

# Silas Marner and the Ecology of Form

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GEORGE Eliot once wrote that “form was not begotten by thinking it out or framing it as a shell which should hold emotional expression, any more than the shell of an animal arises before the living creature; but emotion, by its tendency to repetition . . . creates a form by the recurrence of its elements in adjustment with certain given conditions.”<sup>1</sup> I have always thought of this claim as one legacy of Eliot’s extensive study of the history of cultural forms, her exploration (by way of Strauss, Feuerbach, and others) of a Victorian hermeneutics of the past that, as Suzy Anger has shown, considers how idioms and expressions, myths and legends adapt over time to new cultural coordinates.<sup>2</sup> To do so, I have had to overlook the oddness of Eliot’s argument here. The truth is, her “Notes on Form” does not seem to be about “form” at all—at least, not about form as we tend to think of it: as either a shape (as in Sandra MacPherson’s “little formalism”) or as an inherent property of how certain objects are configured (as in Caroline Levine’s use of “affordance” to describe what forms do).<sup>3</sup> If we tend to think of form as the enclosed and necessary relation between a shape and its content, exemplified here by the mollusk and its hard shell, Eliot dramatically opens that analogy to other possibilities.

Eliot conceives of form not as a fixed shape or property, a design embedded in things, but as a plastic “adjustment with certain given conditions,” emphasizing continuous interaction with the world. Moreover, if all forms, whether social or natural, operate this way (as Eliot asserts), we can assume that the “conditions” of those forms are themselves not fixed—they are conditionally, not permanently, “given.” Insofar as those conditions consist of both a material environment and the other things and organisms that populate it—are filled with other forms—then the elements of that environment are themselves constantly “in adjustment.” For the mollusk, these include everything from the variability of the day or season to shifting forms of the starfish and other

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predators that eat shellfish. Eliot furnishes, in other words, a vision of form that is deeply *ecological: emergent* rather than designed or predefined; densely *situational*, that is, composed of a complex of living and nonliving elements; and centrally concerned with *power*, the uneven distribution of resources and agency, the fact of violence as well as cooperation, of predation along with community. In recasting the question of form as the question of lived pattern—whether social or natural—Eliot formulates what I call an *ecology of form*.<sup>4</sup>

But how might this ecology describe the form of something like *Silas Marner*? In seeming contrast to her open notion of form in action, Eliot's novella has long been singled out for its tightly integrated plot and characters. Early critics celebrated its coordination of character and environment as an "organic whole," while, in Leslie Stephen's judgment, "the whole story is conceived in a way which makes a pleasant conclusion natural and harmonious."<sup>5</sup> L. J. Jordanova has more recently seen its integration of self, labor, and sociability as part of the "organic society" described by Raymond Williams, while Sally Shuttleworth has argued that the novel "interrogates theories of organic continuity in history" in order to "challenge, and ultimately to affirm conceptions of organic unity."<sup>6</sup> As these examples indicate, and as Andrew Miller has observed, when we ask how literary artifacts fit together, we tend to fall back on holism.<sup>7</sup> Whether conceived in terms of the organic body or totality, this holism is a central feature of new historical, formalist, or Marxist studies of a work in which some exceptional example or feature is explained as the symptom of a larger encompassing dynamic, a whole modeled on the organic body.<sup>8</sup> The result, as Mary Poovey has put it, is that the organism has become a "model system" for literary criticism.<sup>9</sup>

How might we think of the literary artifact as a running "adjustment" to an incoherent, dynamic set of "given conditions"? What would it mean to take ecology as the model system of literary study? I seek a way of reading the interaction between features that make up Eliot's novel, and literary artifacts generally, without presuming their ultimate internal integration or organic relation to the world. In what follows, I'll explain how *Silas Marner* rejects the notion of organic totality, articulating in its place a more dynamic and relational collective in which individual bodies are ecologized, articulated as elements within more dynamic and interactive collectives. This dynamism, I will argue, is rooted in Eliot's concern for the continuities between natural and social history, encountered not as determining totalities but rather, through their uneven and highly differentiated implication in the

present, through networks of contingent, unpredictable, but nevertheless sociable encounter. If social theorists, from Edmund Burke to Thomas Carlyle to William Morris, advocated a return to the more organic collectives of the past, Eliot's fiction squares up with history as a tense composite that is also intensely anti-organic.<sup>10</sup>

All of Eliot's novels weigh the impact of "conditions" on their characters, but *Silas Marner* marks a turning point in Eliot's ongoing attempt to theorize character and environment. Her early fictions, including *Scenes of Clerical Life*, *Adam Bede*, and *The Mill on the Floss*, test a fundamentally Romantic understanding of the relation between organic character, inheritance, and environment, articulating a closed notion of ecology as the circumstances pertinent to the formation of the individual, and studying what happens to integrated characters when conditions change. *Silas Marner* weighs these conditions, too, but adds a more open account of the reciprocal effects of life and condition, one reflected in her "Notes on Form." By tracing this ecological turn in *Silas Marner*, especially as a model of filiation that reorients the inheritance plot, I also offer a new way to read recent debates over the relation between queer studies and ecocriticism (discussed in the introduction to this issue).

In the wake of Charles Darwin's *Origin of Species*, a host of thinkers were studying how to explain the sociality of life and its complication in the world without recourse to a governing design or designer. As Ernst Haeckel defined it in 1866, this new science, which he termed "ecology," comprised "the whole science of the relations of the organism to the environment including, in the broad sense, all the 'conditions of existence.' These are partly organic, partly inorganic in nature. . . . As organic conditions of existence we consider the entire relations of the organism to all the other organisms with which it comes into contact, and of which most contribute either to its advantage or its harm."<sup>11</sup> Rather than reading the organism as a more or less direct expression of a tightly integrated environment—in which nature and nurture, derived equally from the ultimate cause, go hand in hand—this new vision underlined a delicate and often unstable interdependency, and a new distribution of agency across the living and nonliving world. Like Eliot, Haeckel insisted on the need to read living forms as expressions of a running interaction with wider conditions, including other creatures. As I will explain, his definition requires a deeply *inorganic* reformulation of what "organism" meant, a reconception of the organism as precariously enmeshed in the "inorganic" world, and so constituted through an often awkward sociability rather than a tight-knit totality.

