sup>158</sup> Qtd. in O’Connor, “Byron’s Afterlife,” 148.

<sup>159</sup> O’Connor, “Mammoths and Maggots,” 33.

<sup>160</sup> O’Connor, “Mammoths and Maggots,” 33.

<sup>161</sup> See Ryan, 41.

<sup>162</sup> O’Connor, “Byron’s Afterlife,” 148.

<sup>163</sup> Dennis, 132.

<sup>164</sup> *Journal*, I, 381-82 n4.



*Cain* might have inspired Mary Shelley, but that in this passage she perhaps confesses to having herself thought about the implications of Cuvier's theories in a historical and geohistorical context.

### **MARY SHELLEY'S THE LAST MAN**

Mary Shelley might have learned about Cuvier's ideas through her independent reading (in Kerr and Jameson's translation or the original French editions P. B. Shelley ordered in 1822) and her place in Romantic intellectual circles, or from her husband's or Byron's work. In any case, *The Last Man* represents a serious engagement with Cuvier's topoi, or rhetorical themes and arguments. Despite the extensive scholarship that considers *Frankenstein's* relationship to contemporaneous scientific developments, the only critical considerations of *The Last Man's* treatment of scientific concerns have been limited to the subject of epidemiology. A couple of critics have noted that Cuvier's ideas were topical at the time that Shelley wrote and published *The Last Man*, or that they influenced the work of other writers of last man narratives that influenced Shelley's, but no critic has previously drawn the connection between Cuvier and Shelley.<sup>166</sup> But read in light of other literary considerations of Cuvier's work, debates in Britain about the religious and scientific implications of Cuvier's ideas, and Cuvier's contribution to Romantic theories of revolution, *The Last Man* becomes less enigmatic.

### *Summary, Contexts, and Critical Responses*

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<sup>165</sup> Both letters to Maria Gisborne (*Letters*, I, 150, 153).

<sup>166</sup> Korte, 154 n6; Stafford, 197-231. Wang notes the importance of "catastrophes" to the novel, but does not draw the connection between that heavily valenced word and Cuvier's work, and in fact goes so far as to claim that "personal and political catastrophes inform but do not determine the political and poetic texture of Mary Shelley's apocalyptic plague narrative" (Wang, 235).

*The Last Man* recounts the destruction of the human species at the end of the twenty-first century. It is the first example in English of a secular apocalyptic story set in the future. The narrative, supposedly reconstructed by the nineteenth-century author from fragments found in the Cumaean Sibyl's cave, is told from the perspective of Lionel Verney, the son of a debauched favorite of the English king who fell out of favor and died in obscurity; Lionel reconnects with the abdicated king's son, Adrian, and marries Adrian's sister, Idris. He goes on to live an idyllic life in the new English republic, marred only by the suicide of his sister, Perdita, after the death of her husband, Raymond, in the Greek wars to conquer the Turkish Empire. Soon, though, a plague sweeps across the world, threatening humanity with extinction; Lionel watches his fellow Britons and then his family die off until, he believes, he is the eponymous last man on Earth. Lionel himself records his story and leaves his manuscript deposited in Rome, in case anyone should come across it in the future, before sailing off in the hopes of meeting another survivor. Shelley's novel was out of print for much of the nineteenth and twentieth centuries,<sup>167</sup> though it is now the most frequently reprinted and discussed of Shelley's works after *Frankenstein*.<sup>168</sup>

When it was first published in 1826, there was an initial demand for Shelley's *The Last Man*, as well as some positive reviews, but most reviewers and the general public reacted negatively to the book.<sup>169</sup> The novel inspired a series of paintings on the subject by

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<sup>167</sup> Lomax, 7.

<sup>168</sup> Hopkins, "Memory at the End," par. 11; Bennett, 149.

<sup>169</sup> Sunstein attributes the demand to the book's "subject, author, and advertised 'portraits' of Byron and [P. B.] Shelley" (271). Shelley does claim to have sketched a portrait of her husband in the novel (*Letters*, I, 341), though neither her letters nor journals contain any reference to attempts to portray herself, Byron, or any other contemporary.

John Martin,<sup>170</sup> and after reading it, Thomas Lovell Beddoes abandoned his own attempt at writing a last man narrative, saying of Shelley “in almost every respect she will do much better....indeed she has no business to be a woman by her books.”<sup>171</sup> Thomas Jefferson Hogg, a friend of the Shelleys, “was moved to tears at the achievement of his ‘Sybil’.”<sup>172</sup> The novel achieved a notoriety that spawned a card game (the 1828 “The Sybil’s Leaves; or a Peep into Futurity”) and a parody in *The Keepsake* (the 1830 “A Dialogue for the Year 2130...From the Album of a Modern Sibyl”), but this was a mocking and hollow kind of renown.<sup>173</sup> A number of reviewers ridiculed her book because of the sense that the theme of “lastness” was overdone by 1826.<sup>174</sup> Readers reacted against the gloominess of the book, and liberals and religious conservatives alike took offence to the idea of the secular end of the human species.<sup>175</sup> Such reactions were not limited to Britain: *The Last Man* was banned outright in Austria.<sup>176</sup> The novel was not only a financial flop, but also had serious personal ramifications for Shelley and her young son Percy, as its publication angered her father-in-law, who suspended their living allowance as a consequence.<sup>177</sup>

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<sup>170</sup> Sunstein, 271. Interestingly, Cuvier viewed Martin’s works and interpreted them as a visual portrayal of his own theories (Pendered, 133; Stafford, 209).

<sup>171</sup> Thomas Lovell Beddoes to Thomas Forbes Kelsall, 1 April 1826 (104).

<sup>172</sup> Sunstein, 271.

<sup>173</sup> Sunstein, 308. Sunstein notes that *The Last Man* became “more an ‘in’ topic than a book actually read” (271).

<sup>174</sup> Elmer, 355; Paley, 107.

<sup>175</sup> See Sunstein, 271.

<sup>176</sup> Sunstein, 271.

<sup>177</sup> Feldman and Scott-Kilvert note that “when *The Last Man* was published in January, ‘by the author of *Frankenstein*’ appeared on the title-page in lieu of Mary’s name. However, even though the first edition of *Frankenstein* had been anonymous, her name had appeared on the title-page of the 1823 edition which Godwin had brought out. Thus she was widely known to have been its author, and the reviewers referred to her by name, which angered Sir Timothy Shelley. Though Mary was certainly not to blame, Sir Timothy Shelley expressed his irritation by suspending her allowance” (*Journals*, II, 498 n2).

The text itself has proven popular with modern scholars in part because of its indeterminacy: its very structure “embraces a confluence of narratives that resists an interpretative closure or categorization: combining tales of multiple love-triangles, political debates, psychological struggles, historical vignettes, records of war, bits of travelogues, the text is cast as a dystopian vision invoking a classical myth,” not to mention “personal referents, aesthetic theories, and historical events.”<sup>178</sup> Part of what is so appealing for critics about the novel is the “overdetermined” (in the psychoanalytic sense of being “multivalent”) nature of many of the symbols and debates contained within it; as Betty Bennett notes, “parallel visions, in different guises, are at the core of all of Mary Shelley’s major fiction,” and *The Last Man* is no exception.<sup>179</sup> The novel has been seen as a critique of the domestic sphere and its gender politics,<sup>180</sup> the Romantic ethos,<sup>181</sup> biblical injunctions about humankind’s roles and responsibilities in the world,<sup>182</sup> quests for glory and power,<sup>183</sup> environmental ethics,<sup>184</sup> British national identity,<sup>185</sup> pastoralism,<sup>186</sup> imperialism,<sup>187</sup> modern patterns of commerce,<sup>188</sup> and Godwin’s and P. B. Shelley’s idealistic political ideologies.<sup>189</sup>

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<sup>178</sup> An, 581; Wells, 213.

<sup>179</sup> Wells, 214; Bennett, 148.

<sup>180</sup> Banerjee; Bennett, 148; Hopkins “Memory at the End,” par. 2; Haggerty; Mellor, 141-69; Wang, 239.

<sup>181</sup> Bannet, 354; Cantor, “Apocalypse of Empire,” 194; Hopkins, “Language of the Heart,” par. 13; Lokke, 129, 116, 118; Paley, 111; Ruppert, 146; Stafford, 216; Sterrenberg, 328-35; Wagner-Lawlor, 753.

<sup>182</sup> Lokke, 118.

<sup>183</sup> Elmer, 357.

<sup>184</sup> Castellano, 85.

<sup>185</sup> Hoffman, 25.

<sup>186</sup> Hutchings, 229; Strang, 411.

<sup>187</sup> Bewell, 296-314; Garrett; Cantor, “Apocalypse of Empire,” 194; Ruppert, 141; Wright.

*The Last Man* has also been mentioned as an early work of science fiction.<sup>190</sup> Critics often list scientific systems as among those contemporaneous ideologies (including the political, spiritual, and artistic) that Shelley is investigating or interrogating through *The Last Man*, but then elide their claims by not pursuing an inquiry into the book's relationship to science of the day.<sup>191</sup>

When critics do approach the science of the book, what they're really exploring is in most cases the medical underpinnings of the novel—the treatment of the pandemic plague, its causes, and the contemporaneous medical debates that undergird its presentation. The plague is sometimes discussed in terms of a “return of the repressed” female psyche, as one critic put it, which is unable to be contained as it emerges abstracted from human women into powerful natural forces.<sup>192</sup> Audrey Fisch has famously read the plague in light of the modern AIDS pandemic,<sup>193</sup> as other critics have read it in terms of the contemporaneous cholera epidemic.<sup>194</sup> The most common—and influential—critical treatment of this book in terms of illness locates it within contagionism/anticontagionism debates of the early nineteenth century.<sup>195</sup>

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<sup>188</sup> Cantor, “Apocalypse of Empire,” 198.

<sup>189</sup> Bradshaw, 173; Paley, 110; Taylor, 28; Wagner-Lawlor, 753. Stafford notes that “while the arrival of the plague as a great leveler seems to satirize radical views of the ideal equality of man, it is Shelley's intellectual belief rather than Shelley himself that is under scrutiny” (226).

<sup>190</sup> Hoffman, 25.

<sup>191</sup> See, for example, Lokke, 117.

<sup>192</sup> Aaron, 17, 19-20. Eberle-Sinatra adopts a similar view (see 102, for example), claiming that in this novel Mary Shelley reveals an “awareness of the strains of writing in a male-oriented society” (96).

<sup>193</sup> Fisch, 271.

<sup>194</sup> Bewell, 307-14; Wang, 245. Stafford notes that cholera was widely understood in a catastrophist framework as threatening mass extinction (Stafford, 219).

<sup>195</sup> Essentially, anticontagionism is a theory of disease transmission that attributes disease to the air—such as miasmas—whereas contagionism attributes disease transmission to bodily contact (McWhir, “Mary

A biographical approach has predominated studies of this novel, treating it as a more or less straightforward *roman à clef*, with Adrian representing Shelley, Raymond representing Byron, Lionel representing Mary Shelley herself,<sup>196</sup> and Perdita representing Mary Shelley as well or perhaps Claire Claremont.<sup>197</sup> From this perspective, the great catastrophe of the novel is read as the death of Adrian, as a reworking of Shelley's drowning.<sup>198</sup> A number of critics have pushed back against the "reductive" tendencies of such biographical approaches to the novel on the basis that they "den[y] Shelley artistic control over this text."<sup>199</sup> Though some critics have chosen to read the biographical attributions more loosely than others, few have altogether disposed with the *roman à clef* reading, even those who attack it as restrictive or distorting.<sup>200</sup>

It is indeed difficult not to read Mary Shelley's biography into *The Last Man*, particularly her statements in the fourth volume of her journal, which she inscribed as her "Journal of Sorrow" and which she began after P.B. Shelley's death in July 1822. *The Last Man* was begun in early 1824 after her return to England and was completed in November

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Shelley's Anti-Contagionism," par. 1). See especially Melville and McWhir ("Mary Shelley's Anti-Contagionism"), who both argue that Mary Shelley falls in the anticontagionist camp.

<sup>196</sup> And hence many critics identify him as a character of ambiguous gendering; see, for example, Johnson (262).

<sup>197</sup> Less common attributions include Ryland as William Cobbett and Evadne as Teresa Guiccoli, Byron's lover (Canuel, 149). Idris is rarely discussed, but when she is it is as the ideal wife that Shelley wished she was.

<sup>198</sup> See Kilgour, 576, 577. Kilgour claims, "Mary rewrites her husband's individual death as a symphonic and universal catastrophe that fulfills and ends all previous narratives—in grand Romantic terms, the loss of the beloved *is* the end of the world" (Kilgour, 567). Elmer likewise writes, that Mary Shelley renders "her terrible losses...[as] commensurate with global history itself" (Elmer, 356).

<sup>199</sup> Wells, 212; Bennett, 147; Kilgour, 572; Lew, 262; O'Dea, 284.

<sup>200</sup> Dawson makes this point on 247-48 and then goes on to suggest that "the various relations between the central protagonists should be read not 'literally,' but as different aspects of a single psychological dilemma pertinent to Mary Shelley at the time of writing" (250). Betty Bennett takes the somewhat ambiguous stance that the characters contain characteristics "synthesized" from people in Shelley's life (Bennett, 147). Wells (216) and Hopkins ("Memory at the End," par. 13) adopt a similar approach.

1825, to be published in January 1826.<sup>201</sup> As biographer Emily Sunstein notes, “she meant to take her time to make *The Last Man* her best work yet,” and she had thought about her plan for beginning work on this project as early as November 1822.<sup>202</sup> Shelley held high hopes for the therapeutic results of working on the novel, which seem not quite to have materialized.<sup>203</sup> Most famously, she wrote in her journal on 14 May 1824, after hearing of Byron’s death, “The last man! Yes I may well describe that solitary being’s feelings, feeling myself as the last relic of a beloved race, my companions, extinct before me.”<sup>204</sup> Shelley went on to ask, “Why am I doomed to live on seeing all expire before me? God grant I may die young—A new race is springing about me.”<sup>205</sup> In an entry from later that year, Shelley seems to continue her hints that *The Last Man* is a biographical sketch: “I inexpressibly long for some circumstance that may assure ↑me that↓ I am not utterly disjoined from my species.”<sup>206</sup> But we need to be cautious in applying her journal statements to her broader life and work: Shelley herself noted that she tended to recur to her journal in fits of depression to record the negative thoughts that she couldn’t otherwise express, making the journal at best a partial record of her views and feelings.<sup>207</sup>

### *Cuvier in The Last Man*

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<sup>201</sup> Morrison and Stone, 240.

<sup>202</sup> Sunstein, 247; *Journal*, II, 442 n2.

<sup>203</sup> *Journal*, II, 474 n3, 483.

<sup>204</sup> *Journal*, II, 476-77.

<sup>205</sup> *Journal*, II, 478.

<sup>206</sup> 3 December 1824, *Journal*, II, 488.

<sup>207</sup> On 19 March 1823, Shelley notes that “I have ~~generally~~ ↑until now↓ recurred to this book to discharge into it the overflowings of a mind too full of the bitterest waters of life,” what she hyperbolically calls, “the most painful thoughts that ever filled a human heart even to distraction” (*Journal*, II, 459, 460).

In the opening of the *Discours*, which popularized his notion of extinction proceeding from natural revolutions or geological catastrophes, Cuvier famously described himself as a new species of antiquarian, and supported that self-fashioning by describing fossils as “monument[s]” that he “had to learn to decipher and restore.”<sup>208</sup> From the use of the word “catastrophe” in her author’s introduction (and its repeated use in the text: 7, 127, 179, 252, 270), to the persistence of “monuments” in the novel,<sup>209</sup> Shelley signals to the reader her engagement with Cuvier’s theory. Cuvier’s influence can be traced in *The Last Man* in a number of further instances. The novel presents England and France’s geological history as consistent with Cuvier’s description of continental splits in the *Discours*—“The eye easily discerns the sister land; they were united once; and the little path that runs between looks in a map but as a trodden footway through high grass”—a minor point in both books, but an interesting moment of congruence (180). When the British survivors in *The Last Man* attempt to reassure themselves that they can adapt to survive the plague (“It is a part of man’s nature to adapt itself through habit even to pain and sorrow” [195]) or to migrate to another geographical region to avoid extinction (“Let us go—the world is our country now, and we will choose for our residence its most fertile spot” [237]), their efforts are futile—just as Cuvier would predict for a species in the midst of a natural revolution leading to extinction. Shelley even goes so far as to present the leader of a religious cult in Paris as drawing inspiration from Cuvier’s idea from the *Discours* about the formation of mythologies: “he, by holding tight the reins of belief, might be remembered by the post-pestilential race as a patriarch, a prophet, nay a deity; such as of old among the post-diluvians were Jupiter the

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<sup>208</sup> *Discours*, 183. Kerr translates “monuments” as “remains,” focusing on the more literal understanding of fossils as dead bodies, and diminishing the power of Cuvier’s imagery (*Essay*, 1, 11, 17).

<sup>209</sup> McWhir, “Unconceiving Marble,” 169.



conquerer, Serapis the lawgiver, and Vishnou the preserver” (281).<sup>210</sup> As mentioned earlier, Cuvier famously applied a historical comparative method in the *Discours* to consider the most recent revolution—a widespread flood, identified with the Hebrew Biblical Flood though not in an exclusive or even privileged way—which he spends quite a bit of time tracing through a number of eastern historical traditions.<sup>211</sup> Shelley’s adoption of Cuvier’s relativistic approach to near Eastern societies’ mythologies after the most recent geological catastrophe—a flood, in both instances—further signals to the reader her interest in the social implications and fictional possibilities of Cuvier’s ideas. But she digs deeper in a number of instances, grappling in important ways with Cuvier’s topoi, as will be explored below.

*The “Author’s Introduction”: Historiography and Relativism*

Cuvier and Shelley rely on the shared topos of translating or deciphering historical fragments as a model for authorship. For Cuvier, the topos is metaphorical, but for Shelley it is literalized into the narrative. Cuvier’s work, in his mind, was primarily “the task of recovery and reconstruction” of fossils.<sup>212</sup> Cuvier opens the *Discours* with some figurative language: to his mind, he is the first of “a new species of antiquarian” who has learned “to decipher and restore” fossils, which he calls “a kind of monument that is almost always neglected, although it is indispensable for the history of the globe.”<sup>213</sup> In the 1813 translation,

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<sup>210</sup> Paley interprets this false prophet as demonstrating that “the religious paradigm is...irrelevant even when the conditions it prophesies are brought forth” (Paley, 118).

<sup>211</sup> Cuvier, 239-46. The flood account in Genesis is treated “as simply one among many of the traditional accounts of a great flood to be found amongst many other near-eastern peoples other than the Jews” that can help to cross-validate an estimated date for the most recent natural revolution (Outram, 148).

<sup>212</sup> Outram, 152.

<sup>213</sup> Cuvier, 183. Rudwick has produced a modern, scholarly translation of *Discours*, to which I refer unless otherwise noted.

Jameson concludes his appendix with a summary of the contents of the four volumes of *Recherches* in which he describes Cuvier's fossil evidence as "imperfect documents."<sup>214</sup> Furthermore, Cuvier was inspired by the work of French linguists, who worked to translate hieroglyphics on Egyptian artifacts procured by Napoleon in his conquerings and pillagings, to view his own task as that of an "antiquarian" rather than a "scientist" (a term that did not exist yet).<sup>215</sup> He emphasized the historical work of a "natural historian" in deciphering, translating, recovering, reconstructing, and "us[ing] fossils as the historian uses documents."<sup>216</sup> He treated his geohistorical work as interpretive<sup>217</sup>: nature's language, which Cuvier emphasizes in the *Discours* but Kerr downplayed, can be understood by him because he put in the time and effort to learn it.<sup>218</sup> Shelley similarly models her authorship in the Introduction after recovery and reconstruction, or translation and interpretation, in her case of the writing on the scattered Sibyl's leaves discovered on the cave floor; Shelley, like Cuvier, is transformed as an author into an antiquarian through her treatment of the leaves.<sup>219</sup>

*The Last Man* begins with the "Author's Introduction," which serves as a preface of sorts for the main narrative. In it, Shelley employs a "found manuscript" trope, presenting a story of having discovered fragments<sup>220</sup> of the narrative written on leaves in the Sibyl's Cave

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<sup>214</sup> Jameson, Appendix, 227-65, qtn. from 249.

<sup>215</sup> The OED dates the first use to 1834.

<sup>216</sup> Rudwick, intro to *Discours*, 174; *Bursting the Limits of Time*, 505, qtn. from 509.

<sup>217</sup> Rudwick, *Worlds before Adam*, 271.

<sup>218</sup> *Discours*, 239.

<sup>219</sup> Ruppert, 147. The book, in some critics' views, is a literary monument to the Romantic era, as Lionel's book in Rome is a monument to his own age (Bewell, 297; Webb, 119, 121). Others read Lionel's manuscript as more literally an artifact (O'Dea, 302).

<sup>220</sup> Although the argument could be made that the Shelley's portrayal of fragments shows her embeddedness in

in Naples.<sup>221</sup> In the story of the preface, Shelley was exploring the cave network with a “companion”—presumably Percy Bysshe Shelley<sup>222</sup>—and some Italian guides, but the two broke off from their guides to try to escape a clearly fraudulent, tourist-trap version of the Sibyl’s Cave to penetrate the hardly accessible, remote and more authentic one (2). After climbing, and nearly crawling at some points, through a labyrinth of caves, Shelley and her companion stumble onto a cave filled with leaves written on by the Sibyl, which contain the narrative presented in the novel. (The image of Buckland emerging into his hyena cave comes to mind here; see fig. 1.) Shelley describes the discovery of the text thus: “On examination, we found that all the leaves, bark, and other substances, were traced with written characters. What appeared to us more astonishing, was that these writings expressed in various languages: some unknown to my companion, ancient Chaldee, and Egyptian hieroglyphics, old as the Pyramids. Stranger still, some were in modern dialects, English and Italian” (3). After collecting “a hasty selection of such of the leaves, whose writing one at least of us could understand,” Shelley and her companion leave, only to return multiple times during their stay at Naples to collect more leaves (3). The “thin scant pages” are “scattered and unconnected,” “unintelligible in their pristine condition” (3, 4) and so Shelley, like

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Romantic discourse, in which images of fragmentation were common (Thomas, 23), I argue that Shelley here is departing from the typical Romantic fragment, which generally has to do with “the integrity of the poetic persona and its coherent production” (Thomas, 23) to focus on a broader, species-wide subject.

<sup>221</sup> In her unpublished dissertation, McWhir explored the imagery of caves for the Romantics, focusing primarily on P. B. Shelley’s works, though touching upon *The Last Man* as well. In relation to *The Last Man* specifically, McWhir notes that P. B. Shelley’s interest in the image of the cave might be behind Mary Shelley’s choice to locate the origin of her story in a cave setting, though she does note that Mary Shelley used the image independently in a journal entry to describe explorations of her own mind on 25 February 1822 (McWhir, *Portals of Expression*, 250, 255). Wells (216) adopts a similar view of the Sibyl’s Cave in the narrative. Moreover, McWhir sees the cave in *The Last Man* as a place where the oppositions of “timelessness and the experience of chronological time are brought together” (McWhir, *Portals of Expression*, 254).

<sup>222</sup> Though Claire Claremont was also present when the Shelleys actually visited a Sibyl’s Cave in Naples in December of 1818 (Wang, 238).

Cuvier with his fragments of fossils, has to “add links, and model the work into a consistent form” (3-4).<sup>223</sup> The process of “deciphering” the “remains” (the word that Kerr and Jameson substituted for “monument” in the *Discours*’s opening; see note 183) has impressed Shelley, she tells us, “through the immensity of nature” (3). Shelley describes her translation of the leaves as long and effortful, but rewarding: “Their meaning, wondrous and eloquent, has often repaid my toil, soothing me in sorrow, and exciting my imagination to daring flights” (3). And yet, she says, “Sometimes I have thought, that, obscure and chaotic as they are, they owe their present form to me, their decipherer. As if we should give to another artist, the painted fragments which form the mosaic copy of Raphael’s Transfiguration in St. Peter’s; he would put them together in a form, whose mode would be fashioned by his own peculiar mind and talent” (4). This kind of relativism for translation of fossils is not a possibility Cuvier opens up in his work, despite the comparative and relative method he applies to multicultural myths.<sup>224</sup>

Shelley is at once using a Cuvierian topos and critiquing it: her fragments are woman-made, not natural, and her use of the antiquarian model is as a consequence more justifiable. Humanity and the natural world don’t “speak” in the novel as they do in Cuvier’s writing. In a modern scholarly translation of Cuvier’s *Discours*, Cuvier says, “We see sufficiently that nature everywhere maintains the same language; that everywhere she tells us that the present

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<sup>223</sup> Webb notes that Shelley is here manipulating the trope of the “found manuscript,” a device that became “more symbolically loaded” in the Romantic era and was used “most elaborate[ly]” by Walter Scott, another author who presented himself as an antiquarian of sorts: “The framing editor frequently represents a specific literary institution or is a professional literary man—for example, an antiquarian, a scholar, or a journalist—who is empowered through that institution to make pronouncements about the text. This type of appropriation of the manuscript erects a mediating, corrective discourse that usurps the narrative authority of the internal narrator and locates that authority within an institutional discourse” (Webb, 122).

<sup>224</sup> Cuvier was aware of the relativism that was influencing the study of history in the early nineteenth century, which was particularly influenced by the translation work of scholars on Eastern languages, but he chose not to view his comparative anatomical methods as historical in that sense (Outram 150-51).

order of things does not reach back very far”; Kerr’s less sensitive nineteenth-century translation gives us “From all that has been said, it may be seen that nature every where distinctly informs us that the commencement of the present order of things cannot be dated at a very remote period.”<sup>225</sup> Kerr’s stilted diction eliminates the interesting implications about nature as a female speaking agent communicating willingly and helpfully with paleontologists. Nonetheless, Cuvier here claims that “nature’s language” can be heard and interpreted by him and others who learn to listen to it. When we step back from the metaphor, we can recognize that geological strata and fossils aren’t really “speaking” to him—he’s imposing his linguistic system on non-signifying natural objects. In *Language as Symbolic Action*, Kenneth Burke reflects on this issue: “Man,” Burke writes, is “the word-using animal” who views nature not as just itself—just what it is—but rather “as emblematic of the spirit imposed upon it by man’s linguistic genius.”<sup>226</sup> This is the way that Cuvier makes his name, after all, by demonstrating that fossilized bones can fit into the explanatory system that he constructs for them; the Genesis myth of Adam fulfilling the divinely appointed task of naming a nature that is physically full but linguistically blank fits into this paradigm. And so, Burke argues, humans project the sociopolitical order onto the natural order and necessarily approach nature through their cultural, verbal systems.<sup>227</sup> Burke concludes that although people often don’t recognize it, they approach the natural world and its “immediate sensory aspects,” which seem so unmediated, through the “analogical, figurative, and the metaphorical”; Cuvier’s metaphor may be more or less consciously constructed, but he nonetheless is presenting his approach to nature through a figurative

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<sup>225</sup> *Discours*, 239; Essay, 146.

<sup>226</sup> Burke, 362.

<sup>227</sup> Burke, 375, 378.

lens.<sup>228</sup> Shelley resists the temptation of Cuvier to personify nature and then to treat these personifications as accurately representing humanity's actual encounters with the natural world. In *The Last Man*, human explanatory systems are shown to be arbitrary linguistic and cultural constructs that do not map onto nature's actions, as will be discussed in relation to the plague and natural disasters. And, as one critic notes, "Part of Mary Shelley's critique...is of those who would organize the social realm around the sign of their own authorship—those, in other words, who would become the ultimate agents of culture, the 'unacknowledged legislators of the world','"<sup>229</sup> like Cuvier. In literalizing and relativizing the topos of deciphering fragments, then, Shelley deprivileges and delimits Cuvier's explanatory mode even while working within it.

*The Many Forms of Disaster: Disease, Sun, Wind, and Water*

Shelley and Cuvier both rely on the topos of disaster, considering its effects on species—previously extinct species like the mammoth in Cuvier's case, but the British subpopulation of the human species in Shelley's. Cuvier's *Discours* presents an argument for the reality of extinction as a natural process, one that occurs because of "revolutions" or geological catastrophes such as floods.<sup>230</sup> Cuvier's use of the term "revolution" had inevitable political overtones in light of the French Revolution, which was not quite twenty-five years in the past at the time that the *Discours* was written, a resonance of which he was aware.<sup>231</sup> Revolutions in nature had to be sudden and violent to wipe out entire species that

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<sup>228</sup> Burke, 379.

<sup>229</sup> Webb, 131.

<sup>230</sup> Landslides, volcanoes, and astronomical causes are all considered and rejected as insufficient to cause the kinds of changes that Cuvier finds evidence for in the fossil record (193-98).

<sup>231</sup> Cuvier nonetheless viewed his use of the word "revolutions" as accurately reflecting his intensive and detailed scientific study (Rudwick, *Meaning of Fossils*, 109).

were otherwise, based on the idea of correlation of parts, fitted to their conditions of existence.<sup>232</sup> So abrupt, in fact, had been a previous revolution that rendered mammoths extinct that specimens frozen in ice could still be found with “their meal of spring flowers...preserved intact.”<sup>233</sup> These sudden and inescapable revolutions were not global phenomena, but rather were limited to geographical regions (as large as that stretching from Israel to China);<sup>234</sup> once the region had been cleared of its former inhabitants, new species migrated into the area to replace them.<sup>235</sup> Evidence for revolutions, or “traces of revolutions,” of the earth’s surface is apparent in geological formations all over the world, Cuvier claims, but these revolutions have become less widespread and violent over time.<sup>236</sup> Prior geologists failed to fully recognize the nature of geological evidence for these revolutions or catastrophes, or to order it into a meaningful system that accounted for all of the evidence at hand.<sup>237</sup> Cuvier’s theory of natural revolutions became widely known, though generally under the title of “catastrophism”; Cuvier did use the word “catastrophe” to refer to the regular and natural geological upheavals that his theory centered on—most often when considering such occurrences’ effects on species made extinct by them—but more frequently and consistently he thought (and wrote) of his theory as centering on “revolutions.”<sup>238</sup>

In volumes 2 and 3 of *The Last Man*, Lionel attributes humanity’s impending extinction to the plague that appears to be sweeping the globe, supposedly caused by “the

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<sup>232</sup> Rudwick, *Worlds before Adam*, 13.

<sup>233</sup> Outram, 157.

<sup>234</sup> Coleman, 135, 136.

<sup>235</sup> Sapp, 12; Appel, 44.

<sup>236</sup> Cuvier, 185, 187-90.

<sup>237</sup> Cuvier 199-205.

<sup>238</sup> Rudwick, *Meaning of Fossils*, 132.

contagion from the East” (162), even though the plague is reported to be appearing spontaneously in many parts of the world, and Britons blithely overlook its severity :

This enemy to the human race had begun early in June to raise its serpent-head on the shore of the Nile; parts of Asia, not usually subject to this evil were infected. It was in Constantinople; but as each year that city experienced a like visitation, small attention was paid to those accounts which declared more people to have died there already, than usually made up the accustomed prey of the whole of the hotter months. (127)

Similarly, the first victim of the plague described in any detail is a sailor from Philadelphia, found dead after struggling ashore near Portsmouth, England (157-58). In fact, people die from a variety of other causes throughout the book: Lionel’s wife from nervous and physical exhaustion, his mother-in-law from old age, his youngest son from typhus, Merrival from exposure to the elements, Juliet from a stab wound, and any number of people from other violence. Lionel himself recovers from the plague after everyone thinks that he has died, and he attributes his miraculous convalescence to his wife’s devoted care; his story opens the question of how many other people might have recovered had they not been given over as lost causes. Critics have generally overlooked these other causes of death and focused on the book solely as a plague narrative.<sup>239</sup> Those critics who relinquish the attempt to make sense of the plague ironically make the strongest case for the nature of the plague: it is ultimately and irreducibly inexplicable.<sup>240</sup> The signs of the plague are “fundamentally contradictory and uncertain,” evading human’s attempts to explain and thereby contain it in any linguistic or meaning system.<sup>241</sup> The effects of the plague are often conflated with its causes when critics

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<sup>239</sup> Such a list would constitute most of the scholars who write on the novel. Exceptions include Cantor’s “Apocalypse of Empire,” in which he notes that the plague encourages self-destructive human behavior (195)

<sup>240</sup> An, 585; Johnson, 264; Paley, 110; Snyder, 440; Webb, 127.

<sup>241</sup> An, 585, 595; Johnson, 264; González, 53-55.



seek an explanatory ideological framework for the pandemic.<sup>242</sup> But *The Last Man* also details the consequences of natural disasters on the human species, and this Cuvierian take on extinction has previously gone unremarked.<sup>243</sup>

A number of sudden changes in nature's seemingly "antique laws" (223) occur throughout the book. The capital city of Ecuador, Quito, is reported to have been destroyed by an earthquake (168). Thunder sounds across a clear sky (288). Three meteors, like three "mock suns" "whirl" through the sky and set the sea alight "like...Vesuvius...with flowing lava beneath" (269-70).<sup>244</sup> A black sun appears on the summer solstice in eastern Europe, Asia, and Africa (162-63), increasing the fears of the healthy and the dying alike, and sparking a mass immigration of English expats: "The plague was forgotten, in this new fear which the black sun had spread; and, though the dead multiplied, and the streets of Ispahan, of Pekin, and of Delhi were strewed with pestilence-struck corpses, men passed on, gazing on the ominous sky, regardless of the death beneath their feet" (163). The British, on their "cloudy isle" believe themselves to be "far removed from danger" from the sun, but soon grow to fear "the unseasonable heat...the balmy air...[and] the cloudless sky" because of the resulting decrease in crops and increase in disease the sun brings (194): "crowned, with the sun's potent rays, plague shot her unerring shafts over the earth. The nations beneath their influence bowed their heads, and died" (199). The sun continues to rise irregularly as the book progresses (298).

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<sup>242</sup> Webb, 127. To illustrate, the effects that Webb lists include "the return to England of repressed cultures, the leveling of class structures, the erection of false prophets, anarchy," which she claims are often confused for causes of the plague, which are, in her view, "mysterious and unexplained."

<sup>243</sup> Most critics treat landscape in the novel as metaphorical, not considering that Shelley may be considering it through a scientific lens. See, for example, Hopkins "Language of the Heart," esp. par. 7.

<sup>244</sup> O'Connor notes that comets were, for Byron, a symbol of catastrophism ("Mammoths and Maggots," 39).

The wind seems as if it should be a blessing to the British, on their “island, whose sea breezes...[give] some promise of health” (273), but soon becomes threatening as notions about airborne diseases rise to dominance: “If infection depended upon the air, the air was subject to infection” (167).<sup>245</sup> The real threat from the wind, though, stems from its influence over other natural forces:

mighty art thou, O wind, to be throned above all other vicereagents of nature’s power; whether thou comest destroying from the east, or pregnant with elementary life from the west; thee the clouds obey; the sun is subservient to thee; the shoreless ocean is thy slave! Thou sweepst over the earth, and oaks, the growth of centuries, submit to thy viewless axe; the snow-drift is scattered on the pinnacles of the Alps, the avalanche thunders down their vallies.... the clouds, deluge the land with rain; rivers forsake their banks; the wild torrent tears up the mountain path; plain and wood, and verdant dell are despoiled of their loveliness; our very cities are wasted by thee. Alas, what will become of us? It seems as if the giant waves of ocean, and vast arms of the sea, were about to wrench the deep-rooted island from its centre; and cast it, a ruin and a wreck, upon the fields of the Atlantic. (166-67)

The deepest threat, the one that Lionel ends his address to the wind on, is the wind’s power over water; wind repeatedly leads to watery destruction (166, 321). Cuvier’s attribution of the most recent natural revolution to a flood, and Jameson’s Neptunism, echo here. In fact, water can be seen as the source for most of the troubles in the book, including the plague itself, which is first described as arising “on the shore of the Nile,” a watery origin for a diffuse disease (127).<sup>246</sup>

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<sup>245</sup> McWhir notes of this anticontagionist treatment of disease as spread by the wind: “Mary Shelley’s emphasis on airborne transmission of plague is metaphorically as well as medically significant, especially given her novel’s emphasis on the spread of words, ideas, and narratives,” as “Words bear infection in *The Last Man*, whether they signify political ideas, philosophical ideals, or obviously disease-related evils” (McWhir, “Mary Shelley’s Anti-Contagionism,” par. 2, 26). This may be speaking to P. B. Shelley’s “Ode to the West Wind.”

<sup>246</sup> Other associations with this location are offered by González: “first of all, there is the Biblical connotation of the Ten Plagues of Egypt as described in Exodus. Of significance, too, is the classical tradition which described the ‘spontaneous generation’ of life on the banks of the Nile, as in Alexander Pope’s *Essay on Criticism*” (González, 55).

Even before the plague hits, Shelley demonstrates the failure of visionary poet-politicians to adequately address the importance of water to human fate. Raymond hopes to see “England [become] a Paradise” (78) under his governance as Lord Protector and to that end, plans to improve “canals, aqueducts, bridges, stately buildings, and various edifices for public utility” to achieve his ends (76). It is of note that managing humans’ relationship with water occupies at least three of his five project plans, and the end to be achieved by doing so is so lofty. But Raymond gets distracted by designs for an art museum, and the woman from his past who reenters his life as the architect, and so he accomplishes nothing and England is left vulnerable. As the natural processes of water act upon Britain and the rest of the world in the great natural Cuvierian revolution that Shelley is portraying, however, it becomes increasingly doubtful that any prevention was possible on the part of humankind or its governments. Early into the seven-year visitation of the catastrophe,<sup>247</sup> Lionel remarks:

Before Christmas half England was under water. The storms of the last winter were renewed; but the diminished shipping of this year caused us to feel less the tempests of the sea. The flood and storms did more harm to continental Europe than to us—giving, as it were, the last blow to the calamities which destroyed it. In Italy.... Whole villages were carried away. Rome, and Florence, and Pisa were overflowed, and their marble palaces, late mirrored in tranquil streams, had their foundations shaken by their winter-gifted power. In Germany and Russia the injury was still more momentous. (194)

For Shelley, as for Cuvier and Jameson, water is the all-deciding natural force. England is hit by “alternate frosts and thaws succeeding to floods....[and] heavy falls of snow [that] gave an arctic appearance to the scenery” (222). Later, Dover is hit by tidal waves that erode the famous cliffs and threaten to engulf the survivors attempting to flee their sinking island (268-70). The image of a survivor on a boat on the threatening seas ends Lionel’s narrative, as he

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<sup>247</sup> Lomax notes that the plague is in many ways an inversion of Genesis, just as Lionel is an inversion of Adam: in its uncreating acts, “the plague takes seven years to destroy man and then rests” (Lomax, 10). Sussman notes that “Verney becomes a kind of anti-Adam: not a powerful namer but a passive witness to global unnamings” (295).

declares his intentions to “with a few books, provisions, and my dog, embark in one of these and float down the current of the stream into the sea” (341). This notion of humanity, culture, and animal life seeking survival on a sea that has wreaked havoc so recently demonstrates the vulnerability of all terrestrial life in the Cuvierian Neptunist model of oceanic catastrophes. The terms Shelley uses to describe the seas is particularly telling of this Cuvierian insecurity: it is a “tempestuous” (268) “ocean of death” (300), replete with “strangling waves” (338), that has “robbed” (328) Lionel of his family and humanity of its hope (341).

Shelley is not alone in using the Cuvierian topos of destruction: Shelley’s third novel can be situated in a contemporaneous vogue for “last man” narratives, including the novels *The Last Man: or, Omergarius and Syderia, A Romance in Futurity* (1806) by Cousin de Grainville, *The Last of the Lairds* (1826) by John Galt, and *The Last of the Mohicans* (1826) by James Fennimore Cooper; the unfinished play *The Last Man* by Thomas Lovell Beddoes (1822); the poems “Darkness” (1816) by Lord Byron, “The Last Man” (1823) by Thomas Campbell, and “The Last Man” (1826) by Thomas Hood; as well as a series of paintings in the 1820s by John Martin. Fiona J. Stafford comments on this trend that the 1820s was a decade in which writers who “felt they had outlived their cultural milieu and were left stranded in an uncongenial age” turned to this “elegiac form.”<sup>248</sup> Paul A. Cantor, in contrast, notes that the sense of lastness was symptomatic of broader cultural trends in the nineteenth century, with the widespread feeling of having arrived “at the end of a long cultural development” giving rise to a retrospective perspective on human history.<sup>249</sup> But what is so interesting about Shelley’s *The Last Man* is that it is more than just a text of despair: its presentation of catastrophe provides deep and enduring insights into what it would mean for

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<sup>248</sup> Stafford, p. 199.

<sup>249</sup> Cantor, “Apocalypse of Empire,” 204-5.

humans to be aware of their subjection to natural processes, like any other animal species. Like Cuvier, she relies on vivid depictions of place (topographia), but she goes beyond that: utilizing the rhetorical devices of ethopoeia (description of a character), pramatographia (description of action), chronographia (description of a historical time), and especially chorographia (description of a particular nation) to achieve peristasis—a description of circumstances, a broad but deep picture of the possible setting, characters, and events of the next natural revolution. These rhetorical figures of description function within the topos of disaster to humanize and complicate it: we watch the British nation treat itself as a new chosen people, believing that Britons alone will survive the natural revolution, but coming to see that British characters in treating themselves *as* the world forget that the rest of the world still persists, whether as nonhuman animals, flora, or other human nations.

Humans are not mammoths, even when facing extinction—they can process and record their experiences in symbolic form—and of course Shelley’s and Cuvier’s readership is human and their written communications take symbolic form. Cuvier treated geological catastrophes as localized events,<sup>250</sup> but Shelley posits that if humankind were to face extinction, as Cuvier had established so many other species had, the accomplishing processes would have to be global, because humans are one of the few species that exist in almost every terrestrial habitat.<sup>251</sup> (Such a presentation of natural revolutions could also reflect her sense of the increasingly globalized reach of the British Empire<sup>252</sup>; to dislodge such a system might require shaking the very foundations of the species.) Nonetheless, Shelley seems to

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<sup>250</sup> Cuvier in Rudwick’s translation contrasts general revolutions with “local” ones, but in Kerr the distinction is made between “partial” and “general” revolutions—suggesting that some revolutions are not fully completed rather than just contained in their reach (*Essay*, 174).

<sup>251</sup> Critics who comment on the global nature of Shelley’s vision include Bewell, 299-300; Cantor, “Apocalypse of Empire,” 195; and Wang, 246.

<sup>252</sup> Wright, 141-42.

suggest, humans and mammoths are subject to the same processes, no matter how much more complicated humans believe themselves to be.

### *The Breakdown of Anthropocentrism*

“Man is a strange animal,” Shelley writes in *The Last Man*, signaling the breakdown of anthropocentrism and, more generally, the human/animal divide in the philosophical world constructed in the novel (114). Both Shelley and Cuvier deprivilege humans, sharing a topos of humans as animals; this is an undercurrent in Cuvier’s work (which is understandable given the theme’s controversial nature), but prominent in Shelley’s novel. Although Cuvier presented humans as somewhat unique in not having any discovered fossil remains, he did not privilege the human species throughout the *Discours* or the rest of *Recherches*, often placing human anatomy side by side on the page with that of other species.<sup>253</sup> For example, in his famous *Leçons d’Anatomie Comparée* (*Comparative Anatomy Lessons*, 1800-5), Cuvier included five charts in the first volume alone that compare the vertebra, spine, sternum, pectoral muscles, and abdominal muscles of humans with a number of other species, including orangutans, moles, fish, elephants, and horses (see fig. 2). He thus develops the topos through a rhetorical and visual figure of repetition. Humans appear as biologically equivalent to animals in Cuvier’s discussion of fossil discoveries: the lack of human fossil bones is attributed to humans’ recent expansion from limited geographical areas, not a specialized history such as a recent creation.<sup>254</sup> Importantly, Cuvier saw humanity as a singular species—with races as varieties—which demonstrated that the same

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<sup>253</sup> Coleman, 64-65.

<sup>254</sup> Cuvier, 233-34.

laws of nature and scientific study that applied to all other species applied to humankind as well.<sup>255</sup> The Cartesian mind/body divide is not something that Cuvier seems to have concerned himself with writing about, nor were the spiritual ascriptions given to humans' uniqueness or place in nature—he explicitly rejected the idea of a “chain of being.”<sup>256</sup> Shelley combines Cuvier's depriving of humans as a species with his argument that extinction is a blind process that affects species without a larger purpose, and the effect is psychologically devastating for *The Last Man's* characters.

*TABLEAU de la longueur en mètres des régions de l'épine dans les mammifères.*

N O M S.	TOTAL.	C O U.	D O S.	LOMBES.	SACRUM.	QUEUE.
Homme . . . .	0,74	0,11	0,30	0,16	0,14	0,03
Orang. . . . .	0,26	0,04	0,11	0,05	0,04	0,02
Pongo . . . . .	0,66	0,12	0,29	0,13	0,10	0,02
Saï . . . . .	0,66	0,03	0,09	0,09	0,03	0,42
Roussette . . .	0,19	0,05	0,07	0,03	0,04	
Chauve-souris .	0,11	0,01	0,02	0,01	0,01	0,06

For Shelley, the human body is an animal mechanism (18, 51, 53, 324).<sup>257</sup> While she contrasts the human mind with the animal nature of the body (18, 20, 51, 52) as the

“boundary which divides the intellectual and moral nature of man from that which characterizes animals” (20), she still

Figure 2: *Leçons d'Anatomie Comparée*, vol. 1, p. 159

values the body and “animal part of our nature”; the Countess of Windsor, described as having nearly conquered her body and so being almost entirely of mind, is presented as “frightening” and plays the villainess for much of the first volume (52). In his early life, Lionel describes himself as essentially being an animal, roaming the hills as a shepherd and

<sup>255</sup> Coleman, 166.

<sup>256</sup> Reiss, 85.

<sup>257</sup> Despite being a vitalist, Cuvier used the term “animal machines” to refer to human bodies (Appel, 50).

poacher (9, 12) and when (toward the end of the novel) he believes himself to be the last human on earth, he soliloquizes to some mountain sheep: “Live on, ye innocents, nature’s selected darlings; I am not much unlike to you. Nerves, pulse, brain, joint, and flesh, of such am I composed, and ye are organized by the same laws. I have something beyond this, but I will call it a defect, not an endowment, if it leads me to misery, while ye are happy” (334).<sup>258</sup> While the plague makes it seem as though “death fell on man alone” (200), clearly the natural upheavals must have harmed untold other animals through disruptions and destruction of their habitats. Nonetheless, the human species appears to be the only one facing extinction.

Lionel, in a couple of despairing moments, tries to make sense of the dissipation of the anthropocentric vision of humanity as a privileged species that formerly undergirded his worldview:<sup>259</sup>

Nature was the same, as when she was the kind mother of the human race; now, childless and forlorn, her fertility was a mockery; her loveliness a mask for deformity. Why should the breeze gently stir the trees, man felt not its refreshment? Why did dark night adorn herself with stars—man saw them not? Why are there fruits, or flowers, or streams, man is not here to enjoy them? (239)

Some pages later, he goes on to lament:

A sense of degradation came over me. Did God create man, merely in the end to become dead earth in the midst of healthful vegetating nature? Was he of no more

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<sup>258</sup> Hutchings points out that Lionel Verney’s name contains tensions between pastoral idealism and animalistic prowess: “His surname, Verney, conjures up words like ‘vernal,’ ‘verdure,’ and perhaps even ‘verity,’ the truth so often associated during the Romantic period with a pastoral view of nature and history. Such an innocent view of things might align Shelley’s narrator with the pastoral lamb....But when we bear in mind that Verney’s forename is Lionel, we might sense something of his own antagonism towards his pastoral side...the predatory beast of ‘lion’ dwelling within” (232).

<sup>259</sup> Bannet notes that this despair tends to be limited to the male characters; the female characters focus their attention on caring for those near to them and don’t struggle existentially with accepting extinction or the loss of an anthropocentric universe. She suggests that while male characters in the novel cling to the “insistence that man has the power to choose and control his future”—and the male pronoun there intentionally signifies the gendered nature of this vision—female characters recognize humankind’s subjugation to natural laws; it is “absurd” but telling, in Bannet’s view, that it takes the extinction of the human species to make men acknowledge their own limited powers and mortality (Bannet, 356, 362, 364).



account to his Maker, than a field of corn blighted in the ear? Were our proud dreams thus to fade? Our name was written ‘a little lower than the angels;’ and, behold, we were no better than ephemera. We had called ourselves the ‘paragon of animals,’ and, lo! we were a ‘quint-essence of dust’....How reconcile this sad change to our past aspirations, to our apparent powers!” (290)

Humans have had to come to see themselves as simply part of nature, subject to nature’s laws. No longer “the heaven-climber,” humankind are now equivalent to “the crawling reptiles” (141). People are forced as a consequence to face their own “arrogance” and ultimate insignificance in the global environment, “losing our identity” as “the lords of creation,” and instead viewing themselves as “least among the many [species] that people infinite space” (167). The topos of humans as animals is tied to despair and the devastation of traditional anthropocentric views.

Relinquishing the anthropocentric worldview in *The Last Man* is inevitably tied up with relinquishing traditional religious views.<sup>260</sup> As mentioned earlier, Cuvier had no interest to speak of in considering the role of religion in natural processes like extinction: he attributes agency to organisms or to larger geological phenomena, like floods, although Kerr in the 1813 translation relocates agency by suggesting an external, higher power intentionally controlling natural processes, be it God or fate.<sup>261</sup> While early in *The Last Man*, God is venerated for creating Earth as “a stately palace” for humankind and providing England alone “the means for our preservation” (53, 178), such visions are replaced by visions of an

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<sup>260</sup> Bennett argues that the plague itself becomes a kind of deity in its absolute power (Bennett, 149).

<sup>261</sup> Much of the reattribution of agency in Kerr’s translation has to do with tense and passive voice: islands “were raised up” rather than “emerge,” blocks “have been derived” rather than “come” from their source rock, vapors “are condensed” rather than “condense,” snow “is melted” rather than “melts,” elements “are impregnated” with carbonic acid rather than “contain” it, continents “have been subjected” to revolutions rather than “affected” by them, and the universal fluid “gave existence to” animals rather than “generated” them (*Essay*, 18, 23, 26, 26, 33, 58, 43). Kerr also labels animals as “destined” to live in their habitats or populate the earth, “in places fitted” rather than “allowed” to them; he even at one point adds a phrase to the end of a sentence describing the reduction of sea level to suggest that the land was thus “left it to be occupied by its own proper inhabitants” (*Essay*, 91, 131, 134, 14).

incomprehensibly vengeful God (269) and, eventually, a loss of the religious script where judgment and salvation make sense: Rome, the seat of Christianity, holds no hope that humans might “awaken again to our affections, our happiness, and our faith” (205).<sup>262</sup> The image of a fierce Mother Nature, “a harsh step-mother” (80), who “could take our globe, fringed with mountains, girded by the atmosphere, containing the condition of our being, and all that man’s mind could invent or his force achieve...and cast it into space, where life would be drunk up, and man and all his efforts for ever annihilated” (168), comes to replace the patriarchal God of Judeo-Christian tradition as the arbiter of human fate. Nature, rather than God, is described as revoking “her” own “laws” (188).<sup>263</sup> In *The Last Man*, morality eventually boils down to the simplistic dictum that there is “but one good and one evil in the world—life and death” (212). The end vision is a simple and even bleak one: a man with a dog on a boat, moving onward without a clear destination, just to preserve some semblance of hope.

