

## **“Unexampled eyes”: Epochal Old Age and the Geological Imaginary**

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The nineteenth century was an age preoccupied by considerations of the earth’s antiquity. Geologists like Charles Lyell and James Hutton were foremost in mapping the earth’s old age, and their writings did much to stimulate an unprecedented (and sometimes deeply disturbing) apprehension of epochs thoroughly removed from human experience. We argue that a geological vision of the earth’s age is very much at stake in George Eliot’s *Silas Marner* (1861), a novel that superimposes the workings of geological time onto one man’s ageing body. Eliot’s novel therefore provides a case study of the geological imaginary, by highlighting the multilayered nature of “age” that continues to spur twenty-first century artistic initiatives.

Le XIX<sup>e</sup> siècle est marqué par le grand intérêt qu’il porte à l’ancienneté de la planète Terre. Les écrits géologiques de Charles Lyell et James Hutton, en particulier, ont contribué à établir une cartographie du grand âge de la Terre ; ils ont aussi beaucoup fait pour le développement de nouvelles approches — approches parfois profondément troublantes — à des époques jusque-là considérées comme n’ayant pas trait à l’expérience humaine. Nous soutenons que la vision géologique de l’âge de la terre est l’un des principaux enjeux du roman de George Eliot *Silas Marner* (1861), un texte qui superpose au vieillissement du corps d’un homme les rouages du temps géologique. Le

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roman d'Eliot se prête ainsi à une étude de cas sur l'imaginaire géologique, permettant de mettre en évidence l'aspect stratifié de « l'âge » qui continue de donner leur impulsion à bon nombre d'initiatives artistiques au XIX<sup>e</sup> siècle.

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

The result, therefore, of our present enquiry is, that we find no vestige of a beginning—no prospect of an end.

James Hutton, *Theory of the Earth* (1788)

In the future, we are the ancient aliens.

Trevor Paglen, *The Last Pictures* (2012)

Not so long ago, an astronaut sang a song on board a low-orbiting habitable satellite. Sound familiar? For a few days it was. Commander Chris Hadfield's rendition of David Bowie's "Space Oddity," slightly revised, was instantly transmitted across the same luminous planet that floated placidly in the background of this viral video.<sup>1</sup> In 2013 such images are apt to delight, charm, perhaps even impress. But they fail to startle. The former immensity of this final frontier has been endlessly regionalized through decades of amplified stargazing thanks to NASA *et al.*, the many Star franchises (including Wars and Trek), and innumerable techniques for capturing, composing, and consuming what was once a vast region incommensurable to the human imagination. The intervening years following Neil Armstrong's immortalization of the phrase "one small step" have shown how the alien has been reconfigured over time to appear familiar. In 1969, three short months were sufficient for Bowie to release a ballad describing voices carried on spacedust between an orbiting tin can and a radio receiver, transforming a previously sublime and startling image (the human in space) into the familiar dynamic of dialogue ("Ground Control to Major Tom").<sup>2</sup> What was once a blank expanse has now become yet another familiar backdrop: some attractive

<sup>1</sup> Chris Hadfield, "Space Oddity" (May 12, 2013) [www.youtube.com/watch?v=KaOC9danxNo](http://www.youtube.com/watch?v=KaOC9danxNo) (accessed September 9, 2013).

<sup>2</sup> Apollo 11 landed on the moon on July 20th, 1969, and David Bowie released his single on November 4th.

desktop wallpaper, fodder for a YouTube hit, or the territory traversed on a one-way trip to Mars.<sup>3</sup>



