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“OUT OF THE MOTHER . . . AND HOME TO THE MOTHER”:
ESSAYS ON MEDIEVAL LITERATURE AND CLIMATE CRISIS

By

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B.A. English, University of Montana, Missoula, Montana, 2013

Thesis

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“Out of the Mother . . . and Home to the Mother”: Essays on Medieval Literature and Climate Crisis

Chairperson: Dr. Ashby Kinch

The following thesis consists of three literary analyses and is prefaced by a reflective essay that outlines the theoretical underpinnings of the analyses. In the first essay, I argue that Geoffrey Chaucer’s *House of Fame* represents anthropogenic change reflective of the historical reality of adaptation to dynamic climates. In the second essay, I argue that reading manuscripts like the BL MS Harley 2253 facilitates psychological expansion beyond the human ego—a key ethical principal in grappling with modern dilemmas. In the third essay, I argue that the *Canon’s Yeoman’s Tale* reveals a hereditary pattern that un masks the deleterious trajectory of Montana’s Bitcoin mines.
“Out of the mother . . . and home to the mother”:
Essays on Medieval Literature and Climate Crisis

"While this America settles in the mould of its vulgarity, heavily
thickening to empire,
And protest, only a bubble in the molten mass, pops and sighs out, and
the mass hardens,
I sadly smiling remember that the flower fades to make fruit, the fruit
rots to make earth.
Out of the mother; and through the spring exultances, ripeness and
decadence; and home to the mother."
--Robinson Jeffers, “Shine, Perishing Republic”

The essays included in this portfolio are in large part responses to a question my
advisor raised during a conversation about what the field of Medieval Studies offers in
response to ecocritical calls to action. I admit that this question stumped me. At the time,
I was anticipating a career in academia where I hoped to contribute to an intersection of
those fields. I hoped to find a way to articulate the reasons behind my preoccupation with
medieval texts that would also make my time studying them feel timely and meaningful.
In graduate seminars that examine ecocritical theory and writing, one encounters many
calls to action. These seminars are the site of philosophical and ethical development; of
communicative practice; of analytical, critical, and systems-thinking cultivation.
However, these seminars also kindled dread within me. I was submerged within a
growing sense of being surrounded by and implicated in doomed ecologies. The research
and writing behind these essays stem from my hope that I can find a sort of antidote to
dread. As I have made my arguments, I have sought solace from apocalyptic worry. I
argue that Chaucer’s House of Fame represents anthropogenic change reflective of the
historical reality of adaptation to dynamic climates; that reading manuscripts like the BL
MS Harley 2253 facilitates expansion beyond the human ego—a key ethical principal in grappling with modern dilemmas; that the Canon’s Yeoman’s Tale reveals a hereditary pattern that unmask... of Montana’s Bitcoin mines. My concern about living in and perpetuating poisoned ecologies has not abated; but I have been reassured about the adaptive capabilities of humans and environments, the ephemerality of individual consciousness and the continued material existence of soil. Most of all, I have been reminded that I want to spend my life among the ferns and birds, touching the soil, and finding ways to keep the positive fumes of creative work flowing into the world.

In his short poem “The Former Age,” Geoffrey Chaucer imagines an ancient past, perhaps a pre-lapsarian past, in which humans have not yet developed the technology of agriculture and war. These first, imagined humans forage for fruit, drink from wells, and little more. Chaucer is more preoccupied by the anxiety that comes with a lack of technology that he attributes to his predecessors. A catalog of negations follows the brief description of the “blisful lyf, a paisible and a swete” (ll. 1):

Yit nas the ground nat wounded with the plough,

... 

No man yit knew the forwes of his lond,

No man the fyr out of the flint yit fond,

Unkorven and ungrobbed lay the vyne; (ll. 9-13)

Ignorance, it seems, preserved the bliss of the beginning of the ecological world of which humans were a part. As Chaucer’s growing list of worldly evils grows, he demonstrates that human history is not pristine. It is unlikely that such a blissful world ever existed.
Certainly, when one considers the strife and violence, the complicated interactions and existences beyond the human scope of the “peple” (ll. 2) of the former age, such a pure ecosystem can never have existed. The fire may not have been accessible in the flint, but its molten heat made the flint. The ground may not have been wounded by the plow, but the fertility of the soil was inhumanly cultivated by cycles of rotting, wounded, dying plant and animal matter. Jeffrey Jerome Cohen and Lowell Duckert, in Elemental Ecology, write that “The rhetoric of pollution fails when ‘purity’ itself is put under pressure.”¹ They include within Empedocles’ elemental group both love and strife as essential forces of ecosystems. If there is no pure beginning, then there is no hope of return to an untroubled past as a solution for present pressures. While I agree with Lynn White² that romanticizing the past holds no hope as a solution to climate crisis--or any other present problem--returning to the past does yield fruit. Learning to know the furrows of the land requires thinking and feeling beyond its use-value as a means of subsistence or as a collection of exploitable resources. Instead, that sort of intimacy means excavating the layers of matter that reveal the inextricability of human fate from the fate of the vine or the flint and the tenuous, mortal flicker of the human ego within that much larger and indifferent framework.

Stephanie LeManager, describes this sort of intimacy with the body of the earth as the “ultradeep.” Referring to offshore oil drilling and fracking, she writes that going ultradeep “court[s] significant and sometimes catastrophic risk. . . . Ultradeep also

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implies an unprecedented devotion, even love.” Each sojourn through the stratigraphy of history and historical literature often does feel like dangerous activity. As I’ve revisited each of the essays in this portfolio, the consequences for my own misreadings and lapses in critical attention have felt acute. The 14th century is at once an unreachable country that can be interpreted continually in the image of the 21st and, at the same time, one that has its telling, specific, and material details. I am sure that I have missed some despite my devotion to clear sight.