Notably, Lionel ends the narrative with a canine companion.<sup>264</sup> Cuvier presents domesticated animals in the *Discours* as “conquered” and “enslaved” to humans, who unjustifiably infringe on these other species’ lives and behavior.<sup>265</sup> Cuvier sees dogs in particular in Rudwick’s scholarly translation as the animal that humans have “conquered most completely”; Kerr presents them as the species “reduced most completely under

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<sup>262</sup> Sunstein records that around the time of publication of *The Last Man*, Shelley “turned misanthropic, referring scornfully to God as ‘Person’” (Sunstein 272).

<sup>263</sup> González notes that “Mary Shelley may be seen here as a forerunner of the contemporary scientific theories about the earth as Gaia, that living organism always in flux in a very Heraclitean fashion, a dynamic ‘being’ which was there before man appeared, and will perhaps remain after the human race is extinguished” (58).

<sup>264</sup> Lionel in fact uses the term “companion,” which interestingly speaks back to the beginning of the narrative, in the Author’s Introduction, when Shelley refers to her fellow explorer (perhaps her husband) by the same term (340).

<sup>265</sup> *Discours*, 227, 233.

subjection.”<sup>266</sup> If humans are a species like any other, their “empire” (or “power” in Kerr’s translation) over other animals is neither rational nor just, not to mention sufficiently regulated.<sup>267</sup> Adrian views himself as a part of the integrity of nature, having an “affinity not only with mankind, but all nature...[as he] felt his life mingle with the universe of existence” (31); Raymond, on the other hand, views a human as “a microcosm of nature, and find[s] a reflection in the internal mind for all this machinery visibly at work around us” (46). Fittingly, then, Raymond’s horse and dog die for and with him as he charges recklessly into Constantinople, regardless of their lives, despite their attempts to deter him: “His very horse seemed to back from the fatal entrance; his dog, his faithful dog, lay moaning and supplicating in his path—in a moment more, he had plunged the rowels into the sides of the stung animal, who bounded forward, and he, the gateway passed, was galloping up the broad and desert [*sic*] street” (144). The dog’s death scene is far more lamentable than Raymond’s, as Lionel relates it: “In that part of town where the fire had most raged the night before, and which now lay quenched, black and cold, the dying dog of Raymond crouched beside the mutilated form of its lord. At such a time sorrow has no voice; affliction, tamed by its very vehemence, is mute. The poor animal recognised me, licked my hand, crept close to its lord, and died” (149). Raymond’s vision loses hold on Lionel after he views a “cor[p]se-strewn” battlefield, a glorious site to Raymond but one that leaves Lionel “ashamed of my species” (131). Adrian’s influence over Lionel, meanwhile, turns him from someone who recklessly kills animals to one who is able to view pets as friends.<sup>268</sup>

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<sup>266</sup> *Essay*, 121.

<sup>267</sup> *Essay*, 119; *Discours*, 227, 233.

<sup>268</sup> Adrian is described as taking “great delight in his park and preserves. He never sported, but spent hours in watching the tribes of lovely and almost tame animals with which it was stocked, and ordered that greater care should be taken of them than ever” (16). When they plan to leave England for the continent toward the

Humanity's exploitation of animals and the latter's enjoyment of their freedom when the social structure collapses is repeatedly presented throughout *The Last Man*. Some animals fail to thrive after humankind dies off en masse from the plague, leaving a few horses, for example, "standing shivering in the bleak fields ready to surrender their liberty in exchange for offered corn" (266); on the whole, though, horses are not voluntarily of service to humans once they get a taste of freedom: Lionel describes the "hours [that] were wasted, while we exhausted our artifices to allure some of these enfranchised slaves of man to resume the yoke" (276). The use of the term "slave" here to refer to a horse is particularly striking in the Cuvierian context. Most formerly domesticated animals are shown as happy to be free of the tyranny of humans, or "empire of man" in Cuvier's phrase, with political and colonial overtones:<sup>269</sup>

Troops of dogs, deserted of their masters, passed us; and now and then a horse, unbridled and unsaddled, trotted towards us, and tried to attract the attention of those which we rode, as if to allure them to seek like liberty. An unwieldy ox, who had fed in an abandoned granary, suddenly lowed, and shewed his shapeless form in a narrow door-way; every thing was desert; but nothing was in ruin. (241-42)

The last line of the preceding passage is telling: a desert to humanity is not a ruin to the rest of nature. The unnamed shepherd dog that takes up with Lionel at the end of the narrative does so of his own accord, not from any force or enticements, and when Lionel enters St. Peter's to mark the dawn of a new century—New Year's Day, 2100—the dog's "pattering steps" were heard alongside his own in equality (340). Shelley here seems to be in concert with Cuvier's use of the anti-anthropocentric topos: humans are animals and should

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end of the narrative, Lionel comments, "There were many dear friends whom we must not leave behind, humble though they were. There was the spirited and obedient steed which Lord Raymond had given his daughter; there was Alfred's dog and a pet eagle, whose sight was dimmed through age" (238).

<sup>269</sup> *Discours*, 233.

recognize their equal (and unprivileged) place in nature, and their consequent vulnerability to natural processes like extinction.

*The Nature of Time: Global vs. Human*

Traditional notions of temporality are challenged by both Shelley's *The Last Man* and Cuvier's *Discours.*; both writers share a sense of time as divided between the human and the global. As mentioned earlier, Cuvier presented his work as a natural historian as that of a more traditional notion of a historian—the antiquarian. His comparative historical methods included not just examining cultural forms, such as near-Eastern mythologies of a catastrophic flood, but also biological forms, particularly fossils and mummies. In comparing current species to images and mummies from ancient societies, such as Egypt, Cuvier concludes that species have remained more or less unchanged over the past 2,000 to 3,000 years.<sup>270</sup> Geohistorical processes remained constant for a time—most recently, since the major flood—but natural revolutions then occur, causing dramatic geological changes and often leading to mass extinctions. The notion of time that develops out of this pattern is a “punctuated” one: long, steady states interrupted by sudden and violent breaks.<sup>271</sup> His vision of punctuated evolutionary time went out of fashion in light of Charles Darwin's later theories of constant adaptation, or phyletic gradualism, but twentieth-century evolutionary studies have reestablished support for Cuvier's geohistorical theory.<sup>272</sup> Cuvier's theory of geohistory served to establish the directional (rather than cyclical) history of the world, however extended, as well as the possibility of studying this history in a verifiable way (i.e.

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<sup>270</sup> Cuvier, 226-232.

<sup>271</sup> Rudwick, *Worlds before Adam*, 14.

<sup>272</sup> Gould, for example, mentions the “the extraterrestrial impact theory of mass extinction,” i.e. the idea that a meteor hit the earth and caused a mass extinction of dinosaurs (Gould, x). Gould and Elredge's own 1972 paper on punctuated equilibria fits Cuvier's revolutionary or catastrophist model as well.

through paleontology and stratigraphy)<sup>273</sup>; he concludes the *Discours* by saying that the human species “to whom has been accorded only an instant on earth” has been gifted with “the glory of reconstructing the history of the thousands of centuries that preceded [its] existence, and of the thousands of beings that have not been [its] contemporaries!”<sup>274</sup> Enthusiastically, Cuvier observes that human effort can reconstruct non-human time. Human time is not equateable with geological time in this paradigm, however, and both forms of time are fundamentally insecure because natural revolutions continue to occur.

Shelley draws on the topos of human and global time as being divided, post-Cuvier, to structure her narrative and de-structure human society. When Adrian recognizes that the plague is likely to render all Britons extinct, Lionel tells us, he “felt that the end of time was come ....the swift-approaching end of things” (237).<sup>275</sup> Of course, what is approaching is the end of human history, not the end of natural or geological history, a point reinforced by the continuing health of the many animals and environments Lionel encounters. But anthropocentrism aside, there is a compelling point here about the relationship of time to human reckoning and natural catastrophes. *The Last Man* has been noted for its innovative approach to the apocalypse, traditionally a religious vision of the end of days in English writing, but set by Shelley in a secular and natural vision of the not-so-distant future, the last decade of the twenty-first century.<sup>276</sup> Shelley’s Miltonian epigraph—“Let no man seek / Henceforth to be foretold what shall befall / Him or his children”—indicates from the start of

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<sup>273</sup> Gould, viii; Rudwick, *Worlds before Adam*, 13.

<sup>274</sup> Cuvier, 252.

<sup>275</sup> Bewell notes that this is a remarkable development in literature, as “Colonial geography supports the idea that ecological catastrophes are a ‘natural’ occurrence elsewhere” (Bewell, 304).

<sup>276</sup> Although, as Sterrenberg notes, Shelley does draw on traditional, religious images of apocalypse, she eliminates their religious resonances (Sterrenberg, 340).

the work its consideration of breaks in cultural and natural continuity; post-Cuvier, the future cannot be predicted with any level of confidence. And so the comical astronomer, Merrival, is shown in *The Last Man* to be concerned with tracing from current observations the future of the planet.<sup>277</sup> There will be no more natural or social turmoil “in a hundred thousand years,” he claims, when “the pole of the earth will coincide with the pole of the ecliptic...[to produce] a universal spring” and an earthly paradise (159). We are then told that “the joyful prospect of an earthly paradise after an hundred thousand years, was clouded to him by the knowledge that in a certain period of time after, an earthly hell or purgatory, would occur, when the ecliptic and equator would be at right angles” (160). This assumption of the predictability of natural processes is utterly shaken by the disasters that humankind has to face within a year of these predictions. The continuity assumed by humankind biologically (with the perpetuation of the species; 165, 167), culturally (with the persistent favor of classics like Shakespeare; 203), and naturally (with the planting of trees for future centuries; 50) is revealed as illusory. Time, as understood by humans, is meaningless in the face of species-wide extinction and the incomprehensible time-scale that nature partakes of; Adrian remarks, “Time is no more, for I have stepped within the threshold of eternity,” reflecting the vast geohistorical timescale that Cuvier popularized (135). For twenty-five days after he loses Adrian and Clara to a storm at sea, Lionel keeps track of the days that pass on a willow branch—in the model of Robinson Crusoe—but eventually he breaks his makeshift calendar and throws it away, recognizing the evacuation of meaning from human timescales.<sup>278</sup>

Perhaps the most poignant portrayal of the influence of such a time-scale on humanity’s

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<sup>277</sup> Paley notes that the “speculations of the astronomer Merrival...seem ironically compounded of the most perfectibilian aspects of William Godwin’s and Percy Bysshe Shelley’s” (Paley, 116).

<sup>278</sup> Albright, par. 18; Bradshaw, 174.

vision of itself (and the most Cuvierian, given the watery imagery) comes as the last remaining Britons are leaving Dover: “We who, like flies that congregate upon a dry rock at the ebbing of the tide, had played wantonly with time, allowing our passions, our hopes, and our mad desires to rule us, now heard the approaching roar of the ocean of destruction, and would have fled to some sheltered crevice, before the first wave broke over us” (287). If there were no humans before the last geological catastrophe (a flood), there may be none left after the next catastrophe, either.

Critics have frequently commented on the temporal structure of the novel, holding a number of different views about the shape of time. Some see it, like *Frankenstein* (1818), as a set of nested narratives (Lionel’s in the Sibyl’s in the Author’s) with different temporal schemes for each (2100 CE in Ancient Greece in 1818 CE).<sup>279</sup> Some argue for the linearity<sup>280</sup> of the time scheme presented in *The Last Man*, and some for the circularity or cyclicity;<sup>281</sup> one critic even described the novel’s presentation of time as “a spiraling, indeterminate sequence that turns back upon itself and never ends,”<sup>282</sup> while another sees time in the novel as collapsing in on itself.<sup>283</sup> Some see time in the novel as gendered,<sup>284</sup> some as nationalistic,<sup>285</sup> and some as species-bound. But the one inarguable accomplishment of plague is to introduce a break in time, to divide the present from the past and the future.<sup>286</sup> As

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<sup>279</sup> Albright, par. 1, 3, 4, 24.

<sup>280</sup> Albright, par. 20; Stafford, 230; Thomas, 30; Wright, 244-45.

<sup>281</sup> Bannet, 366; Bradshaw, 163.

<sup>282</sup> Lomax, 8.

<sup>283</sup> Ruppert, 144, 145, 151. O’Dea makes a similar point (291).

<sup>284</sup> Bannet.

<sup>285</sup> Ruppert, 153.



one critic commented, “the only way the plague participates in...history is to end it,” destabilizing readers’ sense of time.<sup>287</sup> Any other treatment of time in a Cuvierian framework is inconceivable.

## CONCLUSION

Mary Shelley fictionalizes some of the most prominent topoi from Cuvier’s famous *Discours préliminaire* in order to explore their social and human consequences. The proleptic nature of the novel, which makes it stand out from other plague and “last man” narratives, is a means to accomplish a thought experiment about such consequences. In so doing, Shelley critically engages with it in such a way as to maintain her place in the Romantic intelligentsia, even as the Romantic Era was coming to an end. She also follows in the tradition of Romantic thinkers, such as her parents, who saw literature as a means of actively participating in the social realm. Cuvier similarly sought a popular venue for his ideas, demonstrating the porous nature of science writing across genres and audience in the early nineteenth century.

Although Shelley is writing *The Last Man* in a Cuvierian framework, she is by no means simply popularizing or translating his work. A number of divergences are evident, moments where Shelley discards Cuvier’s ideas or critiques his methodological principles. So, for instance, while Cuvier views natural revolutions as potentially multicausal, but finally reducing to the actions of oceans, Shelley treats natural catastrophes as irreducible, overdetermined, and beyond human understanding—a seeming denial of scientific parsimony. Cuvier discusses, famously, the “thread of operations” of natural processes,

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<sup>286</sup> Bannet, 364-65.

<sup>287</sup> Hopkins, “Memory at the End,” par. 11. Qtn. from Elmer, 357.

which is limited to a single “operation” in Kerr’s translation.<sup>288</sup> Either way—“thread” or “operation”—the reduction is refuted by Shelley. Likewise, while Egypt—possibly the birthplace for the plague, and a recent site of conquest and pillaging by France—is a source of concrete evidence for Cuvier, of fossils that validate his theories, it is a source of indeterminacy for Shelley. This ‘other’ location is not so easily comprehended or contained, despite a number of (failed) attempts by the characters in *The Last Man* to articulate a systematic explanation. Nature, likewise, is demonstrated as being more powerful and unknowable than human explanatory modes can encompass.

The plea for greater awareness of natural and societal systems in *The Last Man*, combined with its punctuated temporal structure, suggests an implicit prosocial message as well: society should not need a natural revolution for human society to change its nonadaptive ways. Why should women be limited to the domestic sphere, British imperialism be the primary force of globalization, the poor and otherwise disempowered suffer unseen, powerful politicians overlook their responsibilities for personal (and sexual) indulgences, and the value of each human life not be appreciated until the end of human society as we know it? Why should such value systems persist into the twenty-first century? If life is fundamentally uncertain, why should quality of living not be maximized? All of these questions point to the ways that a Cuvierian vision of humanity and temporality can help promote reform. Byron might have modeled despair in the face of Cuvier’s topoi, but Shelley explores such rhetorical themes more thoroughly and accomplishes a more interesting and perhaps unsettling vision, though one that received less attention over time.

From the time Cuvier’s *Discours* was published and translated until Charles Lyell shifted the scientific conversation in Britain with his 1830 *Principles of Geology*, a number

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<sup>288</sup> *Essay*, 24.

of prominent thinkers worked—sometimes in synchrony, as with P. B. Shelley and Byron, and sometimes in conflict, as with Buckland and Mary Shelley—to situate Cuvier’s work and popularize its implications. Shelley’s *The Last Man* establishes her place in this tumultuous discourse.

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## Chapter 2:

### “Politics and Metaphysics: Elizabeth Barrett Browning’s Opposition to *The Vestiges of the Natural History of Creation* in *Aurora Leigh*”

Often overlooked in scientific and cultural histories, but wildly popular and widely influential, Robert Chambers’s *Vestiges of the Natural History of Creation* (1844) has seldom been analyzed systematically in accounts of nineteenth-century British literary treatments of evolutionary theory. *Vestiges* was a book that intentionally crossed disciplinary boundaries, affirming “the status of common observation in competition with the experimental methods of experts” both to establish generalists’ place in the newly important scientific disciplines (and thereby prevent the formation of a dogmatic scientific clerisy) and to establish scientists as the heralds of and leaders in the progressive society envisioned by *Vestiges*.<sup>289</sup> Victorians widely responded to *Vestiges* and coopted its ideas for a number of religious, political, and ideological ends. The work went through ten editions in ten years, continuing to outsell Darwin’s *Origin* even when professionals and intellectuals felt that Darwin’s ideas had clearly proven themselves superior; every copy printed in nineteenth-century was sold.<sup>290</sup> (For Darwin, *Vestiges* was the one book, besides the Bible, that he could assume all his readers were familiar with.<sup>291</sup>) *Vestiges* was unavoidably debated and

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<sup>289</sup> Qtn from Secord, “Introduction,” xlv. See also Yeo, 29.

<sup>290</sup> Campbell, 206; Millhauser, *Just Before Darwin*, 33.

<sup>291</sup> Secord, *Victorian Sensation*, 39.

incorporated—it provided a grand theory of the age that underlay a number of arguments even if the arguers were not always aware of the origin of such ideas. Literature was one part of this conversation—and perhaps the most interesting, because the most synthetic and systematic.

Benjamin Disraeli, George Henry Lewes, George Eliot, Robert Browning, and Alfred, Lord Tennyson all voiced their interpretations of this controversial natural history work that claimed humans had evolved from apes (not to mention fish and plants), and that the universe developed materialistically, with no repeated interventions from God. This chapter seeks to reconstruct this critical conversation, looking at literary and non-literary figures' debates over the meaning and value of *Vestiges's* theories in the decade and a half following its publication, and focusing on how Elizabeth Barrett Browning took part in this evaluative process in her verse-novel *Aurora Leigh* (1856). *Aurora Leigh* was famously composed by EBB in part to represent her age—even those components not typically considered appropriate poetical material—and in part to register her “highest convictions upon Life and Art,” many of which conflicted with the worldview presented by *Vestiges*. As I will explore in this chapter, EBB contrasts her poetic and philosophical convictions with the gender, religious, political, and developmental ideologies of *Vestiges* through a number of rhetorical strategies.

### ROBERT CHAMBERS

Robert Chambers (1802–71) was an Edinburgh publisher and journalist, who along with his brother William ran the successful and well-respected *Chambers's Edinburgh Journal*, as well as “the largest mass-circulation publishing house in Britain.”<sup>292</sup> *Chambers's Edinburgh Journal* advocated “improvement, secular education, political economy, and the

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<sup>292</sup> Secord, *Victorian Sensation*, 21.

interests of the middle class” despite being “ostensibly apolitical.”<sup>293</sup> In middle age, feeling the stress of his editing and publishing work, Chambers moved for several years to St. Andrews to recuperate. While there, he began to deepen his knowledge of the science of the day, reading widely. Chambers was sufficiently well versed in natural sciences to be elected to the Royal Society of Edinburgh and the Geological Society (in 1840 and 1844, respectively) and to publish a widely read geological treatise in 1848, despite a lack of university education or status as a professional scientist.<sup>294</sup> In 1844, after six years of research and four years of writing,<sup>295</sup> Chambers anonymously published *The Vestiges of the Natural History of Creation* (hereafter *Vestiges*) through a number of intermediaries, including his wife, who copied his final manuscript in her own handwriting, and a journalist friend, Alexander Ireland, who communicated and negotiated with the publisher. This anonymity, though relatively frequent in literary publications, was extremely unusual for scientific authorship and both excited and annoyed the reading public.<sup>296</sup> One of the most common parlor games of 1844-45 was guessing the authorship of the wildly popular *Vestiges*, the origin of which was considered the most intriguing literary mystery since Sir Walter Scott published *Waverley* anonymously.<sup>297</sup> The anonymous authorship made it hard for Victorian readers to trust the work, but also hesitant to dismiss it.<sup>298</sup> It was not until the

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<sup>293</sup> Secord, “Introduction,” xx.

<sup>294</sup> Millhauser, *Just Before Darwin*, 31, 6; Secord, *Victorian Sensation*, 97.

<sup>295</sup> Millhauser, *Just Before Darwin*, 31-32.

<sup>296</sup> Secord, “Introduction,” xxxviii. Secord comments that “Original work in science depended on the credibility of the authors in a way that fiction and poetry did not” (*Victorian Sensation*, 43).

<sup>297</sup> Secord, “Introduction,” xxxviii. Secord notes that “Guessing the author was not just a popular parlor game, but a desperate search with consequences for social cohesion and religious faith....Any conjecture expressed a reading of the work’s politics, gender, religion, and expertise” (*Victorian Sensation*, 23).

<sup>298</sup> Secord, “Introduction,” xviii, xliii, xxxviii.

twelfth edition of the work, published in 1884 by Chambers's own printing house, and well after the death of Chambers, his wife, and his brother, that the content of the work was considered no longer scandalous enough to warrant the author's name being suppressed—totaling forty years of silence.<sup>299</sup>

*Vestiges* covered a wide swath of material, from disciplines including “astronomy, natural history, geology, chemistry, physics, phrenology, political economy, and anthropology” to create “the first full-length presentation of an evolutionary theory of species, in English.”<sup>300</sup> It proclaims itself “the first attempt to connect the natural sciences into a history of creation,” or, as another critic has put it, “the first complete history of the world from its beginnings to the present according to an evolutionary principle.”<sup>301</sup>

*Vestiges*'s ambitious goal was “to explain the origin and development of the natural world by reference to general laws of nature,” to write a history ranging from the creation of the universe “to the origin and future destiny of human beings,” “all in one grand story of progressive change.”<sup>302</sup> Constant development and progress—core Victorian, industrial, liberal values—fueled Chambers's vision. *Vestiges* was scandalous less because of its originality (many reviewers noted that it would make a good general introduction to contemporaneous British science) or even its scope (he sought to do with organic life what Newton had done with gravity—identify a single, unifying principle or law) than because of its usefulness for supporting radical politics, materialism, and skeptical secularism.<sup>303</sup> The

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<sup>299</sup> Millhauser, *Just Before Darwin*, 7; Olson, 189; Secord, “Introduction,” xviii.

<sup>300</sup> Stierstorfer, 27; Secord, “Introduction,” ix; Cosslett, 46.

<sup>301</sup> *Vestiges*, 388 (hereafter cited parenthetically in the text); Stierstorfer, 27.

<sup>302</sup> Yeo, 17; Secord, “Introduction,” ix; Olson, 187.

<sup>303</sup> Secord, “Introduction,” xiv, xlv; Yeo, 10, 13; Raub, 288.

book “was at once a novelty and a portent, and the scientific world was almost literally unanimous in condemning it.”<sup>304</sup> Popularly, however, *Vestiges* was a best seller, with fourteen British editions, eleven in the author’s lifetime (Oct. 1844, Dec. 1844, Feb. 1845, Apr. 1845, Jan. 1846, Mar. 1847, May 1847, July 1850, June 1851, June 1853, Dec. 1860), and forty thousand copies sold. A conservative estimate of its contemporaneous British readership would come to at least a hundred thousand. Beginning in 1847, “*Vestiges* was available in a cheap ‘people’s edition’ targeted at a wide range of readers in the artisanal and middle classes.”<sup>305</sup> Students continued to read it widely into the 1850s.<sup>306</sup>

In 1853, Chambers released his tenth edition, described as “an elaborate revision, quite widely reviewed and discussed,” which differed from previous editions of *Vestiges* in a number of ways.<sup>307</sup> By the 1850s, scientific debates were generally more tolerant than they had been in the 1840s, and reviews of the 1853 edition “other than those in the religious press, were generally positive.”<sup>308</sup> Most importantly for the general public, it was a people’s edition, inexpensive and widely available in circulating and mechanics’ institute libraries. For the scientific community, on the other hand, the 1853 edition contained an extensive appendix with images and quotations from scientific authorities that bolstered the claims made in the book—often Chambers chose to quote from the very scientists who had attacked his book for contradicting accepted scientific theory.<sup>309</sup> Intriguingly for the educated

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<sup>304</sup> Millhauser, *Just Before Darwin*, 5.

<sup>305</sup> Qtn. from Secord, “Introduction,” xxvi. See also Secord, “Introduction,” ix; *Victorian Sensation*, 3.

<sup>306</sup> Secord, *Victorian Sensation*, 258-59.

<sup>307</sup> Millhauser, “Literary Impact,” 222.

<sup>308</sup> Secord, *Victorian Sensation*, 480.

<sup>309</sup> Yeo, 6.



populace who played the game of guessing the author's identity—and for those who sought to dismiss the book on religious grounds—Chambers included an autobiographical preface in the 1853 edition. In this preface, the author (who remains anonymous and writes about himself in the third person) briefly sketches the inspiration behind his work, both religious and scientific. He—using the masculine pronoun as if to emphasize his gender—opens the preface with an explanation of how,

Having previously been convinced that the Divine Governor of the world conducts its passing affairs by a fixed rule, to which we apply the term natural law, he was much impressed on finding reason to believe that the physical arrangements of the universe had been originated in the same manner, as it seemed to him to favour the idea of a perfect unity in the action of the One Eternal and Infinite. (204)

His conclusions thus are presented as the culmination of rational observation and faith in traditional Christian notions of God, as opposed to vague religious terms “in vogue amongst geologists” such as “fiats,” “special miracles,” and “inferences” that explained “the commencement of life and organization...very unsatisfactorily” (204). Like divine inspiration, then, he “therefore embraced the doctrine of Progressive Development as a hypothetic history of organic creation,” as he observed the “gradual evolution of high from low, of complicated from simple, of special from general, all in unvarying order, and therefore all natural” that others note in reproduction, but that he alone was capable of systematizing (206).

### *Chambers's Vestiges*

*Vestiges* essentially presents a *Bildungsroman* of the Earth. James A. Secord has noted that Chambers was inspired by the historical fiction of Sir Walter Scott and drew on his novelistic strategies in writing *Vestiges*; equally so, Chambers seems to draw on the novel of character growth and coming of age, as “the trajectory of...evolution in the *Vestiges* is...a

narrative of progress.”<sup>310</sup> The book opens, with no real introduction, *in medias res*, discussing of the formation of solar systems. The development of stars and planets from an undifferentiated mass to discrete forms is likened to the growth of a child into a man (8). Chambers spends much of the book, then, focusing on the geological record, particularly that located near England, and how changes in the Earth’s environment are reflected in changes in forms of life found in various geological strata.<sup>311</sup> From plants to zoophytes (like sea anemones) to mammals, Chambers argues that all species perfectly correspond to their environmental conditions (147, 240, 377). The Earth has improved so as to allow more perfect species to develop over time (148-50). But, Chambers speculates, the Earth is in no way a special circumstance—there are innumerable planets in the universe, many of which are older or situated better than our own, and so the Earth is in the midst of a development process that a great number of other planets’ biospheres have completed (20-22, 160-61). In theory, the progressivist arguments of *Vestiges* are not terribly heterodox, but they do run up against tenets of Victorian religion and social theory in multiple ways.

The religious positioning of *Vestiges* is carefully designed, in Chambers’s own concluding words, to proceed “with as little disturbance as possible to existing beliefs,” but one gets the sense while reading the book that the lip-service paid to orthodoxy is thin cover for some very questionable visions of the role of God and Christian doctrine in this self-proclaimed “true view of the history of nature” (388). *Vestiges*’s God designed the natural laws of development that power the universe and has not been directly involved since. There are no special, separate acts of creation each time a new species comes into being—there are

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<sup>310</sup>Stierstorfer, 36.

<sup>311</sup> See p. 59 where northwest England is described as providing the fossils of “the first appearance of life upon our planet,” or p. 111, where the first mammalian jawbone is ascribed to Oxfordshire.

too many planets and planetary systems for that to be reasonable, the book argues (154).<sup>312</sup> When the Bible talks about God “creating” or “forming” the world and its inhabitants, Chambers claims, the language is sufficiently vague to support the interpretation that everything was developing according to natural laws “*from commands and expressions of will, not from direct acts*” (155; original emphasis). Though he says that in freeing God from direct involvement in the world, he is freeing Him from anthropomorphizing and reductionist trains of thought, Chambers instead seems to be arguing for the limitations of a deity. Where does evil arise from, if everything proceeds according to God’s laws? Chambers tackles this issue at the end of *Vestiges*, arguing in short that suffering comes from bad luck: conditions are perfect for the species, not the individual, who “is left, as it were, to take his chance amidst the *mêlée* of the various laws affecting him”; “the system has the fairness of a lottery, in which every one has the like chance of drawing the prize” or of being run down by “contingencies” (377). And what about humans being made by God on a special day by a special act? The Bible’s account of creation is presented as that of a flawed “text, formed at a time when man’s ignorance prevented him from drawing therefrom a just conclusion” (156). Humans are no more made in “God’s image” than any other species (348). How do species come into being, if not through special creations? Where Cuvier tiptoed (see chapter 1), Chambers rushes in: species are born from other, lower species. Life can arise spontaneously, even through purely chemical processes (173). Once life has been initiated, the normal processes of reproduction are such as to allow current species to reproduce other members of their species reliably (206). Occasionally, however, when conditions change, reproduction takes a little longer and the resulting birth is one of a more perfect animal—a new species

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<sup>312</sup> Desmond explains this idea in modern terms by saying “staggered creation by a piece of master programming, employing a ‘higher generative law’ to suspend normal reproduction and trigger the birth of more advanced species at the appropriate time” (*Archetypes and Ancestors*, 30).

(234). Chambers points to intermediate fossils—those that contain combinations of characteristics we now see belonging to entirely distinct species—as evidence of this process (71). He goes so far as to argue that the various races of humankind are produced by different gestation periods: shorter pregnancies among the “lower” races make them less developed, and longer ones among Indo-Europeans make them the most advanced (309).

*Vestiges* might at first glance seem to reinforce the traditional notion of a Great Chain of Being, but in fact Chambers troubles the notion of humans being one step away from angels. Chambers argues that humans are the most developed species on Earth, but that developmental (or evolutionary) processes are still ongoing; humans are best adapted to current conditions, but when conditions inevitably change, a new and more perfect species will arise (276). Humans themselves came from other primates or “quadrumana/simiadae,” since (Chambers states) monkeys and apes represent the highest form of physical development and mental capacity among animal species other than humans. In fact, in a passage reminiscent of Cuvier’s comparative anatomy work, Chambers says “in our teeth, hands, and other features grounded on by naturalists as characteristic, we do not differ more from the simiadae than the bats do from the lemurs” (266). Rather than being a privileged species, humanity is presented as a kind of stopgap—no different from any other animal, even in mental capacity: “The difference between mind in the lower animals and in man is a difference in degree only; it is not a specific difference” (335-36). Chambers takes issue with the traditional distinctions drawn between humans and other animals, such as that between instinct and mind, as well as the idea that only the human soul is immortal:

There is, also, in this prejudice, an element of unkindliness towards the lower animals, which is utterly out of place. These creatures are all of them part products of the Almighty Conception, as well as ourselves. All of them display wondrous evidences of his wisdom and benevolence. All of them have had assigned to them by

their Great Father a part in the drama of the organic world, as well as ourselves. Why should they be held in such contempt? (235)

Certainly, humans have some unique mental attributes: veneration, hope, reason, conscientiousness, and benevolence (348). But other animals have love, fidelity, dreams, language, and creativity, among other seemingly human traits (325). As one would imagine, Victorian religious orthodoxy did not readily embrace such suggestions.

### *Current Critical Assessment*

Modern historians of science seem to be divided about what to make of the *Vestiges*. It has been seen as an inherently religious book, “demonstrat[ing] the all-pervasiveness of natural Law as the expression of God in the world,” as well as the work that dealt the first serious blow to Victorian hopes of “raising religion on the back of science.”<sup>313</sup> Its science has been considered “for its time and place, surprisingly sound,” as well as an inadequate contribution to evolutionary theory.<sup>314</sup> But the consensus from those who have closely studied *Vestiges* and its reception seems to be that it was massively influential: “something of a mid-Victorian institution” that made evolutionary theory (or “developmentalism”) “a cause célèbre in mid-century Victorian Britain,” “not as a mere prelude to the Darwinian episode but as the defining factor in shaping the Victorian public’s attitude toward evolution.”<sup>315</sup> One historian noted that at the time “virtually everyone who read any non-fiction, from Victoria and Albert down to literate members of the working class, read Chambers’s work.”<sup>316</sup>

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<sup>313</sup> Cosslett, 46; Olson, 191.

<sup>314</sup> Millhauser, *Just Before Darwin*, 116; Bowler 136.

<sup>315</sup> Millhauser, *Just Before Darwin*, 119; Campbell 206; Bowler 135.

<sup>316</sup> Olson, 189. Secord explains, “The queen was bored by technical monographs and British Association meetings, which meant that science tended to take Albert away from her side. Reading *Vestiges* together offered an opportunity to resolve this tension. With its accessible presentation and attractive narrative....*Vestiges* could make science a shared interest” (Secord, *Victorian Sensation*, 169).

Unsurprisingly, Victorian thinkers had a much more contentious debate over the implications of the still-anonymous *Vestiges*.

### THE EARLY VICTORIAN RESPONSE TO *VESTIGES*

Contemporaneous debate over *Vestiges* was heated and extensive—an amount of attention entirely unprecedented for a science book—and reactions were quite mixed. Secord, who published the most recent and most extensive reception study of *Vestiges*, concludes that it not only made “evolutionary theories...a common currency of conversation” but also made images from the book “ubiquitous in contemporary table talk.”<sup>317</sup> Its accessibility was the source of both praise and alarm as it brought a familiarity with the developmental hypothesis into polite and domestic settings. Its popularity was often used against it by the scientific and religious orthodoxy, as evidence of the public’s inability to evaluate the scientific merits of a book.<sup>318</sup>

Milton Millhauser, author of one of the two book-length historical studies devoted to Chambers’s *Vestiges*, has observed that those who praised the work found “something that the book offered and that the critics did not like”: this was especially true of those frustrated with class relations and dominant religious institutions in Victorian Britain.<sup>319</sup> *Vestiges*’s legitimating of evolutionary theory—alternately known as the development hypothesis, progressive development, transmutationism, or transformism—failed to disassociate such ideas from French and working-class radicals and revolutionaries.<sup>320</sup> Socialists, who wanted to draw on science to overturn current social structures in order to achieve “a secular,

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<sup>317</sup> Secord, *Victorian Sensation*, 37, 38.

<sup>318</sup> Yeo, 14.

<sup>319</sup> Millhauser, *Just Before Darwin*, 161.

<sup>320</sup> Secord, “Introduction,” ix, xxiv, qtn. at xvi.

scientifically constrained cooperative society,” found the idea of constant and inevitable progression compatible with their goals.<sup>321</sup> Even those with less radical religious views welcomed *Vestiges*’s loosening of religious ties to science. Some liberal Whigs, Unitarians, and other Dissenting freethinkers, particularly among the London intelligentsia, felt that *Vestiges*’s vision of progressive development cohered with their faith in human-driven improvement of conditions in this world.<sup>322</sup>

Counter to these positive receptions of *Vestiges* were the overwhelming number of negative reviews. Its anonymous author was attacked on methodological grounds by the scientific orthodoxy, particularly the Cambridge scriptural geologists for “lack of practical research, second-hand knowledge, and disregard of proper scientific methods.”<sup>323</sup> Few scientific thinkers felt that Chambers’s natural laws were sufficient to account for the progressive development of all lifeforms, “from monad to man.”<sup>324</sup> Embarrassingly, it was revealed through the publication of private letters in the *Liverpool Journal* in 1846 that Charles Lyell “condemned the book on the basis of reports from other geologists without even reading the copy the author had sent him.”<sup>325</sup> Particularly offensive to religious sensibilities was Chambers’s presentation of humankind as descended from animals rather than specially and directly created by God.<sup>326</sup> But while *Vestiges* was taking what can only be described as “a merciless critical pounding,” most heatedly from October 1844 to June 1846,

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<sup>321</sup> Desmond, “Artisan Resistance and Evolution,” 93.

<sup>322</sup> Desmond, *Archetypes and Ancestors*, 30, 31; Secord, “Introduction,” xxviii.

<sup>323</sup> Yeo, 5.

<sup>324</sup> Corsi, 262.

<sup>325</sup> Secord, *Victorian Sensation*, 212. Later, as Geological Society president, Lyell used his presidential addresses in 1849 and 1850, “to renew his attack” on *Vestiges*, this time presumably better informed (Secord, *Victorian Sensation*, 418).

<sup>326</sup> Cosslett, 46.

the book “was dissected at public scientific meetings, condemned from pulpits and lecture platforms, borrowed from circulating libraries, and read.”<sup>327</sup> Criticism of the work only publicized it and increased its popularity.<sup>328</sup>

### *The Literary Response*

Literary authors were not behind in evaluating *Vestiges* and discussing its implications in serious, considered ways. In doing so, they used fiction as a forum for expressing ideas like those of the reviewers, but in perhaps more popular and accessible—or, at times, more sophisticated and nuanced—ways.<sup>329</sup> The leap from Chambers to literature was never a great one: he used narratives and images not unlike those that appeared in popular fiction of the time.<sup>330</sup> Chambers’s major project before beginning research for *Vestiges* was the *History of English Language and Literature* (1836), in which he concluded that Sir Walter Scott’s work represented the pinnacle of British literary tradition; from Scott, Chambers learned how an author could construct a history that also looked to the future, a story of progress and development that incorporated instability with hopefulness.<sup>331</sup>

Benjamin Disraeli, no longer much studied as a fiction writer, but one whose novels were widely read in his time, responded strongly to the *Vestiges* controversy. Disraeli’s *Tancred, or The New Crusade* (1847) used a discussion of *Vestiges*—thinly veiled by the fictionalized title “The Revelations of Chaos”—to free the eponymous character from an

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<sup>327</sup> Millhauser, *Just Before Darwin*, 4; Secord, *Victorian Sensation*, 37.

<sup>328</sup> Secord, “Introduction,” ix.

<sup>329</sup> Millhauser notes that *Vestiges* “enters significantly into the background of Victorian literature, an irritant if not a major influence. If it was rarely taken seriously, it could not be entirely ignored” (“Literary Impact,” 214).

<sup>330</sup> Secord, *Victorian Sensation*, 1.

<sup>331</sup> Stierstorfer, 28, 32-33.



intellectually limited love interest. In Chapter 9, appropriately entitled “Disenchantment,” Disraeli skewers *Vestiges* and its readership:

‘To judge from the title, the subject is rather obscure,’ said Tancred.

‘No longer so,’ said Lady Constance. ‘It is treated scientifically; everything is explained by geology and astronomy, and in that way. It shows you exactly how a star is formed; nothing can be so pretty! A cluster of vapour, the cream of the Milky Way, a sort of celestial cheese, churned into light, you must read it, ‘tis charming.’

‘Nobody ever saw a star formed,’ said Tancred.

‘Perhaps not. You must read the “Revelations;” it is all explained. But what is most interesting, is the way in which man has been developed. You know, all is development. The principle is perpetually going on. First, there was nothing, then there was something; then, I forget the next, I think there were shells, then fishes; then we came, let me see, did we come next? Never mind that; we came at last. And the next change there will be something very superior to us, something with wings. Ah! that’s it: we were fishes, and I believe we shall be crows. But you must read it.’

‘I do not believe I ever was a fish,’ said Tancred.

‘Oh! but it is all proved; you must not argue on my rapid sketch; read the book. It is impossible to contradict anything in it. You understand, it is all science; it is not like those books in which one says one thing and another the contrary, and both may be wrong. Everything is proved: by geology, you know. You see exactly how everything is made; how many worlds there have been; how long they lasted; what went before, what comes next. We are a link in the chain, as inferior animals were that preceded us: we in turn shall be inferior; all that will remain of us will be some relics in a new red sandstone. This is development. We had fins; we may have wings.’<sup>332</sup>

A particularly telling line in this satirical passage is Lady Constance’s claim that “It is impossible to contradict anything in [*Vestiges*]. You understand, it is all science.” Of course, *Vestiges* was roundly critiqued and contradicted, but the notion that science could propose poetic and fanciful theories lacking empirical evidence (such as how nebular clusters are “churned into light”) and then use the mantle of science to claim inarguably is ludicrous to Tancred, and presumably to Disraeli as well. Lady Constance appears to be an unusual devotee of *Vestiges*, claiming for the work a specificity that it does not contain, such as the exact number of other worlds, but as the only such character in *Tancred*, she is to be taken as

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<sup>332</sup> Disraeli, 109-10. For critical discussion of this scene, see Millhauser, *Just Before Darwin*, 33, 153; and Secord, *Victorian Sensation*, 188-189.

representative of all that Disraeli finds wrong with Chambers's book: a lack of realism, rigor, and focus. *Tancred* goes on to explore issues of progressive social and species development; a philosophical conversation on civilization in Chapter 14, argues that "the progressive development of the faculties of man" is an illusion: it is not progressive development that is the most prominent natural law, but rather decay which "is an inevitable necessity."<sup>333</sup> The evidence for progress is lacking, when one looks out of the geological record, which is presented as a questionable source upon which to base grand conclusions, to socio-political history. *Vestiges* does not explain everything, contra Lady Constance, and those phenomena it fails to explain are perhaps most important for humans to understand, such as the narrative arc and causes of changes in human social history.

A number of other prominent writers were less critical of *Vestiges*. Leigh Hunt apparently spoke very positively of the work to Chambers in confidence, although he moderated his praise in public, and so we have no firsthand account of his evaluation of the work.<sup>334</sup> Charles Kingsley references it occasionally—though not always positively—in *Water Babies* (1863).<sup>335</sup> George Henry Lewes, an intellectual both in the literary and natural history arenas, wrote of *Vestiges* in 1851, "There are faults in that delightful work, errors both in fact and philosophy, but compared with the answers it provoked, we cannot help regarding it as a masterpiece."<sup>336</sup> George Eliot "continued to speak favorably about *Vestiges* and its pioneering role in spurring debate, well after the appearance of the *Origin of*

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<sup>333</sup> Disraeli, 148, 150.

<sup>334</sup> Secord, *Victorian Sensation*, 490.

<sup>335</sup> Millhauser, "Literary Impact," 218.

<sup>336</sup> Qtd. in Secord, *Victorian Sensation*, 488.

*Species*”,<sup>337</sup> *Vestiges* influenced her thinking on evolution so much that she first read *Origin*, she wrote in her diary that when she viewed it as derivative, a rephrasing of Chambers’s ideas.<sup>338</sup>

*Tennyson’s In Memoriam, A. H. H. and The Princess*

In November of 1844, Alfred, Lord Tennyson wrote to Edward Moxon, his publisher, requesting that he acquire a copy of a book he saw enthusiastically reviewed in the *Examiner*—*Vestiges of the Natural History of Creation*.<sup>339</sup> Explaining his interest, Tennyson said, “it seems to contain many speculations with which I have been familiar for years, and on which I have written more than one poem.”<sup>340</sup> He had a longstanding interest in science<sup>341</sup> (especially the evolutionary implications of geology) and was drawn to *Vestiges* for “its graphic style [and] its vivid picturesqueness”<sup>342</sup>; the elements of the book that so distressed other readers were largely familiar to him already through his reading of Charles Lyell’s *Principles of Geology* (1830) in 1837. Lyell had read and incorporated the ideas of Lamarck and Cuvier into his geological tome, specifically their notions that humanity is a biological species subject to extinction like any other.<sup>343</sup> In fact, Tennyson might have been comforted

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<sup>337</sup> Secord, *Victorian Sensation*, 505.

<sup>338</sup> In her journal entry of 5 December 1859, Eliot wrote of Darwin’s *Origin* “it marks an epoch, as the expression of his thorough adhesion, after long years of study, to the Doctrine of Development” (Eliot, III, 227).

<sup>339</sup> Secord, “Introduction,” xxviii; *Victorian Sensation*, 9.

<sup>340</sup> Tennyson, 186. Literary critics have discussed Tennyson as working through the ideas of evolutionary science in *The Palace of Art* (1833), “Locksley Hall” (1837–38), *Morte d’Arthur* (1842), *Maud* (1855), *De Profundis* (1880), and “By an Evolutionist” (1889) (Dean, 5; Killham, 259; Millhauser, *Fire and Ice*, 25, 27; Stevenson, 67, 69; Zimmerman, 66).

<sup>341</sup> For a discussion of Tennyson’s scientific references as both stylistic and thematic throughout his canon, see Taylor, “Science in Tennyson’s Poetry.”

<sup>342</sup> Chatterjee, 14.

<sup>343</sup> Mattes, 79.

by *Vestiges*'s confirmation of how up-to-date with scientific debates his own reading was, not to mention by *Vestiges*'s suggestion that there is a plan and purpose behind the seemingly ruthless processes of nature that Lyell presented.<sup>344</sup> Although many contemporaneous readers were troubled by the religious system of *Vestiges*, Tennyson found in the work a means to reconcile a nonorthodox but still sincere Christian faith with modern scientific discoveries.<sup>345</sup>

Tennyson's *The Princess* (1847) was his first major poem composed and published after his reading of *Vestiges*, and references to its version of evolutionary theory abound—in the prologue alone, we can identify the setting on Sir Walter Vivian's lawn (EBB, among others, thought that Sir Richard Vyvyan, MP and FRS, was the author of *Vestiges* for a number of years) and the ammonites and other fossils lying about.<sup>346</sup> The eponymous princess in this work has rejected her betrothal to a prince and founded a university solely for women; the lessons taught in this institution express and apply many of the central tenets of *Vestiges*. The princess speaks of creation as a single, nebular event, "All creation is one act at once, / The birth of light" (III.308-9); Lady Psyche, one of the instructors at the university, also endorses the nebular hypothesis made culturally prominent by *Vestiges*:

This world was once a fluid haze of light,  
Till toward the center set the starry tides,  
And eddied into suns, that whirling cast  
The planets; then the monster; then the man. (II.101-4)<sup>347</sup>

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<sup>344</sup> Chatterjee, 15; Mattes, 80.

<sup>345</sup> Chatterjee, 16; Mattes, 77; Millhauser, *Just Before Darwin*, 161, 163.

<sup>346</sup> Ammonites, like trilobites, were well-known fossils taken as representative of some of the extinct earliest marine animals. On *The Princess*'s ammonite, see Zimmerman, 76. Dean has also identified two mammoth fossils in *The Princess*: V.142 and III.276-277 (17).

<sup>347</sup> This passage has been discussed in terms of the nebular hypothesis by a number of critics, including Chatterjee, 28; Millhauser, *Fire and Ice*, 19, "Tennyson's *Princess*," 340; Stevenson, 72.

Tennyson's "fluid haze of light" closely resembles Chambers's description of the primal nebulae as a "universal Fire-Mist."<sup>348</sup> Interestingly, this passage obscures any role of God in creation with the movement of "starry tides," tides of course being associated with lunar cycles and hence with women's menstrual cycles. An androcentric vision of history is thus replaced with a gynocentric one, in keeping with the university's strict gendering, and with Chambers's vision of female reproduction as central to evolution, a theme that I will discuss more extensively in relation to *Aurora Leigh*.<sup>349</sup> The vision of the Academy—and of Princess Ida—is consistently developmental: life in the universe and in human societies has progressed to the point that women are becoming the dominant species, the evolutionary type of the future; the work concludes, however, that it is not women who epitomize evolutionary development, but rather domesticity, as it is the site that brings men and women together and helps them to progress toward a better society.<sup>350</sup> Women's education has led to this state, as "Princess Ida recognizes her own sexual attraction to the Prince through a literary experience assisted by images of flowers, insects, birds, and stars," subjects long associated with the natural sciences.<sup>351</sup> And yet, the Princess's persona is a means for Tennyson to distance himself from the *Vestiges*'s arguments and implications, "holding [each evolutionary] idea at arm's length, displaying commitment but not quite confessing it."<sup>352</sup>

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<sup>348</sup> Millhauser, *Just Before Darwin*, 156.

<sup>349</sup> Zimmerman, 79. For comparisons of Tennyson's treatment of the Woman Question in *The Princess* with EBB's in *Aurora Leigh*, see Kaplan; Taylor, "'School-Miss Alfred'," 5-7; Stone, "Genre Subversion," 106, 116.

<sup>350</sup> Chatterjee, 32; Killham, 261; Millhauser, "Tennyson's *Princess*," 339; Stevenson, 70; Zimmerman, 77.

<sup>351</sup> Qtn. from Taylor, "'School-Miss Alfred'," 12. See also Chatterjee (28) on the central role of women's education.

<sup>352</sup> Qtn. from Millhauser, *Fire and Ice*, 19. See also Chatterjee, 31; and Millhauser, "Tennyson's *Princess*," 339.

Tennyson wrote *In Memoriam* (1850) over the course of seventeen years (1833-49) as an act of grieving for his friend, Arthur Henry Hallam. The poem works through personal and cultural anxieties caused by developments in science, especially evolutionary theory, eventually reconciling with faith the seemingly irreconcilable notion of the insignificance and impermanence of humankind.<sup>353</sup> Welcomed by scientists and religious figures alike, *In Memoriam* impressed its age with its sincere and informed approach to timely scientific crises.<sup>354</sup>

Sections LIV-LVI of *In Memoriam* are typically referred to as the “evolutionary doubt” epicenter of the poem. These famous sections deal with Tennyson’s hopes “that somehow good / Will be the final goal of ill,” “That nothing walks with aimless feet,” “That not a worm is cloven in vain” (LIV.1-2, 5, 9) but fade into fears that “God and Nature [are] at strife,” causing nature to preserve neither the species nor the individual (LV.5), not even humans.<sup>355</sup> This is where the famous line about “Nature, red in tooth and claw” (LVI.25)—probably a reference to Lyell’s *Principles*, not Chambers’s *Vestiges*—appears.<sup>356</sup> These “evolutionary” sections, then, are really geological (or Lyellian) sections.<sup>357</sup> Tennyson integrated *Vestiges*, instead, into his “evolutionary resolution” sections of CXVIII-CXXIII.<sup>358</sup> In CXVIII, Tennyson draws on Chambers’s notion of humankind as “but the initial of the

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<sup>353</sup> Altholz, 67; Gliserman, “Part I,” 279, “Part II,” 442; Stevenson, 44-45, 83; Zimmerman, 67. Dean has listed the sections influenced by geological thought as “its Prologue, poems XXIV, XXXV, XXXVI, XLIII, LIV, LV, LVI, LXIX, LXX, XCV, CXII, CXIII, CXX, CXXIII, CXXIV, CXXVII, CXXXI, and its Epilogue” (9).

<sup>354</sup> Mattes, xi; Stevenson, 92.

<sup>355</sup> See, for example, Gliserman, “Part II,” 451; Harrison; Leonard, 36; and Stevenson, 87.

<sup>356</sup> As Millhauser comments, “‘Nature red in tooth and claw’ does not play a prominent part in Chambers’ scheme of things (or, rather, is rationalized away)” (“Literary Impact,” 220).

