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George Henry Lewes, the Real Man of Science Behind George Eliot's Fictional Pedants¹

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This paper demonstrates that George Eliot drew on George Henry Lewes's actual experience as an emerging scientist in her depiction of two fictional scholars, Edward Casaubon of Middlemarch and Proteus Merman, a lesser-known character from the chapter entitled "How We Encourage Research" in her final work, Impressions of Theophrastus Such. After Thomas Huxley published a devastating review of Lewes's first book of science, Comte's Philosophy of the Sciences, the evidence suggests that Lewes became highly focused on disproving his critics and earning lasting recognition as a scientist, a feat he expected to achieve with his five-volume series, Problems of Life and Mind. The paper concludes with a discussion of what purpose Eliot may have intended when she modeled these characters after George Henry Lewes, her consistently defended partner. Keywords: George Eliot, George Henry Lewes, Middlemarch, Impressions of Theophrastus Such, Thomas Huxley

George Henry Lewes, like his famous contemporary Charles Darwin, devoted most of his life to advancing scientific knowledge. Though Lewes yearned to be remembered as a scientist, his claim to some fame springs almost entirely from his twenty-four years of cohabiting with novelist Marian Evans, better known as George Eliot.² In addition to some distinguished literary and theater criticism, biography, and philosophy (and some forgettable fiction, drama, and poetry), Lewes published many scientific articles and books, including Sea-Side Studies (1858), Physiology of Common Life (1859–60), Studies in Animal Life (1862), and the ambitious, five-volume Problems of Life and Mind (1874–79). Numerous scholars have demonstrated that George Eliot was well acquainted with nineteenth-century scientific theories in general and Lewes's theories in particular, and that this scientific awareness is evident in her fiction.³ What has not yet been discussed is that Eliot also incorporated Lewes's personal experiences as a scientific researcher into her literary works. Specifically, she seems to have reconstituted a little-noticed dispute that involved herself, Lewes, and Thomas Henry Huxley, the scientist who later dubbed himself "Darwin's

bulldog."⁴ The incident is noteworthy because it provides insight into the politics of the Victorian scientific community and because George Eliot makes use of it in her characterization of Edward Casaubon of *Middlemarch* (1871–72) and Proteus Merman, a lesser-known character from the chapter ironically titled "How We Encourage Research" in her final work, *Impressions of Theophrastus Such* (1879). Nancy Henry speaks to the importance of this line of inquiry in her recent comprehensive biography of George Eliot: "It is time to rethink how the experiences of the author factor into larger questions about whether and how historical contexts explain the production and interpretation of literary works" (Henry, *Life of George Eliot* 6). George Eliot was becoming intimate with George Henry Lewes when he suffered a serious setback in his efforts to become a respected scientist. By comparing the details of Lewes's experience with Eliot's characterization of Casaubon and Merman, it becomes evident that there are intentional biographical parallels. What remain controversial, as we shall explore, are Eliot's reasons for drawing parallels between Lewes, Casaubon, and Merman.

G. H. Lewes as an Emerging Victorian Scientist

George Henry Lewes was determined to make a lasting contribution to science. Long before he knew George Eliot, Lewes was developing his theories about the philosophical and physiological links between mind and body. Eliot's support of Lewes's scientific ambitions appears to have been a key reason the two became close. When they met in the fall of 1851, she was the managing editor of the *Westminster Review* and Lewes was a frequent contributor who wrote on a wide variety of subjects. He already could boast to his friends, with good reason, "that there was scarcely any editor whom he wished to cultivate to whom he could not supply just the article that was wanted" (Espinasse 275–76).

Eliot did not immediately like Lewes; specifically, during the first year of their acquaintance, she mentions in her letters to friends that she was not impressed by Lewes's physical appearance (*GEL* 1: 367), his novel writing (*GEL* 8: 51), nor by his contributions to the *Westminster Review*, about which she wrote, "Defective as his articles are, they are the best we can get of the kind" (*GEL* 2: 49).⁵ However, as Eliot and Lewes's friendship deepened over the next year, she became convinced of his genius. Her change of opinion about Lewes's talent was apparent in September 1852 when she took offense on Lewes's behalf upon learning that Harriet Martineau had been criticizing Lewes's notions of psychology. Though Eliot and Martineau had been good friends to that point,⁶

Eliot denounced Martineau's "jeers at Lewes" for "introducing Psychology as a science in his Comte papers," which, according to Eliot, demonstrated her former friend's "incomprehensible ignorance" (*GEL* 2: 54). Eliot's staunch defense of Lewes's accomplishment shows that she already had begun to see him as an under-appreciated scientific researcher. Her support was just what he needed.

Martineau's dismissive comments about Lewes's work should be understood as those of a competitor against her perceived opponent because both Lewes and Martineau were working on very similar projects. In 1853, within weeks of each other, rival publishers released Martineau's The Positive Philosophy of Auguste Comte and Lewes's Comte's Philosophy of the Sciences. Both Lewes's and Martineau's books contained abridgements of recent translations of Auguste Comte's Course in Positive Philosophy (Cours de Philosophie Positive). Originally published in series between 1830 and 1842, Comte's Cours, which became the foundational document of the Positivist movement, was not only important in his native country of France but also was becoming influential in Britain. His laws of social evolution proposed that society developed through scientifically verifiable stages of progress. Both Lewes and Martineau were interested in promoting Comte's ideas and making them more accessible to the general English reader who was unable to read the original French. This is exactly what Martineau's book does—it condenses the essential elements of Comte's ten volumes into two. As Susan Hoecker-Drysdale summarizes in "Harriet Martineau and the Positivism of Auguste Comte," Martineau "refused to analyze or in any way criticize Comte's ideas in her Preface to the translation" (180). Martineau positioned herself as Comte's advocate and admirer, rather than as a scientific expert who was evaluating and adding to Comte's theories.

