

## “The Natural History of My Inward Self”: Sensing Character in George Eliot’s *Impressions of Theophrastus Such*

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*Attempts at description are stupid: who can all at once describe a human being? Even when he is presented to us we only begin that knowledge of his appearance which must be completed by innumerable impressions under differing circumstances. We recognize the alphabet; we are not sure of the language.*

—George Eliot, *Daniel Deronda* (160)

“WILL NOT A TINY SPECK VERY CLOSE TO OUR VISION BLOT OUT the glory of the world, and leave only a margin by which we see the blot?” asks the narrator of *Middlemarch* (1874). Indeed it will, comes the answer, and in this regard there is “no speck so troublesome as self” (392). Metaphors of sensory failure in Eliot seem to capture the self-absorption of characters who discount empirical knowledge in favor of their own straitened worldviews. In *Middlemarch* Casaubon’s shortsightedness is tied to his egocentric attempts to “understand the higher inward life” (21). Dorothea, who marries Casaubon in an effort to attain this kind of understanding, is correspondingly “unable to see” the right conclusion (29), can “never see what is quite plain” (34), “does not see things” (52), and is “no judge” of visual art, which is composed in “a language [she does] not understand” (73).

When Eliot describes obstacles to sensation, however, she does more than provide a critique of egoism in which the corrective is sympathetic exchange. More basically, Eliot’s fascination with the limits of perception points to an issue of increasing philosophical concern in her late work: that each being’s faculties illuminate but a sliver of the world, leaving vast swaths of the universe dark and unfelt. What would it feel like to step outside the human subject, to look on the world with an extrahuman range of faculties? “[I]t would be like hearing the grass grow and the squirrel’s heart beat, and we

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should die of that roar which lies on the other side of silence" (*Middlemarch* 182). To have "a keen vision and feeling of all ordinary human life," the narrator of *Middlemarch* suggests in this oft-cited passage, would be to sense what a human being cannot sense, to feel more than the human body allows one to feel (182).<sup>1</sup>

This essay proceeds from a literal interpretation of this fantastical line, tracking from here Eliot's interest in literature as a mode of enhanced sensation.<sup>2</sup> This interest, as we shall see, would culminate in her last published work, *Impressions of Theophrastus Such* (1879), a text much neglected in Eliot scholarship.<sup>3</sup> Although typically dismissed as inaccessible and overly allusive, this collection of character sketches and philosophical essays provides important insights into Eliot's concern with the limits of human perception and the relation of this problematic to her developing realist aesthetic. To have "a keen vision and feeling of all ordinary human life," Eliot implies in her final work, entails treating the human being not as a *subject* to which the author has special access but as a new kind of sensible *object*—a dense and complex material body like any other.

The Eliot delineated by this essay might appear strange to readers familiar with portraits of Eliot as a psychological novelist whose "sympathetic ethics" rests on a deep or humanistic approach to character. Eliot has long been read in support of the claim that literature inspires moral action by portraying characters as "containing a rich inner life," the hidden contents of which are essential to "defining a creature as fully human" (Nussbaum 90). While I admit Eliot's concern with the value and agency of human beings, my reading of her late-career sketches pushes against the humanist interpretation of Eliot in two ways. First, I suggest that her late-career turn to the typological tradition of the character sketch asserts a critical distance from what Heather Love calls "the traditional humanist categories of experience, consciousness, and

motivation" that ground the modern notion of character. If we can distill a literary ethics in Eliot's final work, I argue, it is an ethics, to cite Love's distinction, "grounded in documentation and description, rather than empathy and witness" (375). As we shall see, Eliot's naturalistic investment in describing people in terms of the characterological traits they share with nonhuman animals calls into question the human exceptionalism of novelistic modes of characterization. Rather than craft characters as uniquely psychological beings, her sketches put them on the same plane as other creatures; like fish, sea lions, or even microscopic vorticellae, human beings are conditioned by bodily frameworks and habitual responses that allow them to sense and experience some things and not others.

Second, by taking inspiration from Love's postulation that literature might account for the variation and complexity of life, as well as for its richness and depth, I highlight Eliot's interest in literature not only as a medium for intersubjective understanding but also as an amplificatory technology, a tool for the sensation of manifold realities. "How many conceptions & fashions of life have existed to which our understanding & sympathy have no clue!" Eliot writes in a notebook dated to the 1870s (qtd. in Collins 390).<sup>4</sup> Her task in *Impressions* is not to penetrate the depths of the human psyche but rather to sketch a vast characterological landscape, to put humanity into perspective by zooming out until the human being appears as a speck in an array of sensitive life-forms. Situating Eliot's 1879 sketches and essays in a longer history of the character sketch, a history beginning with the ancient Greek naturalist and sketch writer Theophrastus of Eresus, I show how the observation-based methodology Eliot develops in her mature work draws on her longtime interest in the practice of natural history. In aligning *Impressions* with the descriptive traditions of natural history and the character sketch, I argue, Eliot puts pressure

on the modern association of character with individual human psychology.

### Theophrastus Who?

*Impressions of Theophrastus Such* chronicles the attempts of a curmudgeonly London bachelor named Theophrastus to catalog and describe members of the human genus in order to better understand the species to which he belongs. Eliot's Theophrastus calls his project "the natural history of my inward self," a phrase that brings into strange harmony the expansive, outward-oriented practice of natural-historical description and the inward-oriented quest for self-knowledge characteristic of novelistic narrative (104). This character-narrator's path to self-knowledge leads, however, not inward to the self but rather outward; it entails describing the members of one's own species to discern "the figure the human genus makes in the specimen which I myself furnish" (104). Amassing descriptions of various unperceptive and unsympathetic human beings, many of whom are writers like him, Theophrastus tries to illuminate that which escapes his embodied awareness: the form of the species of which he is but an instance. Through his sketches we meet characters such as Touchwood, whose touchy temper repeatedly interrupts his quest for knowledge (56–62); Merman, a comparative historian who drives his career into the ground by forgoing historical accuracy to maintain his pride (28–40); and Spike, the "political molecule" who, having none of his own opinions, votes always unwaveringly for "Progress" (63–66).

Attentive to the prominent and distinctive qualities of people, Theophrastus's character descriptions echo those of the historical Theophrastus, the ancient Greek whose *Characters* (c. 322–317 BCE) is considered the first attempt at systematic character description.<sup>5</sup> Like the sketches of this other Theophrastus (to which I will return), Eliot's sketches try

to record aspects of human character that impress themselves upon the senses. These sketches thus inhabit the latter side of a distinction Eliot once made between "'psychological' novels (very excellent things in their way)" and works that provide "genuine description of external nature . . . flowing from spontaneous observation" (Rev. 288). In *Impressions* persons are not uniquely conscious or willful subjects but dense material formations, nonhuman organisms such as touchwood or vorticella—namesakes of characters I unpack as the essay unfolds.