<sup>357</sup> Armstrong, 102; Chatterjee, 37; Gliserman, “Part II,” 441-52; Killham, 254, 264; Mattes, 81; Millhauser, “Tennyson, *Vestiges*,” 25.

<sup>358</sup> Mattes, 81, 83; Millhauser, “Tennyson, *Vestiges*,” 23, 25; Stevenson, 89.

grand crowning type” to think of our species not as a future fossil as in LVI but as “The herald of a higher race” (CXVIII.14). Tennyson by CXXIII has reached a comfortable compromise, accepting geological visions of time and biological visions of animal descent without being dragged down by them, which is made possible through the mediation of *Vestiges*. Chambers, after all, had addressed Tennyson’s early fear that the stars “blindly run” (III.5) by showing that the stars, instead, demonstrate progress.

The Epilogue, most likely written in 1845, relies more than the other sections of the poem on Chambers’s *Vestiges* to synthesize the movement of *In Memoriam*.<sup>359</sup> The Epilogue celebrates the marriage of Tennyson’s sister Cecilia and the future birth of a child, who shall recapitulate the previous evolutionary states to progress one step closer to “the crowning race” (line 128); Chambers’s theory of progressive development (Tennyson’s “one law” [142]) enables this optimistic vision of the future.<sup>360</sup> Marriage, in this vision, becomes an evolutionary step because it is the socially and religiously legitimated means of reproduction, gestation of course being central to Chambers’s vision of progress.<sup>361</sup> The final lines, referring to the “far-off divine event, / To which the whole creation moves” (143-44), “suggest both the biblical idea of the Kingdom of God and the nineteenth century’s dearly cherished belief that perfection lay ahead and the whole world was progressing toward it, a belief for which Chambers found scientific evidence in organic development.”<sup>362</sup> The key step for Tennyson in moving from a state “half-akin to brute” to the transcendent type is

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<sup>359</sup> Dean, 13; Killham, 256-57; Mattes, 83; Millhauser, *Fire and Ice*, 28 n1, *Just Before Darwin*, 156, “Tennyson, *Vestiges*,” 23. This influence was even noted by contemporaneous reviewers; see Secord, *Victorian Sensation*, 531.

<sup>360</sup> Leonard, 35; Mattes, 83; Millhauser, *Just Before Darwin*, 157; Secord, *Victorian Sensation*, 530.

<sup>361</sup> Killham, 263.

<sup>362</sup> Mattes, 86.

literary, the coming of people able to read “Nature like an open book” (133, 132). Such a statement looks forward to a time when the scientists and the literati merge.<sup>363</sup>

*EBB's Response to Tennyson*

Elizabeth Barrett Browning first met Tennyson and his wife Emily in July of 1851, when the Poet Laureate invited the Brownings to a visit in Paris.<sup>364</sup> EBB had, however, sustained an interest in Tennyson's writings and career for years before this initial meeting or the warm acquaintanceship that subsequently blossomed; in 1836, her brother George had given her Tennyson's *Poems Chiefly Lyrical* (1830), and thereafter she followed his career closely.<sup>365</sup> Tennyson was a respected contemporary but also a competitor for EBB. She was disappointed in *The Princess*, frustrated at reviewers who attributed her poetic ideas or style to his influence, and mostly admiring of *In Memoriam* after reading it in December 1850<sup>366</sup>:

the book has gone to my heart & soul . . . I think it full of deep pathos & beauty. All I wish away is the marriage hymn at the end....the effect of the book is artistic & true, I think—and indeed I do not wonder at the opinion that has reached us from various quarters that Tennyson stands higher through having written it....he appeals, heart to heart, directly as from his own to the universal heart, & we feel him nearer to us—I do . . . & so do others.<sup>367</sup>

Though she does not mention the geological sections of the poem in this letter, what she does take issue with is the Epilogue of *In Memoriam*, the section of the book that integrates Chambers's universal vision into the human scale and that reconciles science and

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<sup>363</sup> Secord, *Victorian Sensation*, 531-32.

<sup>364</sup> Collins, 9-10.

<sup>365</sup> Collins, 10; Taplin, 95.

<sup>366</sup> Forster, 252; Hewlett, 63, 102, 242, 246.

<sup>367</sup> EBB to Mary Russell Mitford [13 December 1850], XVI, 246, from the *Browning's Correspondence*, hereafter cited by volume and page number as *BC*



Christianity. Her own poetic treatment of the social issues raised by *Vestiges* was to be quite different.

### ELIZABETH BARRETT BROWNING'S *AURORA LEIGH*

By the 1850s, Elizabeth Barrett Browning (1806-61) had built up a reputation as an educated, Christian, and gifted writer, often being ranked by her contemporaries as one of the greatest British female poets—if not the greatest.<sup>368</sup> She very much wanted to be judged as a poet in her own right, not just as a poetess, however, and toward the end of her life wrote on political subjects that were often considered inappropriate for a woman by reviewers.<sup>369</sup> Though occasionally accused by biographers of using her chronic, mysterious pulmonary illness as an excuse to avoid social and domestic obligations that she found distasteful, she nonetheless received an excellent education at home and stayed well informed on current events.<sup>370</sup> EBB in large part made her name through the publication of her August 1844 *Poems*. This volume, “the fruit of some six years of intermittent poetical activity,” received such a positive critical reception that it “secured her reputation as a gifted writer and an unusually well-educated woman of feeling.”<sup>371</sup> Despite the critical success, the sale of her 1844 *Poems* (2 vols.) did not make much of a profit for EBB, perhaps in part because the 1844-45 social season was alight with interest in *Vestiges*, which was “sharing the review

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<sup>368</sup> Hewlett, xiii; Montweiler, 291. She was even suggested for the Poet Laureateship in 1850 in *The Athenaeum*, when Tennyson was given the position.

<sup>369</sup> Montweiler, 291-92. Taylor notes that although many reviewers balked at her political poetry at the end of her life, EBB's interest in politics dated “back to her earliest writings” (“Political Aesthetic Philosophy,” 96).

<sup>370</sup> Forster, 39, 121; Hewlett, 98-99. Even later in life, while living primarily on the Continent, EBB kept up with literary and political news from England through reading newspapers and conversing with visitors. When she began writing *Aurora Leigh* in Italy in the winter of 1853-54, the year of *Vestiges*'s tenth edition, she was more involved in Anglo-American social circles than usual (Taplin, 239, 279, 287, 347, 385).

<sup>371</sup> Taplin, 130; Montweiler, 291.

columns” with EBB’s volume.<sup>372</sup> In fact, reviews even linked the two books by criticizing them for lacking sufficiently rigorous systems of inquiry.<sup>373</sup> Though *Vestiges* and EBB’s poetry was considered by reviewers, readers, and the authors themselves in tandem, no previous scholarship examines how EBB’s poetry might have engaged with Chambers’s theory.

Although her most authoritative recent biographer, Gardner Taplin, comments that the *Vestiges* scandal left EBB “untouched,” as he claims she remained “all her life by evolutionary thought,” it is hard to believe that an intellectual who read the sensational book at the height of its popularity, who discussed and corresponded about it with friends, who was deeply moved by Tennyson’s *In Memoriam*, and who shared one of her most prominent moments of public celebration with the evolutionary work could have been “untouched” by it.<sup>374</sup> EBB frequently wrote about current events in her poetry, particularly prominent social issues like children’s factory work (in 1843’s “The Cry of the Children”) or sexual abuses in American slavery (in 1848’s “The Runaway Slave at Pilgrim’s Point”); in doing so, she acted on her long-held maxims that “there was *no* subject a poet should not touch” and that “poetry should be a form of action.”<sup>375</sup> As a consequence, EBB drew on books to which she reacted negatively (like *Vestiges*), such as the Socialist French novelist Joseph Marie Eugène Sue’s *Les Mystères de Paris*, which influenced her treatment of the character Marian in *Aurora Leigh*, despite her confession that she found the novel “painful and repulsive.”<sup>376</sup> Perhaps

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<sup>372</sup> Secord, *Victorian Sensation*, 166; Taplin, 131-32.

<sup>373</sup> Qtd. in Hewlett, 62-63.

<sup>374</sup> Taplin, 100.

<sup>375</sup> Forster, 122, 215.

<sup>376</sup> Qtd. in Taplin, 98.

most important, *Vestiges* influenced national discussions of controversial social questions such as class, religion, and gender that EBB had a long-standing interest in and claimed as legitimate subjects of natural history.

Evidence of EBB's familiarity with *Vestiges* comes from her letters. In early January of 1845, she wrote to John Kenyon, a distant cousin, returning his copy of the book:

Thank you, dearest M<sup>r</sup>. Kenyon—I send back your ‘Vestiges of Creation’. The writer has a certain power in tying a knot—(in mating a system)—but it is not a love-knot,—& it appears to me that I have read in my life few more melancholy books—Did the thought ever strike you of the possibility of M<sup>r</sup>. Crosse having *anything to do with the writing*? I understand that Sir Richard Vivian denies it determinedly.<sup>377</sup>

In this letter EBB engages in the popular social game of guessing the *Vestiges*'s author's identity, showing how in tune she was with the spirit of the moment.<sup>378</sup> More important, however, she expresses her sense of the book's shortcomings. *Vestiges* is powerful, particularly in its expression of a universal system, but rather than inspiring adherence to its system, the work inspires sadness. Secord interprets this response as indicating EBB's sense of the mechanistic, materialistic implications of Chambers's work, saying that for her, in the theory, “everything had been joined and fitted, but without feeling.”<sup>379</sup> Later that month, EBB wrote again to Kenyon and to another correspondent, Julia Martin, about *Vestiges*, in the context of a visit with the writer, Anna Jameson. To Kenyon, she comments:

M<sup>rs</sup>. Jameson sate with me nearly an hour yesterday—& a pleasant hour it was,—considering that it was not *one of your*'s. She tried to persuade me that the ‘Vestiges of Creation’ was the most comfortable of books, & that we sh<sup>d</sup>. think ourselves happy

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<sup>377</sup> EBB to John Kenyon [3 January 1845], (X, 5).

<sup>378</sup> In an interesting interdiscursive moment, Chambers wrote an obituary for EBB in 1861, in which he praised her writing: “there is much in her poetry which, for high imagination, subtlety, and delicacy of thought, force, music, and happy diction, is certainly unsurpassed by anything that ever woman wrote” (Chambers, “June 29,” 828).

<sup>379</sup> Qtn. from Secord, *Victorian Sensation*, 168. See also Millhauser, “Literary Impact,” 222.

in our condition of fully developed monkeyhood—but I was too proud & discontented to be found persuadable in these things.<sup>380</sup>

Although perhaps overstating the influence of her mood on her evaluation of the book, this letter records that EBB has made her mind up about *Vestiges*—and not positively. She objects to the notion of the primate descent of humankind, and of herself in particular. It is hard to say whether or not her point about the monkey is a joke, but she repeated her witticism in a letter to Julia Martin about the same visit:

M<sup>rs</sup>. Jameson came again yesterday, & was very agreeable—but tried vainly to convince me that the ‘Vestiges of Creation’ which I take to be one of the most melancholy books in the world, is the most comforting, . . . & that Lady Byron was an angel of a wife. I persisted (in relation to the former clause) in a ‘determinate counsel’ not to be a fully developed monkey if I could help it—but when M<sup>rs</sup>. Jameson assured me that she knew all the circumstances of the separation, though she c<sup>d</sup>. not betray a confidence, & entreated me ‘to keep my mind open’ on a subject which would one day be set in the light, . . . I stroked down my feathers as well as I could, & listened to reason....But there was, . . . yes, & is . . . a strong adverse feeling to work upon--& it is not worked away.<sup>381</sup>

Here, EBB counters Jameson’s pro-*Vestiges* argument with a Biblical phrase (“determinate counsel” from Acts 2:23). More interestingly, she links her dislike of the book so closely to her dislike of one of the reputed authors, Lady Byron, and alternates back and forth between discussing *Vestiges* and discussing Lady Byron, so much that by the end of the letter, it is hard to distinguish which subject her “strong adverse feeling” refers to.<sup>382</sup> Though this is the last letter in the *Brownings’ Correspondence* in which EBB initiates the subject of *Vestiges*, she was receiving letters speculating on the book’s authorship as late as 1850.<sup>383</sup>

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<sup>380</sup> EBB to John Kenyon [29 January 1845] (BC, X, 49).

<sup>381</sup> EBB to Julia Martin [25 January 1845] (BC, X, 41).

<sup>382</sup> EBB’s devotion to Lord Byron might be a reason she was not enthusiastic about his estranged wife.

<sup>383</sup> Mary Russell Mitford to EBB [25 March 1850] (BC, XVI, 86).

Begun in 1853, though mentioned as a planned work as early as 1844, *Aurora Leigh* has been variously called a “novel in verse” and a “verse-novel.”<sup>384</sup> The novel, many critics have noted, was considered a female form, whereas the poetic epic was gendered masculine; her adoption of a hybrid form, then, allowed her to draw on precedents in both generic traditions while escaping either one’s restrictions.<sup>385</sup> It is both a *Bildungsroman* and a *Künstlerroman*, and many biographers and critics have identified the life and ideas of the eponymous female poet with those of EBB herself, despite EBB’s protestations that it was not a personal story.<sup>386</sup> Though out of favor and out of print for much of the early twentieth century, *Aurora Leigh* was reclaimed in the 1970s and 80s as “a feminist epic.”<sup>387</sup> In writing an epic—a typically masculinist form by and about men as a means to achieve self-definition through battle and quest narratives—about a woman who is at once an individual and a symbol and who writes her way to agency and identity, EBB achieved a radical endproduct.<sup>388</sup> Among the concerns that EBB saw herself addressing were “the growing secularization and materialism of the age,” especially via Socialism.<sup>389</sup> Contemporaries widely recognized that in *Aurora Leigh*, EBB “seemed to speak for her age,”<sup>390</sup> and modern

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<sup>384</sup> Hewlett, 271, 292; Raymond, 4; Taplin, 304.

<sup>385</sup> Case, 17; Chaney, 792; Cooper, ch. 6; Friedman; Mermin, ch. 7; Reynolds, 49; Stone, “Genre Subversion,” 101-27. The novel’s gendering as feminine also equated to lower status than the male epic (Showalter, 80-84).

<sup>386</sup> Hewlett, 297; Taplin, 313. Rotunno defines the Victorian *Künstlerroman* as concerned with the poet’s “balance [of] artistic vision with the business realities of the Victorian literary marketplace” (58).

<sup>387</sup> Forster, xi; Machann, 57.

<sup>388</sup> Bailey 117-18; Laird, 356.

<sup>389</sup> Qtn. from Taplin, 344. See also Hewlett, 268. David notes that the age’s materialism “found a convenient ally in Victorian patriarchal formations,” and EBB’s critique of one necessarily involves a critique of the other (165).

<sup>390</sup> Qtn from Laird, 355. See also Hickok, 130; and Stone, *Elizabeth Barrett Browning*, 142 for fin-de-siècle reviews.

critics have continued, in the vein of Cora Kaplan, to think of the book as “an elaborate collage” of contemporary “textual and cultural reference, offering telling reinterpretations of familiar tropes, archetypes, myths, and literary texts.”<sup>391</sup> To this list, I will add the debates raised by *Vestiges*.

*Aurora Leigh* is a first-person narrative told from the perspective of the eponymous character. Born in Italy to an English father and Italian mother, Aurora is orphaned at a young age. She travels to England to live with an aunt, who raises her in restrictive ways until Aurora’s twentieth birthday, when Aurora turns down a proposal from her cousin, Romney Leigh. After her aunt’s death, Aurora moves to London to become a professional poet. A few years later, she is visited by Lady Waldemar, who wants her to stop Romney’s marriage to a working-class woman, Marian Erle, which is driven by his Christian Socialist principles. Aurora visits Marian and finds her not terribly pretty but sincere and good hearted; Marian has been helped by Romney and has demonstrated her own desire to help others in distress. On the wedding day, Marian does not show up to the church. Shortly thereafter, Aurora rediscovers her in France and learns that she was sold to a brothel, drugged, raped, and impregnated. Aurora takes Marian and her baby to Italy, where Romney eventually finds them after the failure of his Socialist plans. Romney and Aurora finally reconcile and the work ends with Aurora describing to the now-blind Romney a vision of New Jerusalem, presumably the transfigured dawn.

*Gender: The Limitations of Authorship and the Empowerment of Motherhood*

Gender and genre are two issues that have to be considered together in any critical analysis of *Aurora Leigh*’s intervention in the *Vestiges* debate. Both *Aurora Leigh* (as a verse-novel and an epic-*Bildungsroman*) and *Vestiges* (as a novelized science book, a

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<sup>391</sup> Qtn. from Kaplan, 14. See also Hickok, 129-30; Reynolds, 50; Stone, *Elizabeth Barrett Browning*, 144.

planetary *Bildungsroman*) are hybrid works, drawing on and exceeding the conventions of multiple genres. The reception of each book was also vexed by gender expectations, both of authors and of genres. Rhetoricians have observed that genre structures can both empowering and limiting. As Charles Bazerman notes, “genres allow us to create highly consequential meanings in highly articulated and developed systems.”<sup>392</sup> Carolyn Miller expands on a similar point by writing that “Form shapes the response of the reader or listener to substance by providing instruction, so to speak, about how to perceive and interpret; this guidance disposes the audience to anticipate, to be gratified, to respond in a certain way. Seen thus, form becomes a kind of meta-information, with both semantic value (as information) and syntactic (or formal) value.”<sup>393</sup> Because genre is so culturally embedded, though, it also perpetuates cultural values and so is “one of the structures of power that institutions wield.”<sup>394</sup> Narrative is able to mediate this conflict by at once revealing, critiquing, and reconciling the social values that underlie genre, which is why the narrative of gender in the *Vestiges* debate can be illuminated through a study of the fictional *Aurora Leigh*, both of them genre- and gender-defying works.<sup>395</sup>

*Vestiges* raised two specters of gender, one much discussed and one little noted. The former deals with the issue of authorship and the latter with the empowerment of maternity. As mentioned earlier, guessing the authorship of *Vestiges* was a popular parlor game in 1844-45, but also a serious concern for those trying to evaluate the merits of the work. Alleged authors included Charles Lyell, William Thackeray, and even Prince Albert, but for much of

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<sup>392</sup> Bazerman 79.

<sup>393</sup> Miller, “Genre as Social Action,” 159.

<sup>394</sup> Miller, *Rhetorical Community*, 71.

<sup>395</sup> Rouse, 185; White, 4.

the 1840s, some of the chief suspects were women, including Harriet Martineau, Catherine Crowe, Lady Byron, and Ada Lovelace, Lord Byron's daughter.<sup>396</sup> Lovelace was suggested more often than other possible authors because she was known to be well educated and deeply interested in scientific topics.<sup>397</sup> Anna Jameson might have been such a proponent of *Vestiges* because, as a proto-feminist, she was excited by the prospect of women finally claiming a place among prominent scientific theorizers.<sup>398</sup> Less progressive critics, however, used the purported female authorship to undermine the work's scientific authority and social reception.<sup>399</sup> Identifying a woman as the writer of *Vestiges* was the easiest way to dismiss the work, and such supposedly feminine qualities as limited reasoning powers and lack of discipline were widely attributed to it.<sup>400</sup>

For EBB, "a woman poet fiercely determined not to be dismissed with more conventionally feminine 'poetesses'," the *Vestiges* debate must have seemed a step backward for herself and others attempting to make their names more as writers than as women.<sup>401</sup> The fictional Aurora faces repeated instances of social prejudice for her desire to become a poet throughout EBB's verse-novel. Lady Waldemar and Romney both accuse Aurora of being unwomanly because of her vocation. Lady Waldemar reproaches Aurora by saying,

... You stand outside,  
You artist women, of the common sex;  
You share not with us, and exceed us so

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<sup>396</sup> Secord, "Introduction," xl-xlii; and *Victorian Sensation*, 461.

<sup>397</sup> Secord, *Victorian Sensation*, 369, 183. Such rumors were powered in part by the feminine handwriting of the various manuscripts of *Vestiges* (which was, in fact, Chambers's wife's).

<sup>398</sup> Markus, 77; Secord, *Victorian Sensation*, 186.

<sup>399</sup> Secord, *Victorian Sensation*, 20.

<sup>400</sup> Secord, *Victorian Sensation*, 21, and "Introduction," xlii; Yeo, 22.

<sup>401</sup> Qtn from Taylor, "Politics of Childhood," 416. See also Reynolds, 7. Laird notes, "Browning's gender carried much of the blame for flaws perceived by critics of her day" (361).



Perhaps by what you're mulcted in, your hearts  
Being starved to make your heads. (3.406-10)

Trying to persuade Aurora to intervene in Romney's upcoming wedding, Lady Waldemar here is kinder than Romney is at the end of the narrative, when he tells Aurora in a fit of frustration, "You stand so less than woman, through being more / And lost your natural instinct (like a beast) / Through intellectual culture" (8.1229-31). Women who write are seen through the eyes of these characters, and by implication through those of the educated population of the time, as diminished and unnatural because of their pursuit of literary careers. Such a stereotype was widely drawn upon and reinforced by the *Vestiges* debate. As Romney says dismissively, but EBB perhaps believed seriously, women writers never

...can be satisfied with praise  
Which men give women when they judge a book  
Not as mere work but as mere woman's work,  
Expressing the comparative respect  
Which means the absolute scorn. (2.232-36)

But even more harmful, perhaps, is the idea that women are incapable of composing a reasonable and reasoned explanatory system, especially when it comes to science. In an embittered moment in Book 2's proposal scene, Romney indicts women's capacities for Aurora's disinterest in his Socialist schemes. He claims that women are incapable of comprehending the world accurately, which for him means impersonally (2.192-98)<sup>402</sup>:

You weep for what you know. A red-haired child  
Sick in a fever, if you touch him once,  
Though but so little as with a finger-tip,  
Will set you weeping; but a million sick . .  
You could as soon weep for the rule of three  
Or compound fractions. (213-18)

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<sup>402</sup> The kinds of reform efforts he cites here closely resemble EBB's own political poetry, such as "The Cry of the Children" (1843), which was based on the Parliamentary reports that Romney accuses women of finding unmoving (Qtn from Hewlett, 96. See also Taplin, 115).

Such a critique could be as easily (and more fairly) directed at Chambers for being “...hard / To general suffering” at the end of *Vestiges* when he dismisses pain as arising from contingencies rather than laws: if misery is not recognized as a widespread problem in this world, conditions “Uncomprehended by you, must remain, / Uninfluenced by you” (2.198-99, 218-20).

Although critics and reviewers seem not to have made this point explicit or examined it in any depth, *Vestiges* attributes species evolution to maternity. One race is differentiated from another by longer gestation periods, and it is through the vagaries of fetal development and birth that more developed species arise. This is not a purely empowering process for women, for Chambers also attributes birth defects to a failure “in the power of development in a mother,” but in his theory it is nonetheless only mothers who possess this “power of development”—other than an implicit role for insemination, males play no part in species progress or in the progress of the world (377). Chambers’s vision of the power of maternity, though different from EBB’s, is nonetheless complementary to hers and opens a number of possibilities for women. When EBB successfully gave birth to her only child, Pen, she “was immensely proud of her achievement. What thrilled her most was to have performed a natural function, ‘the highest function of a woman’ as she had once described it, perfectly.”<sup>403</sup>

Motherhood, though not something the title character experiences herself, is nonetheless a central concern in *Aurora Leigh*. Like Socialism, maternity is an atypical subject for poetry, at least in the personal, embodied, and vexed way that EBB approaches

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<sup>403</sup> Forster, 231. In *Aurora Leigh*, Taylor comments, EBB goes “beyond the celebration of motherhood in Mrs. Ellis’s multiple conduct books and Sarah Lewis’s *Woman’s Mission* and the comparable ideology of Ruskin’s *Of Queen’s Gardens* and Patmore’s *Angel in the House* to affirm the healthy eroticism of female sexuality, with maternity as its fullest expression” (“‘School-Miss Alfred’,” 8).

it.<sup>404</sup> Aurora struggles with the loss of her mother at a young age; in Book I she extensively she describes her experience of studying her dead mother, concluding that all of the roles that she imagined for her

Concentrated on the picture, glassed themselves  
Before my meditative childhood, as  
The incoherencies of change and death  
Are represented fully, mixed and merged,  
In the smooth fair mystery of perpetual Life. (1.169-73)

The mother is not just the literal gateway to life, but also the key to unlocking life's greatest mysteries, the point at which all existential issues crystallize. Beverly Taylor has written about EBB's vision of motherhood in such poems as her "Romance of the Ganges" (1838) and "Lord Walter's Wife" (posthumously published in 1862) as imbued with "immensely transgressive potential," with mothers able to challenge the politics of gender by educating their children about social and legal inequalities: a mother can be, in this view, "a catalyst for a new order, as *materfamilias* of future generations of boys and girls whom she imagines as confident and equal citizens of the world."<sup>405</sup> Such a progressive stance on motherhood could clearly be seen as consistent with Chambers's empowerment of maternity. It must be noted, however, that Chambers sees women's role as somewhat passive, as a capacity to physically develop their offspring adequately in utero according to the natural laws of progressive development, whereas EBB locates motherhood's potential primarily in the nurturing decisions a woman makes well after the process of pregnancy and delivery. These two visions are brought into alignment in *Aurora Leigh* through the character of Marian Erle. After being told she was emigrating to Australia, but then is actually sold to a brothel in France, Marian temporarily goes insane; she is not just restored to sanity, but is transformed

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<sup>404</sup> Calcraft-Rennie, 9.

<sup>405</sup> Qtn from Taylor, "Politics of Childhood," 406, 421. See also pp. 414-21.

into a near-angelic being through discovering her pregnancy and caring for her child.<sup>406</sup>

When Aurora first suspects Marian of being an unwed mother, she likens her to a thief: “A child’s too costly for so mere a wretch; / She filched it somewhere, and it means, with her, / Instead of honour, blessing, merely shame” (6.3453-55). She finds instead, from watching Marian with her child, that the fallen woman is a Virgin Mary rather than a Mary Magdalene, “impl[ying] the theological force she wants to impute to this ‘maiden’ mother’s female energy.”<sup>407</sup> Marian’s child, despite being illegitimate and the product of sexual violence, comes to fulfill Aurora’s ideals of a child’s spiritual power:

I thought a child was given to sanctify  
A woman, – set her in the sight of all  
The clear-eyed Heavens, a chosen minister  
To do their business and lead spirits up  
The difficult blue heights. A woman lives,  
Not bettered, quickened toward the truth and good  
Through being a mother? . . . then she’s none. (6.728-34)<sup>408</sup>

Here it is the individual woman, not the child or the species as in Chambers, who is made more perfect through the process of maternity. As in Chambers, though, Marian’s child seems to be an improvement on Marian and the class from which she comes; almost preternaturally beautiful and good tempered, he “is hardly ever characterized as a real child might be.”<sup>409</sup> Moreover, he is described as “fatherless” and “unfathered” (6.646, 7.327). He has a father, of course, in the technical sense, but other than one unremembered sexual encounter with his mother, the text makes it seem that the father has contributed nothing to

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<sup>406</sup> The mid-nineteenth-century sentimental tradition tended to portray children as angelic, redemptive figures, such as Dickens’s Little Nell, Stowe’s Little Eva, or Eliot’s Eppie (Calcraft-Rennie, 8).

<sup>407</sup> Gilbert, 204.

<sup>408</sup> Vanden Bossche and Haigwood comment, in this vein, that “the lesson Aurora learns from Marian Erle is that motherhood derives its intrinsic value from the biological/emotional bond of mother and infant, not from the ideological sanctions of a patriarchal tradition” (37).

<sup>409</sup> Gilbert, 205.

this child's existence. This lack of a father's presence makes the experience of maternity even more "regenerative" for Marian (as well as for Aurora, who seems to take on the role of adoptive or surrogate mother to both Marian and her son) and more in line with *Vestiges's* vision of empowering maternity.<sup>410</sup>

### *Upending Religious Doubt*

If EBB's attitude toward motherhood aligns with Chambers's emphasis on the centrality of the mother's role in species advancement, her attitudes on God and religion differed greatly. Because *Vestiges* was published anonymously, this section will focus not on Robert Chambers's personal views on religion, but rather on the religious system presented in *Vestiges*. In essence, Chambers argues in *Vestiges* that God designed the laws and created the matter that make up the universe as we currently know it, not through a direct act of creation but "by the simple establishment of a natural principle flowing from his mind" (154). After that point, God was not involved in maintaining of any portion of the universe. For Chambers, this cosmic vision was the only way to avoid envisioning an anthropomorphic (and hence reduced) God: the idea that He would "interfere personally and specially on every occasion into existence on *one* of these [countless] worlds" "lowers him towards the level of our own humble intellects" (154, 156). Chambers does try to write reverently and non-offensively about God throughout the work, and it is important to note that his development hypothesis is not atheistic—at most, agnostic—but critics widely perceived *Vestiges* as "lacking the enthusiasm of a strong personal faith."<sup>411</sup> *Vestiges* made God unnecessary for human and scientific pursuit of knowledge, particularly about the origins and development of

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<sup>410</sup> Gilbert, 204; Vanden Bossche and Haigwood, 27.

<sup>411</sup> Qtn. from Secord, "Introduction," xxiii.

Earth. More radically, however, it presents humanity as no more in God's image, and occupying no more of a privileged position to commune with God, than any other species.<sup>412</sup>

EBB held broadminded views about religion, but still had deeply Christian beliefs. She was known in her lifetime as a "deeply religious poet," so much so that John Kenyon was worried early in her career that her religiosity would harm her popularity, but in fact the religious earnestness that came across in her writing only broadened her appeal to her readership.<sup>413</sup> Her faith grew and changed with her, particularly during a crisis of faith after her favorite brother, Edward, but affectionately called Bro, drowned in 1840.<sup>414</sup> A year later, she wrote that she was "drawn by all sorts of spiritual manifestation," a claim that she upheld as she "agreed to marry Robert Browning in an Anglican church...and they baptized their only child in the French Lutheran Church; she records sharing Communion with the Presbyterians; and when in Rome on Christmas Day, the Brownings attended mass at St. Peter's."<sup>415</sup> EBB's personal faith inevitably bled into her poetry, but her religion in her poetry can be described more as intellectually engaged than devotional.<sup>416</sup> Deeply interested in the connection between religion and politics, EBB saw that "religion is central to any thinking about the social order and the ways in which dominant power systems maintain their authority"; she found that her interest in religious multiplicity translated into a distaste for "religious doctrine which sought to close down freedom and the right of choice."<sup>417</sup> Religion

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<sup>412</sup> As Raub puts it, as "no different than that of the shell-fish" (290).

<sup>413</sup> Hewlett, 95; Lewis, 2. American and late Victorian critics in particular emphasized her religion (Taplin, 411).

<sup>414</sup> Hewlett, 71.

<sup>415</sup> EBB to Henrietta Cook [1 April 1852] (*BC*, XVIII, 85); Lewis, 12.

<sup>416</sup> Dieleman, 136.

<sup>417</sup> Avery, "Telling It Slant," 417.

and the practice of writing poetry were also intertwined for EBB, as she saw Christianity as containing “unspeakable poetry.”<sup>418</sup>

Despite EBB’s broadmindedness, humanism, and analytical approach to religious subjects, she seems to have held dear some religious doctrines that she could not reconcile with the religious schema presented in *Vestiges*. Throughout, *Aurora Leigh* persistently associates atheism with false and foolish ideas, such as Wolf’s views on the *Iliad* and the nebular hypothesis that suggests the universe just “fell out” “fortuitous[ly]” (5.1254-57). Aurora and Romney are both religious, if not orthodox. In a sense, Aurora has her origins in religion, as her father first noticed her mother when the latter took part in a religious parade (1.78-91); over the course of the narrative, she develops a deeply held Christian vision (7.1027-39), even though she continues to practice her “prayers without the vicar” (1.700). Aurora passionately declares to Lady Waldemar, “Apologise for atheism, not love! / For me, I do believe in love, and God” (3.477-78), and the book ends with her religious vision of the New Jerusalem. Romney, despite being a Socialist, is no atheist: he attempts to help Marian “to snatch her soul from atheism” (3.1229), consistently endorses the Genesis narrative when discussing the origins of humankind (2.167, 4.109-16), and preaches the omnipotence, omnibenevolence, and omnipresence of God (3.1206-9). Aurora likewise agrees that “God is not too great for little cares,” unlike the God in *Vestiges* who is too powerful to have any kind of direct involvement in human life—or any life, for that matter (5.561). Romney and Aurora both implicitly oppose the uniformitarian geological vision made prominent by Cuvier, Lyell, and Chambers: Romney claims for Earth the Ussherian age of “six thousand years” (2.167) and Aurora meditates on the creation of humanity as the culmination of God’s Creative process:

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<sup>418</sup> Qtd. in Dieleman, 140.

...Six days' work;  
The last day shutting 'twixt its dawn and eve  
The whole work bettered of the previous five!  
Since God collected and resumed in man  
The firmaments, the strata, and the lights,  
Fish, fowl, beast, and insect, – all their trains  
Of various life caught back upon His arm,  
Reorganised, and constituted MAN,  
The microcosm, the adding up of works, –  
Within whose fluttering nostrils, then at last  
Consummating Himself the Maker sighed,  
As some strong winner at the foot-race sighs  
Touching the goal. (6.149-61)

Not only are humans more than just an evolutionary stage like any other, as *Vestiges* would have it, but they are clearly made in God's image and complete Creation. Aurora laments the notion that her contemporaries, as they "define a man," "...want the beast's part now, / And tire of the angel's," an accusation that seems directed at the author and supporters of *Vestiges* (7.1007, 1005-6). She goes on to critique those thinkers "who waste their souls in working out / Life's problem on these sands betwixt two tides / Concluding, – 'Give us the oyster's part, in death'," the oyster frequently being considered the lowest form of animal life in natural history systems (7.1024-26).<sup>419</sup> At no point in *Aurora Leigh* does EBB raise the argument that humans are not biological creatures; rather, her characters consistently subscribe to a Cartesian dualist vision of the human body, with the real person being "the conscious and eternal soul / With all its ends, and not the outside life, / The parcel-man, the doublet of the flesh" (3.284-86). And so, Aurora concludes, "'Tis impossible / To get at men excepting through their souls, / However open their carnivorous jaws" (8.537-39). The carnivore exists, but it is subservient to the spirit. The idea of the spirit being divorced from the flesh is abhorrent to both Romney and Aurora, as is the notion of a natural law that is not divinely guided; Romney says that there

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<sup>419</sup> Donaldson, 309 n59.



Subsist no rules of life outside of life,  
No perfect manners, without Christian souls:  
The Christ himself had been no Lawgiver  
Unless He had given the life, too, with the law. (9.870-73)

The passage reinforces the notion of the divinity of Christ, a religious tenet that EBB personally saw as non-negotiable.<sup>420</sup> Aurora firmly takes a stance against *Vestiges*, as represented in books that provoke religious crisis, which she here describes in the language of drowning, language that EBB could not have taken lightly, given Bro's fate:

...with some struggle, indeed,  
Among the breakers, some hard swimming through  
The deeps – I lost breath in my soul sometimes  
And cried, 'God save me if there's any God,'  
But, even so, God saved me; and, being dashed  
From error on to error, every turn  
Still brought me nearer to the central truth. (1.794-800)

This passage of struggling with overwhelming doubt recalls EBB's estimation of *Vestiges* in her January 1845 letter to Kenyon: *Vestiges* tied a knot—it was powerful and persuasive—but not a "love-knot"—it bound without inspiring positivity or admiration, threatened without enticing.

Perhaps the most significant passage in *Aurora Leigh*'s rejection of *Vestiges*'s religious schema comes toward the end of Book 5. Aurora reflects on contemporaneous philosophies by contrasting their unsatisfying rationalism with the earnest beliefs of pagans

A pagan, kissing for a step of Pan  
The wild-goat's hoof-print on the loamy down,  
Exceeds our modern thinker who turns back  
The strata . . . granite, limestone, coal, and clay,  
Concluding coldly with, "Here's law! where's God?" (5.1115-19)

Although the pagan might have been deluded in taking natural phenomena as signs of divinity, this kind of belief system is preferable to modern scientific inquiry, which has gone

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<sup>420</sup> Lewis, 12.

too far in looking for law on Earth instead—and then construing natural signs as a denial of God’s presence. “Pan” is a particularly charged figure here, representative of the classical dispensation as a whole as Triton is for Wordsworth in “The World Is Too Much with Us” (1807), in part because “pan” also means “all.” Pan is a figure with which EBB demonstrates discomfort over the course of her poetic career, perhaps because of the lascivious goat-god’s association with male poets’ inspiration and creation, regardless of the appropriation of nature and deprivileging of the feminine that are endorsed by the Pan myth.<sup>421</sup> In EBB’s *Poems* of 1844, she insisted “The Dead Pan” be placed last in volume two for emphasis; in that poem, the refrain “Pan is dead” changes from a lament for the deaths of multiple Greek gods to a celebration of the ascent of Christ—into Heaven and into Western culture.<sup>422</sup> Note that in the above passage from *Aurora Leigh* Christianity is not presented as a stage in the inquiry between the classical and the modern or between the natural and the divine; it is almost as though modern thinkers have skipped a step, the most important step for Aurora and for EBB in moving beyond an early form of natural theology. Geology is targeted for epitomizing the failings in modern inquiry, and the strata that such explorations expose are quotidian, a sharp contrast to the progression of precious stones at the end of the verse-novel that also compose the foundations of New Jerusalem in Revelation 21:18-20: jasper, sapphire, chalcedony, and amethyst (9. 962-64).

If classical and modern thinkers are antithetical but both short-sighted, largely because of misplaced religious loyalties, Aurora the poet represents the way out of the

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<sup>421</sup> Morlier, 259, 271.

<sup>422</sup> Morlier, 258. According to an early Christian legend, “at the moment of Christ’s crucifixion, a wail was heard on the Aegean Sea calling ‘Pan is dead’”; one interpretation of this cry takes “the wail heard on the Aegean Sea [to proclaim] that Christ has killed the pagan gods by his martyrdom,” an interpretation that EBB seems to draw on for “The Dead Pan” (Morlier, 262).

conundrum. When she first came to England, she felt abandoned by God (1.659-60) but learns to find Him in nature; gesturing to the beauty of the English countryside as evidence, she declares to Romney, “And see! Is God not with us on the earth? / And shall we put Him down by aught we do?” (1.1135-36). Nature must be appreciated as evidence of God, and God must be found there by the poet—not denied by the scientist.<sup>423</sup>

*The Politics of Socialism, Secular and Christian*

Closely related to the issue of religion in *Vestiges* and *Aurora Leigh* is that of politics. In *Aurora Leigh*, EBB takes issue with the imposition of a Socialist sociopolitical interpretative schema on areas traditionally reserved for religion, and positions the poet as the figure of interpretative authority over the scientist. *Vestiges* was taken up by Socialists as evidence that human beings are naturally biologically equal, a conclusion that could readily transfer from the natural to the social world. The leap from natural laws of development to social structures is not great; even much of the language is the same (think of the taxonomic categories of kingdom, class, order, family, etc.). Chambers writes about the undifferentiated universal mass in which all bodies in the universe originated: “The nebular hypothesis almost necessarily supposes matter to have originally formed one mass. We have seen that the same physical laws preside over the whole....the constitution of the whole was uniform” (27). Originally, everyone and everything is equal—even uniform—and unseparated. Chambers includes passages in *Vestiges* that say in a scientific context what radicals were saying in a social one: “No individual being is integral or independent; he is only part of an extensive piece of social mechanism” (353). He directly undercuts justifications for social hierarchy: “The inferior mind, full of rude energy and unregulated impulse, does not more require a

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<sup>423</sup> In 1840, EBB had identified nature in particular as an inspiration to poets because that “is where God is” (Qtd. in Hewlett, 81).

superior nature to act as its master and its mentor, than does the superior nature require to be surrounded by such rough elements on which to exercise its high endowments as a ruling and tutelary power” (353). Despite all his statements that seem to support radical political agendas, however, Chambers’s solution for social ills is deeply unsatisfactory: “Thinking of all the contingencies of this world as to be in time melted into or lost in the greater system, to which the present is only subsidiary, let us wait the end with patience, and be of good cheer” (386). Personally, Chambers believed that development in nature provided evidence for inevitable political progress as well, though he did not go so far as to endorse Socialist agendas.<sup>424</sup>

Mid-century Socialists saw science in general, and *Vestiges* in particular, as a means to deprivilege those in power, as progressivist evolutionary theory could discredit the traditional idea that God created a hierarchal universe and that all individuals should stay in their divinely-appointed roles; in *Vestiges*, change is inherent to the progress of the universe.<sup>425</sup> In the 1820s and 30s, London working-class districts were Socialist strongholds; by the 1840s, frustrated and disillusioned working-class Socialists increasingly turned to atheism.<sup>426</sup> As Desmond observes, “The confrontationist policy of the atheists led them to place science (‘systematized facts’) in opposition to religion (‘systematized folly’) for strategic reasons.”<sup>427</sup> At this point, English Christian Socialism, of which Charles Kingsley was a prominent proponent, increasingly garnered public interest. Christian Socialists intended “not to destroy the present social system and build anew but rather to eliminate

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<sup>424</sup> Bowler, 134.

<sup>425</sup> Bowler, 126-27.

<sup>426</sup> English numbered Socialists at half a million out of a population of sixteen million in 1839. See Desmond, “Artisan Resistance and Evolution,” 82, 85.

<sup>427</sup> Desmond, “Artisan Resistance and Evolution,” 90.

some of its inequalities and harsh features...considered inconsistent with Christian principles,” in contrast to French atheist Socialists, such as Charles Fourier, who critiqued harm done to workers by laissez-faire policies<sup>428</sup>:

In place of competition he proposed to substitute cooperation and advocated a new system which, he thought, would allow a fuller expression of human impulses. According to his plan, society was to be divided into self-sufficient economic units called *phalanges*, each having about sixteen hundred persons, who were to be allowed to devote themselves to any occupations they found congenial.<sup>429</sup>

*Aurora Leigh* is persistently hard on Fourier, and demonstrates the impossibility of implementing Socialist doctrines, no matter how small the scale or Christian the intent.

EBB was a Whig in sympathy with the dominant liberal ideology of her age, believing that the suffering of the oppressed and disenfranchised needed to be ameliorated politically.<sup>430</sup> Her more specific political positions tend to be nuanced: she saw herself as a democrat and egalitarian and she was invested in Italian revolution, but she also supported the restoration of French monarchy (because she focused on the overwhelmingly popular vote that supported Louis Napoleon’s coup d’état). Consistently throughout her life, in spite of her political broadmindedness, she has nothing good to say about Socialism or Socialists. Her vehemence about the subject, and frequency discussing it, increased in the early 1850s, when she was planning *Aurora Leigh* at the same time that Socialists were using people’s editions of *Vestiges* to forward their causes. Socialism, she writes in letters to family and friends, interferes with the progress of republicanism<sup>431</sup>; she is impatient with Socialism

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<sup>428</sup> On Fourier’s principles, see Blaug, ix. On Christian Socialists, see Taplin, 328.

<sup>429</sup> Taplin, 327.

<sup>430</sup> Avery, “Telling It Slant,” 405; Forster, 217-19; Hewlett, 11-12.

<sup>431</sup> EBB to Arabella Moulton-Barrett [4 July 1848] (*BC*, XV, 105).

because she believes it to be impossible to institute or realize “out of a dream.”<sup>432</sup> EBB was disturbed by Socialists’ goal of altering “the elemental conditions of humanity” by eliminating competition among groups and individuals, “none of them seeing that antagonism is necessary to all progress”; because of her Christian faith, she could not believe “in <purification> without suffering, in progress without struggle, in virtue without temptation.”<sup>433</sup> Perhaps her most eloquent denouncement of Socialism follows: “I love liberty so intensely that I hate Socialism. I hold it to be the most desecrating & dishonoring to Humanity, of all creeds. I would rather (for *me*) live under the absolutism of Nicolas of Russia, than in a Fourier-machine, with my individuality sucked out of me by a social air-pump.”<sup>434</sup> Her fear here has to do with the way that Socialist ideology leaves no place for individuality. For EBB, Socialism is a quieting of the poetic voice, even of the ability to recognize the value of the individual poetic dialect. She had kind things to say about individual Socialists, however, such as Margaret Fuller and Charles Kingsley (perhaps the model for the character of Romney), even writing of the latter “few men have pleased me more.”<sup>435</sup>

Romney Leigh is presented from early in *Aurora Leigh* as being plagued by guilt at his class privilege. His inheritance is described as a “nightmare [that] sate upon his youth” and tormented him “with a ghastly sense / Of universal hideous want and wrong / To

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<sup>432</sup> Qtn. from EBB to Isa Blagden [10 November 1850] (*BC*, XVI, 228-29). See also *BC*, XVI, 228-29 and XV, 105.

<sup>433</sup> EBB to Julia Martin [27 February 1852] (*BC*, XVIII, 42-43); EBB to Isa Blagden [10 November 1850] (*BC*, XVI, 228-29).

<sup>434</sup> EBB to Mary Russell Mitford [June 14-15 1850] (*BC*, XVI, 138); original emphasis.

<sup>435</sup> EBB to Eliza Anne Ogilvy [3 September 1852] (*BC*, XVIII, 208). See also *BC*, XVIII, 42-43 and XVI, 143. On Kingsley as Romney, see Kaplan, 30-31; Laird, 355.

incriminate possession” (1.517, 519-21). As discussed earlier in this chapter, Romney is clearly no atheist; he works to turn his ancestral home into a phalanstery “christianised from Fourier’s own,” mainly, it seems, by rejecting the notion of free love in these communes (5. 784, 735-38). His project soon fails, as the Shropshire locals and imported phalansterians alike participate in burning Leigh Hall to the ground (8. 917-18, 961-63). His Socialist projects’ failure arises in part from his inability to adequately judge the needs and capacities of those he brings into his commune, as he acknowledges afterwards:

My vain phalanstery dissolved itself;  
My men and women of disordered lives,  
I brought in orderly to dine and sleep,  
Broke up those waxen masks I made them wear,  
With fierce contortions of the natural face, –  
And cursed me for my tyrannous constraint  
In forcing crooked creatures to live straight. (8.888-94)

Romney here finds that it is futile to alter appearances rather than nature; nature inexorably asserts itself in the end. The fault does not lie solely with the poor’s character, however; Romney also fails because his heart is not truly in the projects he commits himself to. Both Aurora and Lady Waldemar critique Romney for his hyperrationality. Aurora describes him as

Liv[ing] by diagrams,  
And cross[ing] out the spontaneities  
Of all his individual, personal life  
With formal universals. (3.744-47)

He may be a writer, but as a precise bookkeeper rather than an inspired poet, like Aurora. Before marrying Marian to achieve an ideological end, Lady Waldemar wants him to “take heed, / This virtuous act must have a patent weight, / Or loses half its virtue” (3.635-42). In his Christian Socialist mode, Romney is cold and calculating rather than the passionate man of Books 8 and 9, which we are led to believe is his authentic self. In trying to love everyone,

making “an almshouse of his heart, / Which ever since is loose upon the latch / For those who pull the string,” he ends up truly loving and helping no one (5.576-78). His Socialist passions are described as a kind of mania, taking him away from the more devotional passions of nature and God that Aurora endorses (3.584-99); commenting on Romney’s proposal of Book 2, Aurora notes the disjunction between her cousin who is “overfull / Of what is,” while she is “haply, overbold / For what might be” (1.1108-10). One would assume that a social activist would be focused on “what might be,” on the change and progress, but it seems that Romney never looks for grander achievements than immediate “practical stuff of partial good” (2.1225). As Kenneth Burke would put it, the “social motives implicit” in verbal systems always need to be interrogated, as they form the bond between intentions and effects, between words and behaviors.<sup>436</sup>

By the end, blind, homeless, and publicly humiliated, Romney acknowledges “Fourier’s void” (9.868), the same conclusion that Aurora had come to years before when she told him “your Fouriers failed, / Because not poets enough to understand / That life develops from within” (2.483-85). Too pragmatic, too focused on the conditions of physical life, Socialism overlooks the importance of the mind and spirit. Interestingly, the home that Aurora builds in Italy resembles a phalanstery built on the Fourier model: a heterogeneous group of people, all coming together to seek shelter from the overly harsh society outside its walls, cooperating while pursuing their own interests and sharing resources. It is perhaps the way that these ends are achieved in Aurora’s home that makes the difference: Aurora, Romney, Marian, and her son are not fitted into a system, but remain distinct individuals seeking their commune of sorts naturally and spontaneously.<sup>437</sup> At times the critique of

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<sup>436</sup> Burke, 378.



Socialism in *Aurora Leigh* does treat Romney and Aurora as “not living characters but mouthpieces for the expression of many of the author’s ideas,” but it is inarguable that EBB’s message is clear and decisive: no Socialism, springing from either *Vestigian* secularism or Christian motives, can be realized successfully.<sup>438</sup>

*Progressive Development: The Individual vs. Species, the Scientist vs. Poet*

Chambers’s *Vestiges*, as previously mentioned in this chapter, can be seen as a scientific *Bildungsroman*, presenting a narrative history that tracks the growth of Earth from its nebular origins “through the various stages which we see in...rudimental” life, developing with increasing “degrees of perfectness” (20, 240). Chambers’s vision reflects the period’s Whig faith in constant, linear progress. Immensely optimistic in a time marked by vast and unprecedented social changes, Whigs tended to view history as at a high point at the current moment, the culmination and apex of time’s movement onward and upward.<sup>439</sup> Chambers’s system is one that treats the current moment on Earth as the most perfect and humans as the highest form of life, that “best adapted to the present state of things in the world” (276). But Chambers concludes that natural processes “are *still and at present in progress*” on the Earth (21; original emphasis). Humanity is not the end type of nature, “but the initial of the grand crowning type,” to be followed by “species superior to us in organization, purer in feeling, more powerful in device and act, and who shall take a rule over us....There may then be occasion for a nobler type of humanity, which shall complete the zoological circle on this planet, and realize some of the dreams of the purest spirits of the present race” (276).<sup>440</sup> It is

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<sup>437</sup> The importance of means versus ends in the Socialist debate is suggested by Donaldson, 300 n1.

<sup>438</sup> Taplin, 333.

<sup>439</sup> Millhauser, *Just Before Darwin*, 78.

<sup>440</sup> Chambers’s ideas here have pronounced echoes in the Epilogue of *In Memoriam*.

easy here to see the influence of the rhetorical figure of incrementum (a progressive or ordered list) in Whig ideology and *Vestiges*'s developmental system: both have a positive linear trajectory.

Simon Avery has noted that in the 1820s and 30s, particularly leading up to the passage of the First Reform Bill, EBB's writing demonstrates Whig ideology; in the 1840s and 50s, however, "she became more *cautious* and *wary* about the power of history as a political tool as time went on. Indeed, this is particularly true of her post-1844 writings when her initial optimism about the idea of progress became much more tempered and qualified."<sup>441</sup> Her poetry of the 1840s in particular demonstrates her questioning of whether the impact on individuals of such nineteenth-century institutions as industrialization and slavery really upheld Whig notions of development and progress.<sup>442</sup> *Aurora Leigh* epitomizes EBB's mixed feelings about progress: Aurora develops intellectually and morally, and the poem holds out hope for individuals such as Marian who are oppressed by society's ills, but the work also critiques both Whig notions of social progress and Chambers's particular vision of development.