Eliot did not draw inspiration for this ecological thought from Darwin or Haeckel but rather from George Henry Lewes's studies of physiology, which emphasized both the open-ended interaction among organisms and their environment—their running “adjustment with certain given conditions”—and the reciprocal impact of those adjustments. This relational turn is central to Eliot's later fiction, which famously studies the “incalculably diffusive” effect that characters have on their wider world. Read in this fashion—that is, ecologically—any collective, from a novel to a nation, can be recognized as an evolving alignment of various conditions, the mixed impulses of the past, the contingency of present events, and the competing possibilities of the future.

### 1. ENTANGLED FORM

*Silas Marner* narrates the expulsion of its titular character from the tight-knit Calvinist community of Lantern Yard, his years of social alienation as an isolated and ill-favored weaver on the periphery of rural Raveloe society, and his ultimate reintegration into that society via the miraculous and mediatory intervention of Eppie, the foundling toddler he adopts. Silas's salvation turns simultaneously on his renewed communion and on his rapprochement with the traumatic memories of the past. Yet this recuperation is mediated by an extraordinary series of chance events: Silas's periodic cataleptic fits, which occur at three pivotal moments in the novel; the death and then reappearance of Dunstan Cass along with Silas's money; the miraculous fact that Eppie, just two years old, manages to waddle into Silas's life and out of a snowstorm that has just killed her mother; even the drawing of lots that first condemns Silas and ejects him from the community of Lantern Yard.

Bewildered, Silas's folksy confidant, Dolly Winthrop, comments: “I've been sore puzzled for a good bit wi' that trouble o' yourn and the drawing o' lots; and it got twisted back'ards and for'ards, as I didn't know which end to lay hold on.”<sup>12</sup> Readers have been sore puzzled by the chancy sortilege of *Silas Marner* for some time.<sup>13</sup> In the widest view, the critical literature is divided over whether to treat Eliot's novel as a providential fable or an example of probabilistic realist fiction. At times it feels like a focused ethnographic study of rural life; at other times, there are flourishes of folklore and myth. This problem is particularly acute when it comes to the meaning of chance events and their importance as a mechanism by which virtue is rewarded in the familiar moral accounting of nineteenth-century fiction. This interpretive

problem is only exacerbated by the apparent fungibility of religious faith, industriousness, and financial reward in the novel. As George Levine explains, one might for these reasons take *Silas Marner* as an especially Weberian work in which prudent labor equates material reward with divine providence: “It is not, in the end, chance that rewards Silas, but merit.”<sup>14</sup>

Yet the merit that is endorsed by the novel is not Silas’s crafty engagement in textile manufacturing but, rather, his charitable adoption of Eppie. Merit in *Silas Marner* is demonstrated in how one *responds* to chance, particularly chance social events (the death of an unacknowledged wife, the loss of someone else’s horse, and, of course, the seemingly miraculous appearance of a toddler during a snowstorm). Merit, in these cases, is marked by choices with wide social implication, in effect, the choice of one set of social relations over another. William Dane’s theft (and the subsequent drawing of lots) ejects Silas from Lantern Yard and resituates him in Raveloe; Godfrey’s theft of Silas’s gold severs his antisocial connection to money and leaves him vulnerable to Eppie’s attachment; Godfrey’s initial failure to acknowledge Eppie lets Silas adopt her. The novel is driven by rhythms of separation and restoration. If, as Dolly comments, the result is a tangle of contingent event and response, “twisted back’ards and for’ards, as I didn’t know which end to lay hold on,” this is because the disentanglement of any individual character from one relation inevitably tangles them in another, a recursive social process that leads beyond the novel and for which there is, strictly speaking, no end and no beginning. Rather than existing as part of some larger totality, in which each element unfolds according to some higher logic of development, the characters of *Silas Marner* are deeply enmeshed in a world that is profoundly unpredictable and uncertain, and it pulls them in contradictory and often incompatible directions.

Dolly’s comment is just another example of how the language of weaving, tangle, and web in *Silas Marner*, as in Eliot’s novels generally, provides a central vocabulary for ecological life—that is, an understanding of the deep entanglement of subjects with one another and with their material environment. I will weigh the sources and implications of this ecological vocabulary shortly, but here I mean to emphasize how this web is understood as a dynamic and unpredictable process, constantly unwoven and rewoven in an interplay of disjunction and connection that separates as much as it weaves together. Here it is important to recall, as Felicia Bonaparte notes, that the “ravel” of Raveloe is its own

synonym and antonym: it can mean both to pull apart and to tangle up, speaking to a continual process of weaving and unweaving, connection and disconnection.<sup>15</sup> The novel is festooned with the language of tangles and threads, links and bonds, ribbons and ties, from the opening description of the weaver with his sack of “flaxen thread” (5), to the “broad strip of linen” Silas uses to guard Eppie when she’s young (127), to the “one main thread of painful experience” that constricts the ultimately childless marriage between Nancy Latimer and Godfrey Cass (154). Eliot was intimately aware of cottage weaving’s fine-spun position in history, as made clear in the first lines of her historical novel, which are replete with “spinning-wheels” and the “pallid” packmen who transport both spun thread and linen (5). As a cottage industry that would collapse in the 1840s, weaving bridged an agricultural past and an industrial present that proved increasingly difficult to sustain. And conceived as a constant process of disconnection (unspooling) and reconnection (as warp and weft), it is not simply a figure for social relations. Weaving, in Eliot’s hands, is a dynamic pattern active at various levels of scale, from concrete brushes with the material environment (a wooden stake, a sack of gold, a stone-pit), to the many scenes of interpersonal encounter, to the wider economic and social transformations that constitute history.

Much of the criticism of Eliot’s novel agrees that it depicts a basic tension between mechanical and organic notions of engagement, between Silas’s objectification, via his weaving, within a larger economic system that binds him in “a constant mechanical relation to the objects of his life” (20), and his more vital, living relation to the community at the close of the novel. Yet these two modes are not consistently opposed. If Silas is sometimes absorbed into a “mechanical relation,” at other times that mechanism is bound up in his own unthinking, animal life: “He seemed to weave, like the spider, from pure impulse, without reflection . . . reduc[ing] his life to the unquestioning activity of a spinning insect” (16). This confusion of mechanical and organic in fact speaks to the duality in the root word “organ” as either instrument for use or component of a larger living system. The familiar Romantic opposition between mechanism and organism obscures how both machinic and organismic thinking depend on the instrumental relation of means to ends (as noted by Georges Canguilhem, Raymond Williams, and Catherine Packham).<sup>16</sup> If, in the Enlightenment account, instruments are purpose-built and operated as a means to some specific end, Romantic organicism internalized this relationship, insisting, as Immanuel Kant famously put it, that living creatures (and works of art)