In rendering character sensible, of course, *Impressions* risks the biological essentialism of Victorian pseudosciences that sought to correlate physical traits with moral or psychological ones. Physiognomy and phrenology, for instance, like other nineteenth-century epistemologies that linked the visible with the invisible, imagined one could read surfaces for their deep, characterological meaning. Unlike such discourses of character, however, *Impressions* stays on the surface of the body, implying that the feel of a person's character is significant and deserves to be examined. In his first chapter Theophrastus makes clear his disdain for physiognomic logic. Although he believes that "direct perceptive judgment is not to be argued against," he critiques the tendency of observers to make correlations between a person's "physical points" and "mental" ones: "With all the increasing uncertainty which modern progress has thrown over the relations of mind and body, it seems tolerably clear that wit cannot be seated in the upper lip, and that the balance of the haunches in walking has nothing to do with the subtle discrimination of ideas" (7). As a rule, Eliot's novels warn against forms of knowledge that situate a "key to all mythologies" in symbolic systems of the visible and invisible.<sup>6</sup> Instead of seeing character as a static signified to which "physical points" can be correlated, Eliot indicates that "character is not cut in marble—it is not something solid and unalterable. It is

living and changing" (*Middlemarch* 694). It inheres in the body, but like the body "character is a process and an unfolding"; it grows, heals, and deteriorates (140).

At the same time, character is not something one can change at will or easily develop through practices of self-making, or *Bildung*. *Impressions* elucidates an unexamined tension between Eliot's understanding of character and the liberal discourses of self-making concerned with "the self-reflective cultivation of character," to use Amanda Anderson's phrase (4). In *Impressions*—as well as at other critical moments throughout Eliot's corpus—character sticks in the living body and in its interactions, not in its intentions. It inheres in the subject's position in space and time, in the fact that one has an embodied perspective and cannot but look out of it. It is neither voluntary nor essential; rather, it unfolds according to the same logic and temporality afforded to bodies.

Indeed, Theophrastus's failed attempts to look inward, to know his character so that he might transcend or correct it, demonstrate the impossibility of shaking one's embodied perspective. In the book's first chapter, "Looking Inward," Theophrastus expresses a frustrated desire to overcome his character, a desire akin to the wish to have one's "squint or other ocular defect" corrected with spectacles (9). Lamenting the impossibility of remedying his "inward squint," he continues, "Perhaps I have made self-betrayals enough already to show that I have not arrived at that non-human independence. My conversational reticences about myself turn into garrulousness on paper—as the sea-lion plunges and swims the more energetically because his limbs are of a sort to make him shambling on land" (12). Here we find another metaphor of sensory failure of the sort with which I began, another suggestion that the self somehow "blots out" the world as a result of an egoism figured as a defect of vision. Literary scholars have tended to read Eliot's fascina-

tion with perceptive limits in terms of what the historians of science Lorraine Daston and Peter Galison have called the "moralization of objectivity" in the late nineteenth century (81): the tendency of nineteenth-century scientists to equate objectivity with ideals of self-abnegation or self-restraint (Levine, *Dying* 171–99; Garratt 27–37). Yet to read Eliot's concern with the failures of human perception under this purely epistemological rubric risks reducing her affective vision to one in which the central problem is human access to a nonhuman natural world. To the contrary, *Impressions* refuses the anthropocentrism of modern epistemology and its focus on the singularity of the human knower. While I agree with George Levine that for Eliot "personality is an obstruction to perception," I want to stress that both human and nonhuman personalities provide such obstacles ("George Eliot's Hypothesis" 1).

Aligning human observers with nonhuman observers and actors, *Impressions* treats the problem of embodiment as a (species-specific) universal. Theophrastus's observations result in what might be read as a more basic and open-ended claim that a structure of sight and blindness is inherent to all sensitive bodies. Consider the above passage in which Theophrastus describes the correction of his "inward squint" as the achievement of a certain "non-human independence." He yearns to experience the world not from an objective or God's-eye view but from a nonhuman perspective, a perspective merely different from his all-too-human one. As Theophrastus reminds us, the body of the sea lion, while perfect for swimming, renders him "shambling on land." The materiality of the sea lion's body limits his ambulatory capacity. Similarly, Theophrastus cannot overcome the limits of his humanity and the gaps in perception and sensation that frustrate his writerly existence. Like the sea lion, whose frustration on land inspires him to swim with vigor, however, Theophrastus will put pen vigorously to

paper, finding the extension of his experience in the affective medium of the text.

In a notebook passage thought to have been composed around 1874, Eliot turns to a German proverb to explicate a similar notion. “Es ist dafür gesorgt [sic] dass die Bäume nicht in den Himmel wachsen,” she writes, adding “in other words, everything on this Earth has its limits which may not be overpassed” (qtd. in Collins 387). This quotation (the epigraph to part 3 of Goethe’s *Autobiography*) translates as “it has been arranged that trees do not grow in the sky” (my trans.). While many of Eliot’s contemporaries might have placed humankind in the sky in this schema, thereby contrasting the infinite potential of humanity to the limited nature of nonhuman life, Eliot extends this proverb to capture the limits of the human, arguing that “a being like man, having a certain shape, certain modes of movement, certain forms of movement sense, & certain unchangeable wants must continue to be determined & limited by these in all his invention” (qtd. in Collins 387–88). In Eliot’s *scala natura*, human beings are no more exempt from limits imposed by nature than any other creature. They have great potential, yes, but they have bodies, forms, sense capacities, modes of desiring and moving.

### Descriptive Minutiae

That Eliot names her protagonist after the ancient Greek naturalist Theophrastus of Eresus (c. 371–287 BCE) situates *Impressions* in a lineage of natural-historical practices that begins in the fourth century BCE. Her explicit and implicit references to practices of species identification tie the text to the long history of biological classification and taxonomic ranking that has allowed scientists to understand the phylogenetic interrelation of life-forms. Around 335 BCE Theophrastus, a student and friend of Aristotle, helped him found the Peripatetic school in Athens’s Lyceum—the school that instigated the shift in Greek philosophy

away from Plato’s theory of forms and toward a mode that more highly valued sense experience as a foundation of knowledge. Sensation and affect played crucial roles in Theophrastus’s philosophy, as can be seen most clearly in his treatise *On Sensation* (Baltussen 71–94). In his best-known work, the *Characters*, he applies the Peripatetic methodology to the study of human behavior, producing the first systematic attempt at character description.

Theophrastus also wrote treatises on stones and on ethics, and he is said to have inaugurated the field of botany in the West with his many detailed studies of plants (Sharples 126–27). Like his colleague Aristotle, whom he succeeded as head of the Peripatetic school, he composed an array of philosophical and naturalistic studies based on careful observations of the natural world. The two friends’ approaches to the organization of this world differed, however. Where in Aristotle’s ordered universe the base and the monstrous are deviations from ideals, in Theophrastus’s *Metaphysics* baseness and monstrosity are the rule, and harmony and beauty are exceptions. Likewise, the *Characters* focuses on ignorance and other negative aspects of human life, describing such types as the thankless man, the coward, and the bore. In Theophrastus’s philosophy this relegation of the noble and the ignoble to the same ontological plane comprehends the relation of the human to the nonhuman. Instead of according the human a special or high place in the natural order, he grants people, rocks, and trees the same ontological status.<sup>7</sup>

Eliot’s Theophrastus is also interested in exploring lateral rather than hierarchical relations between forms of life. Characters crystallize in descriptions, thick with zoological reference, that draw parallels between human and nonhuman behavior. The character Merman, a scholar who reacts aggressively when his arguments are challenged, is said to resemble a walrus, which, “though not in the least a malignant animal, if allowed

to display its remarkably plain person and blundering performances at ease in any element it chooses, becomes desperately savage and musters alarming auxiliaries when attacked or hurt" (34). Another writer character, Vorticella, recalls the parasitic single-cell organisms called vorticellae, which encase themselves in a cystic covering to reproduce. Dismissing all criticism of her writing, Vorticella allows vanity to overtake her like a "polypus, tumour, fungus, or other erratic outgrowth, noxious and disfiguring in its effect on the individual organism that nourishes it" (126). Consumed by the success of her only book, she brings it up at every possible moment, driving away her company to live the life of solitude to which her name seems to have destined her. In a recent article on the zoophyte in Victorian natural history, Danielle Coriale has suggested that the polyp "resisted, repulsed, or confused sympathetic attachment, human identification, and intelligibility in the Victorian imagination" (19). Consistent with this view, Eliot uses the vorticella to portray an unsympathetic, gothic character, self-absorbed and self-enveloping.