We are entering the age of celestial tourism: astronauts tweet from space while opera singers outbid NASA for a seat on the Russian space station. This normalization of space would appear to widen the gulf between our modern selves and a relatively recent past in which the operations of our own planet were only just being mapped by the nascent fields of geology and evolutionary biology. But when Bowie's song weaves together the disproportionate threads of human experience and the dwarfing immensity of the cosmos, it participates in a tradition of writing that seeks to record human life in relation to forces not only vaster than itself, but utterly indifferent to it. Whereas narratives of space have tended to reach forward into the future, into enterprising dreams of human knowledge, technology, and experience, stories of the geological and evolutionary operations of our own planet have generally grappled with ideas of the deep past. Indeed, the earth's immense antiquity—its great old age—was to nineteenth-century literature what space travel has been to twentieth- and twenty-first-century popular culture. Where space programs (both cinematic and civic) evince a human capacity to remember forward into the future, peopling and historicizing the *not-yet-inhabited*, narratives of the nineteenth century frequently record an effort to recover what is forgotten:

<sup>3</sup> We acknowledge the work of essential intellectual predecessors—Galileo Galilei, Isaac Newton, and Jules Verne, to name just a few—who pioneered the exploration of space and the astronomical imaginary. What we argue here is that the immensity of space did not, and could not have, occupied the daily run of the popular imagination until this otherwise unreachable frontier could be traversed via figurative and physical means of communication.

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

the sprawling lost eons of organic and inorganic flux on and of the Earth, our uninhabited past. As is so often the case, a look at the operations of our past sheds light on the systems of our present. So we turn to the comparatively recent past of the nineteenth century, which saw so many attempts to understand the human in relation to what Isobel Armstrong calls “the huge, impersonal movement of geological time.”<sup>4</sup>



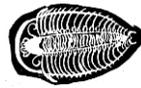
Long before the unrepresentable immensity of space was reduced to apparent familiarity, the Earth itself provided a grueling case study of epochs thoroughly removed from human experience. As the early nineteenth-century geologist Charles Lyell noted in his opus *Principles of Geology* (1830-33), it was James Hutton who, in 1788, first confronted the world with the task of conceiving “the immensity of time required for the annihilation of whole continents by [an] insensible . . . process,”—in other words, by a gradual and ongoing process of terrestrial upheaval and subsidence.<sup>5</sup> And it was Hutton’s claim, that his investigations of past changes in the earth’s crust showed “no vestige of a beginning, no prospect of an end,” that introduced his audience—at first only members of a small scientific community, and then, through Lyell, of the broader reading public—to the concept of deep time.<sup>6</sup> As Lyell puts it,

<sup>4</sup> Isobel Armstrong, *Victorian Poetry: Poetry, Poets and Politics* (London: Routledge, 2005), 248.

<sup>5</sup> Charles Lyell, *Principles of Geology* (Chicago: University of Chicago Press, 1990 [1830]), 63.

<sup>6</sup> James Hutton, *The Theory of the Earth* (Darien, Connecticut: Hafner, 1970 [1788]), 96. The phrase “deep time” was first applied to geological matters by John

Hutton's views of "the immensity of past time, like those unfolded by the Newtonian philosophy in regard to space, were too vast to awaken ideas of sublimity unmixed with a painful sense of our incapacity to conceive a plan of such infinite extent."<sup>7</sup> After Lyell, the reading public was challenged to find means of conceptualizing the temporal expanse required for the gradual process of stratigraphic decay and reproduction on our rocky orb. From the evidence afforded by the geological record and embedded fossil remains, Lyell "stretched time backward an unknown and [largely] irrecoverable extent," transforming our young planet (generally accepted to be about 6000 years old) into an ancient and dynamically fluctuating mass.<sup>8</sup> From Lyell's systematization of geological time to Charles Darwin's theory of transmutation, the nineteenth-century reading public was repeatedly confronted not only with the yawning immensity of earthly ages past, but with their inhospitability to human efforts to imagine them.



In an age of huge industrial, imperial, and scientific achievement, the human lifespan was suddenly shown to be minuscule in the face of planetary flux. Nineteenth-century fiction offers an arresting response to the distended temporality foisted upon the public by Lyell and Darwin. There we see major authors (George Eliot, Jules Verne, Thomas Hardy) struggling to find the

McPhee in his *Basin and Range* (New York: Farrar, Straus & Giroux, 1981), see p. 127 and elsewhere.