In contrast to Martineau's intentions, Lewes was interested not only in disseminating Comte's ideas but also in reviewing and amending them. As Lewes explains in his "Preface" to *Comte's Philosophy of the Sciences*, for the "Social Science and History" section of the book, he has "scarcely added anything, confining [him]self to an abridgment of [Comte's] exposition, preserving [Comte's] own terms, as far as practicable." In the second half of his book, however, Lewes introduces his own "philosophy of the six Preliminary Sciences (Psychology being included for reasons there adduced)" (Lewes, *Comte's Philosophy* iii-iv). This section was actually a slightly revised republication of a series of articles Lewes had published in the *Leader* the previous year—a series that had been all but ignored by London's scientific community.⁷ As noted earlier, Eliot was angry with Martineau's "jeering" (Eliot's term) at Lewes for amending Comte's views with his own theories about psychology as a science separate from but complementary to sociology. Lewes believed psychology had a physiological basis—that it was the science that connected mind and body. In order to present his own ideas to a wider public than the *Leader* was able to reach, Lewes made use of Comte's popularity, even as he proclaimed himself a "reverent heretic" who believed in part but not all of Comte's system (Tjoa 13). History proves that Lewes was on the right track, but the point here is that Lewes's independent emendations to Comte's work angered and offended Comte. As it turned out, Lewes's scientific contribution was judged to have "little effect, particularly in the opinion of Comte" (Hoecker-Drysdale 180). Nevertheless, Comte appeared concerned that Lewes's "unfaithful" representation could damage the Positivist cause. In a private letter to Henry Dix Hutton on 13 November 1853, Comte wrote:

On Sunday last I received the new book compiled by Mr. Lewes for the propagation of the Positive philosophy. After a rapid but attentive reading I am much dissatisfied with it, and have stated my opinion in a reply to the writer, whose exposition is very insufficient, and, as you say, often unfaithful. The volume seems to me to have been composed in haste, to get the start of Miss Martineau's publication, which, I feel sure, will be much more satisfactory, and, particularly, more conscientious. (Comte 32–34)

What must have been even more irksome to Lewes was the fact that Comte was "so impressed with Martineau's work that he replaced his original with her version in his *Bibliotheque positiviste du proletaire au dixneuvieme siècle* and wrote of his deep appreciation for the quality of the result" (Hoecker-Drysdale 180). Comte's appreciation of Martineau's edition of the *Cours* may have contributed to its reissue in 1873. Moreover, her abridged version was translated back into French as a companion to Comte's original volumes, while Lewes's competing book was slighted. Comte made his disparaging remarks about the failure of Lewes's debut book as a scientist in private rather than public documents; presumably, his negative opinion of Lewes's work was not widely known and likely had a minimal impact on Lewes's scientific career. It was not Comte's but Huxley's negative assessment of Lewes as a scientific researcher that brought Lewes humiliation instead of the positive recognition he sought.

Thomas Huxley, the Bulldog of Victorian Science

Thomas Huxley, a prodigy in the scientific community, was commissioned in October 1853 to write a regular "Science" section for the *Westminster Review*. For his first column, which would appear in January 1854, Huxley decided to compare Martineau's and Lewes's new books on Comte's scientific theories. He duly submitted his review in December 1853. As the Westminster Review's managing editor, George Eliot was responsible for reading the proof sheets for each issue, and after reading Huxley's proposed article, she became alarmed. Huxley's review begins with praise for Martineau's book, then quickly turns into an attack on Lewes's; for more than two pages, Huxley details the many errors he has discovered in Lewes's scientific report. He declares, for example, that several of Lewes's findings are "in direct contradiction to the most fundamental and best established facts of embryology." Moreover, Huxley contends that he cannot simply ignore Lewes's mistakes because they are "unworthy of a place in any work claiming to be on a level with the science of the present day" (Huxley 256). Huxley delivers his most devastating blow by charging that Lewes was a "mere" book scientist "without the discipline and knowledge which result from being a worker also" (Huxley 256). Lewes's errors might have been a natural consequence of limited access to laboratory space and equipment, but Huxley insists instead that Lewes's "absolutely untrue" statements are "not excusable even on the plea of mere book-knowledge" (Huxley 256, 255; emphasis in the original). Huxley was strongly promoting the idea that there was a "right way" to do science, that is, through direct observation. Lewes becomes Huxley's scapegoat for all that is wrong with current scientific methodology.

As Lewes and Eliot were well aware, negative reviews in the widely read and well-respected Westminster Review could have far-reaching consequences for an intellectual's reputation. Immediately, Eliot attempted to intervene on Lewes's behalf. In three separate letters, all marked "Private," she begged the editor-in-chief and publisher, John Chapman, not to print Huxley's article. Eliot began her protest by pointing to a mistake Lewes probably identified himself and reported to her in private: "I have found out that [Huxley] is in the wrong in his remark on the embryological doctrine at p. 33 of Mr. Lewes's book, and also that the ridicule he throws on the remark about the gallionella ferruginea is not well founded" (GEL 2: 132). She also reminded Chapman that "[t]he case is all the more delicate as the criticism of Mr. Lewes comes after the unmitigated praise of Miss Martineau." Finally, Eliot argued that Huxley's spiteful review was unworthy of the dignity of publication: "At all events I think you will wish for the sake of the Review as well as from your own sense of justice that this *purely* contemptuous notice should not be admitted" (GEL 2: 132; emphasis in the original). Eliot's use of the phrase "purely contemptuous" to describe Huxley's review reflects her conviction that it was personally motivated.

Though George Eliot evidently believed Lewes was the innocent target of an unfair attack, Gordon Haight explains in a brief editorial note that the skirmish probably was ignited by Lewes's negative review of Huxley's work in the *Leader* three months earlier (1073–75; *GEL* 2: 132 n.8). Haight's note understates the matter. Actually, Lewes publicly criticized Huxley's science just one month before Huxley had the opportunity to reciprocate in the *Westminster Review*; there can be little doubt that Lewes instigated the public war of words. Lewes states rather pretentiously in the first person plural that "we find it necessary to question Mr. Huxley's positions" because Huxley's article seems "calculated to *mislead*" (*Leader*, 5 November 1853; emphasis in the original). Essentially, Lewes argues that Huxley is ignorant of the latest scientific discoveries occurring in Germany and that consequently his theories are out of date.⁸ In this column, the confident Lewes provoked Huxley without fully appreciating the consequences of disturbing the "bulldog."