Readers of *Middlemarch* will remember that the vorticella is a favorite figure for Eliot. It crops up in that novel in a parable that, like the sketch form, grants priority to the minutiae of everyday experience over the drama of narrative action. In *Middlemarch* Eliot attends to the characteristic of the vorticella from which its name derives: the vortex formed in its mouth through the simultaneous beating of the small hairs, called cilia, that surround the oral cavity:

Even with a microscope directed on a water-drop we find ourselves making interpretations which turn out to be rather coarse; for whereas under a weak lens you may seem to see a creature exhibiting an active voracity into which other smaller creatures actively play as if they were so many animated tax-pennies, a stronger lens reveals to you certain tiniest hairlets which make vortices for these

victims while the swallower waits passively at his receipt of custom. (55)

This parable serves to explain the actions of Mrs. Cadwallader, whose attempts at match-making, the narrator implies, might at first appear like the workings of some masterly and premeditated plot. On closer inspection, however, one will find that her actions stem not from "any ingenious plot, any hide-and-seek course of action," but rather from "a play of minute causes producing what may be called thought and speech vortices to bring her the sort of food she needed" (55).

Scholars have typically understood this passage to comment on the interpretive nature of knowledge. But it does something else too: it places human and nonhuman organisms on the same plane as a strategy to describe human behavior as no more rational or intentional than that of other organisms. What might appear to be the willing actions of a subject are shown to be the passive compulsions of a hungry animal. "Thought and speech"—ostensibly characteristic of human behavior—are reduced to a "play of minute causes" like those that allow the lowly vorticella to eat. Eliot's language in this passage echoes that of her longtime partner, George Henry Lewes, whose discussion of the vorticella in his *Studies in Animal Life* (1862) begins with a call for a more sustained study of life's "minuter or obscurer forms" (3).<sup>8</sup> *Impressions* puts what Lewes called the "Philosophy of the infinitely little" into literary practice, looking to the sketch form in order to render visible the microscopic (*Studies* 1). If plot, as Eliot suggests in *Middlemarch*, is the "telescopic watch" that fails to register the subtle motivations of folks like Mrs. Cadwallader, description is the microscope (55).

### To Sketch a Species

By the time Eliot turned to the descriptive genre of the character sketch at the end of the

nineteenth century, the Theophrastan sketch had long since seen its heyday. The ancient Theophrastus's *Characters* had been made famous by a 1592 Latin translation by Isaac Casaubon—a name familiar to Eliot readers, to be sure—which inspired a surge of imitations throughout the seventeenth century.<sup>9</sup> Undoubtedly the most popular was Jean de La Bruyère's *Les caractères, ou les mœurs de ce siècle* (1688), which went through eight editions in six years and to which *Impressions* refers.<sup>10</sup>

Scholars of the novel have long suggested that the character sketch's "flat" portraits of ethical and social types were replaced by the "round" and individualized characters of the novel.<sup>11</sup> In *The Economy of Character* (1998), however, Deidre Lynch reframes this history, directing our attention to a different set of terms. In Lynch's history, as character stretched further across the axis of plot, it cleaved from the surface and materiality of the body, becoming an "inner" as opposed to an "outer" quality. It was not until the late eighteenth century, she contends, when the expanded market for printed matter facilitated new strategies for distinguishing public from private personae, that character came to be understood as something deep and hidden. According to Lynch the novel was "founded on the promise that it was this type of writing that tendered the deepest, truest knowledge of character" (28). But the production of characters with private interiors was not always the aim of fiction, nor would it necessarily continue to be, even in the hands of novelists like Eliot.

Building on Lynch's innovative approach to the history of character, I want to suggest that *Impressions* marks a unique moment in character's historical dialogue with depth and surfaces. Here in 1879 character seems almost anachronistically apparent; rather than a hidden or buried kernel of personality or moral fiber, it is a surface phenomenon produced through a dialogue between outward observations and inward beliefs. The chapter "So Young!" highlights the role that outside forces

have in the production of a character named Ganymede, an aging dandy who continues to believe himself "girlishly handsome" despite having grown older and less attractive (101).<sup>12</sup> Ganymede's self-delusion occurs when "outward confirmations" of his youth uttered during his boyhood come to form the basis of his "habitual inward persuasion" (103); "being strongly mirrored for himself in the remark of others," Theophrastus explains, Ganymede "was getting to see his real characteristics as a dramatic part, a type to which his doings were always in correspondence" (100). Instead of typing Ganymede by interpreting his behaviors to signal some kind of characterological essence, Eliot suggests that he performs his identity *in reference to a type*. Ganymede, importantly, is not an invert—he just believes it a "disturbing inversion of the natural order that any one very near to him should have been younger than he" (103).<sup>13</sup>

And yet, while Eliot does not suggest that types are prefigured or inherent, the concept of the type plays an important role in *Impressions*. In this the text could be said to recall the aims of eighteenth-century sketch writers who "described not men, but manners, not an individual but a species" (Fielding 189) more than those of nineteenth-century authors, many of whom saw themselves as producing "original, discriminated, and individual person[s]" (Scott 549). Indeed, the book's title, *Impressions of Theophrastus Such*, puts it in conversation with this older, typological model of characterization by echoing the original Theophrastus's ancient sketches, each of which begins with the formula "Such a type who . . ." (Henry, *Intro.* xviii).<sup>14</sup> Still, Eliot's engagement with ancient and early modern modes of character sketching is more than a backward turn. It is a meta-critical commentary on the history of characterization and typing itself, one that seems to confront the novel's interest in "character development" with the diffuse and nonlinear descriptive structure of the sketch.<sup>15</sup>

*Impressions* explores the “such” of Theophrastus’s refrain—the connection between the actions of a person and the type of person who performs them. Like the sketches of the ancient Theophrastus’s *Characters*, which describe first an abstraction (complaisance, arrogance, superstition, irony) and then a man exemplifying it, Eliot’s sketches often start with a meditation on a behavior, situation, or emotion and turn after a paragraph or so to a human instantiation of the phenomenon she is describing. A sketch of Touchwood, an incendiary type whose name refers to wood that easily catches fire, begins with the question “What is temper?” (56). This sketch, however, quickly moves to consider the role temper plays in our understanding of character itself (something the historical Theophrastus’s sketches do not do). Why is temper thought inessential to character whereas other characteristics are thought to be essential parts of personality? Too often, Eliot’s narrator remarks,

we hear a man declared to have a bad temper and yet glorified as the possessor of every high quality. When he errs or in any way commits himself, his temper is accused, not his character. . . . If he kicks small animals, swears violently at a servant who mistakes orders, or is grossly rude to his wife, it is remarked apologetically that these things mean nothing—they are all temper. (56)