<sup>7</sup> Lyell, *Principles of Geology*, 63.

<sup>8</sup> Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction* (Cambridge: Cambridge University Press, 2000), 70.

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

words to capture the immensity of the earth's antiquity by mapping planetary old age onto the human soma. In what follows, we delineate one incipient moment in the history of giving words to temporal processes that were—and in important ways still remain—profoundly alien to human experience. In her letters, George Eliot praised Lyell's work, and her literary writings are steeped in the geological imaginary that shaped the popular consciousness of deep time.<sup>9</sup> The yawning immensity of Lyell's vision of the earth's age, we argue, is very much at stake in Eliot's *Silas Marner: The Weaver of Raveloe* (1861), a novel that situates the processes of geological time onto one man's body by staging the effects of deep time as a human drama of ageing. To introduce the geological concerns of Lyell and Hutton into the human equation, Eliot's novel refracts the human lifespan, and particularly older age, through a geological lexicon, employing geologized signs and signifiers—the interwoven motifs of species extinction, fossilization, and vestigial landmarks of the obsolete past—as a means of mapping “age” in both the physiological and geographical senses. By emphasizing Silas's curious embodiment of older age, Eliot transmutes a new cultural awareness of the world's old age onto the comparably familiar experience of human ageing. Bodily senescence becomes both a condition of possibility and a conceptual tool for making the old age of the world representable to the human imagination.



<sup>9</sup> George Eliot, *The George Eliot Letters*, 9 vols., ed. Gordon S. Haight (New Haven and London: Yale University Press, 1954-55), 8.

*Silas Marner* opens into precisely this nexus of the geological, human, and literary imagination of time. Immediately its setting is obliquely described as belonging to a “far-off time”<sup>10</sup> before a clarification, some pages later, that the story takes place in “the early years of this century,” and more specifically in a fictional village called Raveloe, “where many of the old echoes lingered, undrowned by new voices.”<sup>11</sup> The indefinite past of Eliot’s novel is peopled with rustic “peasants of old times,” and “certain pallid undersized men, who, by the side of the brawny country-folk, looked like remnants of a disinherited race.”<sup>12</sup> From the pale men who emerge from “deep in the bosom of the hills,” to the rustic folk of the region who “might be seen in districts far away,” to the town that draws them all together, every figure established at the outset of Eliot’s novel is in some way dislodged from the present tense—both its own and the narrator’s.<sup>13</sup> The “far-off time” of the story, coupled with the image of Raveloe reverberating with the sounds of the past, lends a discernably timeworn cast to the text’s opening frame. Of course, a novel set in an undefined past participates in familiar literary genres (a “far-off time” reproduces the “once upon a time” of the fairytale or fable), but Eliot immediately makes clear her refusal to dwell in familiar territory by doubly dispossessing these “alien-looking”<sup>14</sup> quasi-extinct remnants in the palpable air of “vagueness or mystery” that already suffuses the figures peopling this indeterminate landscape.<sup>15</sup> Time is mobilized as a framing concept and as a spectral protagonist, ever present but never fully realized. In effect Eliot’s emphatically terrestrial setting—both of the novel and its fossilized

<sup>10</sup> George Eliot, *Silas Marner* (Oxford: Oxford University Press, 1996), 3.

<sup>11</sup> *Ibid.*, 4, 5.

<sup>12</sup> *Ibid.*, 3.

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

protagonist, as we shall see—attempts, through the terms of the geological imaginary, to make remote ages hospitable to the experience of its human reader.