Eliot repeatedly attempted to defuse the situation by using her editorial influence with John Chapman to prevent or at least mitigate the damage that Huxley's review would surely do to Lewes's reputation as a scientist. Two days after her first letter to Chapman,⁹ Eliot wrote him a second letter in which she suggests that the "only wise thing to be done in the case, so far as I can see, would be to leave [Huxley's review] out altogether. You are not bound by any obligation that I know of, to review the book" (GEL 2: 133). She wrote a third letter, also marked "Private" and believed by Rosemary Ashton to have been written the same day ("New George Eliot Letters" 118). In uncharacteristically strong language for George Eliot, who was typically highly controlled and professional in her letters to Chapman, she admits that she is "exceedingly annoyed." She regrets mentioning Huxley's error in her first letter-the only correction Chapman appears to have been willing to make. Leaving it in, she says, "would have most clearly betrayed the arrogance and superficiality of Mr. Huxley's review" but now that it has been corrected, "his contemptuous dismissal of the book without any characterization will be retained." She also insists the Westminster Review "will disgrace themselves" by printing what was "utterly worthless and unworthy of notice of a work by one of their own writers—a man of much longer and higher standing than Mr. Huxley, and whom Mr. Huxley's seniors in science and superiors both in intellect and fame treat with respect." Again, Eliot asks Chapman to respect her position as managing editor: "I think I ought to have a voice in the matter, in virtue of the share in the management of the W[estminster] R[eview] which I have had hitherto" (Ashton, "New George Eliot Letters" 119-20). In her efforts to protect Lewes's reputation as a scientist, Eliot is unusually insistent. Unfortunately, it was all for naught.

Though George Eliot used all of her powers of persuasion with the usually deferential Chapman, she failed to have Huxley's article removed or altered. It was printed in the January issue of the Westminster Review. Lewes's only recourse was to publish a long, defensive letter in the Leader on 14 January 1854, in which he answered that he was no mere "bookman" but had been studying biology both practically and theoretically for more than eighteen years.¹⁰ He acknowledged one error of fact in his book (sulphuric for sulphurous acid) and then turned the tables on Huxley by arguing (again) that Huxley's criticism was based on authorities that had been superseded within the past two years (Leader 40; GEL 2: 133 n.9). Gordon Haight's editorial note supports Lewes as "far in advance of Huxley at this time" and conjectures Huxley may have been motivated by jealousy of Lewes's achievement (GEL 2: 132 n.8). Whether Huxley's or Lewes's scientific knowledge was more advanced when this dispute took place, Haight's next observation is apt: "Huxley's sneer that he was a mere 'book-scientist' stung Lewes more sharply than he admitted, and instigated his Sea-Side Studies research in 1855, for which he borrowed a microscope from his friend, Arthur Helps (Haight, Biography 195). Lewes's definitive biographer, Rosemary Ashton, supports the view that Lewes deeply resented the inference that his self-directed learning was inferior; his lack of a university education "was a subject on which Lewes was uncharacteristically touchy" (Ashton, Versatile Victorian 4)."

Huxley's attack and the general failure of Lewes's contemporaries in the scientific community to recognize his achievements drove Lewes to concentrate his attention on scientific research. He was determined to leave his own mark on the world of science. Eliot's increasing literary fame and fortune freed Lewes from the necessity of having to earn money from his writing, and after 1860, he published very little new work. Instead, most of his publications over the next fourteen years were reprints or revisions of works he had written previously as journal articles.¹² Much like Casaubon's search for a "key to all mythologies," Lewes held that the new science of psychology was the key to uniting philosophy, sociology, and the physical sciences—an early insight that became the foundation of his life's work. As Lewes stated in his *Leader* defense, he had been working on biological problems "for more than eighteen years"—that is, for most of his adult life. Until his death in 1878, Lewes continued to search for an elusive link between mind and body.

Life into Art: Middlemarch's Casaubon

Lewes's dispute with Huxley and his subsequent determination to prove his own theories scientifically infallible was a significant turning point in Lewes's professional career—one that George Eliot drew on for the backstory of two of her fictional characters, Edward Casaubon and Proteus Merman. Though Merman is little known, readers have been speculating about Casaubon's possible prototypes since *Middlemarch* first appeared.¹³ Even though Eliot denied it, her acquaintances Harriet Beecher Stowe and Annie Ritchie believed Casaubon was based on Lewes.¹⁴ Their hypotheses deserve reconsideration. By the time Eliot completed *Middlemarch* in 1872, Lewes had been working on his *Problems of Life and Mind* for at least a dozen years (depending on how you count them),¹⁵ with the publication date of his first volume still two years off. Eliot might reasonably have worried that Lewes would never complete his masterpiece, but she also would have sympathized with Lewes's desire to make a significant contribution to the advancement of knowledge. *Middlemarch*'s narrator describes Casaubon's disillusion in terms of a specific history that matches Lewes's own:

The difficulty of making his Key to all Mythologies unimpeachable weighed like lead upon his mind; and the pamphlets—or "Parerga" as he called them—by which he tested his public and deposited small monumental records of his march, were far from having been seen in all their significance. He suspected the Archdeacon of not having read them; he was in painful doubt as to what was really thought of them by the lead-ing minds of Brasenose, and bitterly convinced that his old acquaintance Carp had been the writer of that depreciatory recension which was kept locked in a small drawer of Mr. Casaubon's desk, and also in a dark closet of his verbal memory. ($MM \ge 12$)¹⁶

The narrator's position toward Casaubon's plight is essentially sympathetic, yet a note of sarcasm is detectable. There is some distancing between the narrator's use of the word "pamphlets" and Casaubon's insistence on calling them the pretentious term "Parerga."¹⁷ We find a hint of condescension as well as sympathy in the narrator's description of a researcher so bent on making his work "unimpeachable" that he cannot bear to expose his research findings to outside scrutiny. Even his young bride, Casaubon discovers, has the intellectual capacity to criticize his work. Unwilling to risk further skepticism about the importance of his search for truth, he shuts himself away from her. All Casaubon's potential happiness hinges on "the immortality of the still unwritten Key to all Mythologies." The narrator asks the reader to understand that these "were heavy impressions to struggle against, and brought that melancholy embitterment which is the consequence of all excessive claim" (*MM* 2: 12). The narrator's use of the term "excessive" passes judgment,

but it is a very mild censure. Otherwise, there is a gulf between the narrator's forgiving judgment of "poor Casaubon" and the readers' disdain for his treatment of Dorothea, which necessarily complicates our view of the shivering, self-isolated scholar.