display an internal organization in which part and whole, organs and body, are interlinked as the reciprocal means to each other's end. In either case, the elements of the mechanical or organic relation are deprived of agency and are defined by their ready-to-hand relation to something else—either the other elements of the body or another controlling agency. Whether explored in terms of organic or mechanical relation, the point is that Silas's absorptive weaving early in the novel evacuates his agency. Until he meets Eppie, Silas's economic position seems entirely determinative, not simply of what he does, but of how he understands the world and his position within it. For this reason, we might take Silas's early description as an emblem of the critical procedures we term deep reading. Any given feature of a novel, like any organ, might be redescribed in terms of a function that, wittingly or unwittingly, mechanically or organically, serves a purpose in the larger system and its closures. To put this differently, it is always possible to articulate a feature (or a figure) from a literary work as a means to some larger end. This is the prison house of suspicious reading (you can check out anytime you like, but you can never leave).<sup>17</sup>

The problem that Eliot is worrying in *Silas Marner* is how to articulate a more open notion of collectives that admits strong contingency—chance events that make authentic and consequential decisions possible. And insofar as robust agency also admits the possibility that people will do the wrong thing—choose actions destructive to themselves or others—the novel seeks also to explain why strong contingency doesn't lead to chaos, to understand why the social fabric generally holds despite the chaotic texture of its weave. Eliot's response to this problem takes two forms, one figurative and the other empirical.

I've been arguing that the language of weaving, net, and web—in *Silas Marner* and Eliot's fiction generally—models a more dynamic, more open, more ecological notion of form than furnished by either mechanical or organic models. As if adopting Eliot's vocabulary, a range of recent eco-theorists, including Donna Haraway, Bruno Latour, and Tim Morton, have turned to various metaphors of entanglement, from the "tentacular," to "entangled loops," to the "mesh," in order to elucidate the snarl of human and natural events.<sup>18</sup> In doing so, they avoid both a vital model of the organic integration of life and a more mechanistic or cybernetic model of regulation. Read ecologically, Eliot's seemingly pastoral tale describes the open, dynamic, and chancy processes of life, not the integrated properties of organic systems; it details the contingent relations and events that give texture to historical

experience, rather than the preconcerted harmony of a higher design or instinctive pattern of development.

Yet Eliot was not satisfied, I believe, with a notion of social texture that was merely figurative, a theory of collective form that applied to social forms alone. Eliot's fiction seeks a way of understanding the relation between social entanglement and the entanglements of life itself, the engagement between social forms and forms of life. As I have argued elsewhere, Darwin attempted to solve the problem of a more open and contingent collective by attacking the notion of organicism at its root, articulating a new theory of "pangeneses" in which reproductive agency is distributed throughout the body and its environment: a loose assemblage of more or less free agents, each plotting its own particular destiny within and beyond the life of the organism, in a constant and contingent interchange with the material world.<sup>19</sup> The body, in this view, is not an organic whole but rather a register for a contingent assembly of various conflicting (and generally inherited) characters and relatively autonomous events. Eliot similarly took the organic body as a central object of critique, but she focused on physiological accounts of bodily *development* rather than *inheritance* in her attempt to understand the contingent interaction of bodies and environment (a point made more or less obvious in the strange paternity of Silas and Eppie). As I will argue, Eliot drew on recent physiological studies, especially by Claude Bernard and George Henry Lewes, that emphasized the radical uncertainty of development and the aleatory engagement of bodies and environment, unraveling the tight-knit means-end relations of both organicism and mechanism. In such an account, outcomes are beyond the control of any individual shaping agency, an openness rooted in the way each chance encounter, each event, tangles some relations and untangles others. As Darwin turned to pangeneses in the 1860s, Eliot turned to the doctrine of *epigenesis* as a way to puzzle out the contingent texture of historical life.

## 2. EPIGENESIS AND PHYSIOLOGICAL ECOLOGY

Sally Shuttleworth has explored the extensive derivation of *Silas Marner's* carefully worked psychological vocabulary from George Henry Lewes's then-recent and popular study, *The Physiology of Common Life* (1859).<sup>20</sup> The striking feature of that study is its insistence on the continuity between the modes of experience and encounter that characterize different forms of life. Reviewing centuries of work on the processes that constitute animal life, with particular attention to theories of metabolism,



development, and neural physiology, Lewes's account argues that inter-species comparison demonstrates both the physiological interconnection between the various systems of the body and that body's imbrication in the physical world. It also asserts that, despite our various carapaces, shells, and armors, animal life is constituted through environmental contact: the search for food, nutrition, oxygen, and the general conditions that will sustain life. He personally confirmed earlier studies of respiration in chicken eggs, for instance, which proved that chicks breathe through their shells, and that their development can be stopped and resumed through the addition and removal of a thick layer of varnish (1.360). The dependence of development on environment, Lewes further explained, could also be seen in various experiments with tadpoles, which showed that their tails grow back after being cut off and, more curiously, that the severed tail itself continues to respire and develop (1.361). All such studies showed that sensitivity to the world, the interdependence of life and environment, depended on physiological processes of environmental exchange that are basic to nervous sensation.

Lewes's emphasis on the interaction between organism and environment, and his complementary emphasis on the interplay of organ and body, marks the extensive influence of Claude Bernard, both in his emphasis on physiology and the studied relation between organism, organ, and their respective milieus. The experimental study of interaction with milieu, as Lewes's many examples show, proceeds through processes of embargo often succeeded by repair—sharp breaks achieved through some sort of excision or interposed barrier—and subsequent experiments in which that contact is restored (as in the varnishing and unvarnishing of the chicken egg). *The Physiology of Common Life* is filled with examples of cutting and grafting, especially nervous tissue. In one experiment, Lewes replaced one frog's leg with another and proved (via electrical stimulus) that it could still react to signals from the frog's nervous system.