In *Impressions* few things are cast aside as unimportant to sketch writing: all of what one observes should be accounted for in the description of character. While interested in descriptive detail, however, Eliot’s final text calls for a typological systematicity in the description of character, complicating the suggestion that her realism eschews typological thinking for a particularism in which every character appears unique.<sup>16</sup>

While Eliot herself is hard to type, she was not alone in turning to the character

sketch at the fin de siècle. At a time when the triple-decker novel was breathing its last breath and the aesthetic movement was producing slimmer volumes, this “old” mode of character depiction had returned to trouble the transition from plot-driven narrative to the experiments with perspective and sense perception emergent with aestheticism.<sup>17</sup> In tension with individualized and psychologized notions of character also developing at this time, the late Victorian character sketch (like its many precursors) located character on the surfaces of bodies, clothes, and other observable objects. Unlike the sketches that appeared before them, however, late Victorian sketches tend to focus on the body’s effect on the writing process. In *Human Documents: Character-Sketches of Representative Men and Women of the Time* (1895), Arthur Alfred Lynch, for instance, suggests that “man’s intellectual work is determined in great measure by his physical constitution and his emotional quality,” giving examples such as “Byron’s lame foot” and “Carlyle’s dyspepsia” (v). Unlike its predecessors, the late-nineteenth-century character sketch situated character squarely in bodily experience, a move that—like our own “dyspeptic” narrator’s attempt to write the “natural history” of his “inward self”—works through the fraught relation between materiality and subjectivity (89).

### The Natural History of Human Life

Eliot’s own experience of human finitude interrupted her composition of *Impressions*. In November 1878—nine days after the manuscript had been sent off to her publisher—her partner, George Henry Lewes, died, putting an end to their twenty-four years together. Halting editorial work on *Impressions* until the following year, Eliot set out to complete Lewes’s five-volume magnum opus, *Problems of Life and Mind* (1874–79), the last two volumes of which remained unfinished. When *Impressions* was finally published, it included a prefa-

tory note explaining the delay in publication with reference to the “domestic affliction of the Author” (qtd. in Henry, *Introd.* xxxvn5).

While finishing Lewes’s treatise in psychology, Eliot enlisted the help of their close friend James Sully, a physiological psychologist and aesthetic theorist who shared with Eliot and Lewes a fascination with the effects of literature on the body. Sully’s 1874 essay collection *Sensation and Intuition: Studies in Psychology and Aesthetics* (owned and read multiple times by Eliot and Lewes) stood at the forefront of research about the physiological effects of reading.<sup>18</sup> For Sully the literary text was a unique interface in the back-and-forth between inner experiences and external stimulations that constituted consciousness. Character was central to Sully’s literary-theoretical inquiry into the effects of reading, which investigated the aesthetic aspects of human character as well as the capacity of art to reproduce that character in literature—what Sully called “transformed embodiments of character” (284). In his essay “The Representation of Character in Art,” Sully argues that while it is “a tolerably easy matter” to represent in literature such things as thought and speech, the central challenge of fiction is to use words “to suggest to the reader’s mind . . . an intricate series of visual and other impressions, such as those conveyed by the person’s figure, dress and outward carriage, by the varying cadences of his voice, and so on.” When properly executed, that is, “the descriptive word” creates “impressions” triggering memories of previous experiences and their “corresponding sensations.”<sup>19</sup> Through the activation of dormant feelings and impulses already present in the observer, description directs readers to “partake in the vivid interest of present reality” (285–86). As both Sully and Lewes stressed, the “sensuous medium” of words does more than produce imaginary thought worlds (Sully 284). According to Sully “the *representation* of human character in fiction appears sufficiently real to awaken

just the same species of feelings which would be excited by the *presentation* of a similar type of character in real life” (288).

Some twenty years earlier, in her seminal essay “The Natural History of German Life” (1856), Eliot made an argument like Sully’s about the potential of literary description to shuttle one back to the world from which one’s impressions first emerged.<sup>20</sup> “It is an interesting branch of psychological observation,” Eliot writes, “to note the images that are habitually associated with abstract or collective terms—what may be called the picture-writing of the mind, which it carries on concurrently with the more subtle symbolism of language.” The degree of fixity of the image associated with a given word, Eliot moves on to hypothesize, might be “a tolerably fair test of the amount of concrete knowledge and experience which a given word represents in the minds of two persons who use it with equal familiarity” (107). The vividness of the images conjured in one’s mind speaks to the wealth of experience one has had with the thing described, and the words of a successful description create impressions that recall the world from which they arose. For Eliot, as for Sully, the affective power of the literary text does not induce fantasy; on the contrary, it pulls one back to the textures, densities, and layers of the physical world. As Eliot’s Theophrastus puts it, “A fine imagination . . . is always based on a keen vision, a keen consciousness of what *is*”; it is an “energy constantly fed by susceptibility to the veriest minutiae of experience” (109–10).

Recent scholarship on Eliot has focused on how the burgeoning mind and brain sciences of the period influenced Eliot’s representation of the embodied and adaptive mind (e.g., Ryan, *Thinking*). While early Victorian psychology increasingly localized character in the human brain, however, the science of natural history continued to view character as more dispersed—that is, as the collection of physical qualities and behaviors rendering any organism or species distinct. Scholars

who founded the study of Eliot's connections to science have suggested that Eliot turned away from her early interest in the "static science of natural history" to a more narrative and developmental model of scientific knowledge, one that stressed that the deepest truths are initially invisible to the senses and can be discovered only with the imagination (Shuttleworth 22).<sup>21</sup> In contrast to this work, in which *Impressions* receives little if any attention, I contend that Eliot maintained a profound interest in the observational sciences until the end of her career. Her forays into English tide pools in the 1850s to collect polyps and anemones with Lewes for his *Seaside Studies* (1858) were just the beginning of a lifelong fascination with the sensuous modes of collection and arrangement that ground natural-historical work.

Much is lost in approaching Eliot's work as a symptom of a large-scale shift in modern science away from the descriptive and inductive practice of natural history and toward the more argumentative and deductive model of modern biology—a narrative that historians of science have shown to be problematic. Natural historians have not only continued to practice into the twenty-first century, they have also retained the respect of the scientific community, which has relied heavily on their systematic documentation. As Lynn Nyhart has argued in the context of Germany, while modern experimental zoology excluded some of natural history as unscientific, it incorporated major aspects of it into its theory and practice. Although many nineteenth-century zoologists advocated a strictly morphological perspective focused on anatomical form and development, others argued for a zoology that would incorporate natural history's emphasis on systemics, the study of relations between species and their organization in nature. Thus, nineteenth-century biologists like the life-history scientist Karl Theodor Siebold insisted on an observation-based practice that would retain natural history's attentiveness to

the network of relations in which organisms participated, including their behaviors, habits, and other readily observable traits. Like the ethologists who followed him, Siebold wondered about his contemporaries' tendency to look only at morphology in their studies of animals: "But where is the observation of the way of life of these animals, why does one learn so little of the activities of those very animals whose [anatomical] organization is known with the utmost precision?" (qtd. in Nyhart 432).