This terrestrialized opening serves to encase Eliot’s eponymous protagonist as well. As an embodied instance of this remnant species, Silas Marner redoubles the ancient echoes that sound throughout Raveloe in the form of his untimely agedness. Early on we read that the weaver “was so withered and yellow, that, though he was not yet forty, the children always called him ‘Old Master Marner.’”<sup>16</sup> Elsewhere, Silas’s physicality is dramatized as a scarcely revived kind of rigor mortis, a semi-inanimate existence that gives him the likeness of “a dead man come to life again.”<sup>17</sup> As the weaver’s activity progressively “narrow[s] and harden[s] itself more and more,” his body bears witness to two orders of elapsing time: the human scale of chronological age-years overlain by the ossifying effects of deep, earthly epochs.<sup>18</sup> Eliot’s superimposition is no mere flight of fancy. In 1853, the English physician Barnard Van Oven spoke of older age in exactly such terrestrial terms: “Man begins in a *gelatinous*, and terminates in an *osseous* condition”—an arresting maxim later referenced in a major treatise written by Eliot’s life partner, George Henry Lewes, one year before *Silas Marner* was published.<sup>19</sup> Elsewhere, this interfusion of the geological and literary imagination of old age appears in

<sup>16</sup> *Ibid.*, 19.

<sup>17</sup> *Ibid.*, 6.

<sup>18</sup> *Ibid.*, 19.

<sup>19</sup> As cited in George Henry Lewes, *Physiology of Common Life* Vol. 2 (London: Blackwood and Sons, 1860), 368 (Lewes’s emphasis).

the writings of William Wordsworth, Eliot's beloved literary predecessor. In his poem "Resolution and Independence" (1807), Wordsworth's youthful speaker conveys the profound alterity of human senescence by remarking its affinity with the inorganic realm.<sup>20</sup> "As a huge stone is sometimes seen to lie . . . | Such seemed this Man, not all alive nor dead, | Nor all asleep—in his extreme old age."<sup>21</sup> For the non-old subject of Wordsworth and Eliot's time—and of our own profoundly anti-ageing moment as well—contemplating one's own older age may seem as far-flung and displaced a circumstance as the earth's deep, uninhabitable past.



Eliot rewrites the alien paradigm of the world's old age onto the human body by weaving together the incommensurate scales of geological and human temporalities. In the eyes of his fellow Raveloveans, Silas's alien nature is not simply a product of his own spatial displacement—he is a stranger from the undefined "North'ard"—but also, and most compellingly, because his body bears the strange but legible stamp of a profoundly alien place and age:

<sup>20</sup> Lest we dismiss this as a quaint relic from a bygone time, the tendency to view older age as "not all alive nor dead" retains its noisome traction. Contemporary hospital culture regularly makes use of similar figurations of age-hardening; consider the pejorative label "rock" applied to chronically ill, bed-ridden, often elderly inpatients, while "the rock garden"—frequently used with reference to geriatric care wards—powerfully connotes the speaker's sense of those patients' utter inertness. In these cases, the aged body is viewed in terms of the absolute subjugation of organic life by lifeless, abject stoniness, a disturbingly corporealized reiteration of what Noah Heringman has evocatively called the "trauma of solidification." For more on the relationship between early nineteenth-century writing and geology, see Heringman's *Romantic Rocks, Aesthetic Geology* (Ithaca: Cornell University Press, 2004), 103.

<sup>21</sup> William Wordsworth, "Resolution and Independence," *The Poetical Works of Wordsworth* (London: Oxford University Press, 1960), ll. 57, 64-65.

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

“[T]hose scattered linen-weavers—emigrants from the town into the country—were to the last regarded as aliens by their rustic neighbors.”<sup>22</sup> Eliot’s transliteration of geological signs into corporeal experience takes further, specific forms. Raveloe’s gradual recession into the waves of history evinces both a literal and figurative “senile topography,” which describes “the configuration of land which prolonged degradation has reduced nearly to a base-level plain.”<sup>23</sup> Likewise, Silas’s prolonged memory loss is expressed through a similar geological process, most poignantly in his eroding recollection of ancient homeopathic medical remedies: “the once familiar herbs: these too belonged to the past, from which his life had shrunk away, like a rivulet that has sunk far down from the grassy fringe of its old breadth into a little shivering thread, that cuts a groove for itself in the barren sand.”<sup>24</sup> Emphasizing the opacity of Silas’s memory, Eliot interweaves the topographics of his life with that of an aged earth whose own deep history remains inscrutable to the human eye of experience. But in keeping with Lyell’s theory of uniformitarianism—in which the forces governing past changes in the earth’s strata are understood to be ongoing in the present moment—Eliot aligns Silas’s winnowing life with actual processes of terrestrial flux.<sup>25</sup> As the weaver’s body withers, so the rivulet erodes its surroundings. Through Silas, Eliot textualizes the impalpable flux of