While Lewes gives extensive attention to experiments that use the scalpel to study the operation of various kinds of nervous tissue, Eliot's novel uses narrative to perform a kind of dissection and grafting of Silas's mental life, severing his connection to Lantern Yard, suturing it (awkwardly) to the rural community of Raveloe and then applying Eppie as a kind of human growth hormone. Richard Menke has given extensive attention to the way both Lewes and Eliot explored vivisection as a model for literary fiction, a collaboration born of Lewes's extensive studies of vivisection in the 1850s and '60s. As Menke explains, for both

“Eliot and Lewes, the connection between fiction and vivisection was analogical, but it was also something more”—a window into the continuities between imaginative and physical experience, between all life.<sup>21</sup> The perception of this continuity is enhanced by the tendril character of nervous tissue, which, as Lewes describes it, develops through the extension and growth of “roots” and “fibres.” This horticultural metaphor helps explain, in part, why descriptions of mental life in *Silas Marner* teem with a vernal language of “growth,” “unfolding,” “grasping,” “cutting,” “support,” the “clinging” of “fibres,” and the “bruising” of “roots.” Melora Giardetti observes that the novel’s interpretation of character depends on this vernal imagery: Silas thinks of young Eppie as “a precious plant to which he would give a nurturing home in a new soil” and struggles to care for her “searching roots,” even as Godfrey Cass “thinks with envy of the father whose return is greeted by young voices—seated at the meal where the little heads rise one above another like nursery plants.”<sup>22</sup> In Michael Marder’s view, such environmental immersion is the essence of plant life, rooted in “the entire ecological community wherein vegetal existence is inscribed.”<sup>23</sup> Such comparisons emphasize the intertwined nature of living experience and the way that plants—in their rooted engagement with the environment—remind us of an ecological entanglement that is, by turns, nurturing and destructive.

Lewes highlights this theory of environmental interaction explicitly in his discussion of what he terms the “luminous conception” of epigenesis. The theory of epigenesis (which Lewes attributes to the eighteenth-century physiologist Caspar Friedrich Wolff) argues that development of living bodies is coordinated by a cascading series of influences, encounters between the developing body and its environment: as each organ develops, it modifies and is modified by the surrounding environment, a conformation that establishes the conditions “essential, or most favourable, to the formation of the organs next in order to be developed,” and so on (2:287). Strikingly—at least for the botanical metaphors of *Silas Marner*—Wolff’s crucial initial demonstration was performed on root cuttings.<sup>24</sup> By showing that a fully differentiated root, severed from its plant, could regrow a fully functional plant—stems, leaves, and all—Wolff proved that successive generations of plants weren’t encapsulated, doll-like, within the reproductive organs of the plant (as the preformationists believed), but also that development is mediated and triggered by interaction with the environment, especially radical changes like the sudden exposure of the newly severed root to the exterior world.

Silas's grafting to Raveloe, both in the chancy way it plays out and in the necessity of Eppie's presence to its success, emphasizes the contingency of engagement with the environment, the uneasy way that organs and organisms respond to environments that are not part of their original milieu. Eliot's myriad analogies between people and other living creatures—including plants—are not really analogies in the sense we usually mean; they are not the mapping of relations between unlike things but the testing of commonalities between things related by their ecological life. In noting this, I align Eliot's account of form, by way of Lewes's physiology, with a recent physiological turn in thinking about nineteenth-century writing, including Amanda Jo Goldstein's description of the physiological poetics of the Romantic period, Nick Dames's study of the physiological dimension of Victorian thinking about reading itself, and Benjamin Morgan's exploration of the physiological aesthetics that emerged later in the nineteenth century.<sup>25</sup>

In making the case that development was triggered from without (or at the surface, "epi"), Wolff was in fact intervening in an ancient debate over the nature of form: whether form adhered as a property of specific materials (per Aristotelian hylomorphism) or was produced by the interaction between disparate elements (as Democritus and, later, Lucretius held). As Goldstein explains, "[T]he lexicon of epigenesis casts animal formation as a work of acute circumstantial dependence rather than autotelic power. Here living forms are those that tend, for better or for worse, to make an organ of experience, their developing bodies presenting a compounding archive of prior interactions with their social and material surrounds."<sup>26</sup> This emphasis on contingency and sensitivity to the world sketches a more ecological notion of form, one that aligns with Jane Bennett's definition of an ecology as an "interconnected series of parts" in which the order is not "fixed" but rather "reworked in accordance with a certain 'freedom of choice' exercised by its actants."<sup>27</sup> Epigenesis provided both Lewes and Eliot a physiological model for how experience is implicated within the world, an ultimately ecological account of the exposure of mental life that Benjamin Morgan identifies as the "outward turn" of Victorian aesthetics: "an exteriorization of mind, consciousness, and the self into networks of matter, sensation, and objects."<sup>28</sup>

Importantly, both Lewes and Eliot insisted that this exteriorization of mind, which underlined the ecological life of social experience, is mediated by sensation and feelings. Lewes emphasizes the way feeling extends the operations of mind throughout the body and mediates the body's

implication in the world (1.vii). As Lewes explains (in explicit contrast to Descartes, who claimed “all animals are mere machines”), “It will scarcely be denied that Insects, Crustaceans, and Molluscs are endowed with Sensibility. Those who deny them every vestige of intelligence will nevertheless admit that they can *feel*” (2.43–44). This means that the basis of mind—interaction with the world by means of the sensorium—is shared between the most sensitive person and the hardest-shelled animal. In her *Notes on Form*, Eliot similarly insists that form is not a process of rational cognition but rather of emotional response: “form was not begotten by thinking it out or framing it as a shell . . . any more than the shell of an animal arises before the living creature”; instead, it is “emotion” that “creates a form by the recurrence of its elements in adjustment with certain given conditions.”

In this more expansive definition of emotion and feeling, mediating our engagement with the world beyond rational cognition, I read something like the theories of affect laid out in work by Karen Barad, Mel Chen, and Brian Massumi.<sup>29</sup> Whereas early accounts of affect emphasized its status as a deeply interiorized emotional response to the world, these more intersubjective and material accounts of affect have important consequences, I think, for how we read sympathetic experience in Eliot’s fiction.<sup>30</sup> If we refract this physiological aesthetics through previous accounts of sympathy in the nineteenth-century novel (most recently, by Rachel Ablow, Rae Greiner, and Kristin Pond), sympathy can be revived as a more involved, more ecological experience that we generally give it credit for—a materially engaged affect rather than a projective cognition.<sup>31</sup> Epigenesis gave Eliot a model for the ecological possibilities of sympathetic engagement, and this helps explain Eliot’s faith in the social implications of sympathetic feeling, her sense for how such feelings precipitate social engagement and give actions a ramified political impact. Insofar as epigenesis underlines co-development as a property of the physiological (and, in Eliot’s account, emotional) immersion in the world, it sketched a way to understand sympathy itself as continuity with the environment, providing material grounds for a subject co-engaged with its objects—whether Silas’s brown earthenware jug or his foundling daughter.