In "The Natural History of German Life," Eliot echoes the life-history scientist's emphasis on observable traits, activities, and ecological relations over morphological structures. Responding to the work of the German sociologist Wilhelm Riehl, she argues for a literary-sociological practice she calls "the Natural History of social bodies," a practice that would depict human interaction through "gradually amassed observations" (131, 127). In this early formulation of her realist aesthetic, Eliot maintains that knowledge of a people derives from the sensory experience required to produce a detailed description rather than from conceptual familiarity with ideals and abstract categories. Not unlike her anthropologist contemporaries, Eliot insists that to understand how a people lives one needs the experiential knowledge of the naturalist, not the theoretical knowledge of the physicist, chemist, or physiologist. "Just as the most thorough acquaintance with physics, or chemistry, or general physiology will not enable you at once to establish the balance of life in your private vivarium," she suggests, so too one cannot know or describe a people by theorizing; one must observe and converse with them in person (130–31). Eliot uses Riehl's observation-based methodology as a springboard for the formulation of a theory of literature. Like Riehl, whose "vivid pictures" of German people rely on empirical rather than conceptual knowledge (Eliot, "Natural History" 134), she advocates a detailed and

engaged yet unromantic mode of literary description that would account for the diversity of the human species.

Eliot's comments here speak to a culture of natural-historical writing more central to the Victorian period than is sometimes recognized in literary studies.<sup>22</sup> As historians of science have demonstrated, narratives of the "emergence" of experimental biology or the Darwinian "revolution" overlook not only the long history of morphological and evolutionary thought (Secord; Desmond) but also the continued import of observational sciences like natural history to nineteenth-century culture (Nyhart; Ritvo). Amy King has shown how the techniques of close observation developed by natural history resound in the Victorian novel's attention to detail, its long descriptive passages, and its fascination with nonhuman things.<sup>23</sup> If Darwin's theory of evolution "provided 'plots,'" King writes with reference to Gillian Beer's classic study *Darwin's Plots* (1983), "natural history continued to model—far beyond its professional demise—descriptive techniques, detail, and interest in describing the small scale and the local that became essential to the realist novel in Britain" (158). Where other novels worked to proliferate descriptive detail, however, *Impressions* looks back to the desire of natural-historical writing to disentangle words from things, to let organisms stand naked in their physical being. More than this, in situating the human as an object of natural-historical inquiry, Eliot's final work decenters and de-hierarchizes the human within the *scala natura*. It positions man humbly, as many pioneering naturalists had, "in the class of the animals, which he resembles in everything material" (Buffon, qtd. in Sloan 112).<sup>24</sup>

### After the Human

As *Impressions* implies, science and literature equally might benefit from the power of what Sully called "the descriptive word"

to highlight characteristics held in common by seemingly disparate forms of life. How or why study the human in isolation? Why—if we share our being with so many other creatures—should our perspective on the human be solely a human one? For Eliot the human being is not the most important knower or observer, pitted against the unknowing physical being of nonhuman objects of inquiry. Rather, all perceptive beings lie on a single ontological plane. One might experience oneself as a center, but the surface is infinite.

To close, I will unpack one more moment in the literary critique of human-centered ontologies Eliot offers in *Impressions*, one that positions literature as a kind of nonhuman extension of the human body: "a delicate acoustic or optical instrument," as she put it in 1855, "bringing home to our coarser senses what would otherwise be unperceived by us" (Rev. 289). In *Impressions* every character's blind spot consists in an overestimation of his or her own perceptive abilities: the belief that he or she sees more or better than other creatures. Pushing this argument about the limit of human knowledge to its extreme, the chapter "Shadows of the Coming Race" tells the story of mechanical automata that "transcend and finally supersede" the human because of their ability to communicate without the "fussy accompaniment of consciousness" (138, 140).<sup>25</sup> These inorganic posthumans evolve out of tools intended to enhance human perception, "micrometers and thermopiles and tasimeters which deal physically with the invisible, the impalpable, and the unimaginable," such as "a microphone which detects the cadence of the fly's foot on the ceiling" (138). Undermining the suggestion that consciousness renders human beings superior to other beings, in "Shadows" Eliot playfully imagines an alternative hierarchy of being in which consciousness is a burden rather than a boon.

Structured something like a Platonic dialogue between Theophrastus and his friend Trost, the chapter speculates about a future

race of creatures that would “carry on the most elaborate processes as mutely and painlessly as we are now told that the minerals are metamorphosing themselves continually in the dark laboratory of the earth’s crust” (142). The rise of these “steely organisms,” Theophrastus explains to the incredulous Trost, would eventually enable “banishing from the earth’s atmosphere screaming consciousnesses which, in our comparatively clumsy race, make an intolerable noise and fuss to each other about every petty ant-like performance” (138, 139). In this posthuman, postlinguistic world, “changes as delicate and complicated as those of human language” are carried out by “beings who will be blind and deaf as the inmost rock. . . . [T]here may be, let us say, mute orations, mute rhapsodies, mute discussions, and no consciousness there even to enjoy the silence” (142).

“Shadows” might be interpreted as a reaction to the “conscious automaton” debates of the 1870s among Thomas Henry Huxley, Herbert Spencer, William James, and John Elliott Cairnes (*Offer*).<sup>26</sup> John Fuerst has read this chapter as a prescient vision of the digital computer, as an imagining of the kinds of symbolic logic that would produce the first forays into artificial-intelligence research (45). Most relevant to our purposes, however, is the radical thought that “Shadows” makes possible through its dalliance with science fiction: Theophrastus’s musings confront us with the possibility of a world in which consciousness is not the precondition for reality, a world in which communication is nothing like human language but instead involves metamorphic, material processes. In ancient Greek *χαρακτήρ* (*kharaktēr*) refers to the tool for writing as well as the impression made in wax writing tablets. Theophrastus’s words enact this double impression: he writes, and a world hitherto unimaginable is impressed on our senses, for words, ironically, in their materiality can lead us to imagine a world without words as its medium.

Although Eliot’s work is typically aligned with the humanism of an earlier generation of German theorists, elements of the anti-anthropocentric thinking emergent in Friedrich Nietzsche’s philosophy can be found in *Impressions*. In 1873—five years before Eliot started writing *Impressions*—Nietzsche began his essay “On Truth and Lies in a Non-moral Sense” (published posthumously in 1896) with a fable in which “clever beasts” who invented “knowing” perish after just a short time on earth, taking their consciousnesses with them. This fable, Nietzsche writes, is intended to demonstrate “how shadowy and transient, how aimless and arbitrary the human intellect looks within nature.” The same could be said of the fable presented in “Shadows.” Nietzsche’s conscious beasts take their form of consciousness to be the highest and best. However, “if we could communicate with the gnat,” Nietzsche writes, “we would learn that he likewise flies through the air with the same solemnity, that he feels the flying center of the universe within himself” (114). Eliot’s story likewise draws attention to egoism as a condition of embodied perception, human or otherwise. Taking “the humble mollusc” as an example, at a different point in *Impressions*, Theophrastus points out that although one might imagine such an insignificant creature “to have a sense of his own exceeding softness and low place in the scale of being,” in reality he is “inwardly objecting to every other grade of solid rather than to himself” (41). As Eliot and Nietzsche demonstrate through powerful analogy, if every being overestimates its role in the *scala natura*, there may be no reason to think human beings the highest or most intelligent creatures—or even to think human language the most efficient or best mode of communication. Rather, as Nietzsche argues in his essay, language is merely an agreed-on set of norms that erases the differences and particularities of the sensible world.