It seems that by Book 2, the proposal scene, Romney Leigh has read *Vestiges*, a reasonable assumption given that current events listed in Book 4 (lines 398-406) date the narrative events to 1846-48, which Aurora tells us in Book 3 was three years after the proposal (line 161). Evolution is not a positive process, Romney argues, and the idea of the human species developing into a higher form is not reassuring:

...Observe, – it had not much  
Consoled the race of mastodons to know,  
Before they went to fossil, that anon

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<sup>441</sup> Avery, "Mapping Political History," 18-20, qtn. from 18.

<sup>442</sup> Avery, "Mapping Political History," 26.

Their place would quicken with the elephant;  
    They were not elephants but mastodons;  
    And I, a man, as men are now and not  
    As men may be hereafter, feel with men  
    In the agonising present. (2.294-304)

The mastodon, a new symbol for Cuvier and Byron (as discussed in chapter 1) has here become a broadly accepted figure for extinction.<sup>443</sup> A better state in the future is not comforting for those who live and suffer in the present, particularly when it leaves modern humans behind. EBB's strategic use of antitheses is clear in this passage. The mastodon and elephant are paired without a moderating, intermediate form; mammoths are not even mentioned as a third species that would make the antithesis more closely resemble an incrementum. Moreover, the present and future are presented as oppositional states, without a progressive vision that proceeds by stages. The contrast highlights Romney's extreme thinking, but also his failure to imagine transitions. Romney is punished, in the end, by the loss of his home and sight for his chosen method of instituting his social vision, but not necessarily for the mission itself. Romney aspires to improve society through sheer force of will, "to take the world upon [his] back" in order to "make earth over again" (4.1076-80, 3.118-20). In trying to skip ahead in the evolutionary schema, he has failed to realize that progress comes by discrete steps rather than by leaps. The poor—represented so negatively in groups throughout the book, as resurrected corpses (4.547-50), snakes (4.556-73), "crooked creatures" (8.894), and the stuff of nightmares (4.598)—are the products of such terrible conditions that they cannot be improved as a group suddenly.<sup>444</sup> Time is required to achieve

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<sup>443</sup> The mastodon also appears as a symbol of lost times in Tennyson's "The Epic," which frames "Morte d'Arthur" (1842).

<sup>444</sup> EBB has been taken to task for her presentation of the working class in *Aurora Leigh*. Shannon and Stone note that EBB uses the language of contemporaneous social reformers and anxious middle-class Victorians in the work, which may or may not reflect her personal views (42-49; *Elizabeth Barrett Browning*, 163).

such ends; “seven generations,” in Romney’s final estimation (8.742). In the meantime, however, Marian and others like her are capable of improvement as individuals. Lady Waldemar, in a conversation with Marian later recounted to Aurora, denies the possibility of social change by denying the possibility of species change:

You take a pink,  
You dig about its roots and water it  
And so improve it to a garden-pink,  
But will not change it to a heliotrope,  
The kind remains. (6.1044-48)

But Lady Waldemar is proved wrong by the end of the book, as Marian, transformed by her maternity, is in fact improved and evolved.<sup>445</sup> Evolution is possible, but only through individuals, not through species, and the steps are distinct rather than inherently gradated.

Aurora defines her take on evolutionary progress differently than Romney does, focusing on the role of poets in creating a more useful worldview than scientists and philosophers.<sup>446</sup> Like Romney, Aurora uses the mastodon as a symbol; in her case, it represents her father’s books, the collected wisdom and knowledge of past generations, as she describes herself

...creeping in and out  
Among the giant fossils of my past,  
Like some small nimble mouse between the ribs  
Of a mastodon. (1.835-38)

Romney and Aurora share a paleontological vocabulary, but use it to different ends: Romney for a social vision, Aurora for a personal and intellectual one. Here the mastodon contrasts not with the exotic elephant but with the quotidian mouse; the mouse, in turn, has a fluid movement, crawling in and out of the fossil bones, unlike the elephant, which called up in

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<sup>445</sup> Such spiritual evolution, Ridenour argues, has resonances both with Browning’s *Paracelsus* and Tennyson’s “Locksley Hall” (27). See also Thorne-Murphy (242) on Aurora’s vision of spiritual development.

<sup>446</sup> Giles notes that the narrative serves as a marker of Aurora’s awareness that she will evolve (125).

abstraction by Romney, seems to stand stiffly beside the mastodon like a museum display. Aurora finds the idea that her own time is just a step in the development in the world to be unproductive because it suggests that the current moment is meaningless from the perspective of the future:

An age of mere transition, meaning nought  
Except that what succeeds must shame it quite  
If God please. That's wrong thinking, to my mind,  
And wrong thoughts make poor poems. (5.163-66)

Transition is unimaginable because it necessarily means contrast—the present with the future—as a human can live in only one moment at a time, not in a blur of moments building seamlessly to the future. The current moment is exactly what poets and philosophers should be focused on, both in EBB's and Aurora's opinions, "to represent" "this live, throbbing age" (5.200, 203). Aurora argues that poets rather than scientific thinkers like Chambers are most capable of representing humankind and its place in the world accurately. She asserts that poets are "The only speakers of essential truth, / Opposed to relative, comparative, / And temporal truths,"

The only teachers who instruct mankind  
From just a shadow on the charnel-wall  
To find man's veritable stature out  
Erect, sublime, – the measure of a man,  
And that's the measure of an angel, says  
The apostle. Ay. (1.859-62, 64-69)

Chambers ridiculed the view that humans were one step below angels and so more like them than orangutans, to which they bear a closer "resemblance of analogy" and so a clear "certain relation" (266).<sup>447</sup> As the foregoing passage indicates, poetry not only exceeds the relativistic and time-bound perspective of *Vestiges*, but poets, unlike Chambers, treat humanity as

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<sup>447</sup> The angel was an image that EBB engaged with repeatedly over her career (Riede, 91).

divine.<sup>448</sup> The mechanistic world presented in *Vestiges* was, as Millhauser describes it, one “in which man was an animal and an animal was a chemical machine—a world in which statistics took the place of miracle, and probability of an immortal soul.”<sup>449</sup> Such a world and such a vision of humanity are repugnant to Aurora, who criticizes Romney for trying to “feel by millions” (3.750).<sup>450</sup> After all, *Aurora Leigh* is the story of the development of the narrator, not of the mass of Italian émigrés, female poets, or Victorians in general. The poet addresses more than physical forms, like those Chambers relies on for his argument about the relatedness of all animal life, and realizes that “...Without the spiritual, observe, / The natural’s impossible, – no form, / No motion: without sensuous, spiritual / Is inappreciable” (7.773-76). As problematic as Aurora’s renunciation of direct, personal intervention in social problems like poverty might be, as she claims that she is “incapable to loose the knot / Of social questions,” (2.339-40), her turn to poetry is a turn to individualism.<sup>451</sup> And with this turn to individualism, comes a turn to the individual’s relationship with God and nature, which are necessary for Aurora “to be a complete artist and...a complete person.”<sup>452</sup> She comes to claim—and Romney to agree with her—that

’Tis impossible  
To get at men excepting through their souls,  
However open their carnivorous jaws;  
And poets get directlier at the soul,  
Than any of your economists: – for which

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<sup>448</sup> EBB sees poets as prophets for the age; see Reynolds, 13; Thorne-Murphy, 242.

<sup>449</sup> Millhauser, *Just Before Darwin*, 164.

<sup>450</sup> “EBB often criticized the socialists’ focus on people mainly as members of groups” (Donaldson, 277 n27). Schatz further notes that Romney’s failure is that “he does not understand that the personal is political, that an individual’s actions towards other individuals are the basis for social change” (96).

<sup>451</sup> Reynolds comments that “In *Aurora Leigh* the woman question and the discussion concerning socialism are both made subservient to the reiterated arguments for individual liberty and self-recognition” (18).

<sup>452</sup> Camp, 62.

You must not overlook the poet's work  
When scheming for the world's necessities. (8.537-43)

A poet's place is to address the soul of an individual reader and enlighten him or her;  
combined with Romney's social mindedness in their union at the end of the narrative, such a  
human-driven and individual-centered vision presents EBB's alternative to *Vestiges*'s system  
of development.

And so it might be appropriate to conclude a discussion of EBB's position regarding  
*Vestiges*, as she took her place in the cultural and literary conversation so much dominated by  
male voices, with words of Aurora's girlhood, as she works through her anxiety caused by  
reading particularly troublesome books:

...All this anguish in the thick of men's opinions . . . press and counterpress,  
Now up, now down, now underfoot, and now  
Emergent . . . all the best of it, perhaps,  
But throws you back upon a noble trust  
And use of your own instinct, – merely proves  
Pure reason stronger than bare inference  
At strongest. (1.801-8)

EBB seems to be demonstrating in *Aurora Leigh* that she thoroughly understands the system  
that Chambers builds in *Vestiges*, as well as its implications on a number of social, natural,  
and philosophical levels; unlike Tennyson, however, she finds *Vestiges*'s “bare inference[s]”  
(a phrase used by Chambers in the 1853 preface to critique the unsatisfying generalities of  
scriptural geologists, and now turned on him) unconvincing and ultimately irreconcilable  
with what her “own instinct” and “pure reason” tell her about the world in which she found  
herself.

#### **CONTINUING INFLUENCE: ROBERT BROWNING AND CHARLES DARWIN**

The obvious question to be asked of a study of EBB's contribution to a literary  
cultural conversation about Chambers's *Vestiges of the Natural History of Creation* would

be, what about Robert Browning? What was his response to *Vestiges*, the ideological issues that it raised, the cultural viewpoints that it shifted, and the epistemological claims that it made? As scholarship on nineteenth-century science and literature has been so dominated by studies of Darwin's influence, most scholarship on Browning and evolutionary theory has similarly focused on Darwinian theory, mostly arguing that it had at best extremely limited influence on Browning's poetry. A handful of critics, however, have focused particularly on the role Chambers's ideas might have played in Browning's literary productions. Of particular note are Browning's *Luria* (1846), in which a tangential passage (V.235-42) directly denies Chambers's claim that God engaged in one act of creation, leaving development to proceed according to natural laws; and *Christmas Eve and Easter Day* (1850), in which Browning's portrayal of the German professor demonstrates his rejection of scientific claims to religious authority.<sup>453</sup>

By far, though, the Browning poem most frequently discussed in relation to evolutionary theory is "Caliban upon Setebos: Natural Theology in the Island" (1864, three years after EBB's death). In this dramatic monologue, Caliban, the character from Shakespeare's *The Tempest*, muses on the vindictiveness of the god Setebos. The subtitle and the epigraph, "Thou thoughtest that I was altogether such a one as thyself" (Psalm 50.21)—which stands as a critique in His voice of an anthropomorphic vision of God—have long been taken to indicate Browning's rejection of the project of natural theology as limited and limiting, solipsistic even in its attempts to know the Almighty through scientific study.<sup>454</sup> Chambers, as the anonymous author of *Vestiges*, had in 1846 had expressed his belief that introspection and examination of nature could offer insight into God's workings and

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<sup>453</sup> Millhauser, "Robert Browning," 16; Stevenson, 149-50.

<sup>454</sup> Erickson, 218; Peterfreund, 323, 326.



characteristics, making him the figure most associated with the natural theological project in the early 1860s, when the taint of atheism had faded from his work and Darwin surpassed his theory in technical expertise.<sup>455</sup> Browning was never convinced that the study of nature could provide insights into the human condition or God's nature, and by his personal belief in an inherently loving God, Caliban's theology and cosmogony (and by extension that of natural theologians and Chambers) must be found lacking.<sup>456</sup> Browning's Caliban has often been thought of as a Darwinian missing link, the evolutionary step between an ape and a primate, but it must be remembered that at the time Browning wrote the monologue, Darwin had not yet published his endorsement of the theory of humanity's primate descent—that would come in 1871 with *The Descent of Man*.<sup>457</sup> Chambers's earlier *Vestiges*, in addition to offering the theory of primate descent to popular audiences, also frequently recurred to the notion of intermediate fossil species, containing the characteristics of multiple modern species. Caliban for both Shakespeare and Browning is not just a primitive human or racial Other, but a man-fish, an evolutionary intermediary.<sup>458</sup> Stuart Peterfreund has offered the most persuasive interpretation of "Caliban upon Setebos" as critiquing *Vestiges* in this vein, calling Caliban himself a vestige of the natural history of creation—a living fossil.<sup>459</sup> So if Caliban is a *Vestigian* vestige, the island of the subtitle can be read as Victorian Britain,

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<sup>455</sup> Campbell, 206; Peterfreund, 318-19.

<sup>456</sup> Loesberg, 871. Browning believed that the divine was accessible only beyond, not through, nature (Poston 429).

<sup>457</sup> See, for example, Howard and Timko.

<sup>458</sup> See Trinculo's speech in *The Tempest* II.ii.24-36. The man-fish was an evolutionary symbol for Hopkins and Arnold as well; see Chambers, "Spiritual Incompleteness," 123. See also Millhauser, "Literary Impact," 226.

<sup>459</sup> Peterfreund, 319.

wracked by natural theology and history debates in Browning's age.<sup>460</sup> Thus in *Caliban* Browning turns to an Early Modern literary work to make his own literary intervention in nineteenth-century cultural debates about science, obliquely voicing his ideas through that of a dramatic persona who bears the weight of Browning's message. In this strategy, he is apparently sharing a vision of literary intervention with *Aurora Leigh*, published nine years earlier.

Scholars of nineteenth-century literary, scientific, and cultural history still struggle to consider Chambers's contribution outside of the Darwinian context. *Vestiges* is often described by scholars as "anticipating" *On the Origin of Species*, "absorb[ing] a number of the roughest blows that might otherwise have fallen on Darwin's shoulders," and "open[ing] the way for Darwin's decidedly not anonymous, more respectable, and therefore more acceptable version of evolution."<sup>461</sup> These views of *Vestiges* are understandable, if Darwinism is acknowledged as the lens through which history is being viewed. But without such acknowledgement, the bias in this version of history is made invisible. As Secord has demonstrated persuasively, *Vestiges* may have been a more important influence on public debate about and understanding of evolutionary theory than *Origin*. Victorian contemporaries did not necessarily see Darwin as the pinnacle of scientific achievement of the century, but rather a respected scientific theorizer who was rephrasing Chambers's ideas.<sup>462</sup> Darwin was well aware of the importance of *Vestiges*, carefully following reviews through at least the sixth edition, strategizing about how to prevent the same critiques being leveled at his own

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<sup>460</sup> Peterfreund, 324.

<sup>461</sup> Choi, 286; Millhauser, *Just Before Darwin*, 5-6; Levine, 129.

<sup>462</sup> Bowler, 140.

work.<sup>463</sup> Darwin particularly tried to avoid progressivist phrasing because of his close study of Chambers's critical reception, making notes to use a term like "more complicated" instead of describing an organism as "higher" in its development.<sup>464</sup> Darwin's major success with *Origin* was not in convincing scientific or general readers of natural selection (it signally failed to do so), or in familiarizing readers with the notion of law-bound biological evolution (Chambers's *Vestiges* had accomplished that), but rather in restructuring public and professional discussion about evolution under the respectable umbrella of "Darwinism."<sup>465</sup> It is to such discussion that we turn in the next chapter, focusing particularly on Elizabeth Gaskell's *Sylvia's Lovers* (1863).

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<sup>463</sup> Secord, *Victorian Sensation*, 429, 431.

<sup>464</sup> Secord, *Victorian Sensation*, 433.

<sup>465</sup> Secord, *Victorian Sensation*, 514.

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### Chapter 3:

#### “Working through Darwin’s *Origin*: Elizabeth Gaskell’s *Sylvia’s Lovers* as a Novel of Evolutionary Despair”

In November 1859, Charles Darwin’s *On the Origin of Species by Means of Natural Selection* was first published; in that same month, Elizabeth Gaskell traveled to the Yorkshire coast to find inspiration for the novel project that ended up becoming *Sylvia’s Lovers* (1863). Gaskell’s *Wives and Daughters* (1864-65) is often discussed as partially inspired by Darwin, mostly because she remarked that the character of the heroic adventurer Roger Hamley was partly based on Charles Darwin, to whom she was related by marriage.<sup>466</sup> No scholars have more than mentioned the possibility that *Sylvia’s Lovers* might consider the implications of Darwinian theory. This omission could, in part, be due to *Wives and Daughters*’s generally positive take on natural history and those who practice it, whereas *Sylvia’s Lovers* is frequently described as “the saddest story [she] ever wrote.”<sup>467</sup> I argue that by the time that Gaskell worked through the doubts and depression inspired by Darwin’s *Origin*, she was able to write a novel of evolutionary triumph in *Wives and Daughters*; *Sylvia’s Lovers*, on the other hand, is the record of Gaskell’s own struggle with evolutionary theory.

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<sup>466</sup> See, for example, Corbett, 144-73; and Dewitt.

<sup>467</sup> This saying is attributed to Gaskell. See, for example, Foster, 161; and Gérin, 214. Foster does note, however, that the source of this quotation has never been firmly established (192 n63). For some examples of scholarship focusing on Gaskell’s positive attitudes towards naturalist practices in *Mary Barton* (1848), see King, “Taxonomical Cures”; and Coriale.

Recovering Gaskell's pessimism about Darwinian theory—and by that term I mean not only the words that Darwin published but also the cultural perceptions of his text and ideas—reveals complications in her supposedly confident theological views and links her writing with that of the likes of Mary Shelley (as discussed in chapter 1) and Thomas Hardy (as will be discussed). *Sylvia's Lovers*, Gaskell's most overlooked novel, contains her realizations that the human is diminished in a vision of deep geological time and that Darwin's vision of repetition with minor variations that may or may not successfully adapt to environmental pressures means that people are fated to suffer a repetition of tragedies premised on social and gender inequalities. Darwinian theory offers a number of examples to avoid simple antitheses that Jeanne Fahnestock notes can operate to push concepts apart to poles of opposition<sup>468</sup>; Darwin's vision of evolution is one that cannot allow large divisions in organisms or environments and instead presents a nearly infinitely gradated population. Gaskell resolves the seeming antitheses of the human world, such as the masculine and feminine, land and sea, commercial and rural, by thrusting her characters in the middle and forcing them to breach the gap through individual and communal identities, neither of which allow for simple irreconcilable oppositions.<sup>469</sup> Both Darwin and Gaskell, however, avoid giving direction or incrementum to their terms and so avoid any promise of development or dramatic change.<sup>470</sup>

Leo J. Henkin argues in *Darwinism in the English Novel* (1963) that it took until at least 1869—ten years after *Origin* was published—for British novelists to begin to “make use of Darwin's scientific doctrine,” once the controversy had died down, leading to what he

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<sup>468</sup> Fahnestock, 87.

<sup>469</sup> On overcoming antitheses in scientific arguments, see Fahnestock, 89-90.

<sup>470</sup> On the function of incrementum in scientific writing, see Fahnestock, 90-95.

sees as the height of the Darwinian novel from 1870 to 1890.<sup>471</sup> Henkin further argues that novels that made use of evolution and natural selection tended to be novels of religious disbelief that highlighted “the pitiless waste that marks the struggle for existence, and nature’s lack of concern for individuals”; this pessimism transitioned into the more optimistic scientific romances of the 1890s by H. G. Wells and others.<sup>472</sup> Although Darwin did try to emphasize a more positive view of evolutionary processes in *Origin*, natural selection can be interpreted pessimistically by focusing on the violence inherent in the theory.<sup>473</sup> As Gillian Beer points out, Darwinian evolution depends on “hyperproductivity, upon a fertility beyond use or number,” and selection of only a handful of those organisms to survive and reproduce—hardly an uplifting vision of nature.<sup>474</sup> Although Henkin points out some readers “have been led to attend more to the element of chance and conflict,” George Levine notes that “not all Victorians saw his world as so bleakly competitive or individualistic.”<sup>475</sup> This push and pull in critical interpretation of *Origin*’s impact suggests that any generalizations about Darwinian theory’s impact on Victorian society or on contemporaneous readers are neither useful nor accurate. Natural selection’s implications are so wide reaching, and *Origin* is such a substantial text, that processing the theory could be lengthy and difficult for an individual, and dramatically oppositional interpretations could arise quite easily.

Consequently, the arguments that Elizabeth Gaskell was not engaging in the lively debates

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<sup>471</sup> Qtn. from Henkin, 9. See also Henkin, 113.

<sup>472</sup> Henkin, 113-14, 260.

<sup>473</sup> Beer, *Darwin’s Plots*, xix; Henkin, 197.

<sup>474</sup> Beer, *Darwin’s Plots*, 13.

<sup>475</sup> Henkin, 221; Levine, *Darwin and the Novelists*, 10-11. Tennyson’s *In Memoriam* (1850) is instructive here, as the poem displays a tension about evolution’s implications, especially in the contrast between the despair in LX that Nature often only brings one out of fifty seeds to fruition and the optimistic conclusion focusing on humans’ spiritual progression.

that followed the publication of Darwin's *Origin*, or that her writing did not consider the implications of Darwinian theory until the more positive vision of *Wives and Daughters*, seem tenuous at best. A careful consideration of *Sylvia's Lovers* shows Gaskell applying some of the bleakest implications of Darwinian tropes to human society.

Darwinian tropes that have been discussed by literary critics in the past include chance, change and history, ecological and genealogical connections, abundance, and the denial of design and teleology.<sup>476</sup> Tina Young Choi notes that Darwinian contingency generated narrative structures with "multiple diverging trajectories and arrays of alternatives" that highlighted speculation and encouraged the productions of other writers.<sup>477</sup> Although it has become somewhat fashionable to deny or to minimize Darwin's influence, Darwin's assimilation of Victorian ideologies with respected scientific theory in language that any educated reader could understand facilitated his work's incorporation into literature.<sup>478</sup> As such, George Levine argues, Darwin "can be taken as the figure through whom the full implications of the developing authority of scientific thought began to be felt by modern nonscientific culture."<sup>479</sup> For Gaskell, a Dissenter immersed in intellectual life in the scientific hub of Manchester, Darwin's *Origin* offered generative, if disheartening, narrative possibilities.

In particular, I argue, Gaskell engaged with the logical, if nihilistic, conclusions of such Darwinian tropes as sexual division and competition, the adaptation of organisms to

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<sup>476</sup> Campbell, "Scientific Discovery," 59; Choi; Levine, *Darwin and the Novelists*, 14-20.

<sup>477</sup> Choi, 276. Levine lists such, at times contradictory, narratives, as including "progress, competition, individualism, eugenics, and the whole assortment of social developments associated with the rise of industrial and monopoly capitalism" (*Darwin and the Novelists*, 10).

<sup>478</sup> Beer, "Lineal Descendants," 280-81; Levine, *Darwin and the Novelists*, 3

<sup>479</sup> Levine, *Darwin and the Novelists*, 1.

their often harsh and destructive landscapes, and the nature and shape of time. In these cases, Gaskell demonstrates the bleakness of a Darwinian worldview and the despair Darwin's *Origin* could invoke in its readers. Her note of resistance to *Origin*-induced depression emerges when Gaskell tackles the issue of death and remembrance in considering what kind of narrative best serves humankind's needs, especially in the face of the contentiousness of natural selection. Darwin's *Origin* endorses evolutionary narratives in which humans are no longer privileged, a single generation's experiences are essentially meaningless, and very few organisms leave any records of their existence behind them. Gaskell, on the other hand, upholds oral tradition and the power of historical, fictional narratives to recover and recognize the value in human experience. *Sylvia's Lovers*, then, ultimately demonstrates the value of imaginative literature in working through evolutionary despair.

#### CHARLES DARWIN'S *ON THE ORIGIN OF SPECIES*

Preceding chapters in this dissertation demonstrate that Darwin's *On the Origin of Species* was not the first nineteenth-century presentation of evolutionary theory, or even the first popular version of the theory.<sup>480</sup> Charles Darwin was familiar with prior evolutionary theories from having read his grandfather's (Erasmus Darwin's) *Zoonomia; or, the Laws of Organic Life* (1794-96), Charles Lyell's discussion of Lamarckian theory in *Principles of Geology* (1830-33), and Thomas Malthus's theories of population dynamics in *An Essay on the Principle of Population* (1798, ed. 1826).<sup>481</sup> His theory differed from those that came before, Ernst Mayr observes, in that "his concept of evolution required a real genetic change

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<sup>480</sup> Campbell, "Why Was Darwin Believed?," 205.

<sup>481</sup> Richards, 49; Ruse, "Origin of the *Origin*," 2-3. Herbert and Norman note that Lyell's *Principles of Geology* was the most influential on Darwin's thought (130-31).

from generation to generation, a complete break” with the transformist theories of Lamarck, Chambers, and others.<sup>482</sup>

Darwin wrote up his famous voyage on the *H.M.S. Beagle* in what became one of the most popular travel books of the early Victorian era, making him a household name.<sup>483</sup> He further cemented his science credentials with work on barnacles.<sup>484</sup> After nearly twenty years of mulling over his observations and collecting information from correspondents around the world, Darwin published an “abstract” of his theory, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, on 24 November 1859.<sup>485</sup> Famously, Darwin was pushed into publishing earlier than he had anticipated because a young naturalist, Alfred Russel Wallace, sent him a manuscript in 1858 that outlined a theory of natural selection extremely similar to Darwin’s; rather than suppressing Wallace’s theory, Darwin had Wallace’s work and his own letters to scientific correspondents (which established his precedent for the theory) read to the Linnaean Society.<sup>486</sup> Darwin was anxious to get his ideas in print before Wallace could do so, and published *Origin* the following year. The first edition sold out on the day of its release, and “a second printing was issued a month later.”<sup>487</sup> By 1884, the year of his death, 24,000 copies

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<sup>482</sup> Mayr, xi.

<sup>483</sup> Ruse, “Origin of the *Origin*,” 6.

<sup>484</sup> See Stott for a description of the importance of Darwin’s study of barnacles in establishing his professional reputation.

<sup>485</sup> Cited hereafter parenthetically in the text as *Origin*. Mayr notes that this delay in publishing was caused by Darwin’s fear about receiving treatment similar to “the ridicule heaped on Chambers’s” *Vestiges* (xiv).

<sup>486</sup> Greene, 294. Depew suggests that Darwin had “to intervene in the delicate rhetorical situation created by receipt of Wallace’s paper that made the *Origin* a rhetorical performance on a public stage” (243).

<sup>487</sup> Mayr, vii.



of six editions of the *Origin* had been printed in England.<sup>488</sup> Today, most critics study the first edition of *Origin* (because of its historical interest; because it reads better, not being weighted down with revisions; and because revisions often pushed Darwin further down the path of Lamarckianism), even though the sixth and final edition (1872) was considered definitive at the end of the nineteenth century.<sup>489</sup>

### *Rhetorical and Historical Scholarship on Origin*

To come to terms with the body of criticism written on Darwin's *Origin of Species* is no easy task. Darwin himself is not just among the most written-about figures in history, but is probably discussed more than any other scientist.<sup>490</sup> Those scientists, historians, and rhetoricians who take Darwin for their subject are rarely immoderate in their praise for his accomplishment: *Origin* has been called "the most important book of science ever written," one that "continues to gain relevance to the things that matter most to humanity—from our own origins and behavior to every detail in the living environment on which our lives depend," "a triumph of scientific thought," and "a work of sustained genius."<sup>491</sup> A veritable Darwin industry exists in the field of rhetoric, and rhetorical analysis has in many ways come to dominate Darwin studies. While rhetoricians make a point of not losing sight of the *Origin*'s primary identity as an expository work of science, they nonetheless point out that it is clearly intended to persuade and employs a number of strategies to achieve that end.<sup>492</sup> For

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<sup>488</sup> Browne, 407.

<sup>489</sup> Qtn. from Ruse, "The Darwin Industry," 218. See also Ruse, "Origin of the *Origin*," 1. I follow current critical habit by referring to the first edition in my own analysis contained in this chapter.

<sup>490</sup> Wilson, xvi. Levine claims, "It is arguable that with the exception of Shakespeare, no figure in English culture has attracted more attention than Darwin," and that Darwin is "perhaps the most documented figure in world history" ("Reflections on Darwin," 223; *Darwin the Writer*, vi).

<sup>491</sup> Wilson, xv; Campbell, "Scientific Discovery," 58, 85.

these scholars, the language of the book is of equal importance to the ideas it contains.<sup>493</sup> In his autobiography, Darwin referred to *Origin* as “one long argument.”<sup>494</sup> James Wynn claims that chapters one through four of Darwin’s *Origin* are characterized by “mathematical argumentation,” which he identifies as a rhetorical strategy for establishing the theory’s “precision, rigor, and correctness” and warding off critiques<sup>495</sup>; chapters five through fourteen, however, are characterized by qualitative evidence.<sup>496</sup> John Angus Campbell, on the other hand, argues that the first five chapters are characterized by “a distinctively domestic and familiar air” to make general readers more open to be persuaded by Darwin’s more extreme ideas.<sup>497</sup> This authority, along with the clarity of writing, are the attributes of *Origin* that E. O. Wilson argues were responsible for turning the cultural tide in support of evolutionary theory.<sup>498</sup> The historical context in which Darwin wrote the *Origin* and in which it was received by the public is equally important to those trying to understand Darwin’s rhetorical strategies.<sup>499</sup> Several critics have also pointed out the literary elements of *Origin*.<sup>500</sup> As George Levine claims, Darwin accomplished his ends in *Origin* “by telling a story—an act of imagination that we would now call more tamely a thought experiment—built out of a

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<sup>492</sup> Bergmann, 79-81; Olby, 31; Schillingsburg, 223.

<sup>493</sup> Beer, *Darwin’s Plots*, 34, 46; Mistichelli, 265; Scheick, 271.

<sup>494</sup> Qtd. in Lewens, 317.

<sup>495</sup> Mayr notes that Darwin felt that “his forerunners had failed miserably to convince their readers because they minimized the difficulties” (xv).

<sup>496</sup> Wynn, qtn. from 82 (original emphasis), 96; see also 83.

<sup>497</sup> Campbell, “Why Was Darwin Believed?,” 219. Bergmann (83) makes a similar argument.

<sup>498</sup> Wilson, xv.

<sup>499</sup> Bergmann, 80; Campbell, “Scientific Discovery,” 59, and “Scientific Revolution,” 351-59; Dawson, 4; Levine, *Darwin and the Novelists*, 2; Schillingsburg, 225.

<sup>500</sup> Beer, *Darwin’s Plots*, 33; Bergmann, 86; Campbell, “Scientific Discovery,” 85; Depew, 251; King, “Reorienting the Scientific Frontier,” 159; Scheick, 279; Levine, *Darwin the Writer*, 77-100 and *Darwin and the Novelists*, 12, 17, 101, 210.

combination of actualism, ignorance, analogy, and strikingly subtle reasoning.”<sup>501</sup> Clearly this strategy is similar to the novelist’s project, as is his use of central metaphors to structure his narrative.

Darwin’s two most influential metaphors from the *Origin* are natural selection and the entangled bank. Although much of Darwin’s *Origin* is no longer considered scientifically valid, his sustained contribution to evolutionary theory is the idea of natural selection, which is metaphorical in that nature is not an agent capable of selection in the same way that human breeders artificially select traits in animals.<sup>502</sup> Darwin defines natural selection, in short, as the “preservation of favourable variations and the rejection of injurious variations” (81). This process entails the production of variability within organisms, and both the survival and successful reproduction of organisms that have variations helpful for success in the struggle for existence, helpful for adapting to the ever-changing conditions of life that they face. Natural selection can operate on individuals and on groups, and is a very slow process.<sup>503</sup> The trouble with the phrase “natural selection,” which critics have been pointing out since the 1860s, is its metaphorical quality: it suggests a conscious agency on the part of nature, a personification of a force that Darwin contrasts overtly with human selection.<sup>504</sup> As Levine observes, “If the *Origin* had been a novel, ‘Natural Selection’ would be the good woman, who is always helping others and usually gets to marry the hero. ‘Man’ the self-absorbed villain, exploits others for his own interests.”<sup>505</sup> This is because nature—and natural

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<sup>501</sup> Levine, *Darwin the Writer*, 94.

<sup>502</sup> Bowler, 7; Mayr, viii.

<sup>503</sup> Richards, 60, 64-65.

<sup>504</sup> Beer, *Darwin’s Plots*, 48; Levine, *Darwin the Writer*, 84; Mistichelli, 264; Richards, 64.

<sup>505</sup> Levine, *Darwin the Writer*, 87.

selection—is consistently presented as “morally and intellectually” superior to humankind—and domestic selection—because “she is not distracted by mere appearances.”<sup>506</sup> In some ways, this impartiality and justness attributed to natural selection allows Darwin to use nature as a surrogate for God, whose intervention Darwin eliminates from his theory of evolution.<sup>507</sup> And yet many contemporaries read the natural selection chapter in the *Origin* as promoting brutal competition.<sup>508</sup> Darwin’s famous concluding image of the “entangled bank” represents the interrelation of all living organisms; although the many plants and animals in any given ecosystem may seem to exist in a state of chaos, in fact they maintain a delicate balance shaped by the law of natural selection, acting over a vast period of time.<sup>509</sup> This is, as Levine puts it, “the famous last extended metaphor of the *Origin*.”<sup>510</sup> The closing passage of *Origin* “remain[ed] unchanged through the several editions of the *Origin*,” and the peaceful imagery of birds and insects flitting about the side of a river obscures the violence inherent in natural selection that the book is so explicit about earlier.<sup>511</sup>

Darwin’s *Origin* sparked a controversy that was “in large part carried on in reviews and articles in the press, or in lectures and discussions which were in their turn reported in the newspapers.”<sup>512</sup> Darwin took the critiques of his theory, especially from those he counted

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<sup>506</sup> Levine, *Darwin the Writer*, 87. It should be noted that the gendering of nature here is of Darwin’s doing.

<sup>507</sup> Richards, 6. This may be why both nature and natural selection are gendered female in *Origin* (Beer, *Darwin’s Plots*, 62-65).

<sup>508</sup> Beer, *Darwin’s Plots*, xxi.

<sup>509</sup> Smocovitis, 225-26.

<sup>510</sup> Levine, *Darwin and the Novelists*, 17-18.

<sup>511</sup> Qtn. from Beer, “Lineal Descendants,” 286-87; on the persistence of the closing passage, see also Richards, 66.

<sup>512</sup> Qtn. from Ellegård, 7.

as friends, very hard.<sup>513</sup> The anti-Darwinian camp outnumbered pro-Darwinists, but Darwin's supporters were more organized and, in many ways, more influential, than his opponents.<sup>514</sup> Most Victorians made up their minds about Darwin's book based on their preexisting ideologies, rather than on a thorough understanding of the empirical foundation of his theory.<sup>515</sup> The same issues that divided the public's response to *Origin* also generated its interest in the work: the religious implications of the theory (especially the suggestion that there was no need for a Creator in natural history) and the seemingly official scientific endorsement of humankind's animal origins.<sup>516</sup> His theory of natural selection was not fully accepted by scientific orthodoxy until the twentieth century, although Darwin did succeed in gaining popular cultural acceptance of the general idea of evolution in the late nineteenth century.<sup>517</sup> He became a popular icon in the latter part of his life.<sup>518</sup> Because of the respect his accomplishment garnered from his fellow scientists, Darwin was buried in Westminster Abbey.<sup>519</sup>

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<sup>513</sup> Desmond and Moore, 492.

<sup>514</sup> Browne, 129; Ellegård, 333-34.

<sup>515</sup> Ellegård, 332.

<sup>516</sup> Brooke, 257, 267; Campbell, "Why Was Darwin Believed?," 235; Ellegård, 336, 332; Lewens, 316. Bergmann notes that there is space for God in Darwin's theory, "at most as the remote originator of the natural law that set creation going, and it represents nature as a force more powerful than God and more immediately involved in creation" (80). Beer makes a similar point, and also observes that this was a major departure from the British scientific "milieu where natural theology had set the terms for natural historians" (*Darwin's Plots*, xviii).

<sup>517</sup> Bowler, 3-7, 47; Desmond and Moore, 492. This turn in the 1920s through 40s is generally referred to as the neo-Darwinian synthesis (Campbell, "Why Was Darwin Believed?," 234).

<sup>518</sup> Browne notes that Darwin found "himself and his theory transformed into various types of commodity... [Consumers] could commission an elegant piece of Wedgwood ware decorated by Émile Lessore with cherubs clustering around the tree of life, hand a Darwinian caricature from *Punch* on their walls, sing a duet on the piano on the 'Darwinian Theory,' read edifying popular romances such as *Survival of the Fittest* or *The Lancashire Wedding, or Darwin Moralized*, or give their children nursery primers called *What Mr. Darwin Saw*" (371).

### Origin's Literary Reception

Darwin's *Origin* made an impact on the literati of the time, many of whom took clearly defined sides on the work. As Beer notes, the book "was widely and thoroughly read by [Darwin's] contemporaries," in part because he drew on "familiar narrative tropes (such as leaving the garden, or discovering your ancestry was not what you believed)" that literary writers already used in their stories and could reinterpret and redesign in light of his work.<sup>520</sup> This narrative resonance was accomplished in large part by Darwin's use of non-technical language and what Beer calls "story-generating words" like "race," "struggle," "nature," "fit," and "family."<sup>521</sup> *Origin*'s wide-ranging influence can also in part be attributed to its distribution strategy: five hundred copies of the first run were sent by the publisher, John Murray, to Mudie's Circulating Library, meaning that at least four times that many subscribers likely read the work through that venue.<sup>522</sup> George Henry Lewes wrote in the *Cornhill* in 1860 "Darwin's book is in everybody's hands," meaning, of course, "everybody" considered to be an educated reader at the time.<sup>523</sup> The first run of *Origin* sold out on the day of publication despite its literary competition, including Charles Dickens's *A Tale of Two Cities*, John Stuart Mill's *On Liberty*, George Eliot's *Adam Bede*, William Makepeace Thackeray's *The Virginians*, and Alfred, Lord Tennyson's *Idylls of the King*.<sup>524</sup>

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<sup>519</sup> Bowler, 14; Desmond and Moore, 675.

<sup>520</sup> Beer, *Darwin's Plots*, 3, xxiv.

<sup>521</sup> Beer, *Darwin's Plots*, xxv.

<sup>522</sup> Browne, 88-89.

<sup>523</sup> Qtd. in Browne, 128.

<sup>524</sup> Browne, 88.

Quite a few prominent fiction writers praised *Origin*, including Harriet Martineau and Charles Kingsley.<sup>525</sup> J. S. Mill approved of the rigor of *Origin*'s philosophical framework.<sup>526</sup> Some of the early science fiction writers, such as Jules Verne and H. G. Wells, were also positively inspired by Darwin's work.<sup>527</sup> Eliot's complicated response to *Origin* has been well documented.<sup>528</sup> Many other writers were not so positive, including Marx and Engels, who called Darwin's *Origin* "a 'bitter satire' on man and nature".<sup>529</sup> Benjamin Disraeli railed against *Origin*'s materialism in 1864 in a famous speech at Oxford that he later reprinted in the General Preface to his *Novels* (1870); George Gissing rejected the inhumanity of Darwin's vision of the struggle for existence in *New Grub Street* (1891); and Leo Tolstoy used the character Levin in *Anna Karenina* (1873-77) to attack Darwin's theory.<sup>530</sup> Tennyson had ordered a copy of *Origin* in advance because of his long-standing interest in natural history; he was, however, disappointed by the darkness of the theory, characterized as it was by constant cruelty and death.<sup>531</sup>

Thomas Hardy's bleak worldview has been widely recognized as informed by Darwinian theory, in a way that speaks to Gaskell's *Sylvia's Lovers* more than any of the preceding literary responses.<sup>532</sup> Because of Darwin's work, for Hardy, human life is ruled in

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<sup>525</sup> Desmond and Moore, 217, 477, 486.

<sup>526</sup> Browne, 186.

<sup>527</sup> Henkin, 233.

<sup>528</sup> See, for example, Beer, *Darwin's Plots*, 139-219; and Levine, *Darwin and the Novelists*, 210-28.

<sup>529</sup> Qtd. in Desmond and Moore, 485.

<sup>530</sup> Henkin, 78, 230; Browne, 258.

<sup>531</sup> Browne, 188.

<sup>532</sup> Craik notes a connection between Gaskell's and Hardy's "examination of the strife between the codes arising from the natural impulses of human emotions and passions and the codes arising from the spiritual self-

large part by chance and by character traits that prevent an individual from controlling his or her own destiny; human beings are fundamentally maladapted as well as insignificant in geohistorical timescapes.<sup>533</sup> Human drives are not inherently evil, but they are consistently thwarted.<sup>534</sup> When people put their faith in nature, they are constantly disappointed because nature is indifferent to human concerns and the personal tragedies that individuals blame on nature.<sup>535</sup> Hardy struggles to find a place for the human in the natural order, despite his lack of anthropocentrism, but his resistance to the diminishment of humankind to the point of irrelevance can be located in his novels' focus on the significance of the single life span, using it as the scale for his plots.<sup>536</sup> Writing fiction is the site of his recuperation of humanism in the face of Darwinism, and this strategy is one shared by Gaskell in *Sylvia's Lovers* especially.<sup>537</sup>

### ELIZABETH GASKELL

Elizabeth Cleghorn Gaskell, née Stevenson, born in 1810, died in 1865 without finishing her novel *Wives and Daughters* (1864-65). Her husband, William Gaskell, was a Unitarian minister in Manchester, and it was in Manchester that Elizabeth Gaskell devoted much of her life to the profound social need and engaging intellectual life of the city. Gaskell

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awareness and education" as well as their style of "drawing upon what it has in common with the present and all other ages, explaining only those differences which have an essential bearing on the immediate themes and actions, avoiding all 'local colour' or strangeness for its own sake" (166, 177). Rignall points out that "neither Mrs. Gaskell nor Hardy shares Scott's confident faith in historical progress....Around the edges of the fictional world there lies a darkness which, as we move from Mrs. Gaskell to Hardy, becomes an increasingly potent presence, anticipating the epistemological uncertainty and historical scepticism of the modern novel" (22).

<sup>533</sup> Beer, *Darwin's Plots*, 229, 232; Henkin, 224-25.

<sup>534</sup> Beer, *Darwin's Plots*, 226.

<sup>535</sup> Beer, *Darwin's Plots*, 36; Henkin, 225.

<sup>536</sup> Beer, *Darwin's Plots*, 228, 235, 222-23.

<sup>537</sup> Beer, *Darwin's Plots*, 226.



is best known for her quasi-pastoral novel focused on a town largely populated by older women, *Cranford* (1851), or for her social-problem novels that tackle poverty and industrialization in Manchester, such as *Mary Barton* (1848) and *North and South* (1854-55).

*Sylvia's Lovers* (1863), Gaskell's second-to-last novel and her final completed one, is very different from her other major works. The novel receives the least critical attention of any in her oeuvre.<sup>538</sup> This neglect might persist because much recent criticism of Gaskell's work has tended to focus on her identities as a "social problem" novelist and as a woman writer, and neither of these categories seems useful at first glance for understanding *Sylvia's Lovers*.<sup>539</sup> A handful of critics have noted Darwinian elements in the novel, but none have devoted any extensive analysis to exploring this connection.<sup>540</sup> In November of 1859 (the same month that Darwin's *Origin* was published), Gaskell traveled to Whitby, a small port on the Yorkshire coast, both for the sake of her daughter Julia's health and to accomplish research for her novel project.<sup>541</sup> The idea for a Yorkshire novel, which some critics identify as *Sylvia's Lovers*, might actually have predated Gaskell's first published novel, *Mary Barton*.<sup>542</sup> Other critics trace the genesis of the novel to Gaskell's meetings in the mid-1850s with Rev. William Scoresby,<sup>543</sup> or to her research for *The Life of Charlotte Brontë*, which

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<sup>538</sup> d'Albertis, 131; Eagleton; Foster, 154; Stoneman, 92.

<sup>539</sup> Flint, 10; Stoneman, 92.

<sup>540</sup> Flint, 9; Shaw, "Elizabeth Gaskell," 47; Stoneman 93- 94; Shaw, "Other Historical Fiction," 87; Uglow, 508. Perhaps the lack of work on Darwin and the novel has to do with the work's uncharacteristically pessimistic outlook, or the seeming incompatibility between the *Origin* and Gaskell's "committed Christian position" from which she is usually perceived to be writing (Craik, 158).

<sup>541</sup> Uglow, 458.

<sup>542</sup> Foster, 154.

<sup>543</sup> Pollard, 14.

exposed her to Yorkshire landscape and customs.<sup>544</sup> She was clearly planning the novel by October 1859, although she admitted in a letter that “Not a line of the book [was] written” by that point.<sup>545</sup> The extended period of composition may well reflect Gaskell’s difficulties in grappling with Darwinian theory.<sup>546</sup> *Sylvia’s Lovers* took three years to write, an unusually long period by Gaskell’s own standards, a process that can be attributed both to “the difficulties of the subject” and the personal problems that Gaskell faced during the three-year composition period, including illness and a daughter’s broken engagement.<sup>547</sup> And yet there are many unexplained gaps in her work schedule: Gaskell told her publisher after her November 1859 trip to Whitby that she was inspired by her material and eager to get to work, but did not start steadily on the novel until April 1860<sup>548</sup>; the first half of 1861 was even more inexplicably unproductive for a writer who always liked to be immersed in a project.<sup>549</sup> This slow and jolting progress is one of the reasons cited by critics for the common complaint that *Sylvia’s Lovers* lacks coherence of style, quality, and theme.<sup>550</sup>

*Sylvia’s Lovers* tells the story of Sylvia Robson, who is being raised on a farm outside the Yorkshire whaling port, Monkshaven, by her aged mother and father, Bell and Daniel

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<sup>544</sup> Foster, 154-55; Sanders, “Introduction,” vii; Shaw, “Introduction,” viii.

<sup>545</sup> Gérin, 212.

<sup>546</sup> In this extended period of composition, we can see parallels to Tennyson’s *In Memoriam*.

<sup>547</sup> Gérin, 203, 217, 226.

<sup>548</sup> Desmond and Moore note that “there was plenty of time to read the *Origin* that January 1860. Cold north-easterlies brought blizzards from Siberia, keeping the nation huddled around the fireside” (485-86).

<sup>549</sup> Gérin, 216, 218.

<sup>550</sup> Gérin, 218; Kubitschek, 109. Henry and Uglow both attribute “the unevenness of the narrative” to Gaskell’s desire to use religion in the third volume to soften the crushing pessimism of the prior volumes (Qtn. from Henry, xxviii; see also Uglow, 504). Sanders interprets the final volume, which is the most criticized for its pacing, as instead “accentuat[ing] the sense we have of the changes effected by the passage of time” with their “quickened pace” ( “Introduction,” xiii-xiv).

Robson. Sylvia is a beautiful and vivacious, if strongheaded and illiterate, teenage girl who is loved (not so secretly) by her cousin, Philip Hepburn. Philip is a shopman in Monkshaven, who eventually inherits the business along with his partner, William Coulson, from the Quaker Foster brothers who established it. Philip boards with an older Quaker woman named Alice Rose, whose daughter Hester loves Philip silently and works with him in the shop. During the Napoleonic Wars, pressgangs take up residence in Monkshaven to impress sailors into naval service; one sailor, Charley Kinraid, is nearly fatally shot while trying to defend his fellow whalers from this impressment. At the funeral of a sailor who was killed resisting impressment, Charley and Sylvia are struck with one another and their courtship soon follows, progressing especially after a New Year's party where Charley steals a kiss from Sylvia over a country game. While Bell is inland recuperating from an illness, Daniel approves of Charley and Sylvia's betrothal. Charley is slated for a whaling venture, though, and is caught by the pressgang while on his way to meet his ship; Philip, who is himself on the way to London on an errand for the Foster brothers, witnesses Charley's abduction but decides to not tell Sylvia that he pledged to be faithful and return to her. Philip's omission happens in part because while Philip is gone in London, the townspeople discover evidence that leads them to believe Charley was drowned, and in part because Philip has heard that he has a habit of courting and then abandoning attractive young women. The pressgang then utterly betray the town's trust by ringing the Monkshaven fire alarm and capturing the men who answer the call; Daniel Robson, who had cut off his own thumb to avoid impressment in the American Revolutionary War, leads a riot against the pressgang to free the tricked men. For this treason, Daniel is arrested, tried, and hanged. Sylvia and her psychologically devastated mother are consequently evicted from their farm, and Sylvia agrees to marry

Philip to gain them both a home. After having a daughter, Bella, with Philip, Sylvia is one day confronted by Charley, who has returned from naval service a decorated officer; overwhelmed with Philip's betrayal, she swears never to live with Philip as his wife again. Philip flees town and enlists with the marines under an assumed name; deployed at the Siege of Acre some time later, he carries a wounded Charley off the battlefield, but is subsequently disfigured in an accidental explosion on his ship. He is discharged in England, where he makes his way back to Monkshaven to be near Sylvia and Bella; en route, he rejects the offer of perpetual care in an almshouse. Sylvia meanwhile learns that Charley married a southern heiress shortly after discovering her marriage to Philip, which makes her question her judgments of the two men. Back in Monkshaven, Philip one day sees Bella fall off a sidewalk overlooking the sea and leaps in to save her; although Bella is unharmed, Philip is caught in the waves and repeatedly crushed against the cliffside before he can be rescued. Sylvia and Philip are reconciled at his deathbed, though the novel ends in Gaskell's own day, when Monkshaven has become largely a tourist town and the story of the book has been distorted into a legend of a wife who lived in luxury while her husband died of want nearby; the last note is that Bella emigrated to America and nothing is known of her fate.

At first glance, the plot of *Sylvia's Lovers* might not seem to lend itself to analysis of scientific themes and concerns. On the other hand, many critics have discussed Gaskell's final, unfinished novel, *Wives and Daughters* (1864-65), in terms of Darwinian theory and influence.<sup>551</sup> This is a connection Gaskell indicated herself, as a letter from the time of writing identifies the career of the male protagonist, Roger Hamley, with Darwin's: "Roger...works out for himself a certain name in Natural Science,--is tempted by a large

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<sup>551</sup> See, for example, Beer, "Lineal Descendants," 287; Browne, 190-91; D'Albertis, 137-50; Debradant, 14-29; Endersby, 302; Foster, 169; and Henkin, 37.

offer to go round the world (like Charles Darwin) as a naturalist.”<sup>552</sup> Generally, *Wives and Daughters* is read as interpreting Darwinian or other evolutionary theory in optimistic, developmental, progressivist terms that are consistent with Gaskell’s previous approach to social change.<sup>553</sup> In these cases, the fit adapt, survive, and pair up, but cooperation and compassion provide hope for society as a whole to progress.<sup>554</sup> There is a countermovement in some of the criticism to attribute elements of Gaskell’s novel typically considered Darwinian to the intellectual atmosphere out of which both Darwin’s and Gaskell’s work arose, or to attribute Gaskell’s evolutionary ideas to other thinkers, like Geoffroy or Malthus.<sup>555</sup> Louise Henson articulates the concern that “stress[ing] that Gaskell was responding directly to what Darwin had written” negates “her intellectual independence.”<sup>556</sup> Denying Gaskell’s engagement with the social implications of Darwinian theory at a time when it was one of the most pressing concerns of the day, however, seems to diminish her timeliness and immersion in a vibrant, scientific atmosphere. Moreover, viewing Gaskell as consistently optimistic in her handling of evolutionary ideas over the course of her twenty-year career also seems to be an oversimplification. Even if she came back to an optimistic vision of development and progress in her final completed work, that does not mean that she never held a different view, or that her initial response to reading Darwin’s *Origin* and her engagement in the ensuing cultural discourse about it was purely positive.