Environmental historian Richard Hoffman’s scholarship has been a source of many of those details. His essay “Homo et Natura” woke me to the possible intermingling of scientific and literary studies and his book, *An Environmental History of Medieval Europe*, provides the granular detail that has helped me piece together ‘‘Tyl hyt was at the worldes ende’: Anthropogenic Materialities in Chaucer’s *House of Fame.*’’ This essay was my first attempt to return to Chaucer’s poetry for a perspective on the longue durée of anthropogenic changes within ecosystems. Under a first revision, this essay took the form of a paper I presented at the New College Conference on Medieval and Renaissance Studies in the spring of 2018 under a different title and with a more simplistic theoretical approach-- “Reading Anthropocene in Chaucer’s *House of Fame.*” Since then, I have revised it again, attempting to investigate further the impact that reading has on ecological thinking. Influenced by Stacy Alaimo’s theory of “trans-

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corporeality”⁴ and Iovino and Opperman’s theory that materials are readable as texts,⁵ I read the House of Fame in terms of Chaucer’s engagement with the material impact of human cultural production. Rebecca Davis’s analysis of Chaucer’s use of waterways suggested the course for my own analysis of the poem.⁶ Instead of waterways, I read in the poem’s airy material, evidence of Chaucer’s concern about the violence of poetic creation and tradition. I also contend that his poem offers an ethic of adaptability and attention to vulnerability as a means for the survival of human culture.

Because I have arranged these essays chronologically, according to my initial conception of them, the next essay included is “Manuscript Ecologies: BL MS Harley 2253 Beyond the Human.” This piece grew out of an independent study of the titular manuscript and was the product of many false starts and rhetorical stumbles. Eventually, I extracted my purpose for writing, which was to expose the layers of (what Alaimo would call “trans-coporeal”) reading that one experiences in contact with a manuscript. Building from Sarah Kay’s⁷ and Gillian Rudd’s⁸ work on manuscripts and ecological medieval literary studies, I argue for the psychological utility of contemplating an original manuscript page as a meditative evocation of the cycles of death, creation, and utility included in the BL MS Harley 2253. The manuscript page exists as a microcosmic ecology, one that reminds the human reader that they are only one small part of a

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laboring, creative whole. We do not have, in ecologies, a blank page at our disposal, but one upon which is always written a palimpsestic narrative constantly in danger of being overwritten or ignored, but which is also always speaking back if we read carefully.

The final piece is one that has slipped out of its original context almost completely. “Slyding Science: Slow Violence from Chaucer’s Canon’s Yeoman’s Tale to Montana’s Bitcoin Mines” began as an essay about what I decided to call petro-premodernity. I hoped to read the Canon’s Yeoman’s Tale as a template for, or precursor to, contemporary oil culture and its detrimental environmental impact. However, this essay took new form as I adapted it for presentation at the Montana Medieval Roundup and became a comparative examination of the deviant economies of alchemy and Bitcoin miners. Following the conference, I rewrote it yet again to include more of the theoretical context of Rob Nixon’s Slow Violence and the Environmentalism of the Poor⁹ and Heidi Scott’s call to go retrograde¹⁰ in order to inform my reading of those rhetorics. This final piece is one that is as slippery now as when it first began. It has become an essay that is as close to investigative journalism as I have ever come. It will likely continue to develop beyond the scope of this thesis, as the slow violence of the Bitcoin industry unfolds.

Through these three essays, I have attempted to give voice to the preoccupations that have floated to the surface of my consciousness during my study. Primarily, I am concerned with attention to the materiality of the world and the ethical implications for the recognition of nonhumans. In the “Tyl hyt was at the worldes ende: Anthropogenic

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Materialities in Chaucer’s *House of Fame*” I trace the requisite costs of medieval cultural production. Glass production and agricultural expansion caused serious ecological displacements. I argue that Chaucer depicts the interactivity between material bodies as a means of provoking reflection upon human impacts for the sake of vanity. Expanding my focus in “Manuscript Ecologies: BL MS Harley 2253 Beyond the Human” to the broader genre of medieval manuscripts, I argue that the manuscript enacts a psychological mediation between the human reader and broader ecologies. The page and its construction contain a microcosm wherein humans have the opportunity to situate themselves beyond the center of ecological dynamics. “Slyding Science: Slow Violence from Chaucer’s *Canon’s Yeoman’s Tale* to Montana’s Bitcoin Mines” feels like the culmination of my preoccupation with the stakes of materiality. As alchemy and currency are removed from the physical realm to the abstraction of theory, they lose their ability to be tracked in traditional ways. Instead, the material impacts of alchemical pursuit and Bitcoin creation are deferred onto the landscape and the most vulnerable bodies.

In order to track materialities through poetics, I have also been preoccupied by the experience of reading within a context of changing climate. In all three essays I argue that reading is an essential activity. In my analysis of the *House of Fame* I was fascinated by the idea of ongoing climate change with a past as well as a future; not in order to absolve ethical responsibility or redemptive action, but in order to cultivate the attention to the liveliness of materials, their ability to speak through time. Similarly, the crux of my engagement with BL MS Harley 2253 has been with the ecology of death, specifically the poem *Erthe toc of erthe*. This poem is difficult to read without finding a human significance in the agential earth of the poem. It imagines a world where the material soil
is the central actor that constitutes the poem’s ecology. While I see this poem as the most indicative of an ecology beyond the human, the human is not without its place. Accordingly, as I argue in “Slyding Science,” human attempts to indulge greedy use of ecologies exacerbates the false centrality of human needs. The human is one small part of a larger whole and to act in spite of this is folly.