<sup>22</sup> Eliot, *Silas Marner*, 4.

<sup>23</sup> *Oxford English Dictionary*. 2nd ed. (Oxford: Oxford University Press, 1989).

<sup>24</sup> Eliot, *Silas Marner*, 21.

<sup>25</sup> As James Secord notes in his introduction to the *Principles*, Lyell’s sustained argument is that “We can see [...] forces adequate to produce the Andes and the Alps, especially if the cumulative effects of time were taken into account.” Lyell, *Principles of Geology*, xvii.

geoterrestrial senescence by bringing the operations of Lyell’s “immense lapse of ages” into the observable present.<sup>26</sup>



The overtly geological contours of Silas’s body are further reiterated through the somatic symptoms of catalepsy and near-blindness. Suffering from fits of “mysterious rigidity,” Silas’s cataleptic trances repeatedly give him the aspect of a calcified life-form as he lapses out of episodes of temporary petrification.<sup>27</sup> From the novel’s very first sentence, Eliot excavates Silas from Raveloe’s terrestrial casings as if to dramatize not only the death spasms of his species (the master weaver is soon made obsolete by the technologies of the industrial age) but the very happening of fossilization, by inscribing onto her protagonist’s body an accelerated geological timescale. Both Silas Marner and *Silas Marner* therefore serve as technologies for witnessing imperceivable change, as an apparatus of observation that sutures together the narrow scope of human experience and the epochal reach of natural law. Indeed: Silas’s story occupies a precisely measured present. Eliot pauses with the weaver for exactly sixteen years, tracing a protracted “stage of withering” in his life even though, at the outset of the novel, we learn that he is “not yet forty.”<sup>28</sup> The burden of this alien task of observation is evinced by Silas’s “strange straining eyes”<sup>29</sup>—and again, by Eliot’s arresting mention of his “unexampled eyes”—

<sup>26</sup> *Ibid.*, 147.

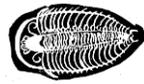
<sup>27</sup> Eliot, *Silas Marner*, 8, 6.

<sup>28</sup> *Ibid.*, 19.

<sup>29</sup> *Ibid.*, 7.

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

that seem themselves embodied portals into the operations of the deep past and whose vague, searching look is a continual reminder that this alien remnant dwells uneasily in an age rushing to embrace its futurity.<sup>30</sup> The weaver's stultified sight is at once the product of and defense against an overwhelming burden of temporality, a bodily state inseparable from his own ageing that bespeaks his profound disengagement with the conventional, age-averse perspective of human temporality.



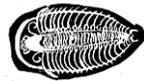
All life, Eliot's narrator remarks, "is spread over a various surface, and breathed on variously by multitudinous currents, from the winds of heaven to the thoughts of men, which are forever moving and crossing each other with incalculable results."<sup>31</sup> *Silas Marner* is a case study of exactly this compulsion of the present to reach toward the incalculable: be it the ancient age of the earth or the weirdly elusive human drama of ageing. Unlike vexing organic and inorganic fossil remains—of which, Lyell writes, "sometimes only obscure or unintelligible impressions are left," or whose "former existence is in many cases merely revealed to us by the unequal weathering of an exposed face of rock"—*Silas Marner* imagines into being a character who embodies and makes visible the operations of geological time.<sup>32</sup> By utilizing the semi-removed past to talk about days to come—the future perfect's enunciation of how life back then will have one day become the remnants of another epoch—Eliot, like her weaver, shuttles between paradigms at once geological and mortal. The novel's aesthetics of anticipation effectively draw into focus the singularity of

<sup>30</sup> *Ibid.*, 40, 3.