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<sup>552</sup> Chapple and Pollard, 550.

<sup>553</sup> Boiko, 95; D’Albertis, 219 n18; Henson, “History, Science and Social Change,” 12, 25, 26, 29; and Hughes, 91.

<sup>554</sup> Martin, 99, 105.

<sup>555</sup> See Boiko; Flint, 9; Henson, “History, Science and Social Change”; Henson, “‘Condition-of-England’ Debate,” 45; Martin, 92; and Niles.

<sup>556</sup> Henson, “History, Science and Social Change,” 31.

Whether Gaskell read Darwin's work directly is debatable. The Darwins and the Stevensons were related by marriage through the Hollands and Wedgewoods.<sup>557</sup> In 1856, Gaskell's daughter Meta spent Easter at Charles Darwin's home<sup>558</sup> and in 1860 went on a continental tour with Darwin's older sister, Catherine,<sup>559</sup> whom Elizabeth Gaskell describes in a letter as "a distant relation,"<sup>560</sup> a phrase that John Chapple says "accurately indicates Gaskell's genteel but hardly intimate connexion with the Darwins."<sup>561</sup> Darwin and Gaskell dined together at the Wedgewoods' in 1851,<sup>562</sup> and Gaskell is listed in Francis Darwin's *Reminiscences* of his father as one of the naturalist's favorite novelists.<sup>563</sup> Although Gaskell never refers in her surviving letters to having read Darwin's *Origin*, most of her correspondence was destroyed during or after her life at her behest; she wanted to thwart intrusive biographers.<sup>564</sup> Her existing letters do, however, reference periodical readings, such as the *Westminster Review*, in which synopses and evaluations of Darwin's *Origin* were

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<sup>557</sup> Uglow, 8.

<sup>558</sup> Chapple and Shelston, 156 [To Harriet Anderson, 15 March 1856].

<sup>559</sup> Uglow, 489.

<sup>560</sup> Chapple and Shelston, 218 [To Edward E. Hale, 14 December 1860]. While Meta was traveling in southern France and northern Italy with Charles Darwin's sister, Gaskell was working on *Sylvia's Lovers*.

<sup>561</sup> Chapple, "A 'tangled bank'," 98.

<sup>562</sup> For Gaskell's letter about the Wedgwood dinner at which she met Darwin, see Chapple, *Elizabeth Gaskell*, 93. Gérin claims that Darwin attended this dinner expressly for the purpose of meeting her (277).

<sup>563</sup> Qtn. from F. Darwin, 102. Noble notes that Darwin used passages from *Mary Barton* to support his claims in the *Expression of Emotions in Man and Animals* (1872) (103-4). Darwin also wrote to Hooker that he enjoyed *Ruth*, which the Hookers presumably lent to him (see Darwin Correspondence Project online, letter from 10 October 1853). Darwin also enjoyed the works of Dickens and his writing style has been likened to Dickens's (Beer, *Darwin's Plots*, 6; Browne, 55; Desmond and Moore, 260-61).

<sup>564</sup> Gérin, 259. We can see the extent of the biographical loss in Uglow's observation that "only one letter from William to Elizabeth survives, and none from her to him, although they wrote constantly to each other when they were apart" (72). Her fear of biographers might be related to her own careful work to commemorate and protect Charlotte Brontë's memory.

published.<sup>565</sup> When her family's library was sold in 1913, the published record of the collection notes that seventeen of the four thousand books sold dealt with "science and medicine," although specific titles (including any by Darwin) are not listed.<sup>566</sup> One letter from Charles Eliot Norton to Gaskell, dated 26 December 1859 says, "You, I fancy, have not read" "the new book of Mr Darwin's which is exciting the admiration and opposition of all our philosophers"; this is an assumption on his part, though, which Carol A. Martin notes might be attributable to the newness of the book at the time of writing.<sup>567</sup> Martin also comments, "that Norton goes on to discuss the work suggests, however, that he thought Gaskell would be interested in it."<sup>568</sup> This interest could be due in part to Gaskell's political leanings. Throughout the nineteenth century, Dissenters were generally drawn to the progressive implications of evolutionary theories, interpreting them as supporting reformist agendas that promoted individual self-improvement and general social change.<sup>569</sup> Both Gaskell and Darwin came from prominent Dissenting, liberal families with deep connections to scientific endeavors.

Gaskell was exposed to scientific figures and ideas for the majority of her life. Henson notes that "Elizabeth Gaskell's famous disclaimers, 'I am not scientific nor mechanical' and 'I know nothing of Political Economy,' are no longer taken at face value. Yet the extent to which she was familiar with and actively used scientific ideas in her writing

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<sup>565</sup> Martin, 93.

<sup>566</sup> Wheeler, 25-30.

<sup>567</sup> Whitehill, 43.

<sup>568</sup> Martin, 93.

<sup>569</sup> Desmond and Moore, 217, 675; Foster, 169; Henson, "History, Science and Social Change," 13; Henson, "'Condition-of-England' Debate," 30-31; Uglow, 72-73. On the other hand, Stoneman comments that despite Unitarians' openness to scientific developments, the implications of evolutionary theory could still be troubling (93).

remains a matter of speculation and debate.”<sup>570</sup> Throughout her life, Gaskell befriended a number of scientists, including a distant relative and scientific polymath, the Rev. William Turner; a professor of chemistry at Oxford, Benjamin Brodie; and a professor of natural history at Edinburgh, George Allman, who had married a family friend.<sup>571</sup> Her husband, William, had studied science at Manchester New College, and his sister, Eliza Gaskell, was also well read and interested in natural history. Upon her move to Manchester after her marriage, Gaskell found herself in an atmosphere of “scientific fervor” that transcended class boundaries.<sup>572</sup> In Manchester, William Gaskell was an active member and occasional speaker at the Literary and Philosophical Society and so followed scientific innovations closely, including discussions of Lyell’s and Chambers’s major works.<sup>573</sup> As of 1860, William Gaskell was helping to plan a meeting of the British Association for the Advancement of Science, and in September 1861 Elizabeth Gaskell hosted visitors for the British Association meeting, even though her husband was out of town.<sup>574</sup> The *Athenaeum*, the journal of the British Association, was also regularly brought home by William from the local lending library.<sup>575</sup> Moreover, the Gaskells’ circle was very invested in scientific discoveries through the 1860s and engaged in passionate debate over Darwin’s *Origin* “in journals, lecture-halls and drawing-rooms.”<sup>576</sup> The *Origin* was so culturally important, that Beer argues “Everyone

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<sup>570</sup> Henson, “‘Condition-of-England’ Debate,” 30.

<sup>571</sup> Uglow, 59, 560; Gérin, 276.

<sup>572</sup> Qtn. from Uglow, 59. See also Secord; and Aglow, 74, 76.

<sup>573</sup> Uglow, 135.

<sup>574</sup> Uglow, 496, 498.

<sup>575</sup> Henson, “‘Condition-of-England’ Debate,” 30; Uglow, 560. Desmond and Moore observe that the *Athenaeum*, in particular, “had histrionics about men from monkeys and snubs to theologians” after *Origin*’s publication (477).



found themselves living in a Darwinian world....So the question of who read Darwin, or whether a writer had read Darwin, becomes only a fraction of the answer” of influence.<sup>577</sup> To think that Gaskell would have been unaware of, uninterested in, or not thinking about the implications of Darwin’s work shortly after its publication is to take a very narrow view of her intellectual engagement and timeliness, even if the evidence that she read the book firsthand is tentative at best.<sup>578</sup>

### DARWINIAN TROPES IN *SYLVIA’S LOVERS*

A number of particulars throughout *Sylvia’s Lovers* indicate that Gaskell is engaging in a very detailed way with Darwin’s *Origin*. From the opening page of the novel, fine points that might seem innocuous on their own add up to a clear Darwinian framework. For example, Gaskell writes on page 1 that the population of Monkshaven was “but half the number at the end of the last century.” (1)<sup>579</sup> Darwin likewise mentions toward the beginning of chapter 3 (“Struggle for Existence”) that “Even slow-breeding man has doubled in twenty-five years” (64). Darwin frequently uses the adjective “branching” to talk about the shape of affinities between living beings; Gaskell likewise describes the “principal street” of Monkshaven—its central artery, in a way—as “branched” and “straggl[ing]” (1). “Tangled” or “entangled”—another of Darwin’s favorite words, as in his attempts to “disentangle the inextricable web of affinities” (434) or the famous closing image of the “entangled bank” (489)—shows up in *Sylvia’s Lovers*, both to describe the surrounding landscape and the thoughts of Sylvia herself (4, 76). Darwin has an entire chapter (Chapter 7) on instinct, which

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<sup>576</sup> Qtn. from Uglow 487. See also Uglow, 560.

<sup>577</sup> Beer, *Darwin’s Plots*, 3.

<sup>578</sup> Poon, 197. Foster claims that the Gaskells “certainly knew [Darwin’s] work” (169).

<sup>579</sup> Sanders, “Introduction,” x.

he defines as a non-human phenomenon: “An action, which we ourselves should require experience to enable us to perform, when performed by an animal, more especially by a very young one, without any experience, and when performed by many individuals in the same way, without their knowing for what purpose it is performed, is usually said to be instinctive” (207). In *Sylvia’s Lovers*, Philip finds himself guided by “the animal instinct which co-exists with the human soul, and sometimes takes strange charge of the human body” (153); instinct, in Gaskell’s novel, is imagined to be more essential to human nature than reason, as it is “quicker to act” (384), crucial for gaining a mate (329), and necessary for survival when the body is put under potentially fatal strain (389).<sup>580</sup>

Perhaps most importantly, both Darwin’s *Origin* and Gaskell’s *Sylvia’s Lovers* tackle the issue of contingency. Darwin’s theory of natural selection is popularly understood as hinging upon chance—chance adaptations of organisms, chance changes in environment, and consequently chance survival.<sup>581</sup> Herschel famously, and disparagingly, called Darwin’s ideas “the law of higgledy-piggledy.”<sup>582</sup> Darwin recognizes the temptation to attribute complex systems to chance, but instead claims that the natural world is the result of intricate laws of interrelations acting beyond our comprehension (74); not knowing causes is not the same as chance, “but it serves to acknowledge plainly our ignorance of the cause of each particular variation” (131). Such protestations were clearly not successful in making most readers disregard chance as fundamental to Darwin’s theory. As Tina Choi comments,

[The *Origin*’s] emphasis on the role of unpredictable and seemingly random events—the juxtapositions of competing species, for instance, or unforeseen changes in climate—in shaping selective pressures was, and still is, one of the most striking and

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<sup>580</sup> Flint notes the importance of instinct in the novel (49).

<sup>581</sup> Levine notes that “Darwin abjured chance but required it for his argument” (*Darwin and the Novelists*, 19).

<sup>582</sup> Herschel to Darwin, December 10, 1859, in Burkhard and Smith, vol. 7, 421.

controversial aspects of his work.... [and] seemed to trouble the very condition of Victorian narrative itself.<sup>583</sup>

Hardy's *Far from the Madding Crowd*, for example, hinges in many ways on a coin toss and makes chance central in a Darwinian worldview, thereby minimizing or eliminating the consoling equivocation seen in Darwin's *Origin*. Gaskell precedes Hardy in committing to the bleakness of such Darwinian randomness. Much of *Sylvia's Lovers* hinges on chance and contingency, for better or for worse: Charley's capture by the pressgang (218), Philip's oversleeping that prevents him from posting a letter about Charley's impressment before his ship leaves for London (225), Charley's hat washing ashore and thereby leading Monkshaven to believe him drowned (234), Sylvia's return to her farm after her marriage to gather herbs at the moment when Charley is there looking for her after his return from the navy (376), Bella's cry when her mother is about to leave with Charley that persuades her to stay (382), Bella's fascination with Jeremiah Foster's watch that endears her to him (408), the sunbeam that falls on Charley on the battlefield and guides Philip to him (431), the explosion on the deck of Philip's ship that permanently disfigures him (434), Bella's fall off the cliffwalk into the ocean and Philip's presence at that moment to save her (492). The list could go on and on. Moreover, most of these incidents are described in language that highlights the chance that underlies them. Gaskell's insistence on the crucial importance of contingency to plot marks this novel as her most Darwinian.

### *Landscape and Fossils*

Critics have frequently noted that *Sylvia's Lovers* is Gaskell's only novel set in a landscape where she never lived. In fact, she visited Whitby (the town on which she closely based the fictional Monkshaven) only once for a fortnight. Critics have offered several

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<sup>583</sup> Choi, 275.

explanations for this uncharacteristic departure from the settings of Manchester or Knutsford, most often that Gaskell had become interested in Yorkshire while working on *The Life of Charlotte Brontë*.<sup>584</sup> But there is more than just its setting in Yorkshire that is striking about Gaskell's use of landscape in *Sylvia's Lovers*: Gaskell strove to represent Whitby as exactly as possible, making corrections to later editions to be completely geographically accurate<sup>585</sup>; Gaskell presents human society as segmented along the lines of the sea, land, and town, which are constantly in conflict; and many of the crucial turning points in the plot take place in the littoral zone,<sup>586</sup> which stretches from that part of the ocean that is constantly covered by water but where sunlight can still penetrate to the ocean floor to the point just above the high tide mark where spray can be felt (including many of the cliffs). These treatments of landscape—unique in her oeuvre—can best be understood in light of Darwin's extensive and complicated discussion of the subject in *Origin*. Setting the novel in the littoral zone of a geographically isolated town magnifies the Darwinian principles at play.

Whitby is uniquely situated on the northeast English coast between the sea and the moors, so that a town historian writing in the 1990s observed that it is as difficult to get to as it was in the 1800s, if not more so.<sup>587</sup> Geographical isolation is an important factor both in Darwin's and in Gaskell's narrative. For Darwin, isolation affects natural selection by maintaining relatively uniform conditions of life in the area, such that "natural selection will tend to modify all the individuals of a varying species throughout the area in the same

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<sup>584</sup> Craik, 143.

<sup>585</sup> Flint, 45; Foster, 155; Twinn, "Unpublished Letters," 150.

<sup>586</sup> Twinn lists "the arrival of the whaling fleet" that is first captured by the press-gang, "Kinraid's impressment," "Kinraid's return and rescue," and "Bella's rescue from the waves," which leads to Philip's death ("Navigational Pitfalls," 41, 46, 48)

<sup>587</sup> White, 1.

manner in relation to the same conditions” (104). Geographical isolation also impedes immigration and, consequently, competition pressures, thus allowing new and unique species to develop in the area in question (105). Such effective sequestration of species, however, means that “better adapted forms” are blocked from competing for resources there, slowing down the process of modification in hard-to-reach areas (108). Isolation is an interesting phenomenon, but one that ultimately weakens the local population and will likely come to an end when better evolved species finally access any given remote location.

Gaskell tells us of Monkshaven’s geographical isolation on the first page of the novel, describing “the wild bleak moors, that shut in Monkshaven almost as effectually on the land side as ever the waters did on the sea-board” (1).<sup>588</sup> Gaskell spends most of the book, however, exploring the influence of the sea, not the moors. The narrator explains that “for twenty miles inland there was no forgetting the sea, nor the sea-trade” (4-5), giving the town “amphibious appearance, to a degree unusual even in a seaport” (2). It is not just Monkshaven itself that has an amphibious appearance, though; its inhabitants do as well. In a telling pun, boys and the tidal animals that they hunt share the same name and activities: “bare-legged urchins dabbling in the sea-pools” (213). The ocean constantly infiltrates the lives of the people in the area, invading the home space (97) and church rituals (70) alike. It also permeates the bodies of the locals. In cooler weather, the mist in the atmosphere at one point causes the people to inhale “more water than air” (45); in the dead of winter, “the sharp air was filled, as it were, with saline particles in a freezing state; little pungent crystals of sea salt burning lips and cheeks with their cold keenness” (166). When Philip leaves the town, he

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<sup>588</sup> D’Albertis notes that Whitby’s isolation was the most important factor in drawing Gaskell to the site (108). See also Sanders, “Introduction,” x. Foster notes that “*Sylvia’s Lovers* is a supreme example of a novel in which topographical location is of vital significance to the plot, not merely as background but as an active agent in determining events and shaping character” (155).

enlists with the marines (391); the amphibious nature of this branch of the armed forces is reinforced by Sylvia's protest upon hearing the news, that "he wasn't a sailor, nor yet a soldier," and the new Mrs. Kinraid's response, "Oh! but he was. I think somewhere the captain calls him a marine; that's neither one nor the other, but a little of both" (450). The uniqueness of this isolated population—full of missing links between contrasting states—is clearly based on its conditions of life, dominated as they are by the sea.

Because of its isolation, Monkshaven sees very little immigration to the area. Philip and his aunt (Sylvia's mother, Bell Robson) are two of the very few immigrants to the town, originating from the inland region of Carlisle (83). Philip earns his inheritance of a thriving local business, and both Bell and Philip are successful in leaving a child behind them, but there are no other terms on which they could be considered "better adapted" or more "fit" for the isolated environment in which they find themselves—both are rather unpopular when in the prime of their lives because of their airs of superiority, and they die after enduring their fair shares of tragedy. Monkshaven natives, on the other hand, have adapted to their environment over a number of generations and their traditional ways of life are difficult, but well suited to the external pressures they face. Disruptions, such as the immigration and success of Philip, are absorbed into local culture within a generation or two, as his life is eventually made the stuff of local legend. Even more blatantly colonizing forces, like the pressgangs that capture unwitting sailors for forced service in the Napoleonic wars, fail to permanently alter the townspeople's conditions of life, nor are they successful in settling in the area and replacing the natives. Monkshaven is not the center of the nation—politically, as with London; industrially, as with Manchester; or nostalgically, as with Knutsford—but

exists on the margins literally and figuratively.<sup>589</sup> With *Sylvia's Lovers*, Gaskell demonstrates that isolation does not equate to weakness or irrelevance, and instead can provide the material for an ethnographic study of human struggle and survival in the face of natural and social adversity.

Darwin notes that “anomalous forms” can exist in geographically isolated areas when they would have been rendered extinct elsewhere; he calls such organisms “living fossils” (107). Whitby, the real-life version of Monkshaven, is a renowned fossil-hunting location.<sup>590</sup> Oddly, fossils never make an appearance in *Sylvia's Lovers*. Yet many readers recognized Monkshaven as Whitby, and would likely have made the association between the famous fossil collecting site and the fictional town implicitly, rendering geology subtextual. In fact, Gaskell makes a point of being very geologically specific throughout *Sylvia's Lovers*, and in setting many pivotal events in the littoral zone, an area of importance to Darwin's theories of the geological record in *Origin*. In the first edition of the *Origin*, ammonites (the fossils taken as a Whitby coat-of-arms, see fig. 3) are mentioned twice as examples of sudden extinction (318, 321) in chapter ten “On the Geological Succession of Organic Beings”—a chapter closely tied to the preceding one, “On the Imperfection of the Geological Record.”<sup>591</sup> Ammonites are closely tied to Whitby culture and history; they were an important part of the tourist industry in the nineteenth century, as visitors could hunt for them or buy them from collectors' shops in town.<sup>592</sup> The monastery that overlooks Whitby—and that in part inspired

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<sup>589</sup> And, Henry would add, psychologically (xxiv). See King (155) on the symbolism of geographical marginality.

<sup>590</sup> White, 154. During the eighteenth and nineteenth centuries, plesiosaurs, ichthyosaurs, and other large fossils were discovered in the cliffs (White, 155). Many Whitby fossils joined the collections of the British Museum of Natural History and the Yorkshire Museum (White, 156).

<sup>591</sup> On Whitby's coat-of-arms, see White, 155.

Gaskell's alias for the town in the novel, Monkshaven—is intimately tied into the town's fossil lore: legend holds that in the seventh century A.D., the abbess Hilda hurled all the snakes on her monastery site over the cliff, where they turned to stone. Because of this traditional belief, locals often carved heads onto the ammonite fossils and adorned them with jeweled eyes to better sell them to nineteenth-century tourists.<sup>593</sup> In chapter nine, Darwin discusses the kinds of discoveries that can be made at cliffs and at the shoreline, including



**Figure 3: A pin showing three ammonites on a Whitby crest.**

the slow speed of the erosion of cliffs (283), the evidence for geological time provided by strata exposed by such erosion (284), the necessity for constant accumulation of oceanic sediment to produce fossils (288), and the changelessness of the bottom of the sea, which “not rarely [lies] for ages in an

unaltered condition” (288). Darwin explicitly discusses the

littoral zone, where fossils are seldom found, a phenomenon

he explains as due to the deposits being “continually worn away, as soon as they are brought up by the slow and gradual rising of the land within the grinding action of the coast-waves” (290). Many organisms might live in this area, but few are preserved (288). Those conditions which are most favorable to life are least favorable to making an imprint on the fossil record, which requires conditions to be “stationary” (292). Any kind of rapid change is not likely to be recorded geologically (295-96). This is unfortunate because the geological record, Darwin asserts, is the only way to gain a sense of the process and progress of time: “A man must for years examine for himself great piles of superimposed strata, and watch the sea at work

<sup>592</sup> White, 155.

<sup>593</sup> White, 155, 183.



grinding down old rocks and making fresh sediment, before he can hope to comprehend anything of the lapse of time, the monuments of which we see around us” (282).

A remarkable portion of *Sylvia's Lovers* is focused on describing the coastal landscape, its erosion (3, 213), its rockiness (34, 213), the strata-like structure of its ecosystems (3, 34), and its relation to the inland (4-5, 213, 214).<sup>594</sup> Even when recounting the Siege of Acre in chapter 38, Gaskell opens with a lengthy picture of the Mediterranean coastal landscape, and almost seems as interested in this landscape as in the human events that are occurring there (424-26). The cliffs are clearly the most defining aspect of Monkshaven geography, though, and dictate much of the human movement in the area (34, 371). These cliffs, containing the fossils that made Whitby remarkable to tourists, are most haunted by Sylvia. Particularly after her marriage but before the revelation of Kinraid's impressment, Sylvia spends every free moment on the cliffs, “gazing abroad over the wide still expanse of the open sea,” like Darwin's model observer, described above (350). Even after the birth of her child, she is drawn to this area, albeit to lower cliffs that we would identify as part of the littoral zone, where there “was a good space of sand and shingle at all low tides” (359). The narrator tells us that “once here, she was as happy as she ever expected to be in this world” because of her ability to abandon any sense of greater or social human ties, any feeling of obligation to others (359). It is here that she thrives, but this area leaves an imprint on her, rather than the reverse. Her story, like that of Charley's impressment or Philip's death, leaves no physical mark, an important point that I will return to later.

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<sup>594</sup> Gérin notes that the setting of Whitby is described extensively at the beginning of the book, “first by observation and then by imposing her own vision on what she saw, by bringing out a certain grandeur in the place which was both literally and symbolically true of it” (213). In some ways, this mirrors the methods of contemporaneous natural history: observing the natural world first, and then constructing theories to explain the observed patterns.

Landscape is not simply geology to Gaskell, however, because it is inherently identified with the interests of the humans who eke their survival from the sea or the land, or the town that exists at the juncture of the two but is of neither element. And yet the elements, particularly the sea, are harshly unconcerned with human needs, revealing nature to be callous and impersonal and any human identification with it to be a mere hopeful projection.<sup>595</sup> The bleakness of this vision is reminiscent of Thomas Hardy's late-nineteenth-century landscapes that sustain only the fittest, and against which human lives are rendered futile and miniscule.<sup>596</sup> Perhaps no image in *Sylvia's Lovers* is more representative of this than that of the massacred French at the Siege of Acre, who "lay headless corpses under the flowering rose-bushes, and by the fountain side" (430), mirroring "the anemones scarlet as blood, [which] run hither and thither over the ground like dazzling flames of fire" (425-26). Such a vision could very well derive from Darwin's descriptions of nature's brutality, the kind of brutality that often leads readers to misattribute Tennyson's "nature red in tooth and claw" to a Darwinian worldview. Darwin's feeble assurance at the end of chapter three, "Struggle for Existence," that "we may console ourselves with the full belief, that the way 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" (79)<sup>597</sup> hardly counterbalances passages like the following:

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, and are thus constantly destroying life; or we forget

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<sup>595</sup> Twinn notes that although the sea "had featured in previous stories...the way it dominates this novel realistically, symbolically and deterministically is unique" ("Navigational Pitfalls," 38).

<sup>596</sup> Shaw observes that even Napoleon is minimized against the background of *Sylvia's Lovers* ("Other Historical Fiction," 85).

<sup>597</sup> Lustig suggests that Darwin might have used such reasoning to reassure himself personally, even if his "theory could not make the problem of natural evils vanish" (121).

how largely these songsters, or their eggs, or their nestlings, are destroyed by birds and beasts of prey; we do not always bear in mind, that though food may be now superabundant, it is not so at all seasons of each recurring year. (62)

To call nature callously violent in Darwin's vision would imply the possibility for a compassionate nature; in fact, although Darwin does identify culturally valenced patterns in nature, he maintains an inherent amorality in natural processes.<sup>598</sup> The Malthusian violence of natural selection is a fact, not a value. It is easy to imagine how demoralizing such a philosophy could be to a humanistic and humanitarian thinker like Gaskell, who presented nature in her first novel as pure, enlivening, refreshing, encouraging, welcoming—everything that contrasted with the negativity of industrial slum life.<sup>599</sup>

The sea and land in *Sylvia's Lovers* are enmeshed in a complex relationship mirrored by men and women generally, and by Sylvia and Charley specifically.<sup>600</sup> Charley is, of course, a sailor who makes his fortunes first on whaling vessels and then in the navy; Sylvia associates him with the sea after his departure, seeking consolation from watching the waves and musing on his absence to the extent that Philip, her husband, is jealous of her time spent with the sea (359-60, 367). Daniel Robson, Sylvia's father, was a sailor who finds life on shore as dull as the company of women, and a definite degradation from his sea-faring days (90); he claims that "goin' to sea come natteral to a man," further reinforcing the masculine gendering of the mariner lifestyle (206). The land is gendered feminine, on the other hand, and is associated strongly with the women in the book. Bell Robson, Sylvia's mother, for example, originates from inland and needs to spend time away from the sea to recuperate

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<sup>598</sup> Richards, 64.

<sup>599</sup> Uglow notes that in Gaskell's oeuvre, *Sylvia's Lovers* is unique in presenting nature as ruled by "predatory competition and random accident" (Uglow, 541).

<sup>600</sup> Craik, 174. Gérin notes that Gaskell's father, William Stevenson, came from a line of naval men and her mother, Elizabeth Holland, was "born of yeoman stock as far inland as could be, in the heart of rural Cheshire," a pattern that parallels the gendering I note here in *Sylvia's Lovers* (1).

from a particularly bad illness (190). Sylvia is rooted in her farmlife, and both lovers envision her “out of doors, in the garden” (231). Sylvia feels most natural “running out into the fields to bring up the cows, or spinning wool, or making up butter,” so much so that she identifies the farm animals as part of “her ideas of humanity” (342). Her very name, though more suggestive of the forest than the farm, still places her as firmly terrestrial. This same name, she objects, is unlucky (352).

In the context of male/sea and female/land conflict, Sylvia’s objection to using her “unlucky” name for her own daughter stems not just from her sense of her own misfortunes, but also from a realization of the inherent unfairness in both natural and social gendering processes. She comments, “men takes a deal more nor women to spoil their lives,” and this point becomes evident when cast in terms of the gendered sea and land (475). Before any characters are even introduced, the conflict between the elements is powerfully established: “for twenty miles inland there was no forgetting the sea, nor the sea-trade; refuse shell-fish, seaweed, the offal of the melting-houses, were the staple manure of the district; great ghastly whale-jaws, bleached bare and white, were the arches over the gate-posts to many a field or moorland stretch” (4-5). The sea at once provides the raw elements of fertilization as well as a macabre image of consumption: the massive whale jawbones threaten to swallow the land. It is not hard to make the analogical leap from this relation of the sea and land to that of men and women: necessary, inevitable, but one-sidedly dangerous. On a personal level, the sea destroys Sylvia’s attempts at brightening and beautifying her otherwise austere homestead with a garden, as “the bleak sea-winds came up and blighted all endeavours at cultivating more than the most useful things—pot-herbs, marigolds, potatoes, onions, and such-like” (231). The threatening nature of the ocean is made clear as it takes the lives of many sailors,

but more profoundly and importantly in this novel, it thereby throws into question the survival of the women and children who rely on their men's safety at sea (31). There is no escaping the sea's influence, just as there is no life envisioned in this novel without men: it is certainly not *Cranford*, nor does the novel contain any viable female community, be it founded on ties of family, friends, or business, which differentiates it from most of Gaskell's other novels. The sea, presented as a type of eternity (63), will always dominate the land, as men will continue to dominate women's lives and stories, the ending of the book tells us as the myth of Sylvia is eclipsed by that of Philip, whose sufferings obscure those of his wife and devoted, chaste lover, Hester. "And so," the narrator tells us, "it will be until 'there shall be no more sea'" (502); there is no hope for change or progress.

Throughout the book, change seems to occur mostly in the burgeoning town through its increasingly important business endeavors and the representative capitalist, Philip Hepburn.<sup>601</sup> Critics have made much of Philip being a "new man," representing the mercantile future of the nation.<sup>602</sup> He also differs from most other men in the novel by being effeminized by his trade, a point his uncle reminds him of at every opportunity (207). As the town occupies a liminal position between sea and land, Philip is neither fully masculine nor feminine.<sup>603</sup> He is, moreover, consistently harassed by men and ultimately destroyed by the sea. Philip, in the end, is literally crushed between the land and the sea, as he jumps in the ocean near the cliffs to save his child from drowning, but sustains fatal internal injuries (493). The symbolism of Philip's fate is overwhelming. He cannot even die without the sea

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<sup>601</sup> Gérin, 216; Schwartz, 4; Stoneman, 96.

<sup>602</sup> Gérin also notes that the character of Philip has been highly controversial and polarizing "ever since the book appeared" (215).

<sup>603</sup> d'Albertis, 131.

drawing his attention and Sylvia's away from their reconciliation and his spiritual journey (494-500). One might assume that Philip's effeminization would end in sterility, as it does for the Foster brothers and William Coulson, Philip's partner in the shop. But as the sea is made a symbol of eternity in the book, the town is explicitly described as representing life (63); Philip is one of the few men in the novel successful in fathering a child, and the capitalistic endeavors of the town move forward, despite struggles.

In the end, the gendering of the land, sea, and town is nothing more than a human projection, a means of making sense of an otherwise impersonal if not hostile world and an attempt to make a connection with it.<sup>604</sup> Although the novel might seem at first blush to uphold the pathetic fallacy, such as in the funeral scene early in the novel where the sea "seemed bared of life, as if to be in serious harmony with what was going on inland" (65), in fact we repeatedly see that the fury of the sea or the blossoming of the land does not parallel human experience (315, 424). Just as Sylvia finds the farm at first reassuringly protective, then looks to the sea for comfort, and finally turns to the town for safe haven (377), no one location is permanent or satisfying. Humans' place on an essentially unchanging landscape is tenuous, and success in business or reproduction does not guarantee a future: the last human connection to the story, Philip and Sylvia's daughter Bella, leaves Britain entirely for America at the end of the book and we never learn of her fate (503).<sup>605</sup> The bleakness of Darwinian theory is realized in this novel of human struggle, failure, and disappearance against an uncaring English landscape. America might offer a possibility of new narratives

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<sup>604</sup> Uglow calls these "emotional climates and landscapes," representing "imaginative and spiritual territory" that the main characters are "endowed with" (520-21). Marroni also recognizes the distinction between actual environment and human projection, noting that while eternity is located in nature, tragedy exists as a human element (175).

<sup>605</sup> Flint notes that because of Bella's immigration, "there is no sense of continuity through generations, and those who are left in Monkshaven to recount their memories tell a travestied version of the facts" (48).

and new gendered structures playing out against a fresh landscape, but that prospect is never made explicit in *Sylvia's Lovers*.

### *Sexual Selection*

Nowhere in the novel does Gaskell more clearly work through the moral and social implications of Darwin's theories than in its presentation of mate selection; though sexual selection would become a more prominent theme in Darwin's *The Descent of Man, and Selection in Relation to Sex* (1871), it still underpins what could easily be viewed as the most human elements of natural selection in *Origin*.<sup>606</sup> The very title of *Sylvia's Lovers* indicates that it is concerned with a woman's sexual choices and those men competing for claim to her sexuality. Gaskell's discarded working titles—*The Specksioneer* and *Philip's Idol*—made the male competitors the central figures of concern, but her final title instead draws attention to the woman's relationship to men, her position as a modifier of their status.<sup>607</sup> It is at core a novel of sexual selection. Gaskell had, of course, written previously about women's (or, more usually, girls') choice of lovers, and in the cases of *Mary Barton*, *Ruth* (1853), and *North and South*, the sexually virile man ultimately wins the heroine. In *Ruth*, this virile man also happens to be a morally bankrupt seducer, and the titular character's path to redemption from her selection error inevitably ends in her own death. *Sylvia's Lovers* is unique among Gaskell's novels in that no love interest for the heroine is clearly the right or wrong choice; both men are complicated, and both contain qualities of worthy lovers. In the end, Sylvia's all-crucial decision is made for her by circumstances and results in a child, but also in suffering and premature death for the spouses. Sylvia's seemingly perfect match—Charley

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<sup>606</sup> Poon argues that Gaskell anticipated many of the major themes of *Descent* in her fiction, although Poon's own work is focused on *Wives and Daughters* (196).

<sup>607</sup> D'Albertis, 106; Krueger, 141. Flint comments that "the novel's title positions her as potential object, rather than subject: the focus of male attention rather than a potentially active agent in her own right" (49).

Kinraid—is aware of his value in the sexual marketplace and quickly finds a superior marriage partner, at least by contemporary standards.<sup>608</sup>

Though Darwin never applies his theory of natural selection to humans in *Origin*, the Victorian reading public immediately picked up on its implications for individual people as well as societies.<sup>609</sup> In *Sylvia's Lovers*, Gaskell frequently demonstrates how easily the human-animal divide breaks down, such as when she narrates a farm dog's interiority (88), describes the instinctive fury of women whose sailor husbands were impressed by the navy (29), has Kester compare the importance of breeding in both cows and women (182), or presents Charley's self-preservation instinct (217).<sup>610</sup> Sexual attraction in the novel is similarly instinctive and irrational.<sup>611</sup> That sexual selection should be of particular interest for a novelist is not surprising, given the Victorian novel's ur-motif of courtship and marriage decisions. Darwin defines sexual selection in chapter four (entitled "Natural Selection") as depending "not on a struggle for existence, but on a struggle between the males for possession of the females; the result is not death to the unsuccessful competitor, but few or no offspring" (88). Successful males are patriarchs, controlling females' sexualities, having sole sexual access to a given female, and producing a large number of children. Sexual selection, to Darwin, is inherently a competition between males, and a female's role in this crucial process is limited to choosing the most attractive male to mate with. He does grant

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<sup>608</sup> Flint notes that Kinraid epitomizes the masculine, aggressive impulse which is "linked to what Gaskell shows to be a competitive struggle for personal survival and social furtherment. Such survival depends on the opportunistic exploitation of the circumstances in which one finds oneself" (51).

<sup>609</sup> Bergmann, 80; Desmond and Moore, 477; Ruse and Richards, xvii. Beer calls humanity "a determining absence" in *Origin* (*Darwin's Plots*, 7, 53).

<sup>610</sup> Uglow identifies Philip and Charley as each being "an animal, trapped by suffering" (521).

<sup>611</sup> Lansbury notes the irrationality of sexuality in *Sylvia's Lovers* (*Elizabeth Gaskell*, 98; *Novel of Social Crisis*, 170).



that this process of female selection might affect the evolution of males over “thousands of generations,” but clearly the influence is gradual and collective (89). Each male, on the other hand, lives out a dramatic process in his lifetime that Darwin describes in much greater detail, one in which “the males alone” inherit “special weapons” that often determine “victory” in this great “struggle with other males” (127, 88). In sexual selection, “the slightest advantage will lead to victory,” and anything from a beautiful singing voice (89) to “the shield” “may be as important for victory, as the sword or spear” (88). Equally important to the definition of sexual selection, though much less discussed by Darwin, is the process’s tendency “to fit the males and females to different habits of life,” of which males competing amongst themselves for mating opportunities is one part (158). As a consequence, Darwin writes, “natural selection will be able to modify one sex in its functional relations to the other sex, or in relation to wholly different habits of life in the two sexes” (87). Natural selection, then, either makes one sex dominant, adjusting the other sex to best suit its needs, or polarizes the behavior and lifestyles of males and females. As Gillian Beer puts it, “evolutionary process relies on sexual division.”<sup>612</sup>

Gender polarization appears as a leitmotif throughout *Sylvia’s Lovers*.<sup>613</sup> The comment, “what different views different men and women take of their fellow-creatures” (119), runs as an undercurrent through most interpersonal situations in the plot, from interest in news (men are attracted to stories of far-off battles, women to local thefts [95]) to Sylvia’s

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<sup>612</sup> Beer, *Darwin’s Plots*, 116.

<sup>613</sup> Schor comments that “The central ‘plot,’ one written by and for men, and acted out primarily through their love of women, depends on the registering of difference between men and women, and its essential progress is one in which men fix their identity by desiring each other’s women” (154).

mate selection (the women in her life favor Philip while the men favor Charley [78, 181]).<sup>614</sup>

In her ironic commentary about historical and cultural disjunctions, Gaskell notes,

Amongst uneducated people—whose range of subjects and interest do not extend beyond their daily life—it is natural that when the first blush and hurry of youth is over, there should be no great pleasure in the conversation of the other sex. Men have plenty to say to men, which in their estimation (gained from tradition and experience) women cannot understand; and farmers of a much later date than the one of which I am writing, would have contemptuously considered it a loss of time to talk to women; indeed, they were often more communicative to the sheep-dog that accompanied them through all the day's work, and frequently became a sort of dumb confidant. (88)

These opinions are also put into the mouths of the older, married farmers, such as Sylvia's father Daniel, who tells Charley right after their engagement, "we'll have a pipe and a glass; and that, to my thinking, is as good company as iver a woman i' Yorkshire" (198).<sup>615</sup> Farmer Corney comments of young men at a party, "They're a set o' young chaps as thinks more on t' lasses than on baccy;—they'll find out their mistake in time; give 'em time, give 'em time" (139). Such opinions are not limited to the countryside, as we see townsmen disinheriting women (as the otherwise kindly Fosters do to Hester, simply because she might marry) and limiting them to domesticated roles that Sylvia finds stifling. Sylvia struggles to connect with men's narratives, as when dreaming of Charley's fantastic seafaring stories, "there was no human interest for her in the wondrous scene in which she was no actor, only a spectator" (106). These stereotypes are pervasive across lifestyles and mutually reinforcing—there is nowhere for women to escape them. The mid-Victorian era in which Gaskell was writing saw women striving for greater legal and social equality,<sup>616</sup> a fight that could from that moment's vantage point be undercut by an evolutionary narrative from such a prestigious source as

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<sup>614</sup> Watson, 84-85.

<sup>615</sup> Stoneman observes that "Daniel Robson's masculinity derives from a decided separation of gender-roles" (97).

<sup>616</sup> D'Albertis, 131.

Darwin, a narrative that aspired to sole explanatory power over the entirety of the observable and explicable organization of nature.<sup>617</sup>

Sylvia's ultimately successful lover—the one who marries and impregnates her—is Philip Hepburn, her mother's nephew. Philip eventually gains Sylvia by offering her and her mother a home with him after her father is executed, they are evicted from their farm, and Bell becomes slightly senile in her grief. All this is not to mention, of course, the fact that he knows that Charley, Sylvia's fiancé, was kidnapped by the pressgang and not drowned, as everyone else believes. Philip could have offered Sylvia and her mother a home, or even help and financial support to find lodging, without the proviso that she marry him in the bargain, but of course he does not do so. By social standards, his behavior is reprehensible. By evolutionary standards championed by Darwin in *Origin*, his behavior is natural and even admirable. In the end, reproducing is the gage of an organism's success, not avoiding death or moral censure.

Early on, Philip believes that his self-education and business acuity will give him an advantage in the battle for Sylvia's affections, and will eventually win her over (161). As it turns out, circumstance plays into his hands more than any personal characteristic. He takes advantage of the tools at hand, such as Sylvia's destitution and Charley's disappearance. In neither case is he actively attacking his competitor (drawing on Darwin's "sword or spear"), but instead he relies on the instinct for self-preservation (Darwin's "shield"). In Darwin's terms, his behavior is justifiable and successful: humans, after all, are described in the *Origin* as making breeding selections based only on the potential benefit to themselves (83, 467).

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<sup>617</sup> Stoneman notes that Sylvia recognizes English law does not address women's needs (101); the law of natural selection, I argue, similarly fails women. Beer points out that the developmental impulse of evolutionary theories, including Darwin's, "tended to restore hierarchy and to place at its apex not only man in general, but contemporary European man in particular" (*Darwin's Plots*, 107).

Much of Philip's strategy is based on his unflagging belief that his desire for Sylvia is justified, is essential to his being, and must be accomplished (128, 161). He holds onto this vision even though his aunt Bell gives up on her hope for Philip and Sylvia's union (125), Sylvia consistently rebuffs him, and he acknowledges Charley's superior fitness (206, 386). Despite the contrast that just about every character draws between Charley and Philip—"Secure and exultant, his broad, handsome, weather-bronzed face was as great a contrast to Philip's long, thoughtful, sallow countenance, as his frank manner was to the other's cold reserve" (206)—in fact, their sexual selection strategy is nearly identical.<sup>618</sup> Early in the book, Philip doubts Sylvia's ability to make independent decisions, telling her that he should select her new cloak material because, "You won't know how to choose" (25). After hearing about Charley's history of abandoning flirtations (192), Philip decides that it is better for him to conceal the information as well as the eventual story of his rival's disappearance because Sylvia would be incapable of judging in the way that he would want her to. Though Charley is not as overtly manipulative, he pressures Sylvia to commit to him physically and socially before she is ready and willing to do so. At the New Year's party, he tricks her into kissing him because she does not know the rules of the forfeit game that she takes part in. Surprised and humiliated, she subsequently tries to avoid him and leave the party as soon as possible. In their private meetings leading up to their engagement, they struggle for dominance, "like two children defying each other; each determined to conquer" (184). Charley comes out on top in the end. He compels her to admit her belief in his fidelity and her own feelings for him before she is prepared to do so: "She was quite silent, almost trembling. He repeated the question as if to force her to answer. Driven to bay, she equivocated" (184). Troublingly, the

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<sup>618</sup> Stoneman notes that Charley and Philip "share the same basic aggression, structured by different ideologies of masculinity" (96).

opening of the final sentence in the passage, “driven to bay,” casts him in the role of the hunter and her in the role of a non-human animal. He likewise denies her the agency to make her choice on her own terms and in her own time. Tellingly, after her father approves of their engagement, Sylvia flees to her bedroom, allowing her father and fiancé alone to shake hands in solitude, “as if concluding a bargain” (197). Both lovers deny Sylvia the fundamental choice that Darwin presents as the only role for females in the process of sexual selection, which perhaps should not be surprising, given that all of Darwin’s language about male battle indicates a male-dominance, victor-take-all, rapine mentality essential to the process of mate selection.

The major differences between Philip and Charley are that the former is successful in Darwinian terms because he has a child with Sylvia, whereas we never know if the latter has offspring, and that Philip in the end possesses a fidelity that makes him more admirable than the wronged but flighty hero Charley. It takes Charley only minutes after Sylvia leaves a party “to turn his attention to the next prettiest girl in the room” (153), and after declaring his shock that Sylvia would marry another man, he courts and weds an accomplished heiress in what seems like no time at all (437-38). As Molly Corney Brunton, Charley’s cousin comments, “Kinraid were allays a fellow wi’ two strings to his bow” (437). His sexual selection strategy dramatically differs from Philip’s in this way.<sup>619</sup> Even after she has discovered Philip’s falsehood about Charley’s death and declared herself unable to live with him again, Sylvia still realizes “that Philip would not have acted so; it would have taken long years before he could have been induced to put another on the throne she had once occupied” (437). Before their marriage, Philip mused frequently on his desire to be with Sylvia:

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<sup>619</sup> Sanders notes that Charley is ultimately not the hero of the novel, despite being “the kind of self-helping, self-improving, self-made man of which the Victorians so approved” (“Introduction,” xvi).

To Philip she was the only woman in the world; it was the one subject on which he dared not consider, for fear that both conscience and judgment should decide against him, and that he should be convinced against his will that she was an unfit mate for him, that she never would be his, and that it was a waste of time and life to keep her shrined in the dearest sanctuary of his being, to the exclusion of all the serious and religious aims. (128)

He believes himself unable to go on living if he has to give up the hope of loving her (160).

After their marriage, he recognizes the imbalance in their affections for each other and goes “on striving to deepen and increase her love when most other men would have given up the endeavor, made themselves content with half a heart, and turned to some other object of attainment” (343). Philip and Sylvia are successful in having a child together, which might come as a bit of a surprise, given Sylvia’s deep dissatisfaction with her marriage and the fact that other characters view Philip as effeminized. One would think that the considerate Philip would not push her to fulfill her marital sexual obligations, or that he would be impotent, but apparently that is not the case.<sup>620</sup> As Darwin comments in the *Origin*, “No one can tell, till he tries, whether any particular animal will breed under confinement” (265); Molly echoes the sentiment, saying of human marriage, “It’s just luck, and there’s no forecasting it. Men is such unaccountable animals, there’s no prophesyin’ upon ’em” (438). Chance, not the more predictable and quantifiable quality of fitness, determines reproductive success in the novel, perhaps to everyone’s detriment.

Darwin suggests in *Origin* that offspring may inherit adaptations from their parents that make them more capable to win in the competition for resources and mates, the “struggle for life” (61).<sup>621</sup> This, unfortunately, often results in the children out-competing, and rendering extinct, their parent species (172, 321). Philip does, indirectly, die because of

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<sup>620</sup> Beer points out that “the emphasis in Darwin’s account is always upon productivity rather than on congress; on generation rather than on sexual desire” (*Darwin’s Plots*, 116).

<sup>621</sup> According to Richards, “Darwin believed that virtually all traits, useful or not, would be heritable” (62).

Bella: after jumping in the ocean to save her, he is dashed against the cliffs. But we never know how successful Bella is in future life. The last words of the novel tell of her marriage to a distant cousin of the Fosters and her immigration to America (503). Whether she survived, whether she had children, and whether she had a happy or lengthy marriage is left unresolved. The future is not so easy to determine, and the results of following the evolutionary rules are not guaranteed. This uncertainty is consistent with Darwinian theory, as Beer points out, because “Nowhere does Darwin give a glimpse of future forms: and rightly so, since it is fundamental to his argument that they are unforeseeable, produced out of too many variables to be plotted in advance.”<sup>622</sup> Gaskell is not necessarily endorsing a worldview ruled by ruthless, strategic battle for survival that overrides concerns like human happiness and fulfillment, but she is applying its consequences to a social vision.<sup>623</sup> Darwin would seem to advocate a brighter vision of evolution, but Gaskell takes the darkness of his own theory to a logical conclusion that he would shy away from, as flirting with nihilism (76, 126).

### *Time and Progress*

Darwin is considered a historian by modern critics because of his influence on his society’s understanding of the nature of time.<sup>624</sup> This is in part, Beer notes, because “*How things came to be as they are* is his great argument.”<sup>625</sup> As Coral Lansbury describes

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<sup>622</sup> Beer, *Darwin’s Plots*, xix.

<sup>623</sup> Flint, 52. Krueger notes that *Sylvia’s Lovers* documents the failure of “attempts to make women’s lives and stories conform with apparent ease to patriarchal plots” (138); Darwin’s narrative of sexual selection can come across as a very patriarchal plot.

<sup>624</sup> Shaw notes that the *Origin* offered “a model of the new historical method, whereby scattered facts are brought together into a whole and the laws of evolution are given a settled foundation” (“Other Historical Fiction,” 76).

<sup>625</sup> Beer, *Darwin’s Plots*, 68; original emphasis.

Gaskell's vision of the task of a historian, the role is not incompatible with Darwin's theory of constant adaptation: "The obligation to record the past faithfully is extended to the reader who must not be permitted to imagine that he stands at a fixed point in time watching all things change around him. Even as he reads, the society of the reader is assuming new forms, and by his recall of the past the historian is himself affecting the process of change."<sup>626</sup> The *Origin* does contain a number of comments on the pace and progress of timescales. Darwin takes care to reiterate that species and landscapes change extremely slowly and by such fine degrees that the variations are almost unnoticeable (84, 89, 283, 432).<sup>627</sup> The best location for studying and comprehending the vast timescape of the earth is a cliff with exposed strata that is still undergoing the process of erosion—and even so, such a site must be studied carefully for years (282). Such focused study does not guarantee an accurate sense of geohistorical time, however, and Darwin even suggests that such comprehension exceeds the limits of the human mind: "What an infinite number of generations, which the mind cannot grasp, must have succeeded each other in the long roll of years!" (287). Although Darwin vaguely references "many paleontologists" who believe in a progressive view of evolution, he himself does not endorse such a vision, even though his work was widely taken up at the time—and is still discussed now—as epitomizing the Victorian Whig vision of progress (345).<sup>628</sup> It is easy to understand why: he frequently discusses evolution as an "accumulative" process (30, 45, 84, 170, 284, 467), which gives a sense of forward motion to natural selection, and his famous branching bush image (see fig. 4) suggests multiplicity but a general upwards and

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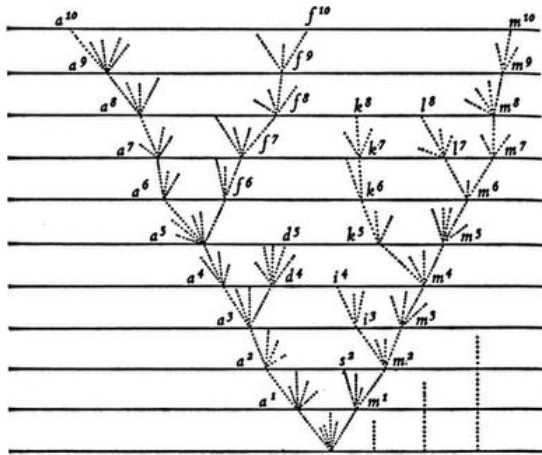
<sup>626</sup> Lansbury, *Novel of Social Crisis*, 163.

<sup>627</sup> Nonetheless, as Levine points out, for Darwin's theory, "*everything* is always or potentially changing, and nothing can be understood without its history" (*Darwin and the Novelists*, 16; original emphasis).