Ultimately, my concern in these essays grows out of my interest in taking the physical world on its own terms. I see in Chaucer’s poetry and Harley 2253 the seeds for an empathetic ethic of reading that helps endow our reading and our movement through a constantly changing and precariously balanced world with a greater ethic of care. Although conservation is a more cautious means of action than interference, I do not see it as the only practicable or sustainable mode of contending with the human place within ecosystems. Instead, I see the pieces of the environment as in constant flux. In view of this, attentive reading of relationships, environments, and texts allows us to imagine and enact responsive and responsible adaptations. In these essays, I write from a perspective that Chaucer and the compilers of BL MS Harley 2253 enact their own experimentation with a similar outlook. It may not have been a norm of medieval philosophy, but I find evidence within those texts for the placement of human actors within a larger scope of material cycles and ecological change. I see the paradox of this outlook, what Robinson Jeffers alludes to as “sadly smiling,” as the ambiguity that animates the creativity of these medieval texts. The realization that recognition of the material diminishes the human may seem antithetical to the study of the humanities. However, I see it as a practical way to contextualize and adapt the texts that we want to see survive into the future.
Works Cited


“Tyl hyt was at the worldes ende”:
Anthropogenic Materialities in Chaucer’s House of Fame

“The roaring flowers of the chimney-stacks
less poison, at their lips in fire, than this
dust that is blown from off the field of glass;”
--Muriel Rukeyser, “Alloy” from The Book of the Dead

“Objects should not touch because they are not alive. You use them, put them back in place, you live
among them: they are useful, nothing more. But they touch me, it is unbearable. I am afraid of being in
contact with them as though they were living beasts.”
--Jean-Paul Sartre, Nausea

When describing our current geological epoch as the Anthropocene, many scholars locate the shift away from the Holocene as beginning in the wake of the Industrial Revolution. The scholarly designation of the epoch is specifically contingent upon a dramatic rise in carbon and methane emissions resulting from human activity and extant traces of these emissions in the strata of the earth’s crust and in polar ice caps. Paul Crutzen, the popularizer of the term, is one of the major proponents of situating geological history within the framework of the Industrial Revolution. His position rests on the premise that during this period, ubiquitous adoption of new technologies like the steam engine amplified the dissemination of carbon dioxide and methane.\textsuperscript{11} Data and critical consensus support Crutzen’s theory that climatic, atmospheric, and stratigraphic changes due to human activities began increasing more dramatically one hundred and fifty years ago as compared with the emissions of previous centuries. William Ruddiman, however, situates the Anthropocene epoch earlier, at the advent of human evolution.\textsuperscript{12} He demonstrates that the deforestation, agricultural development, and livestock cultivation of early Holocene civilizations impacted the chemical makeup of soil deposits on a global

scale, causing corresponding changes to climate.\textsuperscript{13} The ongoing debate about periodization importantly determines the ways in which we represent ourselves in history and which historical narratives we privilege. When authoritative voices pinpoint the beginning of climate crisis 200 years ago, they neglect a longue durée of climate changes and human adaptations. Designating a new geological epoch should encourage reflection on deep time. However, much of the scholarship surrounding the Anthropocene tends to focus on climate collapse and eschatology in the near future.\textsuperscript{14}

Expanding our historical understanding of ecological-human interaction and the ways that we have developed narratives around those interactions determines our options for response as well as our understanding of the complexities of history. In a recent essay, Degomar Degroot warns against the academic and popular tendency to explain climate change as apocalyptic in a way that threatens “to [discourage] the very action that could still limit anthropogenic climate change to manageable levels.”\textsuperscript{15} His solution to provoke adaptive action is “writing more nuanced histories of past climate change,” giving examples of ways civilizations have managed to survive the recent, prolonged cooling period referred to as the ‘Little Ice Age.’\textsuperscript{16} This period lasted from about 1300 to 1850, not as a constant cooling, but as a dominant tendency over time.\textsuperscript{17} Coastal reclamations and deforestation for agricultural expansion contributed to increased meteorological phenomena. Crops failures in the early 14th century led to famine; famine weakened immune systems; and as rat populations declined with human populations, fleas spread

\textsuperscript{13} Ibid.
\textsuperscript{16} Ibid.
bubonic plague throughout Europe. Augmenting scientific findings with cultural artifacts deepens our understanding not only of the variability of climate in an extended timescale, but also how humanity has successfully adapted. Limiting the scope of inquiry into anthropogenic change to 200 years creates a misperception wherein lower impacts are read as negligible. Such a focus privileges a view of modern societies as unique in their capability to exacerbate climate change and distinct from earlier civilizations that appear, in comparison, to be ecologically pristine. Further, it limits our ability to learn about what may be an inherited human tendency not only to create environmental damage but also to adapt to it.

In his 1967 essay, “The Historical Roots of Ecological Crisis,” medieval historian Lynn White calls for a serious response to the phenomenon of global climate crisis. He writes that under the influence of Christian theology and “despite Darwin, we are not, in our hearts, part of the natural process. We are superior to nature, contemptuous of it, willing to use it for our slightest whim.” He argues that the technological advancements of western Europe, coupled with a Christian theology that has been traditionally interpreted as advocating human dominion over nature, perpetuates an exploitative and objectifying relationship to nature. Tracing resource use through the middle ages, White bases his scholarship on the idea that instead of romanticizing the past, “we should try to clarify our thinking [about ecological crisis] by looking in some historical depth, at

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20 Although it is beyond the scope of this essay to investigate fully discourses on religious environmentalism, Biblical scholars like Ellen Davis also counter White’s presuppositions about Christian philosophical engagement with nature. Her agrarian readings of Hebrew literature instill an ethic of ecosystemic stewardship that allows modern readers a means of reapplying the Christian ethical framework. Davis, Ellen. Scripture, Culture, and Agriculture: An Agrarian Reading of the Bible, Cambridge University Press, New York, 2009.
the presuppositions that underlie modern technology and science.” Building on this approach, environmental historian Richard Hoffman makes the case that history consists of chains of dynamic reactions between human societies and natural environments: “Rather than viewing Nature as the passive recipient of human actions, we should acknowledge Nature as an active participant in history, understood as a process of co-adaptation of human societies in their changing environments.” Hoffman asserts that “Evidence from traditional human sources, both verbal and material, and from the growing mass of palaeoscientific data demonstrates [the] reciprocity [of human and nonhuman agencies] in medieval Europe.” Returning to medieval Hoffman’s work provides fertile ground for ecocritical scholars of medieval literature and history and joins the ecomaterialist discourse by providing collaborative frameworks for interdisciplinary readings of material texts. His approach merges the expertise of disciplines from literary studies, historiography, and archeology to pedology, ichthyology, and chemistry. Like Serenella Iovino and Serpil Opperman, ecomaterialists who advocate reading “matter both in texts and as a text,” I suggest that studying medieval texts allows us to recover narratives that represent human ecological destruction.