In the published version of *Impressions*, the dark and dystopian chapter “Shadows”

is followed by a more optimistic one, “The Modern Hep! Hep! Hep!,” exploring the role of the nation in a global human society.<sup>27</sup> As the page proofs demonstrate, however, Eliot initially intended “Shadows” to be the final chapter, but it was inexplicably moved to the penultimate position just before publication.<sup>28</sup> Nancy Henry has suggested that Eliot may have backed away from the radical implications of ending with “Shadows.”<sup>29</sup> The possibility of this alternative ending of *Impressions* motivates my closing remarks, which explore whether in “Shadows” Theophrastus transforms into a kind of expansive hybrid entity that can peek outside the human perspective and experience the “nonhuman independence” he longed for in chapter 1. When pressed to defend his theory about the end of humanity at the hands of a robotic species, Theophrastus explains to Trost:

[I]t is less easy to you than to me to imagine our race transcended and superseded, since the more energy a being is possessed of, the harder it must be for him to conceive his own death. But I, from the point of view of a reflective carp, can easily imagine myself and my congeners dispensed with in the frame of things and giving way not only to a superior but a vastly different kind of Entity. (140)

In this curious comparison, Theophrastus claims that where Trost’s humanity prevents him from imagining his species’s extinction, Theophrastus is able to see things “from the point of view of a reflective carp.”<sup>30</sup>

In nineteenth-century England *carp* might have been read as a reference not only to the fish (“Carp, N1”) but also to the combining form used in botanical discourse to denote the fruit and seed pods of plants (“Carp-, Comb. Form”): as in *hemicarp*, a half-fruit unit, or *mericarp*, a one-seeded unit. The terms *carpos* (fruit) and *pericarpion* (seed), moreover, were coined by none other than Theophrastus of Eresus in an effort to develop a special botanical terminology (Singer 178).

What is more, *carp* is reminiscent of Theophrastus’s interest in the negative, the base, and the minor, since *to carp* can of course mean to talk too much or to complain (“Carp, V1”). This pejorative sense is connected to the otherwise neutral definition of *carp* as “discourse” or “the power of speech” itself, more common between the twelfth and seventeenth centuries (“Carp, N2”). Theophrastus: fish, word, fruit-bearing plant; carp capable of imagining humanity’s extinction. Where the all-too-human Trost cannot conceive of his species’s end, his interlocutor, this ghost of a dead philosopher and literary entity, can imagine it and imagine embodying it.

“I try,” Eliot wrote to a friend in 1870, “to delight in the sunshine that will be when I shall never see it any more. And I think it is possible for this sort of impersonal life to attain great intensity, possible for us to gain much more independence, than is usually believed, of the small bundle of facts that make our own personality” (“To Mrs. Robert Lytton” 107).<sup>31</sup> By the end of *Impressions*, Theophrastus seems to have gained such independence, to have unwoven his personality to the extent that he begins to feel such intensity, an affective intensity not unlike the extrahuman roar on the other side of silence. His text appears to have achieved, if but momentarily, the state for which Daniel Deronda longs when, in a “half-involuntary identification of himself with the objects he was looking at,” he attempts to “shift his centre till his own personality would be no less outside than the landscape” (160). Fascinated by similar remarks across Eliot’s oeuvre, George Levine has read Eliot’s frustration with the limits of perception in terms of nineteenth-century epistemological narratives of objectivity in which the embodied self is seen as an impediment to knowledge and revelation must thus occur in the “negation of embodiment” (*Dying* 69). Yet to situate Eliot’s anxiety about selfhood in this scientific-epistemological frame risks obscuring the affective aims of

her literary project as it seeks to render tactile a reality beyond the human and especially human modes of representation.

In the literary-turned-philosophical realism of *Impressions*, we find a curiously sensational Eliot, intent on imagining what reality might *feel* like if one could crack through the human vantage point—if, precisely through the “sensuous medium” of words, one might unravel character into mere impressions and affective states. Her frustration with the limits of perception abides in the desire not to transcend or obliterate the body but rather to have more of a body, more sense capacities. We could relate this opening up of the self to the use of prostheses like the microscope or the telescope (two of Eliot’s favorite figures), but the aim of literary description in Eliot’s work, I hope to have shown, has to do less with the production of knowledge than with the production of new modes of feeling and perception, new ways of sensing human beings and the multifarious reality of which they are a part.

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## NOTES

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1. This trope first appears in Eliot’s novella *The Lifted Veil* (1859), in which her protagonist’s ability to “participat[e] in other people’s consciousnesses” is compared to his having “a preternaturally heightened sense of hearing, making audible to one a roar of sound where others find perfect stillness” (15, 18). For a powerful reading of this passage attentive to Eliot’s curiosity about sensory expansion, see Hertz 39–41.

2. Here I follow the lead of a recent wave of scholarship exploring how Victorians conceived the effect of reading on the sensorium (esp. Dames; Ablow).

3. Even since Nancy Henry’s pathbreaking edition from 1994, *Impressions* has attracted little scholarly attention. Given the book’s robust engagement with Victorian natural-historical, biological, and psychological discourse, it is especially disappointing to discover its absence from book-length studies of Eliot and science (e.g., Shuttleworth; Davis).

4. In this late notebook Eliot calls for further exploration of the nonhuman and nonlinguistic worlds: “we are the better off for knowing better the nature of fishes & storms & acting according to that knowledge” (qtd. in Collins 392).

5. Eliot had considered titling her book *Characters and Characteristics: Impressions of Theophrastus Such*, a more direct reference to the ancient text (Henry, *Intro.* xxxviii11). The most recent English translation of *Characters* at the time of *Impressions*’s composition was by Richard Jebb (1870), whom Eliot met five years before she began work on *Impressions* (Millett 122n3).

6. In *Middlemarch* the “Key to All Mythologies” is Casaubon’s unfinished magnum opus.

7. On the decentered position of the human in Theophrastus’s philosophy, see Hughes; Cole.

8. Vorticellae also appear in Lewes’s *Sea-side Studies* (56) as well as his essay “Only a Pond!” (597), as Henry, “George Eliot” 47–51, and Wormald 501, 516–17, discuss in greater detail.

9. According to Haight, Eliot was familiar with Isaac Casaubon and “knew his fine edition of Theophrastus’s *Characteres*” (448). In *Middlemarch*, when Casaubon becomes ill the town doctor prescribes him two novels with clear connections to the Theophrastan tradition by the eighteenth-century writer Tobias Smollett, *The Adventures of Roderick Random* (1748) and *The Expedition of Humphry Clinker* (1771 [269]).

10. Shaftsbury’s *Characteristics of Men, Manners, Opinions, Times* (1711) is also an important referent here.

11. According to Forster, “round” characters are three-dimensional, develop and change, and are original and individual, while “flat” characters are two-dimensional, remain the same, and are mere types (67).

12. In Greek mythology, Ganymede is the most beautiful of mortals. He is kidnapped and granted eternal youth by Zeus.

13. It is uncertain whether the word *inversion* would have carried any queer connotation in 1879. The German sexological term *konträre Sexualempfindung* (from which the English word *inversion* is derived) had been in parlance since 1870.