<sup>628</sup> Campbell, "Scientific Revolution," 368; Greene, 301; Herbert and Norman, 148; Ruse, "Origin of the *Origin*," 12.



outwards notion of growth.<sup>629</sup> He also claims that the constantly changing conditions of the struggle for existence determines species' traits, but says that if the same conditions should reoccur in the same location after a lapse of time, the exact form that filled that ecological niche in the past would not and could not reappear: "the two forms—the old and the new—would not be identically the same; for both would almost certainly inherit different characters



**Figure 4: Darwin's so-called tree-of-life from *Origin*.**

from their distinct progenitors" (315).<sup>630</sup> A group's existence is continuous but singular—once it is gone, it is gone forever (316). This linear notion of time, which is not quite progressive but could easily be misunderstood as such, is unforgiving.

Gaskell positions the human in the grand scale of history.<sup>631</sup> In *Sylvia's Lovers*, Gaskell reflects on the process of writing a

historical novel in the vein of Sir Walter Scott.<sup>632</sup> Her metacommentary, however, does not seem to be primarily concerned with the long shadow cast by the Author of *Waverly*.<sup>633</sup>

<sup>629</sup> On Darwin's image of the tree of life, see Campbell, "Why Was Darwin Believed?," 212; Choi, 288; and Desmond and Moore, 217.

<sup>630</sup> This point may seem self-evident, but it was deeply troublesome to even scientific thinkers of the time like Lyell; as Herbert and Norman rephrase the idea, "each species is modified by its history" (145).

<sup>631</sup> Marroni, 164.

<sup>632</sup> The book is set approximately "sixty years" before the current period, as in Scott's famous subtitle to *Waverly*; Gaskell's chosen time period is also significant for being during the French Revolution (Shaw, "Then and Now," 40). See also Shaw, "Then and Now," 38. Shaw notes that "Sixty years is a liminal point in time past: memory of it either does not exist amongst the living, or is so hazy and transient as to be discountable" ("Introduction," x).

<sup>633</sup> Rignall comments that "unlike Scott she does not come down finally on the side of the modern world" (23) and that Gaskell draws more attention to the fictionality of historical reconstructions (27). See also

Instead, she seems more interested in the notion of historical disjunction, the idea that we can feel ourselves comfortably superior to past generations because conditions have changed so essentially that we do not have to relate to their struggles. Such ironically self-satisfied statements test her readers' sense of progress,<sup>634</sup> as she pushes on the notion that "It is astonishing to look back and find how differently constituted were the minds of most people fifty or sixty years ago" because of how much people acted by emotion and intuition rather than rationality, even among "the more educated" class (318), or that mid-Victorian readers are more consistent with their moral principles in their daily lives than prior generations: "one of the greatest signs of the real progress we have made since those times seems to be that our daily concerns of buying and selling, eating and drinking, whatsoever we do, are more tested by the real practical standard of our religion than they were in the days of our grandfathers" (98).<sup>635</sup> Moreover, Gaskell strives to make her readers question the sense of smugness gained from the moment's historical vantage point:

Is it because we are farther off from those times, and have, consequently, a greater range of vision? Will our descendants have a wonder about us, such as we have about the inconsistency of our forefathers, or a surprise at our blindness that we do not perceive that, holding such and such opinions, our course of action must be so and so, or that the logical consequence of particular abhorrence? (68)

Her characters, moreover, find their own timescapes undermined. At the funeral of a sailor murdered while resisting the pressgang, Sylvia recognizes the minuteness of a human life—or even of all human life—when compared to the natural world that temporarily sustains it:

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d'Albertis, 108.

<sup>634</sup> Flint, 49; Foster, 158. Uglow notes that Gaskell's faith in progress might have been in part undermined by the senseless fratricide of the American Civil War (510); see also Shaw, "Other Historical Fiction," 86.

<sup>635</sup> Henkin points out that some Victorians saw the animalistic origins of humanity, which Darwinian theory reinforced, in capitalistic endeavors: "The same rugged individualism of the ape and tiger were manifest in the Victorian world of fierce competition, pitiless appetite for wealth, and idolatry of material things" (222-23).

“she had come down the long church stair with life and death suddenly become real to her mind, the enduring sea and hills forming a contrasting background to the vanishing away of man” (75). Sylvia, as mentioned earlier, is the character who spends time like Darwin’s model geological observer, watching the slow but steady process of the sea eroding away the cliffs. She is aware of deep geological time and recognizes the regularity of natural processes like the ebb and flow of the waves (359-60), and is thereby emboldened to undertake her oath to never live with Philip as his wife again (383), disregarding her old friend Kester’s warning of the inhuman nature of the length of “niver” (319) and the horror of others in her community that she would set an infinite boundary on her anger. Of course, Sylvia does forgive Philip at the end of the book, demonstrating (as Darwin asserted) even a studied human being’s inability to fully grasp the notion of time. Nowhere is this more wittily shown than in the discussion of St. Sepulchre, a chapel founded by a knight in the Middle Ages for retired soldiers “to attend the daily masses he ordained to be said till the end of all time (which eternity lasted rather more than a century, pretty well for an eternity bespoke by a man)” (459). Human beings hold no dominion over time. If anything, as Jenny Uglow puts it, the novel “depicts an endless struggle amid the flux of time.”<sup>636</sup>

Gaskell’s timescape in *Sylvia’s Lovers* is different from—and ultimately more depressing than—Darwin’s. If Darwinian theory offers no notion of progress, then on what can we base an optimistic vision of development? Even though the Monkshaven of mid-century “is altered now into a rising bathing place,” rather than a struggling seaport whose economy revolved around whaling, we are left with the sense that there is no real improvement: “at the ebb of a spring-tide, you may hear the waves come lapping up the shelving shore with the same ceaseless, ever-recurrent sound as that which Philip listened to

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<sup>636</sup> Uglow, 527.

in the pauses between life and death” (502). Conditions have not changed for human beings in the environment that they live and die by, and Sylvia and Philip are representative of the species in being unable to adapt to the changing events in their lives.<sup>637</sup> Philip is the character who most clearly represents this vision of time. As the most intellectual figure in the book, the self-made capitalist of whom the Victorians would theoretically heartily approve, Philip is well-positioned to muse on the notion of progress. He is struck by the parallels between his love triangle with Sylvia and Charlie and that of the youth of Widow Rose, his landlady:

“Then he went on to wonder if the lives of one generation were but a repetition of the lives of those who had gone before, with no variation but from the internal cause that some had greater capacity for suffering than others. Would those very circumstances which made the interest of his life now, return, in due cycle, when he was dead and Sylvia was forgotten?”

(240).<sup>638</sup> Nothing varies over time but degree of suffering, and even that suffering will be experienced over again by untold people. Rather than succumbing to a Schopenhauerian depression, however, Philip looks to historical narratives to inspire him, to Jacob’s fourteen-year labor for his beloved, Rachel, or to the story he reads of the medieval Lord Guy, whose wife Phillis reconciles with him on his deathbed (246, 466). The “pretty story of the Countess Phillis,” however seemingly unrealistic, does repeat in the most tragic of ways—Sylvia forgives Philip on his deathbed, but their moments together are short and unsatisfying, followed quickly by Sylvia’s own death and forgotten in the local legend that vilifies Sylvia’s behavior (471). People seemed fated to repeat patterns: Daniel cannot help but rebel against the pressgang again after having done so in his youth; at her father’s arrest, Sylvia is

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<sup>637</sup> Marroni, 163, 174. Beer points out that in Darwinian theory, “The individual organism does not evolve in the course of its life” (*Darwin’s Plots*, 38).

<sup>638</sup> Uglow describes this beautifully as a vision of “the repetitive nature of human experience, a flowing and ebbing tide washing through time” (511).

described in very similar terms to the “furies” of women whose husbands were taken up by the pressgang at the beginning of the novel. There is no real narrative of escape—even Bella, in leaving Monkshaven, does so by marrying a cousin, as her parents did. As Kate Flint notes, “No confident answer to the problem of emotional pain is offered in *Sylvia’s Lovers*; no theological consolation is proffered.”<sup>639</sup> There is not only no teleology—there is no meaningful movement of any kind, just slight variation within endless repetition.<sup>640</sup> Human suffering is Sisyphean. Darwin’s *Origin* would suggest that variation is not only constant and certain but also generates newness, despite the larger patterns that he identifies in natural history. Once again, Gaskell’s vision of the implications of Darwinian theory are far more nihilistic than Darwin would be willing to present them, though not inconsistent with his ideas.

### *Death, Remembrance, and Narrative*

Darwin was already an authoritative figure when he published *Origin*; with his theory of natural selection, he claimed an explanatory power over not only the past and the present (i.e. that his methodology is the only way to understand how things were and how they currently are), but he also denied any predictability of the future. His work, as many critics have noted since, drew on the values and narratives of his time and also attempted to rewrite some of them, as we see in sexual selection, for example. Those things which his theory could not explain—“The laws governing inheritance” (13), the “laws of the correlation of growth” (12), “the inextricable web of affinities between the members of any one class” (434)—are deemed unknowable. Yet at the same time, Darwin reveals the fictionality

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<sup>639</sup> Flint, 52. Sanders interprets suffering in *Sylvia’s Lovers* through a Christian framework of spiritual purification (“Varieties of Religious Experience,” 23), but the novel lacks any consolatory note, religious or otherwise.

<sup>640</sup> D’Albertis, 134.

underlying some of the work of natural historians, such as when he admits that his term “Struggle for Existence” is meant to be largely metaphorical (62) or in his repeated assertion that the distinction between “species” and “varieties” is one of convenience and represents “no essential distinction” (276; see also 48). He tells us that he has found the key to understanding some of nature’s most mysterious processes, and yet he describes human’s efforts to create and explain as “feeble” and ranks “the works of Nature” as “immeasurably superior” to “those of Art,” while admitting that he uses Art to comprehend and describe Nature (61).

Darwin’s *Origin* is not a grand narrative in the sense that Chambers’s *Vestiges* was, starting with solar nebulae and tracing the development of life from plants to angels. The *Origin* is more of a tract, anticipating objections to his ideas and attempting to persuade readers to align with his theory based on his mass of research.<sup>641</sup> Darwin claims an objectivity—an amorality—for his theory, as discussed earlier in terms of the inherence of struggle, suffering, and death to natural selection (61, 172). He rejects the Christian agenda underlying natural theology, declaring himself anti-creationist (167), and says that the only hope for increasing our understanding of the natural world requires “not look[ing] to some unknown plan of creation” (434). Yet there is an implicit value system in much of Darwin’s terminology: those “dominant” species that succeed in the struggle for existence are contrasted with those that fail, which are termed “inferior” (327); rare species or traits are “of subordinate value” (418); adaptations that help organisms survive are called “profitable” (172). Perhaps more interestingly, Darwin uses metaphors and similes that explain scientific ideas in terms of linguistics. Thus, breeds are likened to dialects in not having definite origins

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<sup>641</sup> Depew, 244.

(40); rudimentary organs are compared to letters in a word that are not pronounced (455).

Most extensively, Darwin comments,

I look at the natural geological record, as a history of the world imperfectly kept, and written in a changing dialect; of this history we possess the last volume alone, relating only to two or three countries. Of this volume, only here and there a short chapter has been preserved; and of each page, only here and there a few lines. Each word of the slowly-changing language, in which the history is supposed to be written, being more or less different in the interrupted succession of chapters, may represent the apparently abruptly changed forms of life, entombed in our consecutive, but widely separated, formations. (310-11)

In terms of this simile, Darwin's theory of natural selection comes as close as anything available to a universal translator.

Both Gaskell and her husband had a lifelong interest in linguistics, which is well documented by critics and historians.<sup>642</sup> *Sylvia's Lovers* in particular was taken to task for its use of Yorkshire dialect by contemporaneous critics,<sup>643</sup> although critics have subsequently noted that it was groundbreaking in that the eponymous heroine speaks a nonstandard dialect, and that dialect is not used for comic purpose.<sup>644</sup> There is very little that is comic in this story of struggle, death, and narrative distortion. It has been frequently noted that the epigraph to *Sylvia's Lovers* comes from the end of section LVI of Tennyson's *In Memoriam*,<sup>645</sup> the heart of the poem's evolutionary doubt:

“So careful of the type?” but no.  
From scarped cliff and quarried stone  
She cries, “A thousand types are gone:  
I care for nothing, all shall go.

“Thou makest thine appeal to me:

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<sup>642</sup> See, for example, Uglow, 72. William Gaskell believed that dialects underwent a process of evolution, and he presented evidence for this claim in his “Lectures on Lancashire Dialect” (Uglow, 513-14).

<sup>643</sup> Easson, 432-55; Flint, 45; Shaw, “Introduction,” xx; Uglow, 530.

<sup>644</sup> Krueger, 141; Spencer, 40.

<sup>645</sup> Gaskell, like many of her time, greatly admired *In Memoriam* (Gérin, 244; Shaw, “Elizabeth Gaskell,” 45).

I bring to life, I bring to death:  
The spirit does but mean the breath:  
I know no more.” And he, shall he,

Man, her last work, who seem’d so fair,  
Such splendid purpose in his eyes,  
Who roll’d the psalm to wintry skies,  
Who built him fanes of fruitless prayer,

Who trusted God was love indeed  
And love Creation’s final law—  
Tho’ Nature, red in tooth and claw  
With ravine, shriek’d against his creed—

Who loved, who suffer’d countless ills,  
Who battled for the True, the Just,  
Be blown about the desert dust,  
Or seal’d within the iron hills?

No more? A monster then, a dream,  
A discord. Dragons of the prime,  
That tare each other in their slime,  
Were mellow music match’d with him.

O life as futile, then, as frail!  
O for thy voice to soothe and bless!  
What hope of answer, or redress?  
Behind the veil, behind the veil.

Gaskell takes from this section the last three lines, the human cry for comfort and answers to the crisis evoked by evolutionary findings that can only imagine resolution after death.<sup>646</sup> Her audience, however, would have brought to mind the rest of the famous section that struggles with a harsh—even cruelly callous—Nature, the fear of not just humankind’s extinction but the species’ entire erasure from the record of the world, and the grotesquely animalistic basis of humanity.<sup>647</sup> Though, of course, Tennyson published this poem well before Darwin’s

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<sup>646</sup> Uglow sees Gaskell as “deliberately edit[ing] *In Memoriam*, to make a negative positive, or at least hopeful” (506), but the epigraph can also read as a despairing cry of a person struggling to hold onto faith in the wake of loss.

<sup>647</sup> Shaw, “Elizabeth Gaskell,” 47; Uglow, 506.



*Origin* appeared, the prominence that *Origin* brought to evolutionary debate made many readers from that day to this evaluate Tennyson's lines in light of the brutality of natural selection.<sup>648</sup> But there is more to the selection of this epigraph than just the priming of readers to consider the darkest implications of evolutionary theory in the novel to follow. The use of Tennyson, rather than Darwin, indicates Gaskell's interest in the power of literary evolutionary narratives.

If considered from the perspective of biological evolutionary narrative, the story of *Sylvia's Lovers* would be that of the unfit failing to reproduce and the dominant succeeding in their battles for the best mates and resources. In this scenario, it does not matter that Daniel was executed, because he had already succeeded in reproducing; Philip would clearly be the hero of the tale, not for his attempt to find redemption as a marine or for his faithfulness to Sylvia after she had cast him out, but because he outwitted Charley and left his offspring with sufficient resources; Sylvia's anguish is irrelevant because she (like females generally in Darwin's narrative) exists as a vessel through which the successful male passes on his lineage; the only marker of the events that passed, a couple of generations after the action, would be the presence of Sylvia and Philip's descendants thriving in the area. But that is not the story we get. As Andrew Sanders observes, "We end not with success, but with failure and death."<sup>649</sup> Gaskell presents her readers with a complex tale in which all are trying to do their best, even if they are misguided—missed connections (such as between Hester and Philip, or Hester and William Coulson, or even Sylvia and Philip) occur constantly. Psychological reactions are integral to understanding events.<sup>650</sup> Human suffering is given its

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<sup>648</sup> Uglow, 506.

<sup>649</sup> Sanders, "Introduction," xvi.

due weight. Death is not something that is simply a byproduct of natural processes, but rather is a profound occurrence that individuals struggle to come to terms with. If we were not given the imaginative historical narrative by Gaskell, we would have no sense of the events that had passed: Bella has immigrated, those people who experienced the events firsthand have died, and the only remainders of the events are the crumbling almshouses that Hester built in memory of Philip and “the tradition of the man who died in a cottage somewhere about this spot,—died of starvation while his wife lived in hard-hearted plenty not two good stone-throws away” (502). The only means of recovering the past is through historical work translated through a literary lens. Evolutionary theory can inform history, certainly, but purely biological narrative is insufficient as historical method. There are many individual stories nested within the overall narrative that can only be hinted at: Coulson’s forsaken sister (192), Jem the consumptive marine whose wife walks until her feet are bloody to meet his ship (456), Crazy Nancy who is institutionalized after being abandoned by her lover (187-88), Philip’s ancestors who are remembered only through the initials carved on an old oak chest (156); even the seemingly surface-level Kester has a hidden story of suffering, “for Kester, when turned out of the condemned cell, fairly broke down into the heavy sobbing he had never thought to sob *again* on earth” (316, emphasis added). Each of these stories could be its own novel, and delving into the nested plots would extend the book far past its 500-odd pages. Gaskell models her alternative method at the end of the novel, where the “lady” interviewer talks with the “bathing woman” and “a few old people” to learn the strands of legend that she then builds up into the story that we just finished reading (502). In fact, this narrative frame closely parallels the way that Gaskell researched her story while in Whitby, mining the memories and oral traditions of the older locals, especially women, and talking

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<sup>650</sup> Lansbury, *Novel of Social Crisis*, 181.

with everyone who might be able to help her construct her narrative.<sup>651</sup> Her story, tapping into traditions of the reappearing lover, thereby becomes more than a period piece; it becomes a grand narrative like Darwin's, but one that is "mythical, fateful, [and] symbolic" as well as empirical.<sup>652</sup> As Lansbury notes, for Gaskell, "Legend without history is mindless feeling....History without legend is a dry catalog that seeks in vain to master and subdue passion."<sup>653</sup> Like Darwin, she practiced the methods she preached. *Sylvia's Lovers* presents us with a fictional engagement with history that nonetheless is a serious attempt to process and make Darwin's argument both tangible and human.

#### CONCLUSION: DARWINISM'S SOCIAL LEGACY, OR SPENCERIAN THEORY

As compared to Chambers's much-maligned *Vestiges*, Darwin's *Origin* was received as a respected scientific work; even its popularity did not work against it, as *Vestiges*'s did, in large part because the *Origin* is a somewhat difficult although still very readable book.<sup>654</sup> The controversies that followed *Origin*'s publication, and that are still ongoing today, are both too well known and too extensive to warrant thorough discussion here. The darkest implications of Darwinian theory—and those most significant to social history—are in fact those that are conflated with the work of Herbert Spencer.

Spencer originated the phrase "survival of the fittest" in 1852, and Darwin's resistance to the phrase was overcome to the extent that he included it in the fifth (1869) and sixth editions (1872) of *Origin*.<sup>655</sup> Despite his use of Spencer's infamous phrase, Darwin

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<sup>651</sup> Schor, 181; Shaw, "Elizabeth Gaskell," 53; Shaw, "Other Historical Fiction," 85; Uglow, 482-83.

<sup>652</sup> Qtn. from Henry, xxviii. See Craik (141), Lansbury (*Elizabeth Gaskell*, 98), Shaw ("Elizabeth Gaskell," 43) and ("Introduction," ix-x) for the traditions from which this love triangle is derived.

<sup>653</sup> Lansbury, *Elizabeth Gaskell*, 94.

<sup>654</sup> Desmond and Moore, 480.

worked to distance himself from Spencer personally and professionally because he thought that Spencer put too much stock in the deductive method to form conclusions about natural processes and because Spencer also was less hesitant to assert that the term “fittest” conveyed a value judgment.<sup>656</sup>

Spencer’s essays in the *Westminster Review* (1857-58) were widely read and are often described as anticipating Darwin’s theories.<sup>657</sup> His take on evolutionary theory, however, was particularly influential on social theory in the late nineteenth and early twentieth centuries, and, as a consequence, remains controversial. Though Spencerian evolutionary theory has received less critical attention in literary studies than Darwinian theory, it warrants consideration in the work of George Eliot especially, the subject of the next chapter.

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<sup>655</sup> Greene, 300-1; Levine, *Darwin the Writer*, 84; Martin, 92.

<sup>656</sup> Browne, 186; Lewens, 331; Greene, 301.

<sup>657</sup> Martin, 93.

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## Chapter 4:

### “The Shape and Limits of Mental Development:

### George Eliot’s *Daniel Deronda* and Spencerian Evolutionary Psychology”

George Eliot (1819-80) offers perhaps one of the most generative and daunting studies of the interrelation of scientific and literary discourse in the nineteenth century. At the center of intellectual and scientific debate as the editor of the *Westminster Review* for much of the 1850s, Eliot maintained her place as a light of the London intelligentsia throughout her adult life, as a breathtakingly erudite woman, the partner of George Henry Lewes (an intellectual whose interests spanned the philosophical and scientific), and the cohost of an elite London salon, not to mention the acquaintance and correspondent of many of the leading thinkers of the day. Her final completed novel, *Daniel Deronda* (1876), has often been taken as the capstone to her oeuvre. And yet when literary critics consider evolutionary theory in Eliot’s work generally and in *Daniel Deronda* in particular, most study Charles Darwin’s influence, following in the footsteps of Gillian Beer’s seminal *Darwin’s Plots* (1984). Such an approach undervalues Eliot’s intellectual engagement with the evolutionary theory of Herbert Spencer (1820-1903), her one-time beau and lifelong friend. This chapter seeks to address this critical gap, focusing particularly on *Daniel Deronda* in light of Spencer’s evolutionary psychology.

Spencer is responsible for “establishing evolutionary science as a master discourse” in the mid- to late nineteenth century, persuading his contemporaries that evolution could inform all branches of natural, physical, and social science; he also became a foundational figure in a number of social sciences by transitioning fields like sociology, anthropology, and especially psychology from personal and philosophical reflections to biologized practices informed by standards and statistics.<sup>658</sup> Moreover, he was the foremost propounder of organicism—“the notion that there are certain basic similarities of structure and function between societies and biological organisms”—in Victorian Britain.<sup>659</sup>

Nonetheless, Spencer has been and remains a deeply unpopular figure in historical, literary, cultural, and scientific studies. Several historians of science and literary critics have outlined the reasons for this neglect; on the whole, the trend can be explained by a tendency to caricature or scapegoat Spencerian political thought as Social Darwinism while simultaneously fearing any association with that disreputable doctrine. The fashionability of Darwinism has also obscured consideration of other Victorian evolutionary theories.<sup>660</sup> When it comes to Eliot, then, literary critics tend to dismiss Spencerian thought as incompatible with Eliot’s social vision, treating it as mechanistic, misogynistic, dogmatic, and socially regressive.<sup>661</sup>

A few studies of Spencer and Eliot as mutually informing thinkers and writers exist, although most trace Spencerian themes in Eliot’s work by either regarding Eliot as entirely

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<sup>658</sup> Matus, 61; Rylance, 3, 241.

<sup>659</sup> Qtn from Paxton, 5; and Taylor, Introduction, xiv. See also Shuttleworth, *Nineteenth-Century Science*, 9-10.

<sup>660</sup> Dixon, “Spencer and Altruism,” 85; Francis, 11; Graber, 80; Mingardi, 4; Paxton, 4; Richards, *Darwin*, 287.

<sup>661</sup> See, for example, Erskine, 103-4; Karl, xxi; Paxton, 4, 6, 14, 211, 225; Shuttleworth, *Nineteenth-Century Science*, 187.

accepting Spencer's ideas or as entirely opposed to them.<sup>662</sup> More often, critics use key Spencerian terms in describing Eliot's project without an awareness or acknowledgement of their likely origin, or of the discourse between these giants of the mid-Victorian London intelligentsia from which they arose; this tendency occurs particularly in discussions of psychology, ethics, and organicism.<sup>663</sup> The dominant critical trend has considered Darwin as representative of mid- to late-Victorian evolutionary theory and seen Eliot's work in particular as Darwinian.<sup>664</sup> Traits of Eliot's fiction that are identified as Darwinian, however, could just as easily been seen as Spencerian: emphasis on mutation, environmental influences, transition, contingency and circumstance, and the generation of alternatives.<sup>665</sup> This may be a matter of both evolutionary theorists deriving their ideas from a shared scientific and cultural discourse and so "develop[ing] closely parallel conceptions," or from mutual influence—Darwin lists Spencer among evolutionary thinkers whose work preceded his own in *Origin*.<sup>666</sup> Eliot in particular might have been put off by Darwin's tendency to use anthropomorphic language about nature and design, although scholars frequently note that Eliot was troubled by Spencer's tendency to generalization.<sup>667</sup>

Eliot and Spencer maintained an intellectual and personal relationship over nearly three decades, and as a consequence their work was mutually informative. Eliot was immersed in evolutionary ideas and interested in the power of scientific images long before

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<sup>662</sup> In the former category, see Chung; Feltes; Rylance, 245. In the latter, see Erskine; Karl, 594-95; Paxton.

<sup>663</sup> See, for example, Choi, 278; De Saily, 24; Franklin, 144-45, 162; Graver, 47.

<sup>664</sup> Most influential in this trend was Beer's work on Darwin's *Descent* and Eliot's last two novels (see especially 170-219).

<sup>665</sup> Choi, 275, 293; Franklin, 162; Garratt, 190.

<sup>666</sup> Qtn from Richards, "Relation of Spencer," 28; see also 18.

<sup>667</sup> Paxton, 25.

her acquaintance with Darwin's work, in part because Spencer was an early proponent of evolutionary theory, and in the nineteenth century, she was considered a Spencerian rather than a Darwinian.<sup>668</sup> Eliot was particularly influenced by Spencer's synthesizing of ethics with evolutionary development on an individual psychological and global cultural level.<sup>669</sup> Moreover, philosophical preoccupations link the two. Spencer was considered by many to be the most important philosopher of his age, and Eliot engages in philosophical writing in her novels not "in the sense that they provide literary clothing for philosophical ideas," but as active works of thought experiments, structured observations, and arguments that lead to conclusions.<sup>670</sup> Eliot's philosophy, like Spencer's, was deeply enmeshed in the scientific concepts, debates, and methodologies of the day, so much so that Diana Postlethwaite opens the *Cambridge Companion to George Eliot* chapter on science with an 1876 passage from Henry James in which a character defends Eliot's use of scientific neologisms: "So long as she remains the great literary genius that she is, how can she be too scientific? She is simply permeated with the highest culture of the age."<sup>671</sup> This sentiment extended to social sciences like psychology and sociology, because such fields were not easily distinguishable from natural sciences in the Victorian era, and Spencer further blurred those boundaries.<sup>672</sup>

This chapter first outlines Spencer's evolutionary thought and biography, focusing particularly on his intellectual and personal relationship with Eliot. After considering the relationship from Eliot's perspective, I shift attention to analyzing *Daniel Deronda* in light of

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<sup>668</sup> Karl, 38; Paxton, 4-7, 16.

<sup>669</sup> Karl, 594-95.

<sup>670</sup> Qtn from Gatens, 74; see also Anger, "Eliot and Philosophy," 92.

<sup>671</sup> Qtn from Postlethwaite, "Eliot and Science," 98; see also Shuttleworth, "Language of Science," 269.

<sup>672</sup> Shuttleworth, *Nineteenth-Century Science*, 16.

Spencerian evolutionary psychology, ethics, and philosophy. Ultimately, I maintain that not only did Eliot both rely upon and critique Spencerian frameworks in a complicated manner, but also that she approached similar topoi—nationality, trauma, experience, inheritance, gender, sympathy, epistemology—informed by a Spencerian synthesis, in which concepts of human development and limitations on both the individual and social level must be informed by evolutionary theory in order to be properly understood. Her main point of distinction from Spencer’s ideology resides in her focus on the individual case study rather than generalizations at the level of societies, global movements, or philosophical abstraction. In focusing on the individual as the embodiment of evolutionary principles and conflicts, Eliot is able to demonstrate the variety of adaptive responses people take to their life situations and so overcomes false, antithetical extremes that opponents of the theory might set up. This variety, however, suggests that a general movement to an evolutionary endpoint is hardly discernible if it exists at all, and so Eliot is less optimistic than Spencer about human progress, adopting her typical meliorist stance.

#### **HERBERT SPENCER’S LAMARCKIAN EVOLUTIONARY SYNTHESIS**

Spencer’s evolutionary theory—as articulated in its most succinct and focused form in “Progress: Its Law and Cause” (1857)—is grand, progressive, and universal, beginning in nebula and ending in human culture. His views are not entirely unlike Robert Chambers’s.<sup>673</sup> There are some important differences between Chambers’s work and Spencer’s, however: *Vestiges* was much more controversial and commercially successful, but Spencer’s work was not published anonymously, his evolutionary theory was explicated in a number of essays and volumes across a wide variety of scientific fields, and his reputation for intellectual rigor

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<sup>673</sup> Postlethwaite, *Making It Whole*, 198, 200.



brought a supportive elite readership to his evolutionary system.<sup>674</sup> Spencer also opposed *Vestiges* because he thought that evolution “could only be brought about by adaptation rather than progression,” that is, by the innate unfolding of a teleological development according to a universal plan that *Vestiges* promoted.<sup>675</sup> Spencer’s exposure to evolutionary theories dated back to his early life—his father was a member of the Derby Philosophical Society, founded by Erasmus Darwin in 1783, and Spencer’s work as a railway engineer in his early twenties brought him in contact with fossils that piqued his interest in geology, leading him to Charles Lyell’s *Principles of Geology* in 1840.<sup>676</sup> Lyell deeply opposed the evolutionary theory of Jean-Baptiste Lamarck, which essentially proposed that organisms grow increasingly complex over time and adapt to their environmental pressures as they become more differentiated from each other; these adaptations, acquired in individual organisms’ lifetimes, are inherited by their offspring.<sup>677</sup> The problem with Lyell’s attempt to discredit Lamarck in his *Geology* was that he went into so much detail that many readers, including Spencer, found this first exposure to Lamarckian theory intriguing and persuasive.<sup>678</sup> Lamarckianism was attractive to Spencer, like others, because as Gillian Beer explains it, the theory is optimistic, “propos[ing] a world of intelligent desire rationally satisfied,” in which “bad behaviour results in loss and degradation” but positive, adaptive behavior gives rise to

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<sup>674</sup> Francis comments that “Those around him began to believe in his prowess as a thinker on philosophy and science, before there was any basis for this” (146).

<sup>675</sup> Bowler, “Changing Meaning,” 107.

<sup>676</sup> Carneiro, xiv-xv; Francis, 22; Peel, xiii, xxi; Taylor, *Philosophy*, 59.

<sup>677</sup> Although Lamarckianism has never been as trendy as Darwinism for historical and literary critics, Beer notes that “Lamarck’s account of evolutionary process is *still* the popular one” (20), while Jordanova observes that “prominent biologists continued to defend Lamarck’s biological philosophy of the inheritance of acquired characteristics” well into the mid-twentieth century (111).

<sup>678</sup> Depew, 245; Taylor, *Philosophy*, 58, 59.

“intelligent succession” in “a world apparently more or less stable.”<sup>679</sup> Spencer committed to Lamarckianism for the remainder of his life, bringing to the theory his own concept of the inheritance of acquired mental characteristics—instincts, habits, beliefs—and so incorporated biology into the previously philosophical fields of psychology and sociology.<sup>680</sup> Spencer also infamously coined the phrase “survival of the fittest” in *Principles of Biology* (1864) to better describe Darwin’s “natural selection” as an evolutionary process that eliminates inferior traits; for him, Lamarckian use-inheritance differed by selecting for positive, adaptive traits and allowing for survival and advance.<sup>681</sup>

Spencer is widely considered to be more of a scientific popularizer than a scientist in his own right<sup>682</sup>; this minimizing of Spencer’s contributions to nineteenth-century science misrepresents how his contemporaries viewed him and how his systematizing was consistent with most other scientific figures of the century (including Darwin and Lyell), not to mention how powerful his influence on scientific thought was. Spencer is responsible for permanently changing scientific terminology so that the theory of evolution is still referred to as such today, as opposed to “the development hypothesis” or the many variations that were previously in currency.<sup>683</sup> He felt that “evolution” better captured the universal process of increasing complexity, increasing heterogeneity, increasing differentiation (i.e., specialization of functions), and increasing integration (i.e., coordination and

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<sup>679</sup> Beer, 19, 20, 21.

<sup>680</sup> Bowler, *Non-Darwinian Revolution*, 65, 158-59; Postlethwaite, *Making It Whole*, 205; Rylance, 216, 241; Taylor, *Philosophy*, 57.

<sup>681</sup> Carneiro, xx; Richards, “Relation of Spencer,” 25.

<sup>682</sup> See, for example, Berkove, “*Before Adam*,” 14.

<sup>683</sup> Bowler, “Changing Meaning,” 107-8; Carneiro, xvii.

interdependence of differentiated components) of organisms and societies.<sup>684</sup> Spencer's interests ranged through a wide variety of disciplines, including philosophy, history, natural history, sociology, and psychology, which might make his career seem scattered or dilettantish, but in fact he saw evolution as the unifying principle underlying all of them<sup>685</sup>:

While we think of Evolution as divided into astronomic, geologic, biologic, psychologic, sociologic, etc., it may seem to a certain extent a coincidence that the same law of metamorphosis holds throughout all its divisions. But when we recognize these divisions as mere conventional groupings, made to facilitate the arrangement and acquisition of knowledge—when we regard the different existences with which they severally deal as component parts of one Cosmos; we see at once that there are not several kinds of Evolution having certain traits in common, but one Evolution going on everywhere after the same manner.<sup>686</sup>

Evolution does not just apply to physical or biological spheres to Spencer, however, but also to “the development of Society, of Government, of Manufactures, of Commerce, of Language, Literature, Science, Art”; he calls this process “Super-organic Evolution,” and locates its roots in the same kind of organic evolution that is observable in the nonhuman animal kingdom.<sup>687</sup> Spencer counters skeptics who cite the inobservability of the process with the argument that evolution is slow, but can produce “marked changes” over the millions of years that it has to operate;<sup>688</sup> in his typically aggressive manner, he argues that Creationists have no facts to support their own theory and calls their ideas understandable only as coming from “the uneducated and the ill-educated,” and likens such a viewpoint to

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<sup>684</sup> Andreski, 8; Gagnier, 317; Levine, *Darwin and the Novelists*, 160; Straley, 590; Taylor, *Philosophy*, 57.

<sup>685</sup> Naso, 13.

<sup>686</sup> Spencer, *First Principles*, “Part II: The Known,” 537.

<sup>687</sup> Spencer, *Principles of Sociology*, I, 7; “Progress: Its Law and Cause,” 3. Spencer goes on to define this notion of Super-organic Evolution as “including all those processes and products which imply the co-ordinated actions of many individuals,” ultimately making it the basis for the study of Sociology (qtn from *Principles of Sociology* I, 4; see also I, 7).

<sup>688</sup> Spencer, “The Development Hypothesis,” 380.

the naïve “incredulity” of a person surprised to see “a boy, grown into a man” after a number of years.<sup>689</sup> Spencer was remarkably consistent in his views on evolution in the nearly three decades that Eliot was familiar with him and his work: evolution, to him, was progressive,<sup>690</sup> continuous, universal, observable in all life forms and societies no matter how small and localized,<sup>691</sup> and tending toward increasing happiness.<sup>692</sup> Spencer applied evolutionary theory to human beings as individuals and societies far before Darwin was comfortable doing so—earning him a place as an important early anthropological thinker—and he considered how national characters might be attributable both to environmental pressures that societies face and to the inheritance of adaptations to such pressures.<sup>693</sup> Spencer believed that human evolution was to proceed not primarily through physical adaptations, because industrialization eliminated or circumvented many environmental pressures, but instead through mental and moral progress, especially as people and societies learn increasingly to cooperate in a globalized world.<sup>694</sup> Spencer also viewed women as more inherently altruistic than men, and so more morally evolved; depending on one’s perspective, then, Spencer’s sociology can seem either to restrict women or to regard women as the drivers of evolutionary change, since “the moral progress of humanity is best measured” by the standard of women’s improved social standing and sympathetic force.<sup>695</sup>

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<sup>689</sup> Spencer, “The Development Hypothesis,” 382, 380. On Spencer’s anti-Creationist arguments, see “The Development Hypothesis,” 377-82.

<sup>690</sup> Spencer, “Progress: Its Law and Cause,” 2-3.

<sup>691</sup> Spencer, *First Principles*, “Part II: The Known,” 538.

<sup>692</sup> Spencer, *Principles of Psychology*, 620.

<sup>693</sup> Richards, *Darwin*, 285; Taylor, *Philosophy*, 62; Zappen, 154.

<sup>694</sup> Bowler, *Non-Darwinian Revolution*, 138; Francis, 291; Richards, *Darwin*, 272-73.

<sup>695</sup> Qtn. from Gray, 222; see also Francis, 53; Paxton, 211; Toise, 134-35.

Unlike Darwin, who was independently wealthy, Spencer needed to support himself with his writing. He therefore “was more than happy to include controversial and explicitly political argumentation in his published scientific treatises,” and often turned to social theory in part because it “generally sold better than more specialized scientific work.”<sup>696</sup> He usually published his writings serially in periodicals and then issued them in volumes to maximize his exposure and profits.<sup>697</sup> Spencer was canny enough to hitch his wagon to Darwin’s *Origin*—particularly the respect accorded it in professional scientific circles—and the Darwin circle opened to Spencer because of his commitment to promoting evolutionary theory, even though he felt natural selection played at best a small role in evolution and never gave up on Lamarckianism as a primary explanatory method.<sup>698</sup> Before Spencer’s alliance with Darwinism, his sales were low: two hundred copies of *Principles of Philosophy* between 1855 and 1862, seven hundred and fifty of *Social Statics* between 1851 and 1862, two hundred copies of *Principles of Psychology* between 1855 and 1856, and an additional thirty-five by 1860.<sup>699</sup> On the other hand, Spencer’s post-*Origin* philosophical opus, *First Principles*, was published in 1860 and met a welcoming scientific public open to its grounding of evolutionary theory in “a Kantian epistemology and a critical realism”; its initial purchasers included J. S. Mill, Darwin, T. H. Huxley, and Joseph Dalton Hooker.<sup>700</sup> Spencer’s *Study of Sociology* (1873), published as three-book volumes just one month after the series of articles that comprised the same material finished their run in the *Contemporary*

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<sup>696</sup> Dixon, *Invention of Altruism*, 195; Jones, 9.

<sup>697</sup> Paxton, 8.

<sup>698</sup> Jones, 7; Richards, *Darwin*, 298. Richardson notes that “Darwin increasingly made use of Lamarck’s idea of acquired characteristics in successive issues of the *Origin*” (n.p.).

<sup>699</sup> Francis, 144; Jones, 5; Richards, *Darwin*, 298.

<sup>700</sup> Richards, *Darwin*, 299.

*Review*, sold over 26,000 copies.<sup>701</sup> His sociology considered the evolution of cultures from different historical periods and geographical regions, a perspective which “prompted sharp criticism from British historians in the 1870s.”<sup>702</sup> Spencer’s widest audience was reached through his *Data of Ethics* (1879), which promoted his philosophical theories and social scientific approach to altruism.<sup>703</sup>

Spencer’s social philosophy is often pigeonholed as social Darwinism, but in fact his legacy is quite wide-reaching: he is considered foundational both to modern libertarian and to modern socialist movements.<sup>704</sup> That two such diverging political theories could be inspired by Spencer points to the complicated nature of his social thought, which is generally unfairly boiled down to “survival of the fittest.” Spencer opposed government-mandated benefaction—such as the New Poor Law of 1834—based on the belief that it was ineffective in alleviating suffering in the short-term and that it inhibited the development and inheritance of altruistic behavior in the species as instincts in the long-term. Spencer also believed, however, that a perfect, universal altruism would be the endpoint of social evolution.<sup>705</sup> This would, in turn, make government unnecessary in the future utopia.<sup>706</sup> Michael Taylor explains this complicated Spencerian notion, based on Lamarckian principles of inheriting acquired characteristics:

the moral qualities which formed “character” were similar to physical powers to the extent that each required exercise to reach their full development. If individuals were

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<sup>701</sup> Abel, 266; Francis, 155; Jones, 9.

<sup>702</sup> Paxton, 199.

<sup>703</sup> Dixon, *Invention of Altruism*, 198.

<sup>704</sup> Richards, *Darwin*, 326-27.

<sup>705</sup> Richards, *Darwin*, 263, 306; Taylor, Introduction, xx; Taylor, *Philosophy*, 110.

<sup>706</sup> Abel, 260; Gagnier, 325; Richards, *Darwin*, 326-27.

permitted the freedom to exercise these qualities, as well as to experience the consequences of their conduct, then their moral powers would be strengthened and passed on from generation to generation according to the Lamarckian mechanism of the inheritance of acquired characteristics. With each generation the moral powers would grow, until eventually they would become “organic” in the race and behaving morally would become (quite literally) second nature. Thus his objection to “state interference”—for example in their form of the Poor Law—was that by absolving individuals of their personal responsibility, either for self or others, it weakened the moral qualities, thereby undermining character and indefinitely postponing the promised future time when every individual would spontaneously act in a moral way.<sup>707</sup>

Social evolution, to Spencer, necessitates individual adaptation to social life, widespread and voluntary cooperation, and a government small enough not to impede such a movement toward a universal peace, happiness, and radical equality.<sup>708</sup> Thus, not only is evolution through adaptation and inheritance of acquired traits progressive, it is also purposive and moral.<sup>709</sup> Spencer was perhaps the most influential nineteenth-century theorist of evolutionary ethics as well as of altruism, with the 1870s witnessing three of his major publications promoting an altruistic vision of individual and social evolution: the second edition of *The Principles of Psychology* (1870-72), *The Study of Sociology* (1873), and *The Data of Ethics* (1879).<sup>710</sup> Spencer’s wide popularity and influence might be partly due to the fact that his vision of evolutionary theory was a “more ‘humanized’ biological process” than most—including Darwin’s natural selection—and as such, “did not necessarily entail the moral bankruptcy that was claimed for evolutionary theory by anxious commentators.”<sup>711</sup> Despite Spencer’s focus on the development and perfection of human morality—or perhaps

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<sup>707</sup> Taylor, Introduction, xx.

<sup>708</sup> Francis, 329; Mingardi, 3; Peel, xx; Richards, “Relation of Spencer,” 21; Taylor, *Philosophy*, 115.

<sup>709</sup> Moore, 4; Paxton, 25; Richards, “Relation of Spencer,” 29; Rylance, 217; Taylor, *Philosophy*, 111.

<sup>710</sup> Dixon, *Invention of Altruism*, 183, 195; Moore, 4.

<sup>711</sup> Rylance, 223.

because of it—he was unpopular with the Victorian religious establishment, in its many forms: Anglicans and Dissenters alike felt that viewing evolution as a moral force was subversive and distracted from the “true” path to moral growth because it minimized individuality.<sup>712</sup> Spencer was not particularly concerned with such critiques, however, because of his own unwavering agnosticism and lack of a particular crisis of faith, like that experienced by so many Victorian intellectuals, from Carlyle to Darwin to Eliot.<sup>713</sup>

*The Afterlife of Spencer’s Thought and Reputation*

Twentieth-century critics were not very sympathetic to Spencer’s philosophy or literary influence, in part because his famous philosophical notion of the Unknowable (to be discussed in greater detail later in this chapter) came across as “a pathetic Victorian attempt at spiritual survival in a world without God.” To the Victorians, on the other hand, Spencer’s thought was deeply compelling—his concept of the Unknowable was a “necessary counterpart” to the exponentially increasing investigations of the Knowable.<sup>714</sup> Spencer was widely considered to be “one of the world’s greatest philosophers,” “*the* philosopher of his time”<sup>715</sup>; in fact, he might have been the first philosopher to sell one million copies of his work during his lifetime.<sup>716</sup> Spencer was at the height of his fame in the 1870s and 1880s, primarily because of his Synthetic Philosophy, which brought an evolutionary perspective to a number of biological and social scientific fields as well as to philosophical and theological

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<sup>712</sup> Rylance, 228.

<sup>713</sup> Abel, 260; Francis, 9; Harley, n.p.; Paxton, 26.

<sup>714</sup> Qtn. from Postlethwaite, *Making It Whole*, 212-13; see also 218-19.

<sup>715</sup> Dixon, *Invention of Altruism*, 187; Mingardi, 2.

<sup>716</sup> Mingardi, 2.



concerns.<sup>717</sup> As a consequence, Spencer could not be ignored by major Victorian thinkers, even if they had preferred otherwise.<sup>718</sup> As one historian of science puts it, “Spencer’s work established an intellectual climate for several generations of theorists, who became imbued with his perception of the mental evolution of organisms and their social dependencies.”<sup>719</sup> Though Spencer was never a celebrity per se, his status as a major thinker spread around the globe, so that he has been described as “the first international public intellectual whose views—on everything from politics and religion to the most humane way to kill lobsters—were listened to by a large and devoted audience.”<sup>720</sup> While biographers and historians of science at the turn of the century idolized Spencer, other thinkers parodied his extensive system, as we can see in William James’s quip that, for Spencer, “evolution is a change from a no-howish untalkaboutable all-alikeness to a somehowish and in general talkaboutable not-all-alikeness by continuous sticktogetherations and somethingelseifications.”<sup>721</sup>

Spencer was particularly popular in the United States, where he undertook a three-month speaking tour in 1882 that was successful in spite of his lack of charisma because of the ease of adapting some of his ideas to Emersonian notions of self-reliance, to industrialists’ need for a philosophy to justify their economic power, and to the general postbellum search for an evolutionary system to explain the seemingly Godless behavior of the Civil War.<sup>722</sup> The term “social Darwinist” was first used to describe Spencerian adherents

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<sup>717</sup> Gagnier, 319; Jones, 10; Taylor, *Philosophy*, 1.

<sup>718</sup> Offer, 8; Taylor, *Philosophy*, 4.

<sup>719</sup> Richards, *Darwin*, 325.

<sup>720</sup> Qtn. from Taylor, *Philosophy*, 2; see also Francis, 8; Mingardi, 2.

<sup>721</sup> Clodd, 171-82; Macpherson, esp. 233; qtn. from Perry, I, 482.

<sup>722</sup> Bowler, *Non-Darwinian Revolution*, 159; Jones, 5; Taylor, *Philosophy*, 2; Werth, xi-xiii.

in America after 1900, where his influence spread over a wide variety of fields, including psychology, sociology, philosophy, political theory, economics, ethics, and theology.<sup>723</sup> Consequently, the American novelist Jack London is most frequently cited by literary critics as deeply influenced by Spencer's evolutionary philosophy.<sup>724</sup> The American novelist Frank Norris also both engaged and critiqued Spencerian theory in works from the first decade of the twentieth century.<sup>725</sup> Spencer's literary influence was not limited to the United States, however, and can be seen in Anton Chekov's novels, Friedrich Nietzsche's ethics, and at least one of Olive Schreiner's novels.<sup>726</sup> In Britain, Eliza Lynn Linton wrote about Spencer in her fictionalized memoir, H. G. Wells used a Spencerian character as the hero in *The Food of the Gods* (1904), and Thomas Hardy was deeply impressed by Spencer's concept of the Unknowable, so much so that he wrote that Spencer's philosophy might have been more important for him than Schopenhauer's.<sup>727</sup> Spencer also tends to appear as an important cultural influence for well-read characters in literature of the 1880s through early 1900s, most notably in Sarah Grand's *The Heavenly Twins* (1893).<sup>728</sup> His ideas might have found their deepest engagement in Eliot's oeuvre, however.

### *Spencer and Eliot*

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<sup>723</sup> Bowler, *Non-Darwinian Revolution*, 156; Werth, xiii.

<sup>724</sup> See, for example, Berkove, "Before Adam" and "London and Evolution"; as well as Taylor, *Philosophy*, 1.

<sup>725</sup> Colson, 25.

<sup>726</sup> Moore, 4; Taylor, *Philosophy*, 1.

<sup>727</sup> Dixon, *Invention of Altruism*, 189; Chilton, 3-7; Hands, 145.

<sup>728</sup> Dixon, *Invention of Altruism*, 187-89.

Famously, Herbert Spencer shared with George Eliot “the only romantic episode in an apparently loveless life.”<sup>729</sup> The two met in the offices of John Chapman, the publisher who employed and housed Eliot when she first moved to London; she quickly came to share the opinion of such intellectuals as George Henry Lewes, Thomas Henry Huxley the scientific popularizer, and John Tyndall the physicist that Spencer was “a forceful and original thinker.”<sup>730</sup> Eliot and Spencer shared a similar upbringing among Midlands Dissenters, with little formal education, but a drive to move to the intellectual hub of the country in London and to succeed there through writing.<sup>731</sup> Although Spencer rejected Eliot’s attempts to move their relationship from companionate and intellectual to romantic and marital, he kept a photograph of her in his bedroom until his death in 1903; he also did not destroy her love letters to him, suggesting that her affection meant something more to him than he ever admitted.<sup>732</sup> Critics tend to blame Spencer’s inability to develop romantic feelings for Eliot on the fact that she defied his evolutionary and gender categories, as physically and intellectually more masculine than average, but at least one biographer blames his frigidness on his concern that getting involved with a woman would bring out in him his father’s abusive tendencies.<sup>733</sup> Spencer remained supportive of Eliot and Lewes’s relationship,<sup>734</sup> and was even sympathetic toward Eliot’s decision to marry John Cross near the end of her life; he was pleased that Eliot and Cross were rereading his *Ethics* and

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<sup>729</sup> Mingardi, 19.

<sup>730</sup> Abel, 259.

<sup>731</sup> Abel, 259; Dixon, *Invention of Altruism*, 182.

<sup>732</sup> Graber, 70; Haight, 115; Karl, 150. His preservation of Eliot’s letters is particularly noteworthy, given that he destroyed most of his personal correspondence to control how the future perceived him (Francis, 329).

<sup>733</sup> Francis, 7, 46, 71-75; Karl, 148-49; Paxton, 19.

<sup>734</sup> For Lewes’s opinion of Spencer, see Karl, 208, 465, 602; Postlethwaite, *Making It Whole*, 165, 178, 190.

*Sociology* together, believing that Eliot maintained agreement with him on most points.<sup>735</sup> He commented in his *Autobiography* that this sympathy extended to the point that his “influence might have been more manifest in further works if she had lived to write them.”<sup>736</sup> Eliot particularly praised Spencer’s “Progress: Its Law and Cause” and *Principles of Psychology*, even suggesting a particular sentence that Spencer used as inspiration for his *Psychology* (jettisoning a different phrasing of Mill’s).<sup>737</sup> Although multiple critics have commented on Spencer’s desire to deny Eliot’s influence upon his thought and work,<sup>738</sup> such judgments are unfair: he cited Eliot’s help in his *Psychology*, he wrote to an American correspondent that he and Eliot were mutually influential, and John Fiske (an American Spencerian) quoted Spencer’s opinion that Eliot “is the greatest woman that has lived on the earth—the female Shakespeare, so to speak.”<sup>739</sup> Eliot’s and Spencer’s common developing interest in altruism is paradigmatic of their co-constitutive intellectual influence.<sup>740</sup> Although Spencer was not particularly inclined toward the arts, including literature, he valued her openness to intellectual discussion and came “to respect her serious view of fiction as an art form”; he, in fact, once asked that the London Library remove all novels except Eliot’s because he felt they were the “only serious works.”<sup>741</sup>

## GEORGE ELIOT

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<sup>735</sup> Karl, 627; Spencer, *Autobiography*, II, 237, 430.