As we have seen, Lewes went through a difficult period as he worked toward recognition by the established scientific community. Much like Casaubon's experience, following the altercation with Huxley Lewes feared that his articles had not "been seen in all their significance" and may not have been read by the "leading minds." In the passage quoted above, it is possible to read Comte, founder of the "religion of humanity," as the Archdeacon whom Lewes wants to impress. And perhaps Casaubon's "Carp," a name that connotes both a scavenger pond fish and an incessant talker, is representative of Herbert Spencer, a scientist friend of Lewes's who was known to be a gossip.¹⁸ The other researchers who take all the glory while Casaubon toils in obscurity are Tench and Pike, also named for primitive, predatory fish. As I will address in the next section, the Dickensian names Eliot gives these competing scientists and their club reappear in "How We Encourage Research."

The biographical similarity between Casaubon and Lewes in terms of Casaubon's project could be the reason Eliot's narrator is so reluctant to criticize Casaubon, even as she shows how his preoccupied anxiety devastates his affectionate, bewildered wife Dorothea. Casaubon is not a monster, our narrator insists, but a misunderstood and disappointed scholar who has lost the ability to think of anyone's pain but his own. Interestingly, Eliot is careful to indicate that Casaubon does not know the German scientists, a difference that, according to Will Ladislaw, makes Casaubon's research futile. Lewes did know the German scientists; he used that argument in his own defense against Huxley's criticisms. Even if Lewes was right about their respective knowledge of the German scientists, this difference, which Lewes insisted was crucial, neither helped Lewes's reputation nor hindered Huxley's. Though there is a clear distinction between Casaubon and Lewes in terms of knowledge of their German predecessors, by 1871, the point was moot—Huxley's reputation as a scientist had long eclipsed Lewes's. If we recognize that Casaubon is, at least in part, a portrait of Lewes, made up of all his negative qualities but none of his positive ones, then the narrator's guilty "poor Casaubon" interjections are more understandable. Furthermore, Lewes evidently recognized the similarity between himself and Eliot's pedant of approximately the same age. As if it was an immediately recognizable inside joke, Lewes called himself Casaubon in letters to their publisher, John Blackwood, and also referred to Eliot as Dorothea

or "Dodo," the nickname Celia gives her sister (*GEL* 5: 291; 5: 332). Rosemarie Bodenheimer speculates that Lewes's recognition that Eliot was Dorothea at least spiritually could have been the reason he began to dub Eliot "Madonna" soon after *Middlemarch* was published—a nickname she may not have appreciated (Bodenheimer 243).

Although there are differences, what interests me are the number of similarities shared by George Henry Lewes and Edward Casaubon. As she was creating Casaubon, Eliot had at hand an example of a man who was buried in stacks of research notes and preoccupied with the struggle to transcribe them into a coherent form. Lewes was frustrated that his ideas were not gaining the respect of the scientific community at the time, but he believed his Problems of Life and Mind, which he jokingly referred to as his "Key to All Psychologies"—an obvious play on Casaubon's "Key to All Mythologies"—would establish him as a serious scientist. But his proof was taking an interminable time to complete. As K. K. Collins first observed in 1978, Lewes shared Casaubon's expectation that his wife would complete his massive project after he died. In a letter to Alexander Main, Lewes joked about Eliot's Dorothea-like assistance with his work: "Dorothea is now busily engaged in going through the collections for that 'Key to all Psychologies' which hangs over her husband. How many 'excursus on Crete' she will have to omit one shudders to think" (GEL 5: 338; Collins 463). By January 1874, Eliot correctly predicts that Lewes's still-incomplete Problems of Life and Mind will be "the long work which is likely to stretch through the remaining years of his intellectual activity" (Journals 144). Lewes's first volume of Problems, "Foundations of a Creed," was not published until two years after Middlemarch, and there were four more volumes yet to be written. Furthermore, it turned out that life did imitate art—just as Dorothea is compelled (and nearly promises) to complete Casaubon's magnum opus posthumously, Eliot did complete and publish the final two volumes of Lewes's Problems in the months immediately after he died. Whether he asked her to do this is not known, but what is clear is that Lewes had planted the seed of expectation at least six years before his death.

Life into Art: Impressions of Theophrastus Such's Proteus Merman

By the time George Eliot completed her final work of fiction, *Impressions* of *Theophrastus Such*, Lewes had published three of his five proposed volumes of *Problems of Life and Mind*. Though he was making progress, Lewes was not receiving the kind of recognition and appreciation he had expected.

Unfortunately, his deepest fears about the work's reception were confirmed. Even the faithful John Blackwood, publisher of Eliot's books and Lewes's articles who had already agreed to publish Problems, was no longer keen after seeing the manuscript (GEL 5: 410-11). Although reviewers did not ignore Problems completely, it garnered only "lukewarm" praise.¹⁹ During this difficult period, Lewes could not have failed to observe that his least productive years in terms of earnings and publications had been his wife's most productive in every way. Eliot is careful to state frequently in her letters to friends that her husband is entirely free from jealousy of her success; however, as students of rhetoric are taught, unprovoked negative statements should be examined with some suspicion. Lewes seems to have been a difficult man to please. Not only did he have extremely high expectations for himself, but also he frequently disparaged the work of others he claimed as friends.²⁰ Though in Eliot's surviving letters and journal pages, hardly a word of complaint against Lewes exists, this does not rule out the possibility or even the likelihood that she lived with a frustrated scientist.