However, this essay does not seek to reduce medieval culture and ecosystems down to the same ethical and moral concerns that govern life in the 21st century. Instead, I argue that within the range of medieval cultural invention, Geoffrey Chaucer’s *House of Fame* is a text that encourages creative response with an ethical framework that questions the morality of human action within a changing ecosystem. Further, I argue that in the

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21 White, Lynn. pp. 1204.
23 Ibid., pp. 13.
poem Chaucer contends with the laws of physics and the question of durability and demonstrates that adaptability is required in order for human cultural production to survive within changing ecosystems and throughout time.

The dream vision begins when the fictionalized Geffrey finds himself “withyn a temple ymad of glass” (ll. 120) covered with narrative images. The dream progresses over the course of three books, following Geffrey as he reads his way through Venus’s temple; as Jove’s golden eagle carries him to Fame’s House and he witnesses the dissemination of tidings; and finally, to a strange building of twigs that houses gossiping tidings. Critics have long noted Chaucer’s engagement with the sources for his tale and his original interventions: ekphrastic reflection within a temple of Venus, a cosmic dream vision, and a journey to the palace of a personified Fame or Fortune all have their origins in Allain de Lille, Boccaccio, Boethius, Dante, Jean de Meun, and Ovid.25 Scholars tend to agree that Chaucer’s preoccupation in the poem is the creation of poetry, the poet’s relationship to an audience, and the transmission of reputation through time. Although many critics analyze the architecture of the poem in detail, few critical studies have focused exclusively on Chaucer’s engagement with the environment outside of those structures. Kathy Cawsey explores Chaucer’s choice to position Fame’s palace atop a mountain of ice within the context of manuscript production and the durability of books.

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through time. Lesley Kordecki investigates Chaucer’s representation of authoritative voices in an extended study of female characters and birds. Rebecca Davis charts Chaucer’s use of waterways in the *House of Fame* and their ability to duplicate poetic structures. She also theorizes the laws of sound theory that Chaucer describes to argue that the natural tendency of humans is to make and disseminate language. Following Davis’s analysis of “kyndely enclyning” (ll. 734: natural movement or directionality), I argue that Chaucer represents violent disruption of the environment as a natural human tendency, although disruption is not exclusively a human activity. Further, the *House of Fame* repositions textual authority as extending beyond the world of human composition to nonhuman agents. As a means of navigating the tendency toward disruption, Chaucer expands the category of “text” to include a broader range of materials encounters. Through the experience of his dream navigator, Geffrey, Chaucer investigates what it means to read the physical world and how an inability to adapt or translate, to be flexible and therefore durable, can mean extinction.

Book I of the *House of Fame* begins with Geffrey’s disorientation within a highly decorated architectural space. In order to reorient himself and understand his own context and his purpose within the dream he must read his surroundings, at first literally. Inside the glass temple, he encounters the “ymages / Of gold” (ll. 121), jeweled “rych tabernacles” (ll. 123), “curiouse portreytures, / And queynte maner of figures / Of olde werke, then I saugh ever” (ll. 125-7: curious portraits and clever kinds of antique figures than I had ever seen). Amid this proliferation of images, Geffrey notices a specific

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26 Cawsey, Kathy. “‘Alym de glas’ or ‘Alymed glass’?: Manuscript Reading in Book III of *The House of Fame*.” *University of Toronto Quarterly*, vol.73, no. 4, 2004, pp. 972-9.
portrait that though “I nyste never / Wher that I was, but wel wyste I / Hyt was of Venus redely” (ll. 128-30: I did not know where I was, but I knew well quickly that it was the temple of Venus). This portrait shows Venus Anadyomene in a tableau with conventional signs of her identity: floating naked in the sea, wearing a garland of roses, holding a comb, and flanked by Cupid and Vulcan. The portrait Chaucer describes here signals his use of the Venus and Cupid of Latin mythography.28 Because Chaucer chooses to display the duo visually, he translates them from Latin textual tradition into the visual vernacular: a medium accessible without specialized scholastic knowledge.29 As Geffrey decodes the visual language of the portrait, his first act in the dream is one of interpretation. Having learned how he must navigate through the world, Geffrey proceeds to read his surroundings and to allow this reading to lead him through his experiences.

A text can be any encountered material to which a good reader attends. Contrary to a Latin tradition that imagines static categories of authority and textuality, Chaucer develops the narrative of his poem in order to “invent forms that accommodate [matter’s] dynamism.”30 Kellie Robertson argues that the subjectivity of material encounters was not unfamiliar to medieval people, noting the “homologous relation between textual matter and physical matter . . . that animates much of post-twelfth-century didactic poetry.”31 Robertson’s description of the medieval relationship to materiality resembles the contemporary ideas that animate material ecocriticism. Stacy Alaimo, in her book *Bodily Natures*, explains what she terms “trans-coporeality”: that empathetic and ethical

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28 Tinkle, Theresa., pp. 114.
being in the world develops out of engagement that considers the material world, including the interface between bodies and materials, more carefully: “Concern and wonder converge when the context for ethics becomes not merely social but material—the emergent, ultimately unmappable landscapes of interacting biological, climatic, economic, and political forces.”\(^\text{32}\) The *House of Fame* is not only concerned with the materiality of narrative, but also the permeability of narrative through each encounter. As he wanders around the strange space, Geffrey “fond that on a wall ther was / Thus writen on a table of bras” (ll. 141-2: found that on a wall there was written on a brass surface) the story of the founding of the Roman Empire, a variant of the *Aeneid*. Virgil’s founding narrative was used as the basis for establishing imperial power and its transfer from the Roman empire to Britain during the Middle Ages.\(^\text{33}\) The tale is situated ambiguously—either on a tablet of brass or on a brass table.\(^\text{34}\) Both are plausible media for engraved and illustrated visual narratives. In either case, the material Geffrey reads takes a form other than a traditional text. By leaving the type of narrative surface ambiguous, Chaucer encourages reading as an act that applies to one’s environment and develops a framework for doing so, prefacing each new episode with “Ther saugh I” or a variation on that phrase.\(^\text{35}\) Geffrey’s phrasing suggests reportage of the narrative embedded in the dream, but the repetition also demonstrates that other visual experiences are open to reading, interpretation, and understanding as well. V.A. Kolve has shown that the ambiguity and shifting forms of narrative medium render reading, seeing, hearing, remembering, and


\(^{34}\) “table (n.),” *Middle English Compendium*, University of Michigan, quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED44346. Accessed May 2017.