14. The Theophrastus scholar William Fortenbaugh translates the original Greek “Toioutos tis, hoios” as “someone such as to . . .” (17).

15. Eliot also began her career with the sketch form, in *Scenes from Clerical Life* (1858).

16. Something implied, e.g., by Armstrong 127–28 and Miller 84. On the tension of type and individual in Eliot, see Gallagher.

17. See, e.g., Vernon Lee's *Baldwin: Being Dialogues on Views and Aspirations* (1886) and Walter Pater's *Imaginary Portraits* (1887). Pater's conclusion to *Studies in the History of the Renaissance* (1873) is also an important touchstone, tied as his notion of "impressions" is to the "weaving and unweaving of ourselves" (119). On the nineteenth-century sketch form more generally, see Sha; Garcha; Hamilton.

18. Lewes's diary reports that the couple read *Sensation and Intuition* on 12 July 1874 and many times thereafter (Shuttleworth 230n17).

19. On the historicity of impressions, see Sully 38 and Lewes, *Problems* 101–02. Before Lewes and Sully, the concept of impression had been central to the work of associationists from Hume and Hartley to Bain and Spencer.

20. Indeed, Eliot's work had a major influence on Sully (Ryan, "Reading").

21. Dolin has recently argued that in Eliot's later novels we see the presence of "what scientists called 'hypothetico-deductive' modes, the discovery of what is unknown, and even to the microscope, unknowable, by presenting a hypothesis which can be tested and verified" (194).

22. Recent work by King and by Coriale has gone some way to correct this.

23. For more on the particular in Victorian natural history, see Merrill, esp. 64.

24. I cannot here do justice to the long and complicated history of the human as an object of natural-historical inquiry or to the many problematic ways in which nineteenth-century anthropologists and biologists cast some persons as *objects* of inquiry and others as scientific *subjects*. On the emergence of a "natural history" of humanity in the late seventeenth and early eighteenth centuries, see Sloan, who argues that in the hands of Linnaeus and Buffon "human beings for the first time were arranged, as a taxonomic group, with the rest of organic nature" (118).

25. The title is a reference to an 1871 novel by Edward Bulwer-Lytton, *The Coming Race*.

26. Samuel Butler less convincingly read the chapter as a plagiarized section of his novel *Erewhon* (Henkin 97).

27. Of all of *Impressions's* essays, "The Modern Hep! Hep! Hep!" has received the most critical attention. Newton examines the problematic reception of this chapter, often separated from the book and read as a straightforward expression of Eliot's views on the Jewish question.

28. In the final page proofs at the Harry Ransom Center at the University of Texas, Austin, "Shadows" is the last chapter. No comments from Eliot or the editor indicate the impending switch.

29. As Henry points out, while "Shadows" leaves Theophrastus in "temporary fragmentation," "The Modern Hep! Hep!" reconstitutes Theophrastus fully within a community" (Introd. xxxiv).

30. In *Middlemarch* Casaubon's scholarly rival is likewise named Carp, and Carp's associates are Pike and Tench.

31. Probably a reference to David Hume's theory of the self as a "bundle or collection of different perceptions" (188).

## WORKS CITED

- Ablow, Rachel, ed. *The Feeling of Reading: Affective Experience and Victorian Literature*. Ann Arbor: U of Michigan P, 2010. Print.
- Anderson, Amanda. *The Powers of Distance: Cosmopolitanism and the Cultivation of Detachment*. Princeton: Princeton UP, 2001. Print.
- Armstrong, Isobel. "Middlemarch: A Note on George Eliot's 'Wisdom.'" *Critical Essays on George Eliot*. Ed. Barbara Nathan Hardy. New York: Routledge, 1970. 116–32. Print.
- Baltussen, Han. *Theophrastus against the Presocratics and Plato: Peripatetic Dialectic in the De sensibus*. Leiden: Brill Academic, 2000. Print.
- "Carp-, Comb. Form." *The Oxford English Dictionary Online*. Oxford UP, 2011. Web. 11 Oct. 2011.
- "Carp, N1." *The Oxford English Dictionary Online*. Oxford UP, 2011. Web. 11 Oct. 2011.
- "Carp, N2." *The Oxford English Dictionary Online*. Oxford UP, 2011. Web. 11 Oct. 2011.
- "Carp, V1." *The Oxford English Dictionary Online*. Oxford UP, 2011. Web. 11 Oct. 2011.
- Cole, Eve Browning. "Theophrastus and Aristotle on Animal Intelligence." *Theophrastus: His Psychological, Doxographical, and Scientific Writings*. Ed. William W. Fortenbaugh and Dimitri Gutas. New Brunswick: Transaction, 1992. 44–62. Print.
- Collins, K. K. "Questions of Method: Some Unpublished Late Essays." *Nineteenth-Century Fiction* 35.3 (1980): 385–405. Print.
- Coriale, Danielle. "When Zoophytes Speak: Polyps and Naturalist Fantasy in the Age of Liberalism." *Nineteenth-Century Contexts* 34.1 (2012): 19–36. Web. 1 Dec. 2012.
- Dames, Nicholas. *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction*. Oxford: Oxford UP, 2007. Print.
- Daston, Lorraine, and Peter Galison. "The Image of Objectivity." *Representations* 40.1 (1992): 81–128. JSTOR. Web. 7 Dec. 2012.
- Davis, Michael. *George Eliot and Nineteenth-Century Psychology: Exploring the Unmapped Country*. London: Ashgate, 2006. Print.
- Desmond, Adrian. *The Politics of Evolution: Morphology, Medicine, and Reform in Radical London*. Chicago: U of Chicago P, 1992. Print.