"How We Encourage Research," the third chapter of George Eliot's Impressions of Theophrastus Such, tells the story of the gradual embitterment of a prematurely aging pedant, Proteus Merman, our narrator's "old acquaintance" (TS 48; Henry, TS 28).²¹ Theophrastus reveals his story's source as Merman's wife, Julia, who "more than once narrated to me [Theophrastus] the details of an event memorable to her as the beginning of sorrows" (TS 49–50; Henry, TS 29). From the tale's beginning, Theophrastus solicits the reader's sympathy not only for Julia's plight but also for the circumstances that conspire against Merman, the unfulfilled researcher. This is the same sympathetic but slightly sarcastic narrative position noticed in Middlemarch. Merman is described as a "victim" who suffers from "truth-worship"-a kind of scholarly devotion that is sanctioned by the public, but privately torturous: "no thumb-screw is used, no iron boot, no scorching of flesh; but plenty of controversial bruising, laceration, and even lifelong maiming" (TS 47; Henry, TS 28). Julia thus traces the "beginning" of sorrows" in her marriage and her husband's invisible "maiming" to the consequences of a single memorable event, which led to Merman's obsessive pursuit of a certain kind of knowledge. Twenty years earlier, Merman had been a scholar of some "flexibility" who "occupied himself in miscellaneous periodical writing and in a multifarious study of moral and physical science," but since those days, he has become fixated on finding a particular truth (TS 48; Henry, TS 28). Unwittingly, Merman's friends may have encouraged his intensified focus by telling him he would be more prosperous if he would get "a specialty" on which

to "concentrate his talent and leave off forming opinions on at least half-a-dozen of the subjects over which he scattered his attention" (*TS* 49; Henry, *TS* 29). The details of Merman's history as a scholar apply perfectly to Lewes. Prior to Huxley's attack—that is, before he turned his concentration toward researching his *Problems of Life and Mind*—Lewes was especially versatile in his scholarly pursuits.²²

Proteus Merman's embitterment began with his decision to "concentrate himself" on a comparative history of the ancient civilizations, a topic that had interested him previously,"but it had not preoccupied him so as to narrow his generous attention to everything else" (TS 49; Henry, "Introduction" 29). Like Casaubon's, Merman's zeal for truth-finding is precipitated by the disdain of his contemporaries in the field, those "half a dozen persons, described as the learned world of two hemispheres,"23 who not only failed to accept Merman's published theories, but also branded him an "ignorant imposter" (TS 50; Henry, TS 31). Believing he had found "the right clue"24 to discredit the acclaimed Grampus²⁵ "whose book is cried up as a revelation," Merman became enormously ambitious: "if I am right I shall set the world right; I shall regenerate history; I shall win the mind of Europe to a new view of social origins; I shall bruise the head of many superstitions" (TS 50; Henry, TS 30). The line is even more powerful when we realize that Merman, who wants to be the next scientific "god," has appropriated the biblical words of God to the serpent, Satan, after casting him out of the Garden of Eden.²⁶ Merman "resolved to muster all the learning within his reach," including "many wildernesses of German print," where he hoped to find "details to corroborate his own views, or possibly to detect Grampus in some oversight or textual tampering. All other work was neglected. . . . [A] mazed editors found this maniac indifferent to his chance of getting book parcels from them" (TS 57; Henry, TS 34-35). Lewes similarly lost interest in writing book reviews as he became increasingly focused on his scientific research.

Merman's motivation parallels that of Casaubon, who fantasized about the fame that would come from disproving his better-known detractors: "To convince Carp of his mistake, so that he would have to eat his own words with a good deal of indigestion, would be an agreeable accident of triumphant authorship, which the prospect of living to future ages on earth and to all eternity in heaven could not exclude from contemplation (MM 2: 223). The effect of Merman's professional disappointment, like Casaubon's, was long lasting. The bitter memory of being spurned by his would-be colleagues, our narrator reveals, was "unhappily not so transient" as the gossip about Merman's failure that swelled for a time and then was forgotten (TS 61: Henry, TS 37). Instead, the

incident had far-reaching consequences. Merman reacted by "[concentrating] himself with a vengeance" in order to prove himself as a researcher not only to his friends and wife, but more specifically to the professional world of science he sought to lead (*TS* 56: Henry, *TS* 34). Though outsiders never saw it, Julia reveals that her husband's disappointment poisoned their marriage, as Merman gradually became rancorous and suspicious:

His certainty that he was right²⁷ naturally got stronger in proportion as the spirit of resistance was stimulated. The scorn and unfairness with which he felt himself to have been treated by those really competent to appreciate his ideas had galled him and made a chronic sore; and the exultant chorus of the incompetent seemed a pouring of vinegar on his wound. (*TS* 61: Henry, *TS* 37)

Like Casaubon's "Key to all Mythologies," Merman's elusive "clue" drives him to imagine triumphing over acclaimed scholars—the Archdeacon and Carp in Casaubon's experience, Grampus in Merman's—who once scorned them. But our narrator implicitly compares Merman to the blameless, disbelieved Jesus Christ, who was crucified and had vinegar poured on his wounds by the very people he meant to save. This level of support for an alienated and alienating pedant husband seems shockingly excessive, and begs the question this essay will attempt to answer in its conclusion: For what purpose was Eliot constructing her fictional characters from Lewes's real experiences as a scientist?

"How We Encourage Research" depicts the dissolution of a marriage, caused, at least in part, by the scholar-husband's alienation from the scholarly community and the consequent bitter resentment he feels. It is a story the world would not have known had the scholar's wife not confessed it to an author, Theophrastus. I contend that these are the essential elements of the chapter, though other readers have interpreted it differently. Andrew Miller's essay on "How We Encourage Research" ignores the Proteus and Julia story completely to focus on the narrator's perfectionism, specifically the question of "whether in *Theophrastus* Eliot conceives there to be an intrinsic connection between education, understood as a perfectionist project, and violence" (Miller 313). Miller links Eliot's own experience as an author to Theophrastus's, but does not relate Lewes's experience as a scientist to Proteus's. Nancy Henry, in her "Introduction" to the critical edition of *Impressions of Theophrastus Such*, also connects Eliot's experience with her narrator's and notices that "How We Encourage Research" is further associated with Lewes's *Sea-Side Studies* through the hilarious names Eliot assigns to Merman

and his scholarly adversaries. Henry further explains the name Proteus is the name of a Greek sea god known for his changeable nature, that Merman's name connects him to the mythical half-man, half-fish creature, and that, as his name suggests, Merman "is made a sacrificial victim for the hubris of aspiring to join a community from which he is (metaphorically speaking) anatomically excluded. Proteus Merman, like Matthew Arnold's "The Forsaken Merman,' can only look from the outside into the world he would like to join" (Henry, "Introduction" xi). Observing that Theophrastus frequently alludes to Shakespearean lines and characters as well as a plethora of other texts, and that these allusions can help us to understand the work's deeper meanings, Henry proffers the following: "He [Theophrastus] tells the reader there will be elements of confession, but also of performance, and it is the reader's job to judge the performance as well as identify the names and allusions in order to fully understand the 'true' account of his own character" (Henry, "Introduction" xx). This advice is especially pertinent to a reading of "How We Encourage Research."