\(^{35}\) ll. 151, 174, 209, 212, 219, 253, 256.
writing interchangeable in addition to Chaucer’s shift from seeing images and words to hearing voices of the characters in the tableau.36

Accordingly, as Geffrey reads about Aeneas’s developing love affair with Dido and his subsequent betrayal of her trust, his reading diverges from the text that he sees and becomes blurred with his moral interpretation. As she speaks for herself, Chaucer liberates her from the interior of the frame narrative, again revising the ways in which texts speak. Her lament acts as the first of several interjections that develop Chaucer’s version of reading not only books as texts, but also larger ecosystems. Around line 265, Geffrey’s description ends and Chaucer the author begins interjecting, provoked by the empathetic experience of reading. Chaucer seems to share the provocation of his character Geffrey, since his interjection and Dido’s speech are entirely his own creation.37 Dido herself begins to speak to Geffrey directly in the dream: “In suche wordes gan to pleyne / Dydo of hir grete peyne, / As me mette redely” (ll. 311-13 In such words, Dido began / to lament her great pain / As I then dreamed). Dido’s statements in this section of the poem pull her out of the stated intent for the narrative; Geffrey no longer simply reads about the founding of Italy. Instead, Dido takes over the narrative and develops beyond a character in a two-dimensional tale that can be read sequentially. Once Dido’s complaint ends, Geffrey interrupts the pattern of the narrative again to note that Aeneas’s betrayal of Dido is not unique. While he gives as examples other narratives produced throughout human culture, he develops a mode of empathy through reading: “But wel-away, the

37 Elaine Tuttle Hansen, in her book Chaucer and the Fictions of Gender comments on Chaucer’s invention here. While her scholarship on Chaucer’s divergence from his sources is relevant to my argument, it would be too much of a digression to respond to her claim that Chaucer objectifies Dido in his invention. See also Theresa Tinkle, pp. 118.
harm, the routhe, / That hath betyd for such untrouth, / As men may ofte in bokes rede” (ll. 383-5). Chaucer describes here a record of harm, often located in books; Geffrey, however has already encountered an alternate mode of narrative archive. Visual encounter, empathetic reflection, and interpretation preserve his memory of narrative.

As Geffrey makes his way to and through Fame’s palace, Chaucer demonstrates the impacts of human culture within the larger ecosystem. Chaucer’s own book elaborates the record of consequences and damage done to the more than human world as well. Aeneas’s motive for betraying Dido was that “he wolde have fame / In magnyfyinge of hys name” (ll. 305-6), leaving her in Carthage and continuing his journey across the sea. Like Aeneas, human desire for fame, power, and conspicuous consumption leaves ecosystems bereft and with consequences that return to impact human culture. In order to read ecosystemic texts, Chaucer frames the act of experiencing and understanding the unfamiliar in the same way he frames the narrative experience within Venus’s temple.38 As Geffrey attempts to find the absent creator of the tale, he leaves the temple and sees before him a vast, seemingly blank field of sand. Chaucer frames his startled experience, attempting to understand his surroundings in the same language that he uses while reading more traditional texts, repeating the phrase “Then sawgh I” (ll. 482). Geffrey finds himself without verbal texts and reverses the phrase: “Ne no maner creature / That ys yformed be Nature / Ne sawgh I, me to rede or wisse” (ll. 489-91). While he seems to temporarily inhabit a narrative void for this segment of the poem, David Coley discusses the use of sand as an ingredient in glass production and

38 See Kinch, Ashby. ““Mind like wickerwork”: The Neuroplastic Aesthetics of Chaucer’s House of Tidings.” Postmedieval: A Journal of Medieval Cultural Studies, vol. 3, no. 3, pp. 304: the House of Fame externalizes the neural work of adapting to new ideas and experiences, writing that, “Chaucer imagines with the force of a real desire what it would be like to think differently, theorizing the extent to which one can rewrite one’s reading brain.”
argues that this desert before Geffrey is the “vernacular poetic text itself, the raw materia that will be translated, structured, and fixed into the vitreous narrative window.” Similarly, Sarah Powrie argues that “Chaucer sees instability as a creative principle and generator of potential meaning . . . . Recognizing that fame is contingent upon an interpreting audience, he invites his reader’s interpretation and invests the reader with hermeneutical authority, so a to initiate the literary afterlife of his text.” Both Coley and Powrie argue for Chaucer’s engagement with human cultural production and poetic production specifically. However, I read the sand as sand and argue that Chaucer leaves it blank to purposefully unsettle the human reader and prepare the way for new modes of reading. Contrary to Geffrey’s expectation for a human ecosystem outside of a temple or church, the field of sand is “Withouten toun, or hous, or tree, / Or bush, or grass, or eryd lond” (ll. 484-5). The sand is as small as men might see in the deserts of “Lybye” (ll. 486-7).