The relation between Silas and Eppie twines around a central analogy that clearly articulates Eliot’s argument for sympathetic co-development and its ethical significance: “As the child’s mind was growing into knowledge, his mind was growing into memory: as her life unfolded, his soul, long stupefied in a cold narrow prison, was

unfolding too, and trembling gradually into full consciousness” (126). The language of epigenetic development could hardly be clearer. Though the analogy evidently gives greater interest to Silas’s psychological transformation, it doesn’t attribute causality; at best its sequence weakly implies Eppie’s influence. Here I wish to read across the grain of Eppie’s general function in the novel, which is almost strictly instrumental, carefully calibrated for its effect on Silas (and, to a lesser degree, on Godfrey Cass). She is the least realized of Eliot’s heroines, much closer to one of Dickens’s flat salvific portraits of an angel in the house (à la Lucy Manette of *A Tale of Two Cities*, published two years earlier) than Dorothea Brooke or even Dinah Morris. Her operation as an extension of Victorian domestic ideology seems so evident it feels hardly appropriate to call this a “deep” observation about her character. Yet Eppie’s epigenetic effect on Silas is evidently reflexive: though she crawls into his life out of the cold, he takes her up and warms her; though she reinvests him in the natural and social world, his anxious care is clearly what makes her open engagement with that world possible. Read in this light, the coordination of effect in the dynamic analogy above oscillates between a causal and a reflexive relation: “as the child’s mind was growing into knowledge, his mind was growing into memory: as her life unfolded, his soul . . . was unfolding too.”

The analogy condenses a mode of interpersonal comparison—a comparison drawn between life histories—that is characteristic of Eliot’s work and presents the ultimate possibility of sympathetic experience. We tend to imagine that such comparisons act on preexisting, autonomous agents, but it is more accurate to say the analogy here drawn between Eppie and Silas elucidates their continuous coproduction and the sympathetic events of mutual entanglement that condition their emergence and growth, their entwined “unfolding” as characters. This kind of contingent reciprocity offers a way out of the causal bind of both mechanism and organicism because it is conditioned by radical indeterminacy, a consistent uncertainty of issue that violates both the designs of instrumental reason and the organic contract by which part and whole are reciprocally bound in relations of cause and effect. As Elena Esposito explains this point, such “double contingency does not mean here simply contingency multiplied for the number of systems involved, but the circular condition in which the possibilities of each one depend on the possibilities of the other one,” a “condition of indeterminacy” in which “contingency [is] duplicated inside itself.”<sup>32</sup>

Double contingency characterizes precisely the difficulty of achieving sympathy and sustaining it for any period of time—as an incidence of fellow feeling that is truly shared—but also its radical possibility. In taking us beyond ourselves, sympathetic experience opens us to an experience that is, in Stacy Alaimo’s terms, “trans-corporeal,” and she argues that “potent ethical and political forces [can] emerge from the literal contact zone between human corporeality and more-than-human [or at least, more-than-singular] nature.”<sup>33</sup> In place of a determinate, closed relation of cause and effect, compound contingency observes our radical openness to the world and its interventions, a thoroughly ecological life that is felt as much as experienced.

### 3. QUEER FUTURES

In recognizing the epigenetic relation between Silas and Eppie, I see two important implications. First, Eppie’s oscillating relation as both a narrative function and a co-involved character marks her status in *Silas Marner* as both a figure and ground for *epi*-genesis. I mean this quite literally. No one, as far as I can tell, has remarked on the oddness of Eppie’s name and its purported derivation from “Hephzibah.” Hephzibah is a queen mentioned only in passing in the Old Testament as mother to a disastrous king. As the only character in Eliot’s fiction whose biblical namesake says nothing about her, Eppie is unique. (Silas, by contrast, was an early Christian missionary whose name has an appropriately sylvan etymology: derived from the Greek Σίλας, or “Silvanus” in Latin, Silas means “of the woods.”) Hence, if Eppie is, in the world of the novel, a material being whose growth is coordinated, epigenetically, with Silas’s development, she is also a cunningly named figure for that process and an example of the entanglement of figure and material ground that characterizes physiological poetics.

The second important implication of this interplay, which recognizes Eppie as something more than simply the cause or effect of Silas’s recuperation, is that it troubles queer critiques of the novel which treat Eppie as a vehicle for heteronormativity. The problem of Eppie and Silas’s conformity is worth weighing, both because some of the most trenchant critiques of the novel come from queer theorists but also because those critiques help illustrate what is at stake in the debate over queering ecology.<sup>34</sup> In Jeff Nunokawa’s account, Eppie perniciously disciplines Silas out of an atavistic, self-pleasuring investment in his gold, while in Lee Edelman’s reading, Silas’s salutary queerness—his



antinormativity—is banished in the novel through Eppie’s intervention and the moral imperative that he lodge his hope for the future in the reproductive possibilities of her well-being.<sup>35</sup> For Edelman, this makes *Silas Marner* an especially powerful example of reproductive futurity, the function by which the children of national politics and fiction reproduce the family and secure the political and institutional systems, consolidating heterosexual reproduction as the center of political life.

This line of argument culminates with Edelman’s famous statement of negation: “fuck the social order and the Child in whose name we are collectively terrorized” (29). But the strange thing about this line of argument, which asserts that Eppie’s kinship destroys Silas’s queerness, is that it doesn’t consider the possibility that what they coproduce queers kinship itself, producing what Judith Butler describes as “a new kinship system” that “mime[s] older nuclear-family kinship arrangements but also displaces them, and radically recontextualize[s] them in a way that constitutes a rethinking of kinship, or that turns kinship into a notion of extended community.”<sup>36</sup> Maggie Nelson, glossing Butler and her own experience of motherhood, asks: “How can an experience so profoundly strange and wild and transformative also symbolize or enact the ultimate conformity?”<sup>37</sup> Nelson’s point, as I take it, is not that her own experience of motherhood departs radically from heterosexual norms but the opposite: *in spite* of any pregnancy’s implication in the wider narratives and imperatives of reproductive futurity, each pregnancy is *also* shot through with queer experiences. These experiences include pregnancy’s social, psychological, and medical uncertainties; the basic unpredictability of what will come from the mixture of bodies and forces that pregnancy brings to bear and from the desires they elicit; and, above all, the way these experiences whipsaw between attachment to and radical alienation from expectations. Sara Ahmed’s analysis of queer phenomenology is useful here: there are few things more *orienting* than pregnancy and childbirth, but for those who go through it, there are also few things more *disorienting*.<sup>38</sup>