The names Proteus and Julia are even more significant because they directly reference Shakespeare's Two Gentlemen of Verona, in which the main character Proteus betrays the trust of his devoted partner Julia (and his gentleman friend, Valentine). "How We Encourage Research" is, in part, a retelling of the Shakespearean drama. In both stories, a loving couple's relationship is severely damaged by Proteus's changeable, fickle behavior. In both stories, the constantly devoted Julia forgives Proteus and tries to forget the hell he put her through. In a further layer of allusion, Shakespeare's Julia also compares herself to Ariadne (4.4.174-81). In Greek mythology, Ariadne is famous for her successful plan to extricate her beloved Theseus from the labyrinth of the Minotaur. For saving him, Theseus promises to marry Ariadne, but instead leaves her on the island of Naxos on his way back to Athens. In some versions of the myth, Ariadne subsequently hangs herself from a tree after she is abandoned. The disillusioned Ariadne reference also connects to Middlemarch's Dorothea, who happens to be standing in "brooding abstraction" next to a statue of the reclining Ariadne in her first moment of recognition that "the years to come in her own home" were not, after all, likely to be filled with "joyful devotedness" to Casaubon, her new husband (MM 1: 288, 311). Soon after this scene of marital disenchantment, Dorothea finds herself alone in her boudoir staring at a miniature portrait of another woman who has made an unfortunate marriage-Will's aunt, who happens to be named Julia. These multiple layers of allusion provide a code that enables readers to interpret Julia Merman's story of how her marriage went wrong as the primary focus of "How We Encourage Research."

It is important to recognize that neither Casaubon nor Merman is presented as fully responsible for the misery of their spouses. Like Casaubon, Merman may have been unaware of the suffering he caused his "brave and affectionate" wife. Julia Merman's unappreciated "feminine heroism," like Dorothea's, is demonstrated in her ability to suffer without complaint,

to keep up the charm of home and soothe her husband's excitement; parting with the best jewel among her wedding presents in order to pay rent, without ever hinting to her husband that this sad result had come of his undertaking to convince people who only laughed at him. She was a resigned little creature, and reflected that some husbands took to drinking and others to forgery: hers had only taken to the Magicodumbras and Zuzumotzis, and was not unkind—only a little more indifferent to her and the two children than she had ever expected he would be, his mind being eaten up with 'subjects,' and constantly a little angry, not with her, but with everybody else, especially those who were celebrated. (*TS* 64; Henry, "Introduction" 39)

Julia's complaint about her husband is minimized in her defense of his overall goodness. Note that she seems reluctant to complain: he is not drinking, only taking to study; he is "only a little" indifferent to her, preoccupied as he is; and he is only "a little angry" all the time, and not with her. Theophrastus, the narrator, endorses Julia's reluctance to assign blame with the line "She was a resigned little creature." His description of Julia's ability to smooth over the damage done by her husband parallels Milly Barton's uncomplaining heroism in stretching the household budget in an effort to compensate for her husband's foolish choices in "The Sad Fortunes of the Reverend Amos Barton." In Eliot's fiction, as feminist critics have long noticed, a woman's apparent acceptance of the status quo is celebrated as "feminine heroism." More specifically, a wife's quiet endurance of her proud and ambitious husband, the marriage dynamic we find in Eliot's final work, returns us full circle to her first published story, and is repeated so often throughout her oeuvre that I consider it a master narrative.

At the same time, even the worst spouses in Eliot's fiction are never wholly villainous, despite being culpable for their partners' suffering. In "How We Encourage Research," Theophrastus presents Proteus Merman's embitterment as a sad little vignette, yet he adopts Julia's perspective and does not expressly judge Merman. Similarly, *Middlemarch*'s narrator disowns any negative judgment when she states, "For my part I am very sorry for him." Discussing her

characterization of Casaubon in a letter, Eliot repeated verbatim her narrator's assessment: "I am very sorry for him" (GEL 5: 322). Though most readers cannot sympathize with either Casaubon's or Merman's inner demons, Eliot is careful to identify their source as a possible justification for their bad behavior. Beyond making her characters and their conflicts as mimetic as possible, what might have motivated this allusion to Lewes's real-life disappointment? Eliot's narrators defend these fictional scholars, in part, because the author recognizes the parallels of experience they share with George Henry Lewes, the man with whom she shared her life for twenty-four years. Eliot consistently defended Lewes in writing, but this does not mean, necessarily, that she was never frustrated with his dogged determination to prove himself as an important scientist. Perhaps a combination of exasperation with Lewes and guilt for feeling exasperated instead of unendingly patient (like Dorothea and Julia are) drove Eliot to explore the problem repeatedly in her fiction.

Lewes evidently recognized this biographical association. Moreover, by referring to himself as Casaubon, Lewes showed he could laugh at himself. "How We Encourage Research" is full of irony and humor that I interpret as a distraction from the painful story of how Proteus's and Julia's marriage unravels. Nevertheless, it is reasonable to assume that the similarities among Eliot's pedants and Lewes were an inside joke they shared. What also should be recognized is the pain in these relationships discernible alongside the humor. Perhaps the jests are screening a more critical truth that might help readers better understand why Eliot consistently depicted marriages as secretly miserable. It may be useful to consider whether by indirection we can find direction out.²⁸ As Eliot once commented to her friend Sara Hennell regarding the damaged marriage of Joseph and Elizabeth Parkes, a couple they had previously assumed was happy: "Alas! What skeletons there are in houses where things look so enviable!" (GEL 2: 342).