- Dolin, Tim. "George Eliot and Victorian Science." *George Eliot*. Oxford: Oxford UP, 2005. 190–215. Print.
- Eliot, George. *Daniel Deronda*. 1876. Ed. Graham Handley. Oxford: Oxford UP, 2009. Print.
- . *Impressions of Theophrastus Such*. 1879. Ed. Nancy Henry. Iowa City: U of Iowa P, 1996. Print.
- . *The Lifted Veil and Brother Jacob*. 1859; 1864. Ed. Helen Small. Oxford: Oxford UP, 2009. Print.
- . *Middlemarch*. 1871–72. Ed. David Carroll and Felicia Bonaparte. Oxford: Oxford UP, 2008. Print.
- . "The Natural History of German Life." 1856. *Selected Essays, Poems, and Other Writings*. Ed. Nicholas Warren. London: Penguin Classics, 1990. 107–39. Print.
- . Rev. of *Westward Ho!*, by Charles Kingsley. *Westminster Review* 64 (1855): 288–307. Print.
- . "To Mrs. Robert Lytton." 8 July 1870. *The George Eliot Letters, 1869–1873*. Ed. Gordon Sherman Haight. Vol. 5. New Haven: Yale UP, 1956. 106–07. Print. 9 vols. 1954–78.
- Fielding, Henry. *Joseph Andrews*. 1742. Ed. Martin C. Battestin. Middletown: Wesleyan UP, 1967. Print.
- Forster, E. M. *Aspects of the Novel*. London: Harcourt, 1956. Print.
- Fortenbaugh, William W. "Theophrastus, the *Characters* and Rhetoric." *Peripatetic Rhetoric after Aristotle*. Ed. David C. Mirhady and Fortenbaugh. New Brunswick: Transaction, 1994. 15–35. Print.
- Fuerst, John. "Concepts of Physiology, Reproduction, and Evolution of Machines in Samuel Butler's *Erewhon* and George Eliot's *Impressions of Theophrastus Such*." *Samuel Butler Newsletter* 4.2 (1981): 31–53. Print.
- Gallagher, Catherine. "George Eliot: Immanent Victorian." *Representations* 90 (2005): 61–74. Print.
- Garcha, Amanpal. *From Sketch to Novel: The Development of Victorian Fiction*. Cambridge: Cambridge UP, 2009. Print.
- Garratt, Peter. *Victorian Empiricism: Self, Knowledge, and Reality in Ruskin, Bain, Lewes, Spencer, and George Eliot*. Cranberry: Fairleigh Dickinson UP, 2010. Print.
- Haight, Gordon Sherman. *George Eliot: A Biography*. Oxford: Oxford UP, 1968. Print.
- Hamilton, Kristie. *America's Sketchbook: Cultural Life of a Nineteenth-Century Literary Genre*. Athens: Ohio UP, 1998. Print.
- Henkin, Leo Justin. *Darwinism in the English Novel, 1860–1910: The Impact of Evolution on Victorian Fiction*. New York: Russell, 1963. Print.
- Henry, Nancy. "George Eliot, George Henry Lewes, and Comparative Anatomy." *George Eliot and Europe*. Ed. John Rignall. London: Scolar, 1997. 44–63. Print.
- . Introduction. *Impressions of Theophrastus Such*. By George Eliot. Iowa City: U of Iowa P, 1996. vii–xxxvii. Print.
- Hertz, Neil. *George Eliot's Pulse*. Palo Alto: Stanford UP, 2003. Print.
- Hughes, J. Donald. "Theophrastus as Ecologist." *Environmental Review: ER* 9.4 (1985): 297–306. Web. 22 Jan. 2011.
- Hume, David. *A Treatise of Human Nature*. Oxford: Clarendon, 1978. Print.
- King, Amy M. "Reorienting the Scientific Frontier: Victorian Tide Pools and Literary Realism." *Victorian Studies* 47.2 (2005): 153–63. Print.
- Lee, Vernon. *Baldwin: Being Dialogues on Views and Aspirations*. London: T. Fisher Unwin, 1886. Print.
- Levine, George. *Dying to Know: Scientific Epistemology and Narrative in Victorian England*. Chicago: U of Chicago P, 2002. Print.
- . "George Eliot's Hypothesis of Reality." *Nineteenth-Century Fiction* 35.1 (1980): 1–28. Print.
- Lewes, G. H. "Only a Pond!" *Blackwood's Edinburgh Magazine* 85 (1859): 581–97. Print.
- . *Problems of Life and Mind*. Ser. 3, vol. 2. London: Trübner, 1879. Print. 1874–79.
- . *Sea-side Studies at Ilfracombe, Tenby, the Scilly Isles, and Jersey*. 1856–57. London: Blackwood and Sons, 1858. Print.
- . *Studies in Animal Life*. 1860. London: Smith, Elder, 1862. Print.
- Love, Heather. "Close but Not Deep: Literary Ethics and the Descriptive Turn." *New Literary History* 41.2 (2010): 371–91. Print.
- Lynch, Arthur. *Human Documents: Character-Sketches of Representative Men and Women of the Time*. London: Dobell, 1896. Print.
- Lynch, Deidre. *The Economy of Character: Novels, Market Culture, and the Business of Inner Meaning*. Chicago: U of Chicago P, 1998. Print.
- Merrill, Lynn L. *The Romance of Victorian Natural History*. Oxford: Oxford UP, 1989. Print.
- Miller, Joseph Hillis. *The Form of Victorian Fiction: Thackeray, Dickens, Trollope, George Eliot, Meredith, and Hardy*. Notre Dame: U of Notre Dame P, 1970. Print.
- Millett, Paul. *Theophrastus and His World*. Cambridge: Cambridge UP, 2007. Print.
- Newton, K. M. "George Eliot and Racism: How Should One Read 'The Modern Hep! Hep! Hep!'" *Modern Language Review* 103.3 (2008): 654–65. JSTOR. Web. 11 Mar. 2012.
- Nietzsche, Friedrich. "On Truth and Lies in a Non-moral Sense." 1896. *The Nietzsche Reader*. Ed. Keith Ansell-Pearson and Duncan Large. Oxford: Wiley, 2006. 114–23. Print.
- Nussbaum, Martha Craven. *Cultivating Humanity: A Classical Defense of Reform in Liberal Education*. Cambridge: Harvard UP, 1998. Print.
- Nyhart, Lynn K. "Natural History and the 'New' Biology." *Cultures of Natural History*. Ed. N. Jardine, J. A. Secord, and E. C. Spary. Cambridge: Cambridge UP, 1996. 426–43. Print.

- Offer, John. "Free Agent or 'Conscious Automaton'? Contrasting Interpretations of the Individual in Spencer's Writing on Social and Moral Life." *Sociological Review* 51.1 (2003): 1–19. Print.
- Pater, Walter. *Imaginary Portraits*. 1887. London: Macmillan, 1929. Print.
- . *Studies in the History of the Renaissance*. 1873. Ed. Matthew Beaumont. Oxford: Oxford UP, 2010. Print.
- Ritvo, Harriet. *The Platypus and the Mermaid and Other Figments of the Classifying Imagination*. Cambridge: Harvard UP, 1997. Print.
- Ryan, Vanessa L. "Reading the Mind: From George Eliot's Fiction to James Sully's Psychology." *Journal of the History of Ideas* 70.4 (2009): 615–35. Print.
- . *Thinking without Thinking in the Victorian Novel*. Baltimore: Johns Hopkins UP, 2012. Print.
- Scott, Walter. *Lives of Eminent Novelists and Dramatists*. London: F. Warne, 1887. Print.
- Secord, James A. *Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation*. Chicago: U of Chicago P, 2001. Print.
- Sha, Richard C. *The Visual and Verbal Sketch in British Romanticism*. Philadelphia: U of Pennsylvania P, 1998. Print.
- Sharples, R. W. *Sources on Biology*. Leiden: Brill Academic, 1992. Print. Vol. 5 of *Theophrastus of Eresus: Sources for His Life, Writings, Thought, and Influence: Commentary*. 9 vols.
- Shuttleworth, Sally. *George Eliot and Nineteenth-Century Science: The Make-Believe of a Beginning*. Cambridge: Cambridge UP, 1984. Print.
- Singer, Charles. "Biology." *The Legacy of Greece*. Ed. R. W. Livingstone. Oxford: Clarendon, 1921. 163–200. Print.
- Sloan, Phillip. "The Gaze of Natural History." *Inventing Human Science: Eighteenth-Century Domains*. Ed. Christopher Fox, Roy Porter, and Robert Wokler. Berkeley: U of California P, 1995. 112–51. Print.
- Sully, James. *Sensation and Intuition: Studies in Psychology and Aesthetics*. London: Henry S. King, 1874. Print.
- Wormald, Mark. "Microscopy and Semiotic in *Middlemarch*." *Nineteenth-Century Literature* 50.4 (1996): 501–24. JSTOR. Web. 18 Dec. 2012.