What seems most disorienting about Edelman’s reading of *Silas Marner* is that the various threads of the novel gather so that Eppie can say, in its ultimate statement, “Fuck Godfrey Cass and the kind of social imperative he represents.” It is true that we do not read her actual language as bearing the same polemical power: “Thank you, ma’am—thank you, sir, for your offers—they’re very great, and far above my wish. For I should have no delight i’ life any more if I was forced to go away from my father” (172). But this is only because we have lost our

feel for the way her use of “father” here marks a radical break with the paternity plot of the Victorian novel, and the convergent social and financial transformation such plots usually secure. (Here I note that, in adapting *Silas Marner* for the stage as *Dan'l Druce*, W. S. Gilbert reworked the plot so that paternity was with them all along; the Silas character is secretly Eppie’s dad.)<sup>39</sup> Eppie’s statement is radically performative because it works to redefine paternity and so changes the basic nature of what familial relation means. It effectively severs kinship from biology or, more accurately, positions kinship as a contingent form sometimes directly opposed to biological relation. Speaking socially, if not sexually, Eppie makes a queer decision. Her announcement marks her need to articulate and insist on the kinship she desires over the kinship she is expected to accept. But it is also a statement that, as Ahmed puts it, “clear[s] a space on the ground” for other queer decisions (160), at least if we agree that “other kinds of queer effects can in turn end up ‘queering’ sex” (161–62). And it articulates the family unit not as an organic biological system, not as a “unit” at all, but as a system of incidental filiation, including Dolly Winthrop and old Mr. Macey, and at some degree of further remove, the Casses themselves. *Silas Marner* articulates itself not as a system of organic *reproduction* but of ecological *coproduction*.<sup>40</sup>

Hence, Eppie’s performative speech in *Silas Marner* is not about the ratification of a wider system of meaning and responsibility but a coproduction in which speech and kinship systems interact and change. Judith Butler cautions that “‘performativity’ is not radical choice . . . [but] has to do with repetition, and very often with the repetition of oppressive and painful gender norms to force them to resignify.”<sup>41</sup> If performance is not “radical choice”—a choice once and for all—it is instead a more modest, more fragile iteration of such choices: in this case, continued acts of filiation that only appear to culminate in Eppie’s refusal. In this incidence, Eppie’s use of “father” shows all the liveliness of Eliot’s definition of form—something that never really fits present circumstances, something always changing, always adjusting to a running engagement with conditions, conditions that are themselves the complex leavings of both historical and contemporary events. Such a form is both disorienting and untimely—out of step with the present because it also encodes the complex history of such interactions and opens new possibilities. Epigenesis furnished Eliot with a way to read forms (social and natural) as the history of such adjustments, as evolving records that continually testify to the openness of encounter, the uncertainty of their place within

history, and their implication for what will come. Such asynchrony, as Elizabeth Freeman explains, opens up new possibilities, too, “the ‘sudden rise’ of possibilities lost to the past or yearning toward the future.”<sup>42</sup> A more dynamic, open, and thus ecological notion of form underlines our ability, by means of chance events and indeterminate choices, to fashion something different of the past and present. In José Esteban Muñoz’s account, such possibilities are the essence of queer utopianism: “The anticipatory illumination of certain objects is a kind of potentiality that is open, indeterminate, like the affective contours of hope itself.”<sup>43</sup>

This returns us to Mr. Macey’s puzzled question, early in the novel, about marriage ceremonies: is it the “words” (vows) or the “meaning” (intent)—or, as Mr. Drumlow puts it, the “re’ges’ter” (its record)—that “glues” a marriage? Eppie shows that familial relations, like the wider web of relations in which they are tangled, do not accrue in individual things or singular acts but in the dynamic and evolving interaction between them over time. Nothing, taken by itself (including Eppie), is the “glue.”<sup>44</sup> Like Muñoz, Eliot emphasized the unpredictability of encounter and the productivity of failure. As Muñoz explains, “Queer utopia is not just a failure to achieve normative virtuosity; it is also a virtuosity that is born in the face of failure within straight time’s measure” (178).<sup>45</sup> The entire plot of *Silas Marner* can be seen to thrive on the failure of the normative impulses that Muñoz terms “straight time”: from the biological futurity of the Casses, to Godfrey’s paternity plot, to the nixed courtship plot that, we are told, underscored Silas’s flight from Lantern Yard. Rather than organic development, *Silas Marner* points to a notion of ecological life that emphasizes the social character of all disruption and all repair.

As Karen Barad observes, all interactions, including those that produce distinctions, are dependent on other filiations, other actions of relation.<sup>46</sup> Or as Eppie puts it, in her confrontation with the Casses, “And he’s took care of me and loved me from the first, and I’ll cleave to him as long as he lives, and nobody shall ever come between him and me” (172). To “cleave,” of course, can mean both to stick together and slice apart; to maintain her coproduction with Silas she must sever the proffered paternity of the Casses; to ravel one relation inevitably means to unravel others. Sympathy is necessarily complemented by antipathy: Eppie’s compulsive engagement with Silas means also her “repulsion towards the offered lot and the newly-revealed father” (171). The world is, indeed, “twisted back’ards and for’ards.” Barad describes such relations as “intra-actions,” emphasizing the essentially coproduced,

social, ecological nature of all of our actions in the world, as she defines it, “the mutual constitution of entangled agencies.”<sup>47</sup> To recognize such “intra-action” as fundamental to ecologies is also to address the less nurturing dimension of such interactions.

I am not arguing here that the relation between Silas and Eppie marks a queer ecology—at least not in the happy way described by Timothy Morton.<sup>48</sup> In Jordy Rosenberg’s account, Morton’s queer ecology promotes a rosy picture of nature that “is representative . . . of the ontological turn more broadly” because it fantasizes a fortuitous natural world that can escape the violence of human history.<sup>49</sup> Instead, I’m suggesting that recent accounts of queer futurity, in emphasizing the full possibility of uncertain relations, have taken an increasingly ecological character.