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NOTES

I. I gratefully acknowledge the helpful suggestions of Laura Mooneyham White, Michael Page, Amber Hadenfeldt, and Nancy Henry on earlier drafts of this paper.

2. For the sake of clarity and consistency, I will refer to this essay's subject as George Eliot rather than Marian Lewes or any of the other names she called herself even when I am discussing her life prior to 1857, the year her pseudonym first came into existence. 3. Important studies on the intersections of nineteenth-century science and George Eliot's literature include Gillian Beer's Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction; George Levine's Darwin and the Novelists: Patterns of Science in Victorian Fiction; Sally Shuttleworth's George Eliot and Nineteenth-Century Science: The Make-Believe of a Beginning. See also Richard Menke's "Fiction as Vivisections: G. H. Lewes and George Eliot," which chronicles Lewes's development as a scientist as well as Eliot's use of Lewes's theories in her fiction.

4. There is no consensus among scholars regarding the first reference to Thomas Huxley as "Darwin's bulldog," although most agree the spirit of the name dates back to the "Battle of Oxford," when, on 30 June 1860, Huxley "deliberately chose to use the British Association for the Advancement of Science as a major platform" to promote Darwin's theories of evolution. There he famously debated Sam Wilberforce, Bishop of Oxford, in a clash subsequently viewed as Science versus the Church. Darwin was ill and did not attend the meeting, but reports estimated that between seven hundred and a thousand people witnessed the dramatic debate, the turning point in Huxley's fame as Darwin's prophet (Browne 121, 136; de Beer xiii). Huxley used the expression himself several times in the 1870s (Browne 105).

5. All references to the *George Eliot Letters*, edited by Gordon Haight, are abbreviated to *GEL*, with volume and page number provided in parenthetical citations. Haight's *George Eliot: A Biography* is abbreviated as *Biography*.

6. George Eliot and Harriet Martineau both were essential to the success of the *Westminster Review* at a time when few other women were making their living as journalists in London. Eliot had recently visited Martineau for several days at her country home in Ambleside, where Eliot's poor health did not preclude her from enjoying Martineau's companionship (*GEL* 2: 62-63).

7. George Henry Lewes coedited the *Leader*, a weekly literary newspaper, with Thornton Hunt from 1850 to 1854. Lewes's series of articles on Comte appeared between April and August 1852.

8. Eliot puts Lewes's criticism of Huxley in the mouth of *Middlemarch*'s Will Ladislaw, who famously criticizes Casaubon's science for exactly this reason.

9. George Eliot's three letters to John Chapman regarding Thomas Huxley's review were all undated. Gordon Haight provides the probable dates of the two letters he printed as 17 and 19 December. Rosemary Ashton published the third letter in 1991, which was unknown when Haight completed his ninth volume of the *George Eliot Letters*. Ashton believes the third letter was also written on 19 December, the same day as the second letter (Ashton, "New George Eliot Letters"118).

10. Lewes claims both in this letter and again in the "Preface" to the first volume of *Problems* of Life and Mind that 1834 was the beginning of his scientific study that led to his magnum opus: "The work, of which this is the first volume, has been many years in preparation; indeed its origin may be said to go so far back as 1834, when with the rashness of ambitious youth I planned a treatise on the Philosophy of Mind." The "Preface" is dated 1872.

II. Lewes may have been sensitive to others' criticism, but his own reviews of others' work were frequently hostile. Rosemary Ashton's and Hock Guam Tjoa's biographies of Lewes describe many examples of friendships Lewes damaged this way. He also made boastful claims about the relative importance of his own work. Tjoa summarizes: "Lewes's writings on science and philosophy are filled with suggestions for alternative theories and sometimes with jarringly self-important claims for his originality" (25). It is difficult, then, to determine whether Lewes was rejected first by other scientists or whether he was rejected after he insisted on his own views, but it appears to be a biographical consensus that Lewes believed he was unfairly ostracized from the tight circle of England's scientific community. Lewes stated late in life that he could identify with the philosopher Baruch Spinoza, also a social outcast, because he too had suffered "the social persecution which embitters all departures from accepted creeds" (cited by Tjoa 15). Rosemarie Bodenheimer confirms Lewes's rejection: "Lewes's optimism about his findings, his sense of having made genuine discoveries in scientific research, generally met with a muted response among the British scientific community. Its members allowed Lewes to be a clever popularizer, but no more" (243).

12. "[Lewes's] interest in anatomy and physiology, though remaining that of an amateur, bore fruit.... A series of clearly written popularizing science books was published, first in magazines, then in volume form: Sea-Side Studies at Ilfracombe, Tenby, the Scilly Isles, and Jersey (1858; first published in Blackwood's Magazine, 1856–7), The Physiology of Common Life (1859-60; first published in Blackwood's Magazine 1858), and Studies in Animal Life (1862; first published in Cornhill Magazine 1858).... Though Darwin and Huxley came to respect Lewes's scientific studies—the former writing to thank him for his appreciative articles in the Pall Mall Gazette in 1868—Lewes was more than once subjected to professional snobbery from career scientists" (Ashton, Versatile Victorian 3–4).

13. From its publication, readers of *Middlemarch* have been speculating about Casaubon's prototypes. Gordon Haight thought that Casaubon was a combination of Eliot's friend, Dr. Robert Brabant and Eliot herself ("George Eliot's Originals" 18-19). Other critics have proposed the following models for the aging scholar: Isaac Casaubon (Malcolm Bull and Katharina M. Wilson), Isaac Casaubon's son, Meric (Michelle Faubert), John Milton (Anna K. Nardo), and several of the Leweses' scientific friends, including Dr. Mark Pattison (Rebecca Mead) and Herbert Spencer (Martin Raitiere). (See Works Cited for complete references.) Because Casaubon functions as a kind of treatise on how *not* to be a researcher, critics have been understandably reluctant to compare Casaubon with Eliot's consistently defended husband, George Henry Lewes. Unlike other biographers who have upheld the view that the Lewes-Eliot partnership was a "perfect union," I recently challenged this assumption in my dissertation, "Reassessing George Eliot's Union with George Henry Lewes and her Literary Representations of Marriage."