The landscape is decidedly foreign to the eyes of an English poet, but it is not quite alien. Although Geffrey hoped to find the creator of the story in which he has been immersed within Venus’s temple, he arrives in an unexpected littoral space. The Libyan sand places Geffrey into the landscape of his ekphrastic experience, onto the same shore where Aeneas escaped his shipwreck. Geffrey has encountered this fictional sand as a reality, a physical landscape vulnerable to danger. This defamiliarization causes Geffrey terror until he gains a reference point for his interpretation—Jove’s eagle. Although the eagle initially terrifies him, once the eagle soars upward with him in “hys grymme pawes

39 Coley, David, pp 83.
41 Davis, Rebecca. pp. 114.
stronge” (ll. 541), and Geffrey’s vantage point grows larger, he begins to gain an appreciation for the new ecosystemic text with which he is presented: “I gan beholde more and more / To se the beaute and the wonder” (ll. 532-2). Chaucer shows Geffrey here in between concern and wonder, within Alaimo’s “trans-coporeality”: caught within a suddenly and startlingly material environment. It is here, in the midst of the flight to the Fame’s realm, situated in the center of existence—“ryght even in the myddes of the weye / Betwixen hevene and earth and see,” (ll. 714-5)—that the eagle teaches Geffrey about the organizational strategy for this ecology. Appropriately, the lesson occurs in transit between physical places, where they find themselves most “betwixen.” The eagle relates to Geffrey the physics of sound production. Words have agency and act on behalf of their speaker. Chaucer imagines them as homunculi and calls them “tydynges” (ll. 644). When a word is spoken, the “tydynge” follows the propensity of its material nature by rising with the air to Fame’s palace. There, Fame judges the merit of the “tydynge” and decides whether and in what light it will be disseminated through time and space.

By positioning his theory of sound within a metaphor of fame, Chaucer uses his dream vision to imagine the consequences of material interfaces. Although scholarship has considered his primary concern to be the longevity or fixity of literary traditions, the materials from which cultural products like manuscripts and stained glass are made have durability. Chaucer’s poem traffics heavily in images of anthropogenic disruption that document the centrality of human action in the shifting medieval landscape. Through his description of sound theory, Chaucer alludes to industrial investments of the period that profoundly changed the relationship of humankind to both forests and fields. Cultural products also require the extraction and processing of nonhuman, material bodies in order
to survive. These nonhuman, material bodies have an impact and longevity of their own
and it is this legacy with which I argue Chaucer contends in his theory of sound.

As the eagle carries Geffrey to Fame’s house, he explains the origin, phenomenon, and final destination of sounds as disruptions and redirections of natural elements that grind and erode matter. Sounds are, in Chaucer’s dream imaginary, emissions that physically and violently distort the space they inhabit:

\[\ldots\text{ soun ys air ybroke.}\]
\[\ldots\]

For whan a pipe is blowen sharpe
The air ys twyst with violence
And rent--loo thys is my sentence
Eke whan men harpe-strynges smyte,
Whether hyt be moche or lyte,
Loo, with the strok the ayr tobreketh;
And ryght so breketh it when men speketh.

(ll. 770-80: sound is broken air, \ldots for when a pipe is sharply blown, the air is violently twisted and rent--lo, this is my meaning. Also when men smite harp strings, whether it be forceful or lightly done, lo, with the stoke the air breaks; and just so, it breaks when men speak.)

As Chaucer elaborates these two examples of human cultural production, playing musical instruments, he represents their impact on the air as a material force. The “air is twyst with violence / And rent,” broken by strumming and speaking. Chaucer figures air here as
receptive of an impact, despite its supposed incorporeality. Like the field of sand, Chaucer suggests that the air is not a blank space, but a site of interaction. Although the sounds the pipes and harps produce may in fact be harmonious, Chaucer uses the brutality of human sounds to emphasize the materiality of the dream environment and its receptivity as a site of ethical action and reaction.

The eagle explains to Geffrey that matter follows a law of motion wherein heavy materials tend to sink and light materials tend to rise. Rebecca Davis argues that the physical laws Chaucer elaborates describe a “natural propensity” of materials. She writes that “native motion, then, is a response to displacement. Its purpose, paradoxically, is conservation.” Disruption, within this context, is a natural counterpart to conservation and stasis. What Davis terms “native motion” is also one manifestation of transcoporeality; the interface that provokes responsive motion to displacement also contains an ethical imperative. Within a description of the interface as natural or “kyndely” belies the displacement as outside of ethical boundaries. In the nonhuman world, ethics do not apply. However, disruption of the nonhuman by the human contains the opportunity for considering consequence.

By using nonhuman examples to demonstrate the function of “kyndely enclynynge” (ll. 734), Chaucer implies that the anthropogenic appropriation of nonhumans disrupts natural affinities, just as human sound production disrupts the flow of air. To illustrate his theory of natural affinities, Chaucer chooses as his examples fish and trees and in doing so figures the relationship of both fish and trees to human

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42 Davis, Rebecca. pp. 107.
43 Ibid. pp. 108.
consumption. In order to demonstrate the movement of bodies through space, the eagle explains that,

\begin{quote}
  every ryver to the see
  Enclyned ys to goo by kynde,
  And by these skills, as I fynde,
  Hath fysses dueling in flood and see,
  And trees eke in earth bee.
\end{quote}

(ll. 748-52: Every river is inclined to go to the sea by nature, and by these reasons, as I observe, fish have homes in river and sea, and trees are also in earth.)

If the river, the fish, or the tree cannot return to its “propre mansyon” (ll. 754), it will “apaire” (ll. 756) or deteriorate. Conservation of these exemplary bodies depends upon the maintenance of their physicality. Chaucer implies that, when stripped from their “propre mansyon” trees and fish disappear into decay over time.\textsuperscript{44} As beings already conserved by remaining in their natural environments, both trees and fish must be violently removed or utilized by human hands in order for Chaucer to use them and their original locations as examples of natural affinity; they do not leave the earth or sea by their own volition. During Chaucer’s lifetime, however, both fish and trees were highly valued commodities in diminishing supply. By the mid 14th century, only six percent remained of the woodland extant in Britain since King William’s Domestacy survey in 1086.\textsuperscript{45} Much of the timber had been cleared to increase space for agriculture and grazing and was used mainly as fuel for the home, to power industrial kilns, and to build

\textsuperscript{44} Ibid.
\textsuperscript{45} Hoffman, Richard C. \textit{An Environmental History of Medieval Europe}, pp. 121.
ships for naval use.\textsuperscript{46} Partly because Christian doctrine required that meat be consumed during only two thirds of the year,\textsuperscript{47} fish were a major protein source for the English population. Declines in fish populations led to domestication through aquaculture.\textsuperscript{48} Chaucer, too, describes the motion of accreting tydynges in Book III in terms of eel hunting: they “stampen, as men doon aftir eles” (ll. 2154).\textsuperscript{49} In this elaboration of the theory of natural affinity, Chaucer amplifies the violence and displacement of human cultural production. Anthropogenic disruption is a natural facet of human activity, rupturing though it may be. Chaucer does not include his own moral imperative, but leaves the space between cultural production and impact ambiguous, returning the responsibility for interpretation and choice-making to his readers.