Ecologies can be violent as well as nurturing; there’s a fair bit of luck in the fact that two-year-old Eppie cut her linen tether rather than cutting herself, or Silas. Ecologies are sustained by chance, by uncertain interactions, by violent encounters, and by repeated gestures of collaborative affiliation. This is how new communities are made and sustained. Many relations, when they are supportive, are “good enough,” in a Winnicottian way. But many assemblages are *not* good enough; they subsist without positive issue or fail to subsist at all, as the contrast between Godfrey Cass and Dunsey Cass nicely illustrates. The juxtaposition of Silas and Godfrey in this historical novella, as well as Silas and Eppie, gives a comparative historicism writ small but with wide implication. It is always the case that some assemblages work when others fail, and these two possibilities are entangled, are the substance of our encounters with the past. They constitute, in Freeman’s terms, “the value of surprise, of [sometimes] pleasurable interruptions and momentary fulfillments from elsewhere, from other times.”<sup>50</sup>

The ecological imagination of *Silas Marner*, though it focuses on the ultimately happy filiation of the Marners, does not obscure the violence and displacement that helped produce it. From the first, the novel emphasizes the intervolved relation between lives and wider conditions of scarcity and struggle. The fact that itinerant weavers are “pallid and undersized” is not simply a marker of what they do, but how they eat. Even the boys who periodically take time to tease Marner in the opening pages do so during intervals of nutting and birds’-nesting (6). Whether it’s the eggs and nuts that his neighbors use to patch their own diets, or Silas’s meager “bit of pork,” or the charitable gifts of pigs’ “pettitoes” (feet) that neighbors afford Silas after the loss of his gold, Eliot uses food

to indicate the tender entanglements of Raveloe life, the dependency of any life on both organic and inorganic conditions (38, 77). In this light, Dunstan's theft of Silas's gold and even Godfrey's treatment of Molly look predatory in the strict sense of the word, an abrogation of scarce resources (monetary and bodily) that has substantial, even deadly costs. The ecological account does not authorize an escape from the violence of human history but, rather, recognizes violence as a constitutive but not determinative condition of all history, social and natural. This is not simply a nuanced analysis of the economic foundations of rural ideology but, more fundamentally, the physiological and energetic entailments of life. To assume that these dimensions are tangential to the novel is to imagine that such narratives are saved from ecological life, that they are not part of the rough texture of living in the world.

#### 4. THE WIDER ECOLOGY OF THE PRESENT

A literature of rich contingency has never been more important as a way to break out of closed notions of our action in the world. Looking forward, this recognition feels especially pressing. The climate crisis promises a future in which human populations, in the global South, in coastal areas, and in the developing world, will continue to confront scarcity and displacement. Global warming has raised the specter of interactions between economic and environmental systems that exceed the capacity of human comprehension, much less control. As Bruno Latour poses this question: "How can we simultaneously be part of such a long history, have such an important influence, and yet be so late in realizing what has happened and so utterly impotent in our attempts to fix it?"<sup>51</sup>

*Silas Marner* suggests that being a "part of" such a history, and such a world, does not (as this phrasing seems to imply) mean we are simply components of any social or ecological hegemony. Eliot's novels explore the basic incoherence and heterogeneity of history as a central condition of agency. At key moments, we have the opportunity to choose which constellation of historical accidents we will endorse and make a life of. Such rich contingency marks how the novel commits to the messiness of history.<sup>52</sup> To think epigenetically about our relation to history means to consider actively how our interaction with the past is ongoing, immediate, and, in important moments, indeterminate and volitional. To engage history in this way is to recognize it not as a set of given formations but, rather, as something like the wider ecology of the present—a

differentiated and dynamic environment in which agents circulate both near and far, characterized by collaborations and conflict, successes, possibilities, and failures. This is one way to read the teeming agencies that make novels possible. Such alignments and calibrations are, I think, what Eliot had in mind when describing the “adjustment with certain given conditions” in her notes on form.<sup>53</sup> Indeed, Eliot famously told her publisher so, describing how Raveloe “came to me first of all, quite suddenly, as a sort of legendary tale.”<sup>54</sup> *Manner* arrested Eliot’s work on *Romola*, but it opened up, for a time, a new possibility. All writing is like this, the reaction and qualified embrace of agencies not our own. Where did this sentence come from? It’s a puzzle.

## NOTES

1. Eliot, *Poems, Essays, and Leaves from a Note-Book*, 192–93.
2. Anger, *Victorian Interpretation*.
3. Macpherson, “A Little Formalism”; C. Levine, *Forms*.
4. This formulation stands in dialogue with Nathan Hensley and Philip Steer’s call for an “ecological formalism,” one that considers Victorian literature alongside the present environmental crisis, coordinates natural and social questions, and sees form as “a means for producing environmental and therefore political knowledge.” Hensley and Steer, *Ecological Form*, 5.
5. “Belles Lettres,” 151; Stephen, *George Eliot*, 108.
6. Jordanova, *Languages of Nature*; Shuttleworth, *George Eliot*, 80, 87.
7. Miller, “Dislodging Language.”
8. There are many sources for this holism, from traditional conceptions of the nation as a social and economic body (as detailed by Catherine Gallagher), to the Romantic conception of the perceiving subject and the living body as an organic whole (explored most recently by Jennifer Mensch, Catherine Packham, and Pheng Cheah). Gallagher, *The Body Economic*; Mensch, *Kant’s Organicism*; Packham, *Eighteenth-Century Vitalism*; Cheah, *Spectral Nationality*.
9. Poovey, “Model System.”
10. My reading of Eliot as offering a critique of closed organicism—by way of epigenesis—cuts against the general consensus regarding Eliot’s organic tendencies. For an extended argument about Eliot’s organic conception of community, see Graver, *George Eliot and Community*. Eliot’s rejection of organicism can be placed in dialogue



with the various nineteenth-century revisions of organicism that John Kucich has identified, through which social theorists and novelists worked to reconcile older organic theories of society with the individualizing impetus of modernity, a compromise between “the ideal society as a whole composed of many discrete, harmonious parts . . . with increasingly fluid conceptions of social position and identity.” Kucich, “Modernization and the Organic Society,” 345.