<sup>736</sup> Spencer, *Autobiography*, II, 430.

<sup>737</sup> *GEL*, II: 145; Postlethwaite, *Making It Whole*, 210; Rylance, 212.

<sup>738</sup> Denton, 89; Karl, 152; Paxton, 7.

<sup>739</sup> Qtn. from Karl, 530; see also Spencer, *Autobiography*, II, 429-30.

<sup>740</sup> Paxton, 230-31.

<sup>741</sup> Abel, 259-60; Francis, 64.

Mary Anne Evans (who changed her name to Mary Ann in 1836, Marian in 1850, back to Mary Ann in 1880, and of course famously adopted George Eliot as a nom-de-plume in 1859, each renaming reflecting a major life change and decision to reinvent herself)<sup>742</sup> spent the first half of her life in a religious family in the Midlands, and the second half as one of the brightest and most influential literary lights in London. As one biographer puts it, she “was born into Jane Austen’s England and died in Thomas Hardy’s. Although she lived only sixty-one years—as against the four score of several other Victorian writers—she spanned perhaps the most important years of the nineteenth century.”<sup>743</sup> She retains her place, “along with Dickens [as] the preeminent novelist of the nineteenth century.”<sup>744</sup> Her astonishing breadth and depth of intellectualism still makes her work a daunting study for present-day literary critics who have a century and a half of other critical work to contend with. Eliot’s novels are both deeply psychological and social, concerned with aesthetics, gender politics, and philosophy at the same time as physical, biological, and social science. Her role as the editor of the *Westminster Review* in the early 1850s put her in touch with many of the most prominent thinkers of the age, and enabled her “to speak with familiarity and authority...to and about most of the important scientific theorists of her time.”<sup>745</sup> Her movement from a nominally Anglican household to evangelical religious fervor to an independent freethinker broadened her sympathies and understanding of the contentious issues that science raised in the mid-nineteenth century, but also prepared her to accept seemingly revolutionary changes in thought, including evolutionary theory, that deeply disturbed many of her contemporaries.

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<sup>742</sup> Karl, 14, 33, 87.

<sup>743</sup> Karl, 5.

<sup>744</sup> Karl, xviii.

<sup>745</sup> Paxton, 11.

In many ways, she is also representative of the Victorian Era in her tendency toward gradualist and meliorist social philosophies, rather than radicalism.<sup>746</sup>

### *Eliot's Relationship with Spencer*

Eliot met Spencer in 1851, but they became closer in 1852, after she relocated to London and her complicated relationship with Chapman stalled; Spencer invited her to performances at concert halls and theaters, which he was required to attend and review as part of his responsibilities as a sub-editor for the *Economist*.<sup>747</sup> Biographers tend to agree that Eliot was drawn to Spencer largely because of her intense loneliness, both romantic and intellectual, and the fact that he was probably the closest to an intellectual equal she had encountered.<sup>748</sup> Their intellectual relationship continued long after her hopes for romance were crushed by his blatant rejection of her expressions of love in July of 1852.<sup>749</sup> Redeemingly, Spencer was responsible for introducing Eliot and Lewes twice, once casually in 1851 and the second time in the (successful) hope of sparking a romantic interest between his friends in 1852.<sup>750</sup> Spencer also earned Eliot's acceptance for evolutionary theory long before Darwin's *Origin* was published, although his view of evolution has been called a "conservatizing influence" on her thought, particularly where it concerns feminism.<sup>751</sup>

George Eliot's journals demonstrate her long personal and intellectual engagement with Spencer. Her entries involving him are usually almost telegraphic in their brevity,

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<sup>746</sup> Karl, 133.

<sup>747</sup> Henry, 67.

<sup>748</sup> Karl, 142, 147; Henry, 67.

<sup>749</sup> Graber, 70; Henry, 67. Spencer's emotional coldness may have offered a model for Casaubon in *Middlemarch* (Karl, 153; Machann, 29; Szirotney).

<sup>750</sup> Henry, 69.

<sup>751</sup> Qtn.. from Paxton, 34; on Eliot and Lewes's initial lack of differentiation between Spencer's and Darwin's evolutionary theories, see Rylance, 225.

recording Spencer's visits and talks, without much detail about what the conversation entailed.<sup>752</sup> She refers to him with pity on a personal level, especially on Christmases, as "our...lonely friend."<sup>753</sup> She occasionally records their conversational subjects as having to do with philosophy, Eliot's writing, or Spencer's work, including his long-planned autobiography.<sup>754</sup> Long after their initial publication, however, Eliot notes that she is rereading some of Spencer's major writings, including his *Principles of Psychology* in 1879 and his *Principles of Sociology* in 1880, demonstrating that her engagement with his work was long-term and cyclical, so that his ideas retained their salience for her for decades.<sup>755</sup>

George Eliot's letters tell a similar story. Spencer makes fairly frequent appearances in her correspondence as a subject, particularly to her friend Sara Hennell. Throughout the 1850s, Eliot regularly enthuses about Spencer's writings to Hennell. She praises his article on the Universal Postulate in the October 1853 issue of the *Westminster Review* as "first-rate" and notes that its ideas made the author "a great deal talked of" at Cambridge<sup>756</sup>; she describes his article on the "Genesis of Science" "grand," and leading her to believe that he is "an original and profound philosophical writer" whose psychological studies will earn him a place in history.<sup>757</sup> *First Principles* comes in for particular praise, as "superior to anything he has done before" because "it is less barely intellectual—the considerations are larger"; she

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<sup>752</sup> See, for example, the entry for September 25, 1859: "Went to the Zoological Gardens. Herbert Spencer was waiting for us when we came home. He dined with us and we spent a pleasant evening in chat" (Harris and Johnston, 63). Throughout the 1860s, Spencer is frequently mentioned as going for a walk or as a visitor to the Lewes home (Harris and Johnston, 101-40).

<sup>753</sup> Harris and Johnston, 107.

<sup>754</sup> Harris and Johnston, 81, 120, 171.

<sup>755</sup> Harris and Johnston, 165, 213.

<sup>756</sup> *GEL*, II: 118, 126.

<sup>757</sup> *GEL*, II: 165; in this letter, Eliot likens Spencer to Kant.

declares herself “supremely gratified by” this “result of his riper thought.”<sup>758</sup> Nearly two decades later, we find Eliot advising Spencer to focus on his “Ethics,” as “something more needed than even the completion of the Sociological portion” of his oeuvre.<sup>759</sup> After more than twenty years of acquaintance, Eliot writes of Spencer that she believes herself “indebted to him for much enlargement and clarifying of thought.”<sup>760</sup> She frequently writes of Spencer’s visits that they are pleasant, he is cheerful, and the conversation is clever, welcome, stimulating, and enjoyably argumentative.<sup>761</sup> Although Eliot acknowledges a gulf between her opinions on “art and classical literature” and Spencer’s, she notes that “His is a friendship which wears well, because of his truthfulness: that makes amends for <other> many deficits.”<sup>762</sup> Her most recurring complaint about Spencer is his lack of sympathy, not just with Eliot and Lewes personally, but as a capacity.<sup>763</sup> Graciously, Eliot repeatedly forgives Spencer this lack of sympathetic interest, saying “what a man is not conscious of he must not answer for,” and her last recorded words on him, two and a half weeks before her death, endorsed his genius: “He has so much teaching which the world needs.”<sup>764</sup>

### *Summary and Critical Appraisal of Daniel Deronda*

*Daniel Deronda* opens at a roulette table in Leubronn, where Gwendolen Harleth, an attractive but headstrong woman, finds her luck turn for the worse at the moment that she

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<sup>758</sup> *GEL*, III: 358, 364. Both of these letters are addressed to Hennell, but Eliot repeats her praise to Barbara Bodichon, saying that *First Principles* “is the best thing he has done” (*GEL*, III: 367).

<sup>759</sup> *GEL*, IX: 270.

<sup>760</sup> *GEL*, VI: 163-64.

<sup>761</sup> See, for example, *GEL*, II: 22, 29, 405; IV: 30, 57, 235, 489; VI: 420.

<sup>762</sup> *GEL*, III: 469; IV: 489.

<sup>763</sup> *GEL*, III: 154, 192; IV: 489; VI: 426.

<sup>764</sup> *GEL*, III: 169-70; VII: 334.



notices a handsome stranger, Daniel Deronda, watching her from across the room. She returns to her chambers to find a letter revealing that her family's meager fortune has been lost and she is being called home by her mother. The narrative then shifts back several months to Gwendolen's move with her family, which consists of her twice-widowed mother and four half-sisters from the second marriage, to be close to the guidance of her uncle, the Reverend Gascoigne. We learn of Gwendolen's desire for independence and admiration, and of her complex psychology generally, in part as we see her courted by the heir to the local minor aristocracy's fortune. She plans to accept Mallinger Grandcourt's marriage proposal before discovering that he fathered four children with a mistress, Lydia Glasher, who believes herself to be his only rightful wife, and so Gwendolen flees to the continent to gamble away her distress. The narrative then shifts to Daniel, who was raised by Grandcourt's uncle, Sir Hugo Mallinger, and is widely believed to be Sir Hugo's illegitimate son. We read of Daniel's rude awakening to this possibility as an adolescent, his subsequent anxiety on the subject, and his consequent altruism toward those he considers wronged or suffering. While rowing the Thames one day, Daniel discovers a striking young woman trying to drown herself and saves her; she turns out to be Mirah Lapidoth, a Jewish singer who fled her father's attempts to sell her into concubinage, but who has been unable to discover the mother and brother she was separated from as a child. Daniel takes her to the house of a college friend, Hans Meyrick, where Mirah can be cared for by the Meyrick women. Mirah is desperate to be reunited with her mother and brother, Ezra Cohen, but Daniel's search for them is hesitant, marked by an antisemitism he is not fully conscious or proud of, and which eventually leads him to a rather stereotypical pawnbroker by the name of Mirah's brother. This pawnbroker has as a houseguest a consumptive but remarkable

intellectual Jew called Mordecai, who is convinced from the first that Daniel is also a Jew, sent to help him complete his own Zionist mission to create a Jewish nation—something Daniel vehemently, almost fearfully denies. Meanwhile, Gwendolen returns home and finds herself needing to choose between an unpleasant governess position and Grandcourt's suit, and selects the latter. She learns, to her dismay, that her husband is not as innocuous as she believed during courtship, and strives to control her every gesture. In her misery, she turns to Daniel as a guide toward self-improvement, a role he takes on hesitantly and partially. Daniel discovers over time, by humoring him and trying to better understand his thought, that Mordecai is actually Mirah's brother and so reunites the siblings. He also receives a summons from his long-lost mother to travel to Genoa to see her. When this long-awaited meeting occurs, however, Daniel finds not the broken waif he imagined for years, but a princess (by marriage) who was once the most celebrated singer in Europe—she reveals his Jewish heritage, which she considered a form of bondage and tried to keep from him by having him raised by one of her most devoted admirers as an English gentleman. Daniel bumps into Gwendolen and Grandcourt, who were forced to put ashore in Genoa by some damage done to their Mediterranean yacht; angered by this coincidence, Grandcourt insists that Gwendolen accompany him in a sailing expedition, during which he is knocked from the boat and drowns while his wife freezes, unable to throw him the rope he calls for, until she jumps in the sea in a belated and useless gesture. Gwendolen is tortured by the image of Grandcourt's drowned face, and brought home by her uncle and mother to recuperate, having gained very little from her husband's will. Daniel tries to comfort her, but leaves to claim his grandfather's trunk of philosophical and religious papers from Germany—his heritage—then returns to England to reveal his ethnicity to Mirah and Mordecai. Mirah and Daniel marry,

but Mordecai dies before they can leave for their much-discussed journey to the East, where Daniel plans to study the situation of Jews to consider the possibilities for a renewed national center.

Eliot's final completed novel was written between 1874 and 1876, though she began research for it in mid-1873, and it was published in monthly Books or Parts from February through September 1876.<sup>765</sup> The action of the novel is set one decade in the past, from 1864 through 1866, as is evident from the political debates and contemporaneous events referenced by the characters: the American Civil War and consequent Cotton Famine in Britain, the Morant Bay Rebellion, Otto von Bismarck's push for German unification, and the debate leading up to the Second Reform Bill.<sup>766</sup> And yet these significant global events and other social justice concerns of the day slip into the background in *Daniel Deronda*, fleshing out without dramatically informing the narrative.<sup>767</sup> Thus, while critics have referred to the novel as "a capstone" of Eliot's oeuvre, her "her final long statement in fiction," they also acknowledge that it is "the final and comprehensive expression of George Eliot's idealism" on a personal, individual level and that it is deeply experimental.<sup>768</sup> From the time of its publication, *Daniel Deronda* was critiqued as divided between its "Jewish" (aka Daniel) and "English" (aka Gwendolen) halves, a move away from the organic integration of, say, *Middlemarch*, where the Dorothea and Lydgate plotlines similarly diverge but were seen to hold together better in an overall vision; Eliot was frustrated by this interpretation of the novel, since, as biographer Frederick Karl puts it, "she saw the material as associative,

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<sup>765</sup> Handley, x-xii; Henry, 233.

<sup>766</sup> Handley, xi; Henry, 208-9.

<sup>767</sup> Karl, 551.

<sup>768</sup> Karl, 525; Handley, ix; Henry, 232; Shuttleworth, "Language of Science," 273.

reciprocal, and interlocked.”<sup>769</sup> She was heartened, however, by the generally positive response from the Jewish community.<sup>770</sup>

### PSYCHOLOGY: EXPERIENCE MEETS INHERITANCE

Key to understanding the character’s motivations and relationships in *Daniel Deronda* is understanding their basis in Spencerian psychology.<sup>771</sup> In 1855, Spencer published his *Principles of Psychology*, which proposed a neurally based associationist psychology that relied on Lamarckian inheritance of acquired characteristics—in this case, such characteristics were mental, or as Spencer puts it, “psychical.” Spencer’s major contribution to the field of psychology was to be the first to apply evolutionary principles to it, and so to make it a biological, scientific study—the social science that it is today.<sup>772</sup> Psychology, Spencer claims, is in many ways a master science, and in fact displays phenomena such as evolution and adjustment to internal and external circumstances that “all other sciences” also demonstrate.<sup>773</sup> For Spencer, nervous system firings in response to stimuli lead to the formation of neural pathways, which associate such stimuli with certain

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<sup>769</sup> Karl, 554.

<sup>770</sup> Henry, 233; Lovesey, 509.

<sup>771</sup> Literary critics tend to overlook the importance of Spencer’s *Principles of Psychology* in understanding Eliot’s thought and writing, even though, as noted before, the influences between the two were particularly salient for this novel. Instead, critics usually reference Lewes’s psychology (which took its cast primarily from Spencer [Karl, 280; Postlethwaite, 165-66]), Claude Bernard’s, or Alexander Bain’s (Anger, *Victorian Interpretation*, 122; Gettelman, 35-36; Matus, 65-66; Shuttleworth, “Language of Science,” 283, 290; Shuttleworth, *Nineteenth-Century Science*, 18-23, 175-200). Willburn even attributes Eliot’s psychological language to mesmerism (275). Postlethwaite (“Eliot and Science,” 107) is an important exception, although her essay mentions the importance of Spencer’s psychology without analyzing it in any substantial detail. Handley uses Spencerian associationist keyterms in describing the psychological power of *Daniel Deronda*, though he does not attribute them to Spencer’s psychological work (see, for example, xiv, xvii). Beer also notes the growing importance of evolutionary psychology in the 1870s in relation to the novel, and even notes some Spencerian psychological concepts in the novel, but either attributes such trends to the culture at large or to Darwin’s *Descent of Man* (see especially 171, 175, 201, 216).

<sup>772</sup> Postlethwaite, 200-1.

<sup>773</sup> Spencer, *Principles of Psychology*, qtn from 67; see also 482.

circumstances or outcomes; these generate instincts, defined by Spencer as “complex reflex action” that is not substantially differentiated from habits; neural associative pathways also generate memories, which he says arise from “forming fragments of correspondences.”<sup>774</sup>

The more an animal (whether human or nonhuman) repeats certain experiences, the stronger its neural associations become, although if an “exceptional” experience occurs that is “utterly at variance with the ordinary course of nature,” it can also form an uncommonly strong association.<sup>775</sup> Such associations manifest themselves as consciousness. Emotions, rationality, even the human notion of free will are explicable at (and reducible to) this automatic cognitive level.<sup>776</sup> These associations are inherited as physical traits:

Hereditary transmission, displayed alike in all the plants we cultivate, in all the animals we breed, and in the human race, applies not only to physical but to psychical peculiarities. It is not simply that a modified form of constitution produced by new habits of life, is bequeathed to future generations; but it is that the modified nervous tendencies produced by such new habits of life, are also bequeathed: and if the new habits of life become permanent, the tendencies become permanent. This is illustrated in every creature respecting which we have the requisite experience, from man downwards.<sup>777</sup>

In humans specifically, Spencer believes that the inheritance of acquired mental characteristics or habits can be observed most clearly by comparing different races, demonstrating what might seem to be an essentialist anthropological tendency, typical of many nineteenth-century systematists including Darwin, to identify “warlike, peaceful, nomadic, maritime, hunting, commercial races—races that are independent or slavish, active

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<sup>774</sup> Qtn from Spencer, *Principles of Psychology*, 539, 554. See also Francis, 84.

<sup>775</sup> Spencer, *Principles of Psychology*, qtn from 518-19; see also 531.

<sup>776</sup> Spencer, *Principles of Psychology* 570, 607. As Richards points out, though “rational behavior grew out of stereotyped instinctive acts, Spencer contended the reverse also occurred: rational acts constantly repeated would become instinctive” (Darwin, 283). Spencer argues against the existence of free will, claiming that it would refute the basic and necessary evolutionary process of adapting to the environment (*Principles of Psychology* 620).

<sup>777</sup> Spencer, *Principles of Psychology*, 526.

or slothful”; it is important to note, however, that these “national characters,” as Spencer describes them, are complex responses to environmental phenomena that have warranted well-adapted habits of life, which in turn have become “organic” over time.<sup>778</sup> His views are a little more nuanced and open to change, then, than some of the stadial evolutionary anthropological thinkers who drew on essentializing racial hierarchies in order to justify European repression of colonized peoples.

Eliot and Lewes both deeply admired Spencer’s *Psychology*, seeing it for the conceptual leap forward that it was, writing highly of its evolutionary and associational frameworks, and lending copies to friends.<sup>779</sup> *Daniel Deronda* expresses a similar concern with psychology, which Eliot calls “a strange spiritual chemistry going on within us, so that a lazy stagnation or even a cottony milkiness may be preparing one knows not what biting or explosive material” (269). Like Spencer, Eliot praises psychology as a supreme field of study, though in her case the concern is with exploring what the “chemical process” tells us about the dynamics of the individual human mind and interactions between people rather than with outlining the mental processes that are shared between human and nonhuman animal species, as in Spencer (362). Her final novel is sprinkled with key terms from Spencer’s particular brand of associationist evolutionary psychology outlined in *Principles of Psychology*, including “impulse,” “habit,” “nerves,” “reflex,” “impression,” and “automatic.” Eliot provides for the reader such salient examples of reflexive and destructive psychological processes as “The navy waking from sleep and without malice heaving a stone to crush the life out of his still sleeping comrade...[who] lack[s] the trained motive which makes a character fairly calculable in its actions” (269). It is a striking example, but one that Eliot

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<sup>778</sup> Spencer, *Principles of Psychology*, qtn from 526-27; see also 606.

<sup>779</sup> Postlethwaite, 201.

leaves underexplored. Two of the most in-depth case studies of associationist psychology and heritable mental characteristics in a Spencerian evolutionary vein are of Gwendolen Harleth—whose mental associations and inheritances are ultimately destructive and lead to an evolutionary endstop—and Daniel Deronda—whose traits are redemptive and promise progress for the future of his family and nation.

Gwendolen and Daniel are both ciphers to themselves and to those around them because of their lack of knowledge about their ancestries, which in Spencerian psychological terms determines their baseline psychological tendencies. Gwendolen, we are told, is particularly subject to her habitual mental traits, “simply following her antipathy and inclination, confiding in them as she did in the more reflective judgments into which they entered as sap into leafage” (102). Gwendolen has no memory of her father, though she is aware that he came from an upper-class, perhaps aristocratic family, whose members felt that he had stepped down so much in marrying Gwendolen’s mother that they are uninterested in her (17). Gwendolen refuses to ask her mother about her father, or even about her mother’s life prior to her second, disastrous marriage, so the characters and readers alike are left uncertain about which of Gwendolen’s traits were inherited from each side of the family and which arose from Gwendolen’s own life experiences.<sup>780</sup> We receive some suggestive hints, however: Gwendolen’s maternal grandfather made his fortune in the West Indies (17, 51), and the problematics of being descended from such an imperialist and likely slaveowner are alluded to through the character of Grandcourt, who refers to “the Jamaican negro” as “beastly” in polite conversation and who, the narrator tells us, would have preferred extermination to pacification (279, 507). So it may be Gwendolen’s grandfather to whom she

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<sup>780</sup> Shuttleworth comments that Gwendolen’s “lack of hereditary roots is associated with her psychic disunity, her lack of an unquestioned center of value” (“Language of Science,” 287).

owes her frequently cited snake-like quality that is attributed at one point to “a trace of demon ancestry” (55), not to mention her fits of violence that cause her, for example, to kill her sister’s canary simply because it irritates her (18). Then again, Gwendolen’s mother is so conscious of her daughter’s paternal inheritance that she worries Gwendolen will likewise die from a riding accident (62). Gwendolen is drawn to horses, as her father apparently was, an inclination that could be attributed to a long-standing habit of the upper classes to use horses for fighting and recreation; she says “I never like my life so well as when I am on horseback, having a great gallop, I think nothing. I only feel myself strong and happy” (92-93).

Gwendolen’s desire to participate in the hunt is instinctual but explicitly not developed from her own experience: “The colour, the stir of the field had taken possession of Gwendolen with a strength which was not due to habitual association, for she had never yet ridden after the hounds—only said she would like to do it” (57). Her fearlessness in action, her “inborn energy of egoistic desire,” “that sense of superior claims which made a large part of her consciousness,” and her determination to have her own way at all costs to others (58, 33, 11, 32-33) are all reminiscent of Matthew Arnold’s presentation of the upper classes (aka the Barbarians) in *Culture and Anarchy* (1867-68), further gesturing toward her mental and emotional inheritance from her father.<sup>781</sup> It also explains her comfort with her upward social mobility, which several other characters observe makes it seem as though she was born and raised in the aristocracy rather than marrying into it.

If Gwendolen’s father is primarily responsible for her inherited mental characteristics, then, Nancy Henry has persuasively argued that her stepfather is to blame for her habitual associations with terror. Henry demonstrates that many of Gwendolen’s unusual fears, such as sleeping away from her mother or finding herself alone in a field, are explicable as the

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<sup>781</sup> The connection between *Daniel Deronda* and *Culture and Anarchy* has also been made by Lovesey (508).



result of sexual assault, giving a double meaning to the title of the first book, which refers to Gwendolen: “The Spoiled Child.”<sup>782</sup> Gwendolen, we are told, is “subject to physical antipathies” (101), as “the life of passion had begun negatively in her” (67), and we see her aversion to physical and emotional intimacy from men, such as when she rebukes Grandcourt for kissing her neck (275-76). Perhaps because of her early sexual trauma, Gwendolen has a “liability...to fits of spiritual dread,” which are not religious but rather associated with a loss of a sense of willpower, causing the narrator to call “helpless” “terror” “her native” emotion (51, 52, 247). Gwendolen herself does not understand “these occasional experiences, which seemed like a brief remembered madness, an unexplained exception from her normal life” (51). According to Spencer’s psychological principles, this terror would get stronger each time it is re-experienced as it reinforces the neural pathway. This is exactly what we see with the notorious “dead face.” When Gwendolen’s family moves into their new home, her younger half-sister opens a hinged panel that reveals “the picture of an upturned dead face, from which an obscure figure seemed to be fleeing with outstretched arms” that causes Gwendolen to shudder and angrily rebuke Isabel for “open[ing] things which were meant to be shut up,” before locking the panel and pocketing the key herself (20). During a later tableau vivant performance, the vibrations from a “thunderous chord” struck on the piano cause the panel to open suddenly; the audience is startled, but Gwendolen screams and freezes “like a statue into which a soul of Fear had entered: her pallid lips were parted; her eyes, usually narrowed under their long lashes, were dilated and fixed” (49). Jill Matus notes that “The incident of the panel...introduces the novel’s exploration of the effects of shock on a particularly susceptible consciousness. If the painting provokes an exaggerated response in

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<sup>782</sup> Henry 217, 225-28; See also Herzog, Penner, and Reimer. Matus argues that Gwendolen displays “textbook symptoms of trauma or PTSD (Post-Traumatic Stress Disorder)” at a time when “the concept of trauma as a psychic wound was barely on the horizon” (59).

the way it springs into view, it is also terrifying because it is a return of something that has already caused Gwendolen fear.”<sup>783</sup> Although she tries to suppress this experience from her own memory and from those of her witnesses, Gwendolen never really moves beyond this experience. The less control she is able to assert in her marriage, the more terror she finds herself experiencing, perhaps in part because of the unavoidable sexual intimacy with her husband. When Gwendolen fantasizes about murdering Grandcourt, her fear is of perpetual guilt, which takes the form of “a white dead face from which she was for ever trying to flee and for ever held back” (577); and when he finally drowns, Gwendolen witnesses the dead face transferred from art to her imagination to reality, and finds herself mentally incapacitated through the end of the narrative, reflecting “I shall never get away from it” (590). The dead face, then, seems to represent a revenge fantasy on a controlling and sexually exploitative male—first her stepfather, and then her husband—which exerts more power over Gwendolen’s consciousness each time the image appears to her internally or externally, as her associations with it are reinforced. She needs Daniel to help her form new associations with her own actions, to teach her how to think in new ways, a role that he is not entirely capable of fulfilling.

Although many readers find themselves more interested in Gwendolen’s psychology—which, ironically, becomes increasingly less of a concern for the narrative as it progresses<sup>784</sup>—Graham Handley notes that “Daniel is just as psychologically integrated as Gwendolen.”<sup>785</sup> He also as clearly represents the Spencerian integration of associationist psychology with Lamarckian use-inheritance. Daniel’s most defining mental association

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<sup>783</sup> Matus, 67. See also Henry, 219.

<sup>784</sup> Flint, 175.

<sup>785</sup> Handley, xviii.

through most of the narrative is with his unknown mother. The idea that he is illegitimate and that his mother might have suffered or still be suffering strikes him when he is an adolescent, “enter[ing] his mind, and... chang[ing] the aspect of his habitual feelings” as he “brought such knowledge into an association with his own lot” for the first time (141), giving him “a new sense in relation to all the elements of his life” (142). Thus, he is sensitive to comments on his appearance because he is under the impression that he resembles his mother (158), and he rescues Mirah because her attempt at drowning herself “stirred a fibre that lay close to his deepest interest in the fates of women—‘perhaps my mother was like this one’” (162), even though “the habit of his mind [was] to connect dread with unknown parentage” (177). Otherwise, “Daniel’s tastes were altogether in keeping with his nurture” (143). Thus, even when Daniel finds out that he is Jewish, he cannot entirely identify as such, telling his mother, “The effect of my education can never be done away with. The Christian sympathies in which my mind was reared can never die out of me....But I consider it my duty—it is the impulse of my feeling—to identify myself, as far as possible, with my hereditary people, and if I can see any work to be done for them that I can give my soul and hand to, I shall choose to do it” (566). Leonora’s skepticism about Daniel’s ability to embrace what he views as his grandfather’s mission has to do with the fact that, like his beloved Mirah, he “is attached to the Judaism [he] knows nothing of” (570). Experience and inheritance are not necessarily unified or even unifiable. Daniel himself takes an ambivalent stand on the issue, arguing that “To delight in doing things because our fathers did them is good if it shuts out nothing better; it enlarges the range of affection—and affection is the broadest basis of good in life,” but that ultimately age or continuity is not in itself a reason for retaining the habits of one’s ancestors (357).

Early in the book, Daniel reflects, “I am not sure that I want to be an ancestor....It doesn’t seem to me the rarest sort of origination” (138), and for most of the book it seems that he may avoid this participation in the biological evolutionary processes that are necessary for the inheritance of acquired habits. (Spencer and Eliot both opted out of such evolution by themselves dying childless.) In fact, although Daniel marries Mirah in the final chapter, *Daniel Deronda* is unique among Eliot’s comic novels for the lack of children at the end, replaced instead by a vision of national purpose that is unachieved, as Daniel has not left England to pursue his Zionistic education.<sup>786</sup> From his childhood onward, the narrator subtly underscores the importance of his “inborn” characteristics, like affection and “lovingness” (145), the same terms his mother Leonora later uses to describe his father’s all-consuming traits (541).<sup>787</sup> Mordecai pushes his vision of spiritual union based on shared inheritance too hard on Daniel, both before and after Daniel discovers his Jewish heritage, and Daniel pushes back, saying, “what we can’t hinder must not make our rule for what we ought to choose....Don’t ask me to deny my spiritual parentage when I am finding the clue of my life in the recognition of my natural parentage” (643). The notion of choosing natural or spiritual inheritance for oneself or for another is unthinkable for Daniel (430, 538), who instead subscribes to the notion of inherited mental characteristics on a personal and a broad species

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<sup>786</sup> Beer, 173.

<sup>787</sup> It is underemphasized in the text that Daniel has inherited his father’s bodily appearance, which is not recognizably Jewish; this is consistent with Novak’s study of late Victorian anthropology focused on comprehending Jewish populations: “a national consciousness was all the more essential, because (as we shall see) some contemporary anthropologists and race-scientists argued that the Jews failed to represent a consistent physical or racial type”; as such, “the Jewish body lacks a presence, at once haunted *by* and appearing *as* the ghost of a universal inheritance” (Novak, 62, 72).

level<sup>788</sup>; he defines his understanding of this Lamarckian notion, repackaged in Spencerian psychology as

an inherited yearning—the effect of brooding, passionate thoughts in many ancestors—thoughts that seem to have been intensely present in my grandfather. Suppose the stolen offspring of some mountain tribe brought up in a city of the plain, or one with an inherited genius for painting, and born blind—the ancestral life would lie within them as a dim longing for unknown objects and sensations, and the spell-bound habit of their inherited frames would be like a cunningly-wrought musical instrument, never played upon, but quivering throughout in uneasy mysterious moanings of its intricate structure that, under the right touch, gives music. Something like that, I think, has been my experience. (642)

This issue is brought to the forefront of the narrative when Daniel meets his mother, Leonora, who tried to circumvent the inheritability of her father's character by having her son raised in England without the knowledge of his ancestry, but who finds over time that despite her lack of "consent" to the process, she is compelled to "obey something tyrannic" (540-41).

Troublingly, will and individual aspirations, especially for women, are ultimately suppressed in the grand historical arc of male heredity. As Daniel expresses it, "Your will was strong, but my grandfather's trust which you accepted and did not fulfill—what you call his yoke—is the expression of something stronger, with deeper, farther-spreading roots, knit into the foundations of sacredness for all men" (568). The male pronoun seems here to be of significance as not just the referent to humanity so common at the time, but as a reinforcement of a specifically patriarchal process that is cruel but compelling as an explanation for the persistence of personality traits evolved over time and through families. Although Daniel tries to sympathize with his mother, he fulfills his grandfather's desire to utilize the female generation to reproduce his own ego (544) by identifying his excitement about finally discovering his heritage as a "a quivering imaginative sense of close relation to

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<sup>788</sup> Horowitz notes that *Deronda*'s sense of duty leads him to inevitably choose it, so that "Choice, in other words, is more like a recognition than a decision" (28).

the grandfather who had been animated by strong impulses and beloved thoughts, which were now perhaps being roused from their slumber within himself” (585). Sally Shuttleworth notes, although she does not explore at any length, that “Physiologically the Jews represent a cultural and religious unity, a historical continuity that is lacking in fragmented European society,” and so provide the perfect Spencerian case study for Eliot.<sup>789</sup> Although Mordecai insists on sharing a soul with Daniel, Daniel himself only accepts the idea of sharing a “latent” (544) soul with his grandfather (638), which is possible because of the “sensibility” of Daniel’s neural “fibre,” which would not be feasible for someone of “duller...affection” (617). Although Daniel and the narrator frequently recur to spiritual language, as is evident from his references to discovering or inheriting an “added soul” (638), Eliot also recurs to Spencerian neural language, referring to Daniel’s ancestry as an “electric chain,” nerves having been understood as running on electrical impulses since Luigi Galvani’s experiments in the 1780s (617).<sup>790</sup> Of course, as mentioned above when Daniel says that his education can never be done away with, the inheritance of his ancestral mentality is not all-determining; his own habits and education have made their indelible mark on his psychology, preventing him from “profess[ing] to believe exactly as my fathers have believed,” just as his “fathers themselves changed the horizon of their belief and learned of other races” (620). The process of blending habit and inheritance has been going on for ages, and is vital to progress and development.

Gwendolen and Daniel are, of course, not the only characters who manifest Spencerian psychological principles, both associationist and inherited acquired mental traits

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<sup>789</sup> Shuttleworth, “Language of Science,” 287.

<sup>790</sup> Although Eliot and Spencer lacked the language for “neurons,” I use the modern term for nerve cells in the brain for ease of explanation to the modern reader and to clearly express the idea that these thinkers were ascribing to without twentieth-century anatomical terminology at their disposal.

in a Lamarckian evolutionary strain. The Meyricks, for example, are described as unique because of their “streaks of eccentricity” inherited from both parents, creating mental structures “like medieval houses with unexpected recesses and openings from this into that, flights of steps and sudden outlooks” (167). The Meyricks also subscribe to a notion of the heritability of personal traits, suggesting that it is a common, lay explanation for mental characteristics; of Mirah, Mrs. Meyrick says that she is convinced that she must have had “a good woman” as a mother: “you may know it by the scoundrel the father is. Where did the child get her goodness from? Wheaten flour has to be accounted for” (190). Mirah herself revels in the thought that her own preponderance of suffering comes from her inherited place “in the long song of mourning that has been going on through ages and ages” in the Jewish community (183), and although she is not raised with much religious knowledge, she enjoys synagogue “because it brings back to me the same feelings—the feelings I would not part with for anything else in the world,” feelings of association with her mother and her people (305). Her brother, Mordecai, has deeply engrained neural pathways, so that even when he is happy to discover his long-lost sister, he experiences

that peculiar nervous perturbation only known to those whose minds, habitually moving with strong impetus in one current, are suddenly compelled into a new or reopened channel. Susceptible people whose strength has been long absorbed by a dominant bias dread an interview that imperiously revives the past as they would dread a threatening illness. Joy may be there, but joy, too, is terrible. (496)

Although Mordecai uses the Cabbalistic doctrine of the rebirth of souls to express a similar concept (461), his notion of souls that are merged across generations to carry knowledge through time and accomplish nationalistic goals is essentially Spencerian (425-27, 449, 457-58) in its presentation of national heritage as “the inborn half of memory” that “lives in [a people’s] veins as a power without understanding” (457). For Daniel and the narrative,

however, Mordecai's enthusiasm is slightly misplaced, as Daniel cannot fully inherit a brother-in-law's soul, although he can possess and embrace a grandfather's; the novel ultimately upholds Lamarckian use-inheritance of acquired associationist pathways as a biological process.

#### **ALTRUISM AND SYMPATHY: THE GENDER DIVIDE AND HALTING EVOLUTION**

Although Eliot does not overly subscribe to a notion of teleological development, many of the characters' trajectories in *Daniel Deronda*—especially those of Gwendolen and Daniel—are traceable as a progression toward increased altruism and sympathy. Despite the fact that his name is typically associated with the callousness of social Darwinism, Spencer actually believed that Super-organic Evolution—the evolution of human social groups—was tending toward a utopic realization of perfect altruism among all people. Possession of sympathy on an individual and a social level is necessary to achieve this end, and a marked increase in sympathy is a sign of cultural evolution.<sup>791</sup> Music and art, particularly those forms that bring a person into immediate physical or imaginative vision of another's emotional “gestures and expressions of face” succeed in “giv[ing] life to the otherwise dead words in which the intellect utters its ideas; and so enable the hearer not only to *understand* the state of mind they accompany, but to *partake* of that state. In short, they are the chief media of *sympathy*.”<sup>792</sup> His concern with altruism as the endpoint of social evolution is a theme that Spencer takes up primarily in work that postdates Eliot's composition of *Daniel Deronda*, particularly his *Ethics* (1879), but as a frequent visitor to Eliot's home who discussed his ideas far in advance of actually collecting them in a publishable form, Spencer might very

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<sup>791</sup> Spencer, “On the Origin and Function of Music,” 329.

<sup>792</sup> Spencer, “On the Origin and Function of Music,” 329. See Noble on Darwin's later developed, but similar, theory of sympathy and literature (118-19).



well have shared his notions on the subject with Eliot before she wrote her final completed novel. Then again, Eliot's own well-established views on the importance of sympathy could have affected Spencer's notions on the subject.<sup>793</sup> In a passage reminiscent of Eliot's meliorist sentiments—in Spencer's work that she often listed as the one she most admired, no less—Spencer writes,

That spirit of toleration which is so marked a characteristic of modern times, and is daily growing more conspicuous, has thus a far deeper meaning than is supposed. What we commonly regard simply as a due respect for the right of private judgment is really a necessary condition to the balancing of the progressive and conservative tendencies—is a means of maintaining the adaptation between men's beliefs and their natures. It is therefore a spirit to be fostered.<sup>794</sup>

Eliot's only novel set in her present, then, takes as a primary focus the state of sympathy in her society and the future of altruistic motives.<sup>795</sup> *Daniel Deronda* is deeply concerned with, as Suzy Anger puts it, “the obstacles in the way of understanding others, but judges that there are better and worse ways of getting around those obstacles and that there are pressing moral reasons for attempting to do so.”<sup>796</sup>

Critics and by other characters in the book refer to Daniel as the most sympathetic character, even as a person perfectly embodying the principles of sympathy and altruism.<sup>797</sup>

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<sup>793</sup> Eliot's concerns with sympathy and altruism are not often attributed to Spencer, but instead to Comte or Feuerbach (see, for example, Anger, “Eliot and Philosophy,” 77, 80)

<sup>794</sup> Spencer, *First Principles*, “Part 1: The Unknowable,” 130.

<sup>795</sup> Lovesey, 505; Welsh, 69.

<sup>796</sup> Anger, *Victorian Interpretation*, 97. Anger goes on to comment, intriguingly, that the free indirect discourse that opens the novel “both enacts and thematizes the human mind's capacity to move between third-person and first-person representations” and so the capacity to experience sympathy (*Victorian Interpretation*, 119-20). Levine makes a similar point, though he sees this authorial strategy as extending through much of the narrative (*Dying to Know*, 183-84). Kurnick notes that “the very look of the page, in which large blocks of narrative text carefully adjudicate the claims of competing characters, functions as an objective correlative of the sympathetic imagination, working as a slow but sure solvent of the partialities that fuel the diegesis to assure us that somewhere, at least, those claims are reconcilable” (491).

Readers need to approach such assessments critically, however, and consider more fully how Daniel interacts with others and how others respond to his attempts to sympathize with them. The narrator tells us that Daniel's sympathetic consciousness was developed as an adolescent when he first suspected that he is his "uncle" Hugo's illegitimate son, a notion that "had given a bias to his conscience, a sympathy with certain ills, and a tension of resolve in certain directions, which marked him off from other youths much more than any talents he possessed" (149). His sympathetic mental habits lead him to altruistic behaviors, to

acts of considerateness that struck his companions as moral eccentricity. "Deronda would have been first-rate if he had more ambition"—was a frequent remark about him. But how could a fellow push his way properly when he objected to swop for his own advantage, knocked under by choice when he was within an inch of victory, and unlike the great Clive, would rather be the calf than the butcher? (151)

This tendency particularly comes out in his university years and in his sacrifice of his own studying to help his friend Hans, who has an eye inflammation, cram for his exam instead. This generosity with his time, of course, entails disadvantage to his own course of study and to his hopes of securing a fellowship to impress his uncle. Daniel's sympathy is excessively diffusive—in the narrative's terminology, "many-sided" and "flexible"—to the extent that it could "hinder any persistent course of action" and "neutralize sympathy" (307). This personality trait is not just a matter of emotional complication, but one of paralysis of "that indignation against wrong and that selectness of fellowship which are the conditions of moral force" (308). At the beginning of the narrative that causes him to have a more specific sympathetic focus—that identification of himself as a Jew that leads to "his judgment no longer wandering in the mazes of impartial sympathy, but choosing, with that noble partiality which is man's best strength, the closer fellowship that makes sympathy practical" (638)—

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<sup>797</sup> Welsh is typical of critical attitudes toward Daniel, commenting, "For George Eliot, *Deronda* is undoubtedly the closest to an affective center of the novel," with an ethos modeled on Eliot's own (70).

Daniel actively courts a negation of his sense of self in an excessively sympathetic “half-speculative, half-involuntary identification of himself with the objects he was looking at, thinking how far it might be possible habitually to shift his centre till his own personality would be no less outside him than the landscape” (160). Such an attempted negation of self is impractical, and overlooks how much his ego in fact guides his actions. Daniel himself is not aware of the problematics of his own particular brand of sympathy and altruism, but he is bothered by the ways that others make claims on his sympathy. Daniel is particularly irritated that others view him as a mentor with no wants of his own, as “entirely off the same plane of desire and temptation as those who confess to him” (397); as he says to Mirah after the Meyricks liken him to Buddha willingly letting himself be eaten by a tiger, “Even if it were true that I thought so much of others, it would not follow that I had no wants for myself. When Bouddha let the tigress eat him he might have been very hungry himself” (399). Daniel is, in fact, not purely sympathetic and/or altruistic. His ego often inhibits sympathy with others, such as when he first attends a synagogue and assumes that his feelings of transcendence are his alone, that he is “the only person in the congregation for whom the service was more than just a dull routine” (311). Even his rescue and support of Mirah as she is at the brink of drowning herself comes from his identification of her with his own history (176), as his “deepest interest in the fates of women” spring from the thought that “perhaps my mother was like this one” (162).<sup>798</sup> So while his sympathy with others originates in a sense of his own otherness and in his interest in his mother’s fate, it seems to end there as well, at least when it comes to women.

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<sup>798</sup> Anger notes that “even Deronda and Mirah, the characters who most surely have the moral disposition the novel praises, confront interpretative impassés which suggest that a hermeneutics of sympathy is very difficult to attain” (*Victorian Interpretation*, 122).

The most successful transference of sympathy between two people in the novel is between Daniel and Mordecai, and even that relationship is not perfect or entirely sympathetic. The world at large, and Daniel's family in particular, thinks that Daniel is under a delusion in his humoring of Mordecai, and is motivated primarily by Mordecai's low social position—perhaps a worthy subject of altruism, but an overdevelopment and misapplication of sympathy (437, 615). This perspective is not entirely off the mark. The narrator repeatedly tells us that Daniel is aware that much of Mordecai's beliefs are illusions, and he hesitates to overly commit to a sympathetic union because that would entail a certain submissiveness that Daniel feels would be detrimental to both of them (428-29); the sympathy that he does extend to Mordecai comes from the compulsions of his conscience and his inborn sensitiveness (423-24, 436). Daniel is "receptive" to Mordecai's needs, but only to an extent that does not conflict with his own egoism (425). Even once Daniel discovers his Jewish heritage and recognizes that he has inherited his grandfather's Zionistic mission, both of which align his sense of self more with Mordecai's and so bring him into closer sympathetic possibilities with Mordecai's vision, Daniel resists an entire sympathetic merger and feels the need to pursue an educational mission to the East to decide on his own course that may or may not align with his deceased brother-in-law's visions (643, 688).<sup>799</sup> At the end of the novel, we have not even seen Daniel depart for the East, and it is unclear whether he in fact will follow through on this one step that keeps open the possibility of implementing Mordecai's Zionistic dreams someday. "It was otherwise with...Mordecai," however, as the narrator makes a point of showing us (404). His need for a sympathetic other can come

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<sup>799</sup> Anger notes that Daniel sympathizes with Mordecai only in what he finds pragmatic—an "uncharacteristic" difficulty—and that he instead turns to his family's documents as objects of his sympathy; I argue, instead, that such a failure of sympathy is entirely characteristic of Daniel and that he instead turns to sympathize with those ancestors whose acquired mental traits he has inherited (*Victorian Interpretation*, 124, 129).

across as demanding and insensitive (429), but his model for this is noble, “like a poet among people of a strange speech, who may have a poetry of their own, but have no ear for his cadence, no answering thrill to his discovery of latent virtues in his mother tongue” (451-52).<sup>800</sup> Daniel, although nurturing at times in what can be considered a feminine, maternal vein, in fact does not approach this ideal of sympathy to the extent that Mordecai does. Mordecai searches for a spiritual transmission of self that circumvents traditional Spencerian/Lamarckian inheritance of mental characteristics (489) in the idealized “maternal transference of self” (425; see also 455) that the narrator describes as far and away stronger and more compelling than romantic, heterosexual passion (407), entailing as it does toil, renunciation, endurance (455), and “spiritual perpetuation” (425).<sup>801</sup>

Daniel’s attempted transference of sympathy with his biological mother is not nearly as successful as even the deeply flawed parental relationship Mordecai forges with Daniel, however. When Daniel meets his mother for the first time as an adult, he anticipates extending his sympathy to “the suffering and the confession” coming from a place of deep emotionality (539). He quickly discovers, however, that the best that he can extend her is “compassion” (539, 569). Leonora is not interested in the emotional union that sympathy would bring to the two of them, and creates a “spiritual distance” between herself and her son, which confuses and hurts him (536). The narrator reflects that Daniel displays a sensibility tending toward sympathy and suffering that is more typically feminine than his mother’s, using religious language to describe how “to Deronda’s nature the moment was

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<sup>800</sup> Anger observes that “Although Ezra employs a rhetoric of selflessness, we might see a form of appropriation in his conduct....Mordecai’s desires, however, are for the good of a larger community, something that Eliot along with many Victorian social theorists understood as involving selflessness” (*Victorian Interpretation*, 124).

<sup>801</sup> Willburn is typical of critical response in assuming that because Mordecai insists on a spiritual union with Daniel, such a goal is actually achieved (271).

cruel: it made the filial yearning of his life a disappointed pilgrimage to a shrine where there were no longer the symbols of sacredness” (566).<sup>802</sup> His mother’s “frank coldness” repels him, giving him “impulses of indignation at what shocked his most cherished emotions and principles,” and he starts to view his mother as though “she had been a stranger who had appealed to his sympathy” (542). We find that he is not capable of extending much sympathy to a stranger, if we define sympathy as the affinity with another that leads to mutual influence or unity, the ability to share another’s feelings, rather than just feeling compassion for suffering. Leonora recognizes this and asks her son, accusatorily, “Shall you comprehend your mother—or only blame her?” (540). Leonora explains twice over to an incredulous Daniel that she did not have affection for him as a child, that she “wanted to live out the life that was in [her], and not to be hampered with other lives” (536-37) or undergo the “subjection” that “love makes of men and women” (571). While she is proud of her independence and the fact that men were subject to her instead of vice versa, Daniel cannot bring himself to believe in the authenticity of such emotions, in the idea that a woman could want to avoid sympathy with father, husband, and son and could instead find fulfillment in her profession, as he is impressed by “a grave, sad sense of his mother’s privation” (571). For Leonora, though, the privation is being forced into traditional domestic roles and not being able to express her artistic gift to a receptive public. She says,

Every woman is supposed to have the same set of motives, or else to be a monster. I am not a monster, but I have not felt exactly what other women feel—or say they feel, for fear of being thought unlike others. When you reproach me in your heart for sending you away from me, you mean that I ought to say I felt about you as other women say they feel about their children. I did *not* feel that. (539; original emphasis)

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<sup>802</sup> Other critics make the point that Daniel’s sympathy is typically coded feminine (Flint, 176; Vigdeman, 30; Wilt, 328).

Finally, she comes to realize that there is an inherent disconnect between the sexes, and that men are incapable of entering into full sympathy with a woman,<sup>803</sup> explaining to Daniel,

You are not a woman. You may try—but you can never imagine what it is to have a man’s force of genius in you, and yet to suffer the slavery of being a girl. To have a pattern cut out—“this is the Jewish woman; this is what you must be; this is what you are wanted for; a woman’s heart must be of such a size and no larger, else it must be pressed small, like Chinese feet; her happiness is to be made as cakes are, by a fixed receipt.” (541)

Unprepared for this kind of apologia, Daniel ceases to identify himself with his mother—the basis for his sympathetic personality in his youth—and instead looks to a spiritual union with his grandfather, meanwhile choosing for himself a wife who eagerly accepts her domestic and religious subordination.<sup>804</sup> Leonora is contemptuous of her father’s heritage, saying that his complete lack of sympathy marked him as the kind of man who turns his “wives and daughters into slaves”; such men “would rule the world if they could; but not ruling the world, they throw all the weight of their will on the necks and souls of women. But nature sometimes thwarts them. My father had no other child than his daughter, and she was like himself” (541). Daniel will never fully achieve sympathetic union with his grandfather—he also inherited his father’s innate loving nature, and his experiences of sympathizing with the suffering of the downtrodden have formed neural, associative habits that cannot be undone—but his inability to enter into such sympathy with his mother does not bode well for the most sympathetic character in the novel, one who should be the most socially evolved according to Spencer’s schema, and who therefore should represent the greatest progression in

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<sup>803</sup> Flint observes that this scene illustrates that “Moral and emotional transvestism, however valuable as a tool of imaginative understanding, can ultimately be no substitute” for experience (177). See also Paxton, 214.

<sup>804</sup> Although Anger, as is typical of literary critics writing on the novel, upholds Daniel as a paradigm of sympathy, she notes that Leonora’s challenge here does undermine Deronda’s identity as a sympathizer (*Victorian Interpretation*, 125, 128).

contemporaneous society. By the end of the novel, the altruistic utopia that Spencer dreams of seems further in the future than ever.

Gwendolen's relationship with Daniel is equally complex, and further reinforces the point that full sympathy is impossible across gender lines, even when directed from the most developed male to the most damaged woman in the narrative.<sup>805</sup> Gwendolen suffers immensely under the repression of her psychologically abusive husband. The narrator's description of her emotional pain is moving: "Inarticulate prayers, no more definite than a cry, often swept out from her into the vast silence, unbroken except by her husband's breathing or the splash of the wave or the creaking of the masts; but if ever she thought of definite help, it took the form of Deronda's presence and words, of the sympathy he might have for her, of the direction he might give her" (577). She relies on the notion of Daniel's available guidance and sympathy to keep herself from acting in a destructive way, on the idea, more than the reality, of Daniel's sympathetic support. Daniel's initial extension of sympathy to Gwendolen arises from "something beyond his habitual compassionate fervor," from sexual attraction and from a sense of his ability to redeem and rescue her (273-74). But as with others who believe him to be purely altruistic, Daniel resists Gwendolen's construction of him as selfless: "He was not a priest. He dreaded the weight of this woman's soul flung upon his own with imploring dependence" (591). He is not entirely without insight into Gwendolen's psychological motives, such as when she gambles on marriage in a similar desperation that motivated her to lose all her money at the casino in Leubronn (273). But it is to Gwendolen that Daniel explains his notion of sympathetic insight arises from a projection of egoism onto another (387). He decides, therefore, that Gwendolen's emotional turmoil comes from having too narrow a sphere in which to develop and exercise sympathetic ideas

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<sup>805</sup> Toise is one of the few critics to note that Daniel's sympathy for Gwendolen is restricted (141).