When Geffrey arrives at Fame’s palace, he encounters monuments to great authors wrought in pillars. Having reached their “propre mansioun” in Fame’s palace, Chaucer’s tydynges do not “apaire” but are memorialized, when their merit is valued highly enough, in the durable materials of human cultural production. A representation of the poet Virgil, “that bore hath up a longe while / The fame of Pius Eneas” (ll. 1484-5), stands upon a ‘piler, / That was of tynned yren cler” (ll 1481-2). While Virgil’s famous visage is preserved in Fame’s House in a plated iron statue, his own poem is preserved in the stained-glass temple of Venus: “a temple ymad ofglas” (ll. 120). David Coley argues that while glass retains a reputation as a fragile material, narratives memorialized in glass

\textsuperscript{46} Ibid.
\textsuperscript{47} Ibid., pp. 257.
\textsuperscript{49} For a full analysis of Chaucer’s engagement of poetic form with eel trapping culture in England, see Davis, Rebecca, pp. 122-8.
“were not insubstantial, transient things.”\textsuperscript{50} Although glass may not outlive iron as a whole object, we now understand that glass, whether whole or in particles, refuses to dematerialize and biodegrade for one million years.\textsuperscript{51} While Chaucer certainly did not have that specific scientific data for the longevity of glass, he demonstrates his knowledge that the durability of glass as a material of narrative transmission is contingent upon environment and care in his choice to use glass as the medium through which he transmits his own textual reiteration of the founding of the Roman empire to his readers. The production of glass was not an activity free from environmental impact and medieval people were not unaware of the troublesome smoke produced by their industries. Glass production--the medium through which Chaucer constructs the narrative of Book I--contributed greatly to the problem of both medieval air quality and deforestation. Glasshouses, the kiln complexes where glass was produced, required the use of wood ash, “the source of alkaline flux to reduce the temperature at which sand, the main ingredient of glass, melts”\textsuperscript{52} as well as a constant source of fuel of their furnaces. The wood ash was an essential chemical stabilizing component in the formula which made glass durable. Michael Cable’s research indicates that roughly 80 pounds of timber for wood ash and 220 pounds for fuel were needed to produce one pound of glass.\textsuperscript{53} Not only was the amount of wood required for glass production staggering, but the production itself emitted wood smoke that intensified the abundant pollution from wood burned as

\begin{flushleft}
\textsuperscript{50} Coley, David. pp. 62.
\textsuperscript{51} New Hampshire Department of Environmental Services.
\end{flushleft}
heat in medieval hearths, kitchens and other metallurgical workshops, especially in dense urban areas like Chaucer’s London. By the 12th century, the detrimental effects to personal health had become so aggravating that Henry II created legislation banning the use of wood for fuel.\textsuperscript{54} Ironically, coal was the proposed substitute. At the same time that medieval agricultural producers deforested England to make way for crops, a boom in ship-building and civic construction competed for timber from dwindling forests with local glass production. Chaucer “was at least casually familiar with the glass maker’s art”\textsuperscript{55} and the requisite costs of such constructions. Whether or not Chaucer was familiar with glazing may not matter since one does not need to be a specialist or professional to experience a polluted environment.

Relying on the reader’s remembrance that the production of sound brutally rends the air, Chaucer continues to amplify the ethical stakes of the impact of human cultural production via the smoke emitted by the redistribution of tydynges. As the tydynges arrive at Fame’s palace, Lady Fame judges each and decides whether they are worthy of dissemination, following which Eolus, the keeper of the winds, projects them as an odorous smoke to the ends of the earth, through his clarion sklander:

\begin{quote}
Wente this foule trumpes soun,
As swifte as pelet out of gonne
Whan fyr is in the poudre ronne.
\end{quote}

(ll. 1642-44: This foul trumpet’s sound, went as swiftly as the cannonball out of a cannon when the powder is lit with fire.)


\textsuperscript{55} Coley, David. pp. 64.
Chaucer again characterizes sound, this time the “foule trumpes soun,” as a violent act equivalent to the damaging velocity of a missile shot from a siege engine. As Eolus distributes tydynges, his blowing of his horn mimics Chaucer’s earlier use: “whan a pipe is blowen sharpe” (ll. 774). The sonic violence of this trumpet blast redoubles the violent impact to the air. Not only has the tydynge been uttered and sent toward Fame’s house through a rupture of the air, but it has now also been intensified through Eolus’s secondary emission. Eolus’s action also returns Geffrey to the narrative of Venus’s temple, where his trumpet sends catastrophic storms toward Aeneas. Again, Chaucer sets Geffrey within the initial narrative, while rewriting its implication for Geffrey’s experience of the present. Through this reminder of the primary narrative, Chaucer rewrites it to include a consideration of the nonhuman world.

Not only does Eolus’s trumpet amplify the sonic and material impact of tydynges, it also augments Geffrey’s ability to sense the materiality of air and sound through the addition of colored, sinking smoke:

such a smoke gan out wende
Out of his foule trumpes ende,
Blak, bloo, grynyshe, swartish red,
As doth where that men melte led
(ll. 1644-47: such a smoke began to emerge out of his foul trumpet’s end--black, blue, greenish, dark red--as it does where men melt lead.)

The smoke that Eolus emits as he sends tydynges to their fate is multicolored and noxious. Twice in the stanza Chaucer uses the word “foule” to describe the smoke’s odor. He also links the color and smell of the smoke to lead melting. Men melt lead for a
variety of uses, including molding cannonballs and the construction of stained-glass windows where the lead constitutes one of the materials used to link decorated plates of glass. The sound of the trumpet is like a “pelet out of gonne,” and the vibrancy of its color mimics the visual appearance of a finished stained-glass window or manuscript: black, blue, green, and red were commonly used pigments. Through the sound of “sklander,” Chaucer connects the destruction of war to the physicality of the smoke as he simultaneously connects the same impact to creative cultural production.

Certainly, Aeneas’s imperial journey has been linked from the beginning of the poem to poetic creation and longevity. Such connectivity within the stanza suggests that Chaucer wants to provoke readers to interrogate the ethical equivalency of each route to fame. On one hand, military conquest imposes authority over countless subjects and promotes behavior motivated by egocentric action. Further, imperial campaigns require the expenditure of large quantities of finite resources, including lives. Chaucer goes on to connect the smoke to “the pit of helle” (ll. 1653), compounding the deadly nature of Eolus’s emissions. Only the dead reside in hell. It is a fitting comparison for the result of imperialism but appears to be more of a paradox within the context of fame via poetry and other memorializing media. However, Chaucer has also created a context for readers to make this connection more reliably, having already established the violent action of sound-making. By figuring the emission of human narrative production as figuratively linked to medieval industrial production, Chaucer demonstrates an awareness of the degenerative impact of anthropogenic carbon emissions on the nonhuman and human alike. Chaucer’s characterization of the smoke of infamy emitted from Fame’s palace by
the dissemination of human tydynges is both destructive to the air through which it moves as sound and eternally damning to human life.

Reading Chaucer’s *House of Fame* in terms of its expression of anthropogenic disruption, both verbal and material, reveals Chaucer’s awareness of humanity’s involvement in changing landscapes in 14th Century England. His poem acknowledges human intervention in deforestation, industrial pollution, and atmospheric contamination as the impact of our pursuit of longevity through both cultural production and imperialism. Chaucer does not condemn all fame, however. Eolus carries a second trumpet, called “Laude” that sends fragrant “breth” (ll. 1684) as opposed to “foule” smoke. When Fame commands Eolus to use “Laude,” it sounds “as lowde as any thunder” (ll. 1681) and smells of “bawme [balsam]” (ll. 1686) poured “Among a basket ful of roses” (ll. 1687). Although the criteria for Fame’s judgement of a worthy tydyngge remain ambiguous, Chaucer contrasts the impact of “goode werkes” (ll. 1666) with those of “sklander.” Instead of the smell and sounds of war and industry, “Laude” creates smoke that aligns more closely with a gentler return to the natural affinities of the nonhuman material world. Although thunder can signal the destruction of a storm, it also signals the famous “shoures soote” (*The Canterbury Tales*, ll. 1) that bring new life into the world, like balsam and roses. Although Chaucer does not present readers with instructions for an ethical poetics, he emphasizes the vulnerability of nonhuman, materials to violence and impact. Seemingly ethereal air can be broken by sound, which calls attention to the interface between material bodies. Similarly, human extraction and manipulation of nonhuman bodies, such as fish and trees, disrupts the natural affinities that govern the physical universe. Although Chaucer makes clear the fact that disruption
is unavoidable and suggests that it is a natural quality of human culture, his poem sets high stakes for human disruption. One cannot know how cultural actions will strike Fame’s estimation; whether an impact is favorable or destructive, the effects to nonhumans reach farther than can be immediately measured. The impact of human cultures outlives our ability to fully understand the interrelationship of material bodies except in retrospect. However, as Chaucer advocates, careful reading of the interactions between humans and nonhumans requires the ethical consideration of the more than human world. Misreading is always possible, but Chaucer emphasizes that the material and creative worlds are unfixed; this flux cultivates creative reaction, adaptation, and longevity.


Cawsey, Kathy. “‘Alym de glas’ or ‘Alymed glass’?: Manuscript Reading in Book III of *The House of Fame*.” *University of Toronto Quarterly*, vol.73, no. 4, 2004, pp. 972-9.


Manuscript Ecologies: BL MS Harley 2253 Beyond the Human

“It was a riverside meadow, lush, from before the hay harvest,
On an immaculate day in the sun of June.
I searched for it, found it, recognized it.
Grasses and flowers grew there familiar in my childhood.
With half-closed eyelids I absorbed the luminescence.
And the scent garnered me, all knowing ceased.
Suddenly I felt I was disappearing and weeping with joy.”
--Czesław Miłosz, “A Meadow,” from Facing the River

The medieval manuscript is an ecology. Written on animal skin in ink composed of vegetable, mineral, elemental, and human constituents, it includes the human creative network in its ecosystemic physicality. While the animality of manuscript pages may remain largely invisible to readers, medieval and animal studies scholar Sarah Kay argues that the textual content written on the surface of manuscript pages often draws attention to the pages themselves as epidermis and thus to the human’s own physicality, mortality, and individuality: “the medieval page qua skin is especially well-placed to replicate (even if unconsciously) the juncture between the material and symbolic realms that constitutes the basis of the Skin Ego.”56 The living human hand that touches the page senses and cognitively digests the realization that the status of the human is indeterminate: that the affective experience of touching a manuscript page reveals that a human skin is ultimately an animal skin at the same time that both are revealed as mortal. The presence of flesh touching flesh (parchment touched by fingers) also signals the similarity between the two iterations of flesh; veins, hairs, and blemishes are common manifestations in both living and dead, stretched flesh. Accordingly, the interpolation of the dead animal skin

into the reader’s experience is symbolic—“a sublime and abstract signifying system.” Kay takes the view that “a dead human is merely meat” in contrast to the laboring sheep or bovine upon whose flesh human “pretensions to eternal life” are written in text; but her interpretation considers only the body’s use value to humans. Her theorization of this phenomenon, however, reaffirms the potential of the manuscript to provoke a meditative and material engagement with the place of