11. Quoted in Stauffer, “Haeckel, Darwin, and Ecology,” 140.
12. Eliot, *Silas Marner*, 144. All subsequent references to this edition are noted parenthetically in the text.
13. In F. R. Leavis’s view, it is characterized by a didactic, “fairy-tale” atmosphere that communicated a “profoundly and essentially moral imagination,” while Henry James complained that the novel presented a “perception of nature much more than of art.” Leavis, *The Great Tradition*, 46. The tension between “fairy tale or science”—as Sally Shuttleworth put it—(between didactic fabula and a careful study of social pathology) persists to this day. For examples of the former, see Nunokawa, “The Miser’s Two Bodies”; Rochelson, “The Weaver of Raveloe”; Berger, “When Bad Things Happen”; Giardetti, “How Does Your Garden Grow?” For the latter, see Neill, “Primitive Mind”; Stewart, “Genres of Work”; Pond, “Bearing Witness”; Willis, “*Silas Marner*.” I allude here also to David Higdon’s study of Methodist lot drawing as a context for the novel, “Sortilege in George Eliot’s *Silas Marner*.”
14. G. Levine, “Protestant Ethic,” 395.
15. Bonaparte, “Carrying the Word of the Lord,” 48. Raveloe is based on Bulkington, a village that neighbored Eliot’s childhood home in Warwickshire. The region was known in Eliot’s time as a center for ribbon manufacturing. M. Ashton, *Bulkington Memories*, 14. On the ribbon trade, see discussion in R. Ashton, *George Eliot*, 31, 34; Dodge, *Silken Weave*.
16. Canguilhem, *Knowledge of Life*; Williams, *Culture and Society*; Packham, *Eighteenth-Century Vitalism*.
17. This is the central protocol of what Paul Ricoeur famously termed the hermeneutics of suspicion. Rita Felski, glossing Ricoeur, identifies suspicious reading with the skeptical systems of Marx, Freud, and Nietzsche. Felski, “Critique and the Hermeneutics of Suspicion.” But its most important recent formulation was provided by Louis Althusser, who elaborated Marx’s discussions of ideology in terms of the Freudian study of dreams. Althusser’s account of

ideology internalized the relation between means and ends in Marxism. If Marx's account of ideology was tacitly instrumental (ideology serves to mystify economic conditions), Althusser's ideology reorganized the entire system, so that base and superstructure stand reciprocally as the means to each other's ends. As with any organicism, this creates a crisis of agency and control. If suspicious reading is famously a closed system of interpretation, as later explored by Jerome McGann, Terry Eagleton, and Fredric Jameson, this closure rests on an organic conception of ideology's function.

18. Haraway, *Staying with the Trouble*; Latour, *Facing Gaia*; Morton, *Ecology Without Nature*.
19. Griffiths, "The Fertile Darwins."
20. Shuttleworth, *George Eliot*.
21. Menke, "Fiction as Vivisection," 619.
22. Giardetti, "How Does Your Garden Grow?"
23. Marder, *Plant-Thinking*, 183.
24. Lewes had read Wolff's treatise in the original; he quotes it in Lewes, *The Life and Works of Goethe*, 142n.2.
25. Goldstein, *Sweet Science*; Dames, *The Physiology of the Novel*; Morgan, *The Outward Mind*.
26. Goldstein, *Sweet Science*, 40. For more on Erasmus Darwin's engagement with epigenesis, see Griffiths, "Distribution of Romantic Life."
27. Bennett, *Vibrant Matter*, 97.
28. Morgan, *The Outward Mind*, 6. For additional accounts of Victorian investments in material aesthetics, realism, and character, see Tondre, *The Physics of Possibility*; Brilmyer, "Plasticity."
29. Barad, *Meeting the Universe Halfway*; Chen, "Toxic Animacies, Inanimate Affections"; Massumi, *Parables for the Virtual*.
30. Eve Sedgwick, adopting the affective theories of Silvan Tompkins, emphasizes that affects (like drives) are "thoroughly embodied," even if they might be directed at a range of objects. Sedgwick, *Touching Feeling*, 18.
31. From its earliest use (as Ablow notes), sympathy had also been used to describe the coordinated response between living systems and the basic affinities of matter; the first two definitions in the *OED* single out a "relation between two bodily organs or parts . . . such that disorder, or any condition, of the one induces a corresponding condition in the other" as well as the "(real or supposed) affinity between certain things." Rather than a system of projection, sympathy provided a social experience continuous with both sympathetic magic and

- elective chemistry. Ablow, *The Marriage of Minds*; Greiner, *Sympathetic Realism*; Pond, "Bearing Witness in *Silas Marner*."
32. Esposito, "An Ecology of Differences," 291.
  33. Alaimo, *Bodily Natures*, 2.
  34. The introduction to the current issue gives a more extended sketch of this debate.
  35. Nunokawa, "The Miser's Two Bodies"; Edelman, *No Future*. Further references to *No Future* are noted parenthetically by page number.
  36. Kotz, "The Body You Want," 84.
  37. Nelson, *The Argonauts*, 13–14.
  38. Ahmed, conclusion to *Queer Phenomenology*.
  39. Knapp, "George Eliot and W. S. Gilbert."
  40. For more on queer kinships, see Butler, "Is Kinship Always Already Heterosexual?"; and Halberstam, "Forgetting Family."
  41. Kotz, "The Body You Want," 84.
  42. Freeman, *Time Binds*, 171.
  43. Muñoz, *Cruising Utopia*, 7. All subsequent references to this edition are noted parenthetically in the text.
  44. The continuity between Muñoz's conception of queer utopianism and Eliot's ecological vision should not be too surprising, insofar as Muñoz is drawing on Ernst Bloch's account of utopian hope. If the emphasis Bloch (and, later, Muñoz) places on the "not quite conscious" seems eerily similar to Eppie's "trembling gradually into full consciousness," this is in part because both Bloch and Eliot are drawing on nineteenth-century theories of development that aligned the subject's development with vital formation. The implication of vital development might seem to fall back on a unitary notion of organic development, the teleology that, in Pheng Cheah's analysis (*Spectral Nationality*), links the *Bildungstrieb* and nationalism. Muñoz described this as the problem of "straight time" (22); Eliot, as "sympathy ready-made." Eliot, "The Natural History of German Life," 144.
  45. In a similar vein, I have previously argued that productive knowledge in a novel like *Middlemarch* is produced from error, from moments in which presumed understanding fails and motivates fresh insight. Griffiths, *The Age of Analogy*, chap. 4.
  46. Barad, *Meeting the Universe Halfway*, 141.
  47. Barad, *Meeting the Universe Halfway*, 33.
  48. Morton, "Guest Column."
  49. Rosenberg, "The Molecularization of Sexuality."
  50. Freeman, *Time Binds*, 59.

51. Latour, "Agency," 1–2.
52. Note that this is a really different view of what choice means than set out by Evan Horowitz in "George Eliot, the Conservative."
53. Ryan Fong, drawing on the work of Erving Goffman, has argued that such "frame alignment" is central to how narrators set characters into relation within the nineteenth-century novel." Fong, "The Afterlife of Forms."
54. Quoted in Milner, "Structure and Quality in *Silas Marner*," 718.

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