(387), that her sense of guilt after failing to act quickly enough to save her drowning husband was exaggerated and did not reflect anything more than “an inappreciably instantaneous glance of desire” (597), that she is “mastering herself with a determination of concealment” even under “a severe physical shock” (589)—though we know from the narrator that Gwendolen’s shock is primarily psychological and has been well established through her emotional and physical traumas. Daniel’s “misunderstanding” of her words and motivations is repeated throughout their interactions (qtn from 687; see also 381 and 657) and “widened his spiritual distance from her,” making “it more difficult [for her] to speak” openly to him (595). Daniel sometimes actively restricts his sympathy for Gwendolen, out of fear of overly committing himself to an English woman when he feels that his obligations lie with those who share his newfound heritage (599-600, 654). Even while trying to counsel Gwendolen through her emotional turmoil after Grandcourt’s death, he cannot avoid egoism in their interactions, as “Any one overhearing his tones would have thought he was entreating for his own happiness” rather than for hers (658). Although Gwendolen herself is no paradigm of sympathetic extension, “Only by reading Eliot’s novels as dramatizing an ethics of sympathy can one adequately register Gwendolen’s narrative,” and how intricately it is connected to Daniel’s, despite famous statements to the contrary by the likes of F. R. Leavis and Henry James, who proposed excising the Jewish sections of the novel to focus on Gwendolen instead.<sup>806</sup>

Lest it seem like the narrative—and this Spencerian interpretation of it—is excessively harsh on Daniel, it should be noted that nearly all men in the narrative routinely fail to extend sympathy to women. In one of the most telling anecdotes in this vein, the

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<sup>806</sup> Qtn. from Anger, *Victorian Interpretation*, 120; see also Levine, “Eliot’s Hypothesizing,” 43. On the idea of dividing the novel, see Leavis, 122; and Karl (xx), who points out that James “maintained a problematic relationship to her work [and] tended to slight elements which did not fit his pattern of fiction.”

narrator relates the conversation between a fourteen-year-old miller's daughter and her mother; the girl "could not believe that high gentry behaved badly to their wives, but her mother instructed her—'Oh, child, men's men: gentle or simple, they're much of a muchness'" (298). As Alexander Welsh comments, "The novel exposes power rather than celebrates love."<sup>807</sup> Grandcourt, for example, projects a sympathetic front before marriage (257), although we come to learn through the narrator that he has never practiced sympathy in his day-to-day life (364). While this deception is justifiable under Darwin's schema of sexual selection, as described in chapter 3, it is reprehensible in Spencerian terms, because it inhibits the evolutionary inheritance and increase in sympathy and altruism. As the narrator tells us, "he had no imagination of anything in her but what affected the gratification of his own will" (474) and "His object was to engage all his wife's egoism on the same side as his own" (509); even if he is aware of Gwendolen's feelings, he does not entirely understand the motivations behind them, attributing them to shallow stereotypes of women (509, 574). This lack of sympathy becomes his undoing, as it "condemns [him] to a corresponding stupidity" (509) about the inevitability of his own plans and others giving into them. Less thoroughly reprehensible men, like Gwendolen's uncle Gascoigne, also fail this litmus test; Gascoigne is able to intuit Sir Hugo's opinions about Grandcourt's will in a single conversation and so demonstrates men's ability to sympathize with other men, although he tells himself that "he felt the humiliation through the minds of the women who would be chiefly affected by it," a belief based on the "innocent conviction that his niece was unaware of Mrs Glasher's existence, arguing with masculine soundness from what maidens and wives were likely to know, do, and suffer, and having had a most imperfect observation of the particular maiden and wife in question" (649). Reverend Gascoigne's generalizations about women prevent

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<sup>807</sup> Welsh, 71.

him from recognizing the psychological and experiential particularities of the woman he believes himself to be sympathetically connecting with.

Mordecai, likewise, who is so interested in a sympathetic connection with Daniel, fails to make one with his sister, Mirah, after they are reunited. He subscribes to the vision of the Jewish woman's mind that Ezra Cohen the pawnbroker articulates as God's will, as "a child-bearing, tender-hearted thing" (491), the same vision that Daniel's grandfather adhered to and that drove his daughter to send her son away from the faith. When Mirah is suffering the torment of jealousy in her belief that Daniel is romantically involved with Gwendolen, Mordecai believes that she is only concerned about whether Daniel is moving away from him (563). Later Mordecai relates the story of a Jewish woman who switches places with the beloved of a Gentile king that she herself loves, so that she is executed instead of the condemned woman; Mordecai interprets this story as demonstrating that "women are specially framed for the love which feels possession in renouncing," whereas Mirah disagrees and instead argues that the Jewish woman became a martyr so that the king would never be able to be fully happy or to forget her—Mordecai dismisses this interpretation out of hand (629). Mordecai here again shows himself unaware of Mirah's inner life and motivations, and uninterested in considering women's psychologies as differing from his preexisting schemas.

Only Herr Klesmer, the musical genius, is really successful in experiencing and expressing sympathy toward women, both toward Mirah and Gwendolen in their requests for his career advice and toward Catherine Arrowpoint, his future wife, whose beauty is "most powerful" after they make a sympathetic connection, a connection that the narrator describes as "manifold" and triumphant (203, 204). Perhaps his sympathetic powers are due to his

status as a musician—a primary art form for the conveying of sympathy to Spencer—or as an outsider, culturally and economically.

Men who are part of the dominant culture have no particular need to develop sympathy with women, which perhaps explains why Klesmer is the most sympathetic man and Daniel makes a close second. Not clearly identifying with any cultural or economic system, they both think outside the rules of the sexual selection marriage market, as they themselves do not entirely have a place in it. As the epigraph to chapter X reads,

What women should be? Sir, consult the taste  
Of marriageable men. This planet's store  
In iron, cotton, wool, or chemicals—  
All matter rendered to our plastic skill,  
Is wrought in shapes responsive to demand:  
The market's pulse makes index high or low,  
By rule sublime. Our daughters must be wives,  
And to be wives must be what men will choose:  
Men's taste is women's test. (83)

Women's taste is not of particular concern to "eligible" men, but might be of more concern to those outside the most respectable social pale. The narrator goes on to ask, "What in the midst of that mighty drama are girls and their blind visions?" and immediately answers, "They are the Yea or Nay of that good for which men are enduring and fighting. In these delicate vessels is borne onward through the ages the treasure of human affections" (103). Given the importance of women to a Spencerian evolutionary schema, we cannot ignore the novel's repeated demonstration that "a man cannot resolve about a woman's actions, least of all about those of a woman like Gwendolen, in whose nature there was a combination of proud reserve with rashness, of periously-poised terror with defiance, which might alternately flatter and disappoint control" (354). Control and dominance need to be taken out of the equation for gender relations to be equalized, and for society to progress through

development of sympathy to the point of truly egoless and global altruism. How exactly that can happen, though, remains an open question, implying that the time scale on which such evolution would occur is massive.<sup>808</sup> Kate Flint notes that *Daniel Deronda* is not only Eliot's "most eloquent" but also her most "radical, of all her treatments of gender,"<sup>809</sup> and as such leaves us with a profound indeterminacy about solutions to social problems, such as the failure of sympathy between men and women:

Any "solution," in [Daniel's] case, as in Gwendolen's, for the Jewish people as for the English woman, must lie outside the bounds of current realist fiction. They must lie in a social future for her fictional characters of which, for once, Eliot can expect her readers to know nothing. Women, in particular, are going to find no guidance in the plotted lives which they encounter in their habitual reading; not, it would seem, in the current condition of England, or indeed in its colonies. Rather than searching for a preexistence script, the plots of the future remain to be written.<sup>810</sup>

This notion of failure of sympathy, of the realist novel, and of all knowledge of the future is unsettling, but Spencerian in its embrace of the Unknowable.

#### **THE SPENCERIAN UNKNOWN AND UNKNOWABLE: LIMITS OF SCIENTIFIC EPISTEMOLOGY**

Spencer was a foundational figure to a number of social sciences, but not a blind adherent of scientific epistemology. Science, for Spencer, is the best means of gaining knowledge about the world, for "comprehending all positive and definite knowledge of the order existing among surrounding phenomena."<sup>811</sup> The kind of knowledge that science can realize is the focus of the second half of Spencer's philosophical opus, *First Principles*, but

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<sup>808</sup> Eliot criticized Dickens in her essay on "Natural History of German Life" for presenting a false vision of "the working classes [as] in a condition to enter at once into a millennial state of *altruism*, wherein everyone is caring for everyone else, and no one for himself"; she goes on to claim, instead, that "What has grown up historically can only die out historically, by the gradual operation of necessary laws" (265, 281; original emphasis).

<sup>809</sup> Flint, 173.

<sup>810</sup> Flint, 178.

<sup>811</sup> Spencer, *First Principles*, "Part 1: The Unknowable," 113.

the first half is focused on what he calls “the Unknowable.” The Unknowable consists of that part of consciousness that “transcends knowledge” and “passes the sphere of experience”—this is the domain of religion.<sup>812</sup> Just as the two halves of the book are required to construct a whole philosophical system, so too are the Unknowable and the Known ontological correlatives. According to Spencer,

he who contemplates the universe from the scientific point of view must learn to see that this which we call Religion is similarly a constituent of the great whole; and being such, must be treated as a subject of science with no more prejudice than any other reality. It behooves each party to strive to understand the other, with the conviction that the other has something worthy to be understood; and with the conviction that when mutually recognized this something will be the basis of a complete reconciliation.<sup>813</sup>

Thus, Spencer attempts to intervene in the Materialist-Spiritualist controversy, suggesting that each side is groundless because the only legitimate religious or scientific epistemology must take into account “the Unknown Cause as co-extensive with all orders of phenomena.”<sup>814</sup> As Spencer articulates this idea in his essay “Progress: Its Law and Cause,” much of which he recycles into “The Known” section of *First Principles*, embracing the reality of the Unknown entails the recognition that all religious and scientific pursuits bring one “face to face with the unknowable,”<sup>815</sup> that “the Universe is an insoluble problem”:

Alike in the external and the internal worlds, [the scientist] sees himself in the midst of perpetual changes, of which he can discover neither the beginning nor the end. If, tracing back the evolution of things, he allows himself to entertain the hypothesis that all matter once existed in a diffused form, he finds it utterly impossible to conceive how this came to be so; and equally, if he speculates on the future, he can assign no limit to the grand succession of phenomena ever unfolding themselves before him. On the other hand, if he looks inward, he perceives that both terminations of the thread of consciousness are beyond his grasp: he cannot remember when or how

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<sup>812</sup> Spencer, *First Principles*, “Part 1: The Unknowable,” 31.

<sup>813</sup> Spencer, *First Principles*, “Part 1: The Unknowable,” 35.

<sup>814</sup> Spencer, *First Principles*, “Part II: The Known,” 548.

<sup>815</sup> Spencer, “Progress: Its Law and Cause,” 60.

consciousness commences, and he cannot examine the consciousness that at any moment exists; for only a state of consciousness that is already past can become the object of thought, and never one which is passing.<sup>816</sup>

Or, put another way, “absolute knowledge is impossible” because “under all things there lies an impenetrable mystery.”<sup>817</sup> This is an essentially Kantian ontological vision, in which human consciousness is limited to knowledge of the phenomenal world, behind which the noumenal existence is unreachable.<sup>818</sup> All knowledge is ultimately symbolic, standing in for actualities, and true in so far as it fulfills the predictions about the world that is based upon it; this is the case for both religious and scientific ideas.<sup>819</sup> Most important for human consciousness is an awareness of its own limits, the symbolic nature of its cognitions.<sup>820</sup> Just because the Unknowable is in fact, always and ultimately unknowable, does not mean that the pursuit of knowledge should be abandoned; the more science studies the world’s characteristics, both known and unknowable,

the more marvelous in their attributes [they appear] the more they are investigated, and are also proved to be in their ultimate natures absolutely incomprehensible—as absolutely incomprehensible as sensation, or the conscious something which perceives it—whoever clearly recognizes this truth, will see that the course proposed does not imply a degradation of the so-called higher, but an elevation of the so-called lower.<sup>821</sup>

This pursuit provides an appreciation for details of the world, an overturning of traditional hierarchies, a questioning of preexisting categories, an awareness of the limits of human

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<sup>816</sup> Spencer, “Progress: Its Law and Cause,” 59.

<sup>817</sup> Spencer, “Progress: Its Law and Cause,” 60.

<sup>818</sup> Richards, *Darwin*, 328.

<sup>819</sup> Spencer, *First Principles*, “Part 1: The Unknowable,” 43, 80.

<sup>820</sup> Spencer, *First Principles*, “Part 1: The Unknowable,” 123.

<sup>821</sup> Spencer, *First Principles*, “Part II: The Known,” 548.

knowledge. The Unknowable also resists incorporation into literary and scientific narrative.<sup>822</sup>

Eliot both begins and ends *Daniel Deronda* with the Spencerian Unknowable. The epigraph to Chapter 1 suggests that people need to be more aware that both scientific and imaginative approaches to representing the world are immersed in symbolism and uncertainty:

Men can do nothing without the make-believe of a beginning. Even Science, the strict measurer, is obliged to start with a make-believe unit, and must fix on a point in the stars' unceasing journey when his sidereal clock shall pretend that time is at Nought. His less accurate grandmother Poetry has always been understood to start in the middle; but on reflection it appears that her proceeding is not very different from his; since Science, too, reckons backwards as well as forwards, divides his unit into billions, and with his clock-finger at Nought really sets off *in medias res*. No retrospect will take us to the true beginning; and whether our prologue be in heaven or on earth, it is but a fraction of that all-presupposing fact with which our story sets out. (3)<sup>823</sup>

Any human attempt at representing that which is Unknowable to human consciousness is nothing more than a misguided effort to reassure oneself that the vast mysteries of the universe are knowable and manageable. Or, as George Levine puts it, *Daniel Deronda* "leaves us yet with the empiricist's sense of the limits of human consciousness."<sup>824</sup> The "all-presupposing fact" referred to at the end of the opening passage turns out to be a series of questions, an attempt to judge a woman's appearance, and to gauge her interiority on that basis (3). Human consciousness, as Spencer points out, is only knowable to an extent, and the narrator reinforces this point about Gwendolen, who is so erroneously judged on appearances

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<sup>822</sup> Garratt, 176.

<sup>823</sup> The most common critical approach to this famous epigraph is not Spencerian, but can be summed up by Shuttleworth's assessment that it "challenges the dominant assumptions of the realist text" and the distinctions between scientific and literary methodologies and epistemologies (*Nineteenth-Century Science*, 175-76).

<sup>824</sup> Levine, "Eliot's Hypothesizing," 49.



in the first chapter, and who even halfway into the novel is not entirely predictable: remember, “a man cannot resolve about a woman’s actions, least of all about those of a woman like Gwendolen, in whose nature there was a combination of proud reserve with rashness, of periously-poised terror with defiance, which might alternately flatter and disappoint control” (354). The limits of the knowable differ from person to person, depending on each one’s capacity for sympathetic imagination, as Catherine Arrowpoint’s “limit of the conceivable did not exactly correspond with her mother’s” (203).<sup>825</sup> Daniel is a proponent of embracing the Unknowable, as “he dreaded, as if it were a dwelling-place of lost souls, that dead anatomy of culture which turns the universe into a mere ceaseless answer to queries, and knows, not everything, but everything else about everything—as if one should be ignorant of nothing concerning the scent of violets except the scent itself for which one had no nostril” (308). The ineffable qualities of experience, especially aesthetic enjoyment that arises from embracing the “sense of poetry in common things,” enlarge one’s perspective even if they cannot help one “escape suffering from the pressure of that hard unaccommodating Actual, which has never consulted our taste and is entirely unselect” (321). After rereading Darwin’s *Origin*, Eliot wrote to a correspondent “to me the Developmental Theory and all other explanations of processes by which things came to be, produce a feeble impression compared with the mystery that lies under the processes,” and this novel that so deeply engages with Spencerian evolutionary social science comes to rest on unraveling and accepting the nuances of the Unknown.<sup>826</sup> At the end of the novel, portions of what seem to be the Unknowable turn out in fact to just be previously unknown and become Known at the moment:

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<sup>825</sup> Toise argues that the limits of the Unknowable are defined by gendered subjectivity (141).

<sup>826</sup> *GEL*, III: 227.

There comes a terrible moment to many souls when the great movements of the world, the larger destinies of mankind, which have lain aloof in newspapers and other neglected reading, enter like an earthquake into their own lives....Then it is as if the Invisible Power that has been the object of lip-worship and lip-resignation became visible....Then it is that the submission of the soul to the Highest is tested, and even in the eyes of frivolity life looks out from the scene of human struggle with the awful face of duty, and a religion shows itself which is something else than a private consolation. (689)

Though there is a grave weightiness to this experience, it is essential to personal growth, to the greater movement of human consciousness, to the development of Super-organic Evolution. The end of the novel, then, with the potential of Daniel's educational, Zionist voyage to the East; of Gwendolen's hope for healing; of Mordecai's dying Hebrew "confession of the divine Unity, which for long generations has been on the lips of the dying Israelite" (695) is not mystical but epistemological—a recognition of the greater universal forces that are Unknowable and inseparable from any pursuit of knowledge and any growth on an individual or social level.<sup>827</sup>

#### CONCLUSION: ELIOT'S NOVELS AS SPENCERIAN SCIENCE

One anecdote of Eliot's early relationship with Spencer stands out as telling of her critical awareness of his methodological flaws, but indulgence of his quirks and ultimate respect for his idealism. On 29 June 1852, Eliot wrote to Hennell, "I went to Kew yesterday on a scientific expedition with Herbert Spencer, who has all sorts of theories about plants—I should have said a *proof*-hunting expedition. Of course, if the flowers didn't correspond to the theories, we said, '*tant pis pour les fleurs*'."<sup>828</sup> Eliot tends to cast key words or phrases, especially in her letters, in French as "a way of making the situation somewhat arch, even

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<sup>827</sup> As Shuttleworth notes, Eliot is arguing here that people "should remain open to hitherto unexplored alternatives or different forms of thought" ("Language of Science," 275). Gwendolen's future as a single woman and Daniel's Zionist vision are equally opened and dreamlike, full of possibilities but no certainties (Vigderman, 33).

<sup>828</sup> *GEL*, II: 40.

comic,” according to at least one biographer.<sup>829</sup> So while it is easy enough to dismiss the subjects that are unaware of being studied for not fitting to a preconceived system, as Spencer might have done (along with a number of other scientists and scientific thinkers of every age), it is far harder to maintain an awareness of the problematics of the individual case, as Eliot did in this early experience and continued to do through *Daniel Deronda*. This is one important role for Eliot’s literature in the scientific project: as a psychological, individualized, social study of the many complications of evolutionary theory, needed as a correlative to Spencer’s spearheading of the theory’s spread through an unprecedented number of disciplines. Her work thus modifies and limits his Synthetic Philosophy by grounding his grand generalizations in particularities that are relatable to daily life, in individual psychological case studies situated in concrete communities; neither project could have succeeded without the other. And critics never tire of citing Eliot’s experimental methodologies in her novels, as she wrote in a letter to her publisher in 1876—the time of *Daniel Deronda*’s publication: she viewed her writing as “a set of experiments in life—an endeavour to see what our thought and emotion may be capable of—what stores of motive, actual or hinted as possible, give promise of a better after which we must strive.”<sup>830</sup> This viewpoint leads us to the second way Eliot’s novels participated in Spencerian scientific discourse: *as* science. Darwin himself in private writings and in *The Expression of Emotions in Man and Animals* (1872) viewed fiction as equivalent in empirical observations to anthropological studies, as a social science providing reliable data.<sup>831</sup> Lewes wrote that

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<sup>829</sup> Karl, 80 n1.

<sup>830</sup> *GEL*, VI: 216-17. See also Karl, 556; Levine, “Introduction,” 18; Rosenthal, 778; Shuttleworth, *Nineteenth-Century Science*, 180.

<sup>831</sup> In particular, he cites the work of Scott, Dickens, and Eliot by name (Noble 103-7).

literature is a means of transmitting ideas through an entire culture or race at a speed far exceeding that of biological transmission—via a Spencerian inheritance of acquired mental characteristics—and operates on the level of conscious associative patterns.<sup>832</sup> Thus, literature in many ways serves the end that Mordecai hopes to achieve through a sympathetic union of souls with Daniel: use-inheritance on a maternal pattern that circumvents literal maternity or paternity. For her contemporaneous audience, and for the intelligentsia who gathered around her, then, Eliot was practicing Spencerian evolution, just in a form that was available and palatable to her—intellectual rather than biological reproduction.

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<sup>832</sup> Garratt, 189-90.

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## Coda: The Neo-Victorian Continuation

Neo-Victorian novels, which adopt Victorian settings and characters but are written after the mid-twentieth century, tackle many of the themes and issues discussed in this dissertation project. These modern-day novelists are living with the scientific and literary inheritance of the nineteenth century and so try to adopt contemporary perspectives to understand what are now traditional problems.<sup>833</sup> Neo-Victorian novelists puzzle through issues that their Victorian forebears explored in *The Last Man*, *Aurora Leigh*, *Sylvia's Lovers*, and *Daniel Deronda*—such as the place of faith and art in a scientized and industrialized world, the possibility of authentic human connections and sympathy in a globalized era, the role of humans in a non-anthropocentric universe, and the shape of time when viewed from a deep geological perspective. Neo-Victorian writers also touch on some of the broader connecting themes that I have identified as central to the arc of this dissertation project but which remain implicit in Mary Shelley's, Elizabeth Barrett Browning's, Elizabeth Gaskell's, and George Eliot's novels: women intellectuals' negotiations of scientific knowledge in a time when generalists were becoming increasingly displaced by specialists, including a focus on the value of literary historical narratives in an era of emerging scientific ones, the nature of realism in a time when seemingly fantastic

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<sup>833</sup> As Bowler and Cox note, Neo-Victorian fiction tends to tackle such “key issues” as “gender criticism’s engagement with the nineteenth-century inheritance, the problematic commodification of nostalgia, and the implication of projecting notions of present-day ‘trauma culture’ backwards in time” (6). Evolutionary theory is a common topic in Neo-Victorian fiction, Gutleben argues, because it allows “contemporary fiction to register instances of further crises, especially the loss of faith in man” (207).

theories were becoming established as factual (or at least reputable), and the complexities of sexuality that arise from evolutionary theories (i.e., Should we accept humans as bestial, or would that lead to the disintegration of society? Can and should we stick with traditional partnering patterns in the face of rapid social change? How can an individual navigate an awareness of new conflicts between the carnal and the social without having his or her psyche destroyed in the process?). Neo-Victorian novels often explore the intellectual and social relationship of women with evolutionary theory because, as Catherine Pessoa-Miquel puts it, “the Darwinian theme reminds us that evolution is not necessarily synonymous with progress and that societies can change for worse as well as for better,” even within comic novels—ironically, modern times might not offer women writers the same opportunities as the Victorian era.<sup>834</sup>

Although space and time restrictions prevent a fuller consideration of Neo-Victorian novelists’ treatments of Victorian women’s roles in genre systems evaluating evolutionary theories, this coda will touch on a few key works to demonstrate the continuing relevance of this dissertation topic to contemporary thinkers. Some novelists, like John Fowles, explicitly muse on evolutionary theory’s role in redefining Victorians’ sense of self; others, like Michel Faber, weave evolutionary theory into the cultural background that affects different Victorian characters’ psyches to varying extents. The Neo-Victorian novels that I hope to explore in greater depth as I continue to develop this project resist scientizing trends of the nineteenth-century: such works demonstrate, as Jessica Straley puts it, that “pitiless realism was not the only successful descendant of the encounter between the theory of evolution and literature”

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<sup>834</sup> Pessoa-Miquel, 130.

and defy the idea that “Literature, philosophy, and even religion...[must] be secondary [to science education] for the modern individual.”<sup>835</sup>

A. S. Byatt emphasizes affective responses to narrative over objective knowledge claims in order to highlight the importance of embodied knowledge, the role of literature as a “mode of knowledge,” and the constructedness of all narratives; the Neo-Victorian novel offers her the opportunity to “re-centre the literary text as a medium for cultural memory” because of the intellectual freedoms that she identifies as inherent to the Victorian era.<sup>836</sup> Byatt’s *Angels and Insects* (1992) contains within it two stories: “Morpho Eugenia,” about a natural historian and adventurer who marries the daughter of his primary sponsor only to discover that she is involved in a years-long incestuous relationship with her brother, and “The Conjugal Angel,” which focuses on spiritualist séances in the home of Tennyson’s sister, Emily Jesse. The two parts of the collection cohere through concerns over scientific developments evacuating human life of meaning, not just de-anthropocentrizing but denying a spiritual component to humanity and the universe.<sup>837</sup> Tennyson’s *In Memoriam* runs through both, as that “nature red in tooth and claw” in the first and in the extensive mourning that Victorians undertook on a daily basis in the second. In “Morpho Eugenia,” the reader is primarily privy to a man’s perspective, and not just any man but a scientist whose career as a natural historian, collector, and adventurer leads him to misjudge and misunderstand women because he translates their behavior into the animal contexts with which he is most familiar.

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<sup>835</sup> Straley, 585, 590.

<sup>836</sup> Qtn. from Mitchell, “Feeling it,” 267; and *History and Cultural Memory*, 94. See also Mitchell, *History and Cultural Memory*, 104; and Wells, 539.

<sup>837</sup> Campbell furthermore sees the stories as connected by a concern with “the relationship of women to this world and to language” in “a world shaken by the perceived conflict between science and religion,” “and both depict women who are able to enter and alter male discourse” (147). She goes on to note that “The two stories are also concerned with sexual classification and the special vulnerability of women to rigid labeling” (150).

Sexual mores in the human world are more complicated and misleading than in the animal kingdom, however, and this bestializing of humans through metaphor is shown to be as problematic as the personification of animals. Charles Darwin's methods of collecting, systematizing, and theorizing about the natural and social world are taken to task.<sup>838</sup> Beauty, which is so emphasized in *The Descent of Man and Selection in Relation to Sex* (1871) but which also plays a prominent role in *Origin of Species* (1859), is revealed as an inadequate guide to behavior and value.<sup>839</sup> This theme is nowhere more evident than in the title:

"Morpho Eugenia" is the name of an exquisite and rare butterfly, and "Eugenia" is the name of the main character's wife, who is likewise seemingly lovely and surprisingly interested in marrying downward socially. In fact, the human Eugenia is corrupt and the butterfly is soon forgotten in the narrative as anything but an initiator to a hideously deceptive and manipulative relationship.<sup>840</sup> Lord Alabaster, Eugenia's father, struggles through his loss of faith and tries to follow Darwin's model by constructing a quasi-philosophical tract based on natural historical research, but he finds himself inextricably tangled in theological conundrums and unconvincing arguments. More generally, the plundering of the natural world for wealthy collectors' curiosity and pleasure is revealed as wasteful and cruel. The stretches of scientific writing that interrupt the narrative are dull, unnecessarily extended, confusing, and distracting from the main plot's human interests.<sup>841</sup> When Matty Crompton, a

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<sup>838</sup> Finney makes a similar point in stating: "the desire to anthropomorphize the animal world under the influence of Darwinism is made to seem...untenable" in "Morpho Eugenia" (73).

<sup>839</sup> Byatt herself made the connection between "Morpho Eugenia" and Darwin, though she also said it was inspired by George Eliot's work, especially in relation to Darwinism ("True Stories," 176).

<sup>840</sup> Gutleben notes that the scientist's blindness to his personal life demonstrates that "William was deluded by mere sexual attraction, proving thus incapable of rising above the animal patterns of which he is so cognizant" (210).

<sup>841</sup> Gutleben comments that "The Darwinian affiliation between man and animals is finally proven faulty, it

dependent relative in the Alabaster home, decides to pursue science exploration and not just pedagogical science writing in fictional narrative form, she has to do so under the aegis of a man, and so must give up her tenuous position in British society and her character as a respectable woman.<sup>842</sup>

In the second story, the “Conjugal Angel,” we see women’s stories and perspectives playing a central role not just in the narrative but in Victorian society more generally.<sup>843</sup> Spiritualism is presented as an attempt to reinvest the individual human life with meaning in the face of fears over the materiality and finality of death. Byatt highlights in particular women’s frustration at being forced into secondary or invisible roles, such as the elision of Emily Tennyson’s mourning of Arthur Henry Hallam in *In Memoriam*, the famous tract of emotional struggle over personal loss and the loss of a stable vision of humankind in the face of early Victorian scientific developments.<sup>844</sup> Spiritualism is treated as a respectable and engaging outlet for women’s professional and personal inquiry into universal patterns.<sup>845</sup> As such, spiritualism becomes the scientific project’s correlative in many ways.<sup>846</sup> Ghosts, to the mediums’ minds, are displaced by “new knowledge” and so need help connecting with the

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cannot explain the specificity of human behaviour and particularly not of man’s artistic resorts” (211).  
<sup>842</sup> Alfer and de Campos note that although the consequences of the plot of “Morpho Eugenia” are harsh for women, ultimately it is a story of sexual selection and “the moral of this Darwinian fable is survival, not forgiveness—biological rather than moral altruism” (133-34). Campbell takes a more positive approach to Matty’s plot, claiming that the character “is empowered by participating in the scientific discourse of her time and by creating her own text as a means of communicating with and freeing the man she loves” (159).

<sup>843</sup> As Williamson puts it, “Byatt’s literary resurrection creates a space in which received ideas about Victorian literature can be reconsidered and rethought to give them a new critical life” (110).

<sup>844</sup> In an essay published separately from and later than this volume, Byatt acknowledged the feminist urge of this recovery work (“True Stories,” 185).

<sup>845</sup> Wells argues that “Byatt’s fiction holds a special appeal for female readers, since her work deals with the power that stories can have to suggest new possibilities, beyond historical constraints, for women’s lives” (540).

<sup>846</sup> Shuttleworth makes a similar point, claiming that “The pursuit of natural history and of spirit rappings were both motivated by a desire to extend the boundaries of knowledge, to broaden apprehension beyond the confines of daily life” (152).



living through the barriers erected by science and technology between modern people and deep human tradition (171). Evolutionary theory especially evokes a need for spiritual reassurance, as one character puts it, because “we cannot bear the next thought, that we become nothing, like grasshoppers and beef-cattle. So we ask them, our personal angels, for reassurance. And they come, they come to our call” (171).<sup>847</sup> Evolution implies an equivalence in the natural world, a global democracy, because all creatures are subject to the same pressures and processes, including humans. Therefore, “if there were not death and judgement, if there were not heaven and hell, men were no better than creepy-crawlies, no better than butterflies and blowflies” (189), and such an idea is insupportable for women especially, who are doing the physical work of social reproduction, which might be rendered meaningless in such a vision and which certainly seems to be elided in men’s evolutionary narratives.<sup>848</sup>

A. S. Byatt’s *Possession* (1990) interweaves the story of modern-day scholars with seemingly direct presentations of the actions and thoughts of the Victorian authors they are studying.<sup>849</sup> As Nick Bentley notes, this particular treatment of the nineteenth century demonstrates Byatt’s “interest in the way narratives of the past affect people in the present.”<sup>850</sup> The novel is full of references to those scientists prominent in my dissertation, including Cuvier, Buckland, Eliot, Lyell, Wallace, Huxley, Lamarck, and Darwin, but these

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<sup>847</sup> Finney phrases this idea thus: “Haunted by the narratives of Lyell and Darwin, Victorians turned to other narratives such as Swedenborg’s to restore their sense of purposefulness and form in a world threatened by random chance and formlessness” (85).

<sup>848</sup> Kontou similarly describes “the various ways in which natural history and spiritualism can be seen as locked together in a dialogue over man’s physical and psychical evolution” in “The Conjugal Angel” (114-15).

<sup>849</sup> Holmes claims that “*Possession* is Victorian in the configuration of its narrative as well as in subject matter” but that simultaneously, “a desire to appropriate, however tentatively and ironically, the humane values of the great tradition of the nineteenth-century novel and to establish, however tenuously, continuity between the present and the past” (322, 333).

<sup>850</sup> Bentley, 140.

figures are peripheral to the plot. Seemingly, evolutionary theorists are part of the cultural landscape, but no more so than spiritualism—each attempts to understand the world with new tools, which are partial and biasing. Modern scholarship is revealed as deadening through ironic references to the “Ash Factory,” not a crematorium as the name might suggest but a dim basement office dedicated to sorting through documents relevant to the life of the poet Randolph Henry Ash. Similarly, one of the main characters, Roland Mitchell, thinks of textual work as “exhum[ation]” of something that had been “laid to rest” (4). The Victorian subjects absorb the identities of their modern investigators, like Mortimer Cropper, who drives a hearse-like car, carries around a mysterious black box, and takes to grave robbing. James Blackadder, the British counterpart to the American Cropper, finds that, like Cropper, his identity is so lost in his scholarship that he cannot distinguish his own ideas from those of the dead author he has devoted his life to studying (34). Those professionals who manage vibrant intellects are generalists, capable of breathing life into their work because they value experiences outside of it (such as Leonora Stern and Euan MacIntyre). Victorians are vexed figures in this binary because of their generalist tendencies on one hand but the destructiveness of their pursuits on the other (20, 33).<sup>851</sup> Ash, who seems to be a combination of Tennyson and Browning, displays narcissism not just through always including his own name as a symbol in his work, but also through his violent collection and dissection of marine life.<sup>852</sup> His collection room at the seashore resembles a torture chamber. As one of his

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<sup>851</sup> We can see such a generalist intellectual training as part of the “traditional forms” for which Buxton notes Byatt is “an enthusiastic advocate” because of the “plenitude” they offer (Buxton, 100). In an interview, Byatt commented that she was drawn to the Victorians because of their generalist tendencies, because “everything was part of one thing: science, religion, philosophy, economics, politics, women, fiction, poetry. They didn’t compartmentalize—they thought BIG” (Stout, 14). See also Mitchell, “Feeling it,” 266-67.

<sup>852</sup> On the similarities between Ash and Browning, see Campbell, 109. Franken also claims that Ash is a composite of Matthew Arnold and G. H. Lewes (87), and Kelly adds Wordsworth, Morris, Ruskin, and Carlyle to the list (81).

biographers describes his methods, Ash “unwittingly, with his crashing boots covered with liquid india-rubber, as much as with his scalpel and killing-jar, deal[t] death to the creatures he found so beautiful, to the seashore whose pristine beauty he helped to wreck” (269). Such destructive anatomizing is reflected in his later scholars’ attempts to dissect and pin down his writing in such a precise way as to take all the life out of it.<sup>853</sup> Female Victorian artists, on the other hand, like Christabel LaMotte and Blanche Glover, refuse to kill organisms for scientific pursuits; understanding and possessing does not require killing for them (177). Ash’s wife Ellen demonstrates a similarly well-adjusted ethic by studying Lyell’s writings in a way that balances the religious doubts it inspires with its persuasiveness and relevance (242-43). Modern feminist scholars seem to be better at seeing into vibrancy of past than their male colleagues as well.<sup>854</sup>

Paired with its gendered and temporal distinctions, *Possession* concerns itself with understanding the role of sexuality in contemporary and Victorian life.<sup>855</sup> A hyperfocus on sexuality is presented as a modern pastime, as a lens that distorts not only how we look at the world but how we understand others as doing so (267-68, 276). It is not clear that previous generations did not share an identical concern with sexuality, but Byatt’s narrative argues that we cannot make that assumption. Sexuality does seem to be an undercurrent for *Possession*’s Victorians, for example, but in many cases modern readers have constructed such themes and trends from their own perspectives.<sup>856</sup> Sexuality looks different for the

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<sup>853</sup> Helmers also notes that this scene casts Ash as a rapist of the natural world (155).

<sup>854</sup> Campbell notes that in *Possession*, “Byatt shows the reductive, cramping construction of women in two periods of history, but she also shows women’s potential for creative self-assertion and empowerment, available especially when women work together” (128).

<sup>855</sup> Sadoff and Kucich argue that such a focus on sexuality is typical of postmodern literature (xi).

<sup>856</sup> As Fletcher puts it, “*Possession* communicates an impatience with our post- (or anti-) Victorian openness

Victorians, such as in the Ashes' prolific writing that sublimates the thwarted consummation of their physical relationship (499).<sup>857</sup> Ash and LaMotte may live more vibrant lives than the modern people whose stories orbit theirs, but readers have access to these experiences through an omniscient narratorial shift that may or may not be accurate.<sup>858</sup> These vibrant, personal, and especially sexual experiences are untranslatable and unrecoverable if unrecorded, as is often the case.<sup>859</sup> In this way, human lives are analogous to the fossils that Ash, LaMotte, and their modern-day counterparts seek on the cliffs of Whitby (292): only knowable in tangible fragments.<sup>860</sup> Ash and LaMotte's affair at Whitby links *Possession* in important ways to Elizabeth Gaskell's *Sylvia's Lovers* (which is mentioned in the book explicitly [263]) because in both cases, experiences at this precise location were contemporaneous with Darwin's publishing of *Origin* and produced alternative narratives to that famous evolutionary tract.<sup>861</sup> *Possession* subtitles itself a Romance, and its first epigraph

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about sexuality" (160).

<sup>857</sup> Mitchell argues that "Byatt thus reverses what might be expected of representations of sexuality in the Victorian era and the late twentieth century. On the one hand, she draws her Victorians as frank and relatively uninhibited in their sexuality, whilst on the other, she creates twentieth-century characters whose relationship proceeds slowly, mutely, and with little physical contact" (*History and Cultural Memory*, 112).

<sup>858</sup> Buxton calls these narrative shifts "'transgressive' time capsules" and sees them as a way to satisfy a natural human curiosity, shared by Roland and Maud (100).

<sup>859</sup> Hadley notes that the third and final temporal shift in the novel, the Postscript, in particular "provides the reader with privileged access to events for which there are no textual traces" ("Feminine Endings," 189. See also 190-91).

<sup>860</sup> Su likewise connects fossils and identity in the novel, arguing that "*Possession*, in particular, suggests that collecting can in certain instances help individuals to imagine alternative identities" (685).

<sup>861</sup> Bentley notes that the novel begins with the discovery of literary letters in a scientific work, Giambattista Vico's *The New Science* (1725), and that this scientific theory posits that "'truth' is not only accessed by scientific fact and the language that science uses but that it can also be registered in the imaginary and literary motifs and symbols that a culture produces" (Bentley, 140-41). And although there are no marriages at the end of *Possession*, like *Sylvia's Lovers* the novel upholds heterosexual reproduction as the path forward for western society (see Fletcher, 155 and Hadley, "Feminine Endings," 191). Morse also notes the connection with *Sylvia's Lovers* (155).

from Nathaniel Hawthorne's *House of the Seven Gables* suggests that Byatt is taking a license with fact that Eliot, for example, would likely not have allowed herself:

When a writer calls his work a Romance, it need hardly be observed that he wishes to claim a certain latitude, both as to its fashion and material, which he would not have felt himself entitled to assume, had he professed to be writing a Novel. The latter form of composition is presumed to aim at a very minute fidelity, not merely to the possible, but to the probable and ordinary course of man's experience. The former—while as a work of art, it must rigidly subject itself to laws, and while it sins unpardonably so far as it may swerve aside from the truth of the human heart—has fairly a right to present the truth under circumstances, to a great extent, of the writer's own choosing or creation. . . . The point of view in which this tale comes under the Romantic definition lies in the attempt to connect a bygone time with the very present that is flitting away from us.

This idea of Romance rather than realism is reflected most clearly when the narrative shifts to the actions and thoughts of the Victorian characters. Ultimately, however, the distinction between novel and Romance does not make a difference for the reading experience, because all of the narrative feels true, which is accomplished partly through an authoritative omniscient narratorial voice and partly through an expert use of free indirect discourse.<sup>862</sup> A readerly tendency to suspend disbelief is minimally disturbed by the narrator's strategies and so realism seems to dominate a supposed Romance.<sup>863</sup> As Hilary Schor argues, for Byatt, the Victorian novel offers the still-relevant recognition that "realism may not be comfortable, but that discomfort may be the source of our most generative imaginings."<sup>864</sup> After all, realism is

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<sup>862</sup> Campbell observes that the conclusion to the novel accomplishes this end as well, by containing three endings "two for the characters' knowledge, one for the reader's" that are "both formally satisfying and true to the contingent reality of the practical world" (138). Su views Byatt's free handling of the past less positively, citing "Byatt's apparent preference for what might be called a usable past over an absolutely accurate one" (704).

<sup>863</sup> Buxton notes that "While Maud and Roland exhibit a scholarly postmodernist sensibility, the text itself exhibits a strong suspicion of that epistemic condition, even a condemnation of it. For all its postmodern gestures, *Possession* is first and foremost a 'straight' narrative, a realistic fiction" (98). See also Hadley, *Fiction of Byatt*, 90.

<sup>864</sup> Schor, 248.

more about complexity than it is about thwarting or fulfilling readers' and characters' desires.<sup>865</sup>

While Byatt seeks to use the fruitfulness and vitality of the Victorian era as a means for working through contemporary problems, other Neo-Victorian fiction more overtly imposes a modern perspective on the past, finding its narratives lacking.<sup>866</sup> John Fowles's *The French Lieutenant's Woman* (1969), which is often cited as the first Neo-Victorian novel, reaches back to the Romantic period with references to Mary Anning and Jane Austen. Like Austen in *Persuasion* (1818), Fowles sets important sections of his novel in Lyme Regis, the famous location of Anning's remarkable paleontological discoveries that fueled the theorizing of male scientists including Cuvier. Charles Smithson, the male protagonist, shares his first name with Darwin; this connection is reinforced by the narrator's tendency to refer to Smithson almost exclusively by his first name and Darwin almost exclusively by his surname—it is as though the two persons, “Charles” and “Darwin,” are not sufficiently distinguished. When Charles is discovering fossils and making natural historical connections, then, it is hard not to imagine Darwin overlaid on his activities.<sup>867</sup> Charles's fossil hunting expeditions for sea urchins is a dilettantish way to try to contribute to the age's scientific investigations, as he looks for rare fossil specimens that he paradoxically collects for his own private display (45). Fowles seems unaware of or unconcerned with the paradox between the

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<sup>865</sup> Llewellyn, 32.

<sup>866</sup> Gauthier, 37.

<sup>867</sup> Letissier, treats the novel as an originating Neo-Victorian text in large part because of its focus on Darwinian conflicts: “The three citations from *On the Origin of Species* inserted into *The French Lieutenant's Woman* raise seminal questions that are frequently re-encountered in later neo-Victorian fictions: the deterministic influence of inheritance (Chapter Three); the ruthless Malthusian law of the gap between population growth and food increase, and the advantage that adaptive capacities confer upon some chosen individuals (Chapter Nineteen); and finally how natural selection leads to the formation of new species, alongside the extinction of others, and how those who are the closest to changing improving specimens suffer the most (Chapter Fifty)” (“Trauma by Proxy,” 75-76).

desire for knowledge and the private hoarding that were the motivation and result of so much Victorian natural history, while Byatt explicitly points to the problematics of those practices in “Morpho Eugenia” and *Possession*. Much of what Byatt explores implicitly, however, Fowles discusses explicitly: the importance of generalization to Victorian scientific pursuits (48-49), the way that literature can substitute for experience for women (53), industrialization’s division of humans and the natural world that could not be breached by natural history (68-69), the artificiality of “realist” historical fiction (96), the differences between Victorian and modern day approaches to sexuality (268), the way that anxiety about death drives scientific inquiry (294), and human beings’ unique evolutionary ability to choose adaptive behavior (296). Fowles also makes narratorial intrusions more literal, as the authorial voice regularly interjects not just sentence-long comparisons to modern events and mindsets, but also pages-long history lessons; the fictional author also appears as a character as a stranger on a train (405-7) and finally an observer on the sidewalk at the end of the novel (452).<sup>868</sup> The false endings of chapters 44 and 60 also draw readers’ attention to the artificiality of historical narrative.<sup>869</sup> Perhaps most compelling in Fowles’s novel, however, are his insights about how humans’ relationship with time is dramatically altered by evolutionary theories. He writes of Charles’s epiphany on this subject:

In a vivid insight, a flash of black lightning, he saw that all life was parallel: that evolution was not vertical, ascending to a perfection, but horizontal. Time was the great fallacy; existence was without history, was always now, was always this being caught in the same fiendish machine. All those painted screens erected by man to shut out reality—history, religion, duty, social position, all were illusions, mere opium fantasies. (206)

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<sup>868</sup> Acheson notes that Fowles’s play with limited omniscience is a way to object to mid-twentieth-century novelists’ use of omniscience narration, though I would argue that it is also a reflection of the Darwinian worldview of which Fowles is so self-conscious throughout the novel (399).

<sup>869</sup> Hadley takes Fowles to task for these multiple endings, as “the narrator of Fowles’s novel elides the complexity of Victorian endings” in the smugness of a postmodern form (“Feminine Endings,” 185).

As a consequence of the artificiality of human social structures, “The scientist is but one more form; and will be superseded” (295). No pursuit of knowledge is better than any other, and no tradition can stand up in the face of deep geological time and the bare physicality of biological existence. Charles, the amateur scientist, is unable to fully implement this insight in his life and is borne under psychologically and socially by its reality. Sarah Woodruff, the titular sexualized woman, on the other hand, uses social structures to her benefit and as a consequence becomes biologically and artistically productive at the end of the novel.<sup>870</sup>

Michel Faber’s *The Crimson Petal and the White* (2002) is a Dickensian look at the social rise of a “virtuous” prostitute and the many strata of society that she encounters.<sup>871</sup> Set in the 1870s, Faber’s novel includes an intrusive narratorial voice, like Fowles’s, but it fades quickly after the first few chapters, only to reappear in an acknowledgement at the end that the author “was far too young in the 1870s to pay proper attention to everything [he] should, so this account is no doubt riddled with inaccuracies” (838). Keeping up the pretense of authorial presence in a work of Neo-Victorian fiction allows Faber to use a third-person limited voice in addition to free indirect discourse that grants readers more direct access to characters’ thoughts, both of which strategically make the reader aware of the bias of any modern perspective on Victorians. Nonetheless, evolutionary theory prominently appears when characters are struggling with their sexual identities. The versatile prostitute Sugar is described as “straining as if for a Lamarckian feat of evolution, her jaw trembling slightly, her mouth falling open with effort” (128) while trying to keep her head high as she is being

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<sup>870</sup> Fletcher notes that “It is precisely the dispersal of the figure of woman across time that makes...[it so that] history cannot contain Sarah; she stands outside of her age” as a timeless symbol (105).

<sup>871</sup> Chialant makes the connection between Faber and Dickens, calling Faber’s omniscient narrator an “urban *flâneur* in the Dickensian mode” (44), although Louttit argues that the narratorial style is more indebted to Henry Mayhew (330-31).



undressed by a customer. A fellow prostitute wonders if men find Sugar so attractive because of the “animal serenity” that she projects, making her “[appear] to be wholly at one with her clothing, as if it were her own fur and feathers” (31). Her repression of the body underneath her clothing is exactly what, ironically, attracts men to her for sexual encounters, just as a man of the church, Henry Rackham, is both appalled by the bestiality of the human body and aroused by it, especially body hair (339-40). *Crimson Petal* picks up temporally where Chapter 4 of this dissertation left off: at a time after Eliot’s final novel, when Darwin had become the general face of evolutionary theory.<sup>872</sup> This modern novel brings an eroticism to evolutionary theory by emphasizing that Victorian angst about Darwinism was less about the ape in the family tree than the ape under the suit of clothing. While Faber adopts the Dickensian structure of making London seem at first overly complex and frightening but in the end demonstrating that everyone mentioned in the novel is interconnected, Faber is not at all squeamish about the muck of Victorian and modern urban life: from discussions of condoms to references to diarrhea, he does not shy away from dotting London’s streets with decomposing animal carcasses and dog feces.<sup>873</sup> In doing so, he escalates the sense of realism of his novel, and situates his own book alongside Darwin’s as one of those perpetually in-demand works that treat “the fabric of our society” irreverently in order to expose the truth of the biological life beneath it (69). Like Darwin, Faber adopts an open and unresolved ending

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<sup>872</sup> This timing in relation to Eliot’s work is not likely a coincidence; as Shiller notes, “neo-Victorian novels employ Eliot’s sense of history [as fundamentally quotidian, a series of private moments and undocumented acts] as a referent” (540).

<sup>873</sup> Letissier claims that in *The Crimson Petal*, “Eschatology is defeated by scatology” as Faber approaches realism from an emphasis “on odours, smells, fragrance and stench” that taps into a modern “nostalgia for the real...[that] could probably only be found at the pre-symbolic stage” (“*The Crimson Petal*,” 120, 122, 123).

to his book, and in a way both inspired by and perverting of Darwin's *Descent of Man*, Faber also resituates women's physical and emotional experiences as valid and central to history.<sup>874</sup>

Studying nineteenth-century women's interventions in moments of potential social crisis can give us pause as we consider the implications for twentieth- and twenty-first-century culture of the rise of scientific privilege and perspective. The Neo-Victorian fictions of A. S. Byatt, John Fowles, Michel Faber, and others provide compelling modern examples of the enlightening possibilities of looking back to the models and concerns raised by Victorian literature and science. Georges Letissier notes that "Neo-Victorian novelists are interested in the way in which human consciousnesses, individually or collectively, respond to epistemological challenges," and I would add that such novelists also look to the nineteenth century for examples of adaptive and nonadaptive ways to do so, focusing on evolutionary theory as a particularly salient test case.<sup>875</sup> As Fowles puts it in *The French Lieutenant's Woman*, the accessibility of Victorian science was "better for...the human being" than the "narrow *oubliette*" in which humanists and generalists were later shut up by scientific specialization and professionalization—in fact, he maintains, it is a model that society ought to follow today (48-49).<sup>876</sup> As modern-day humanists, this is an imperative to which we should give careful consideration.

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<sup>874</sup> Preston makes a similar point, stating, "The novel draws most of its thematic material from the limitations placed on women's scope for action in the nineteenth century, and it is unsparing in its detail of how women suffer at the hands of men" (102). Letissier notes that "Mutability and fluidity are characteristics of high Victorianism which Faber stresses," in large part through emphasizing "departures from well-established gender norms" ("*The Crimson Petal*," 118).

<sup>875</sup> Letissier, "Trauma by Proxy," 95.

<sup>876</sup> Adams likewise suggests that for Byatt in *Possession*, "the contemporary characters are necessarily less 'real' than their Victorian predecessors...because their cultural beliefs deny them a sense of autonomy and individuality" (112).

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