<sup>31</sup> *Ibid.*, 21.

<sup>32</sup> Lyell, *Principles of Geology*, 147-8.

the present age: an unwitnessable moment captured, a freeze-frame exposed and shuttered. Perhaps that is the reason why, by novel's end, Silas's eyes possess "a less vague, a more answering gaze; but in everything else one sees signs of a frame much enfeebled by the lapse of the sixteen years."<sup>33</sup> What Eliot has envisioned through Silas is nothing less than the sublime tenuousness of the present: a human age that, like Silas, remains largely insensate to the incalculable epochs of past and future alike.



But perhaps all this is the remnant of a bygone age—a quaint curiosity, like the Dodo, in the precipitous Extinctathon of western modernity? As a means to our end, we advance one contemporary instance of an aesthetic initiative with an eye to the deep temporality of an extra-terrestrial humanity. *The Last Pictures* (2012) by visual artist and geographer Trevor Paglen is a public art project that exists at the aesthetic and technological nexus of the geological imaginary. *The Last Pictures* comprises one hundred photographs depicting scenes of modern human history, etched onto an ultra-archival silicon disc and launched into orbit 24,000 miles above the earth onboard the Echostar XVI satellite in October 2012.<sup>34</sup> Like Eliot's thought experiment, which superimposed the human lifespan onto an unprecedentedly vaster timescale, *The Last Pictures* engages with the human time of art as it functions "as both a

<sup>33</sup> Eliot, *Silas Marner*, 133.

<sup>34</sup> Trevor Paglen, *The Last Pictures* [www.creativetime.org/projects/the-last-pictures/](http://www.creativetime.org/projects/the-last-pictures/) (accessed September 9, 2013).

## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

time capsule and a message to the future.”<sup>35</sup> Whereas Eliot took Silas Marner as the last of a disinherited race, interweaving this existential belatedness with the biomarkers of human ageing, Paglen’s textualization of the passing present is cast out and toward the unseeable, unthinkable, unintelligible reader of the future. From the immense hostility of earthly ages past to the titanic undertakings of the space age itself, these kindred districts of the sublime have provoked a cognate desire: to imagine and anticipate a human age that occupies, in a state of perfect banality, inscrutably far-flung epochs. Paglen’s emphatic reminder that our present will one day become the vestigial past is the artistic descendant of Eliot’s radically estranged subject of the geological imaginary. “In the future,” Paglen writes, “we are the ancient aliens”—the satellite, and its maker, now fossilized, like the weaver’s flying shuttle.

**Authors’ Note:** We include this image (a hand-cut block print of a fossilized trilobite, by Pascale McCullough Manning) to underscore the connections between Silas Marner’s embodied older age and the specter of extinction suggested by his peculiar malady. Not only does the trilobite evoke Silas’s periodic calcifications, but the fossil, whose eyes are ever preserved in their absence, serves as a reminder that its testimony of the past to which it bore witness is only ever partial. In this way the trilobite stands in for all those “ancient aliens” that were, or will be, enlisted by artists from Eliot to Paglen and beyond.

<sup>35</sup> “Trevor Paglen’s *The Last Pictures* is going into outer space this fall” (August 7, 2012) [www.creativetime.org/blog/2012/08/07/trevor-paglens-the-last-pictures-is-going-into-outer-space-this-fall/](http://www.creativetime.org/blog/2012/08/07/trevor-paglens-the-last-pictures-is-going-into-outer-space-this-fall/) (accessed September 9, 2013).

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## EPOCHAL OLD AGE AND THE GEOLOGICAL IMAGINARY

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