14. Harriet Beecher Stowe and her friend Annie Fields both believed Eliot's description of Dorothea's miserable marriage was a portrait of her own partnership with Lewes, even after Eliot denied it emphatically in her response letter to Stowe: "True thanks, dear Friend, for every loving helpful word that you have sent me. But do not for a moment imagine that Dorothea's marriage experience is drawn from my own. Impossible to conceive any creature less like Mr. Casaubon than my warm, enthusiastic husband, who cares much more for my doing than his own, and is a miracle of freedom from all author's jealousy and all suspicion. I fear that the Casaubon-tints are not quite foreign to my own mental complexion. At any rate I am very sorry for him" (*GEL* 5: 321; Fields 334). Because most readers despised Casaubon, there is good reason Eliot did not point the finger at Lewes but at herself. Furthermore, Eliot was speaking the truth when she insisted that Casaubon's gloomy personality is opposite to Lewes's vivacity, but she said nothing about their similar experiences as researchers.

15. Lewes contended that he had been working on *Problems* since 1834 (see note 10), which would amount to thirty-eight years by the time Eliot published *Middlemarch*, and forty years by the time Lewes published the first volume of *Problems*.

16. For the purpose of in-text citation, George Eliot's works have been identified by an abbreviated title with the volume and page number corresponding to the Cabinet edition, Eliot's last authorized edition, which is readily available in the *HathiTrust Digital* database. *Middlemarch* is abbreviated to *MM*; *Impressions of Theophrastus Such* is abbreviated to *TS*. While there are many scholarly editions of *Middlemarch*, there is only one scholarly edition of *Impressions of Theophrastus Such*. Hence, references to *TS* cite both the Cabinet and the Henry editions. 17. "Parerga" is the plural form of "parergon," which, in this context, according to the online *Oxford English Dictionary*, means "a piece of work that is supplementary to or a by-product of a larger work." In 1867, Lewes republished the third edition of his 1845-46 work, *The Biographical History of Philosophy*, which he retitled simply *The History of Philosophy*. His chief alteration was to replace the original "Introduction" with what he now was calling a "Prolegomena," which means the same thing as introduction but sounds more intellectual. Was Eliot poking fun at Lewes here also?

18. In 1859, Lewes and Eliot became angry with their old friend Herbert Spencer for being unable to keep her identity as George Eliot secret from John Chapman (GEL 3: 111).

19. Rosemary Ashton states that "Lewes's professorial collaborators on the late Victorian periodical *Mind* (founded in 1876) were markedly unenthusiastic about his last published work, the ambitious *Problems of Life and Mind* (1874–79)" (cited by Ashton, *Versatile* 4).

20. Lewes asserted his own views in frank terms and frequently mocked those with whom he disagreed. He had to have the last word. Francis Espinasse, a good friend of Carlyle's who knew Lewes for many years, remarked, "Naturally in his conversation, even more than in his writings, he said right out what he thought and felt. The expression of his contempt for cant, had he been cynical, would have been bitter, but in his case it took the form of levity, and thus exposed him, with serious people, to the charge of flippancy.... The truth, I take it, was that Lewes, who was no respecter of persons, sometimes made Carlyle wince—and Carlyle was more than twenty years his senior" (Espinasse 281).

21. Perhaps the name Proteus, the shape-shifting sea god, alludes to this constant remaking of Lewes's professional identity. He was novelist, poet, biographer, theater and literature critic, philosopher, and would-be scientist. As Nancy Henry has observed, Merman is of course only half a man—the other half is fish-like, which accounts for his aspirations to become like the Grampus he emulates and fears ("Introduction" xi). The online *Oxford English Dictionary* lists a particularly apt usage for the word "Proteus": "The Proteus-lover woos his playful bride, / To win the fair he tries a thousand forms" (Erasmus Darwin, "The Botanical Garden").

22. Rosemary Ashton, who dubs Lewes the "Versatile Victorian" in the title of her study of his journalism, confirms that Lewes's "omnicompetence" was a strike against his reputation as a scientific theorist: "Had [G. H. Lewes] been any less prolific and less of a generalist, his work might well have been better known today. Even during and immediately after his lifetime, praise for his omnicompetence tended to be qualified with suspicions of shallowness" (Versatile 2).

23. Commenting on an early draft of this paper, Laura Mooneyham White notices Eliot's phrase "the learned world of two hemispheres" is a pun on geography and the brain. This double meaning emphasizes that for Merman, (1) the whole world *is* the few people who are real scientists in his field and (2) all his brain.

24. George Eliot's spelling of "clew" has been regularized in Nancy Henry's scholarly edition of *Impressions of Theophrastus Such*; otherwise, the Cabinet edition matches the Henry edition word for word.

25. Like the fish names Eliot gives to the contemporary scholars Casaubon so deeply fears—Pike, Tench, and Carp—Merman's dreams of becoming more famous than Grampus. *The Oxford English Dictionary* explains that Grampus is "the popular name of various delphinoid cetaceans, having a high falcate dorsal fin and a blunt rounded head, and remarkable for the spouting and blowing which accompanies their movements. In popular use, the name seems to be more frequently applied to the formidable 'killer' (*Orca gladiator*).... the English word *grampus* was adopted by J. E. Gray, 1846, as a modern Latin generic name; the only

species certainly determined is G. griseus, sometimes called *cow-fish*." As Nancy Henry has noticed, Eliot's hilarious names for the researchers show she is satirizing them all and not exclusively Proteus Merman ("Introduction" xi).

26. "And the LORD God said unto the serpent, Because thou hast done this, thou art cursed above all cattle, and above every beast of the field; upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life: And I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shalt bruise his heel" (Genesis 3: 14-15, *King James Bible*).

27. It is possible that Eliot here is intentionally alluding to Anthony Trollope's 1869 novel, *He Knew He Was Right*, which describes the gradual failure of a once-happy marriage. Eliot stated that she rarely read contemporary literature unless written by Anne Thackeray or Anthony Trollope (Handley 420), and she did have a copy of *He Knew He Was Right* in her home library (Baker 19).

28. The reference here is to the proverbial line from William Shakespeare's *Hamlet:* "By indirections find directions out" (II.i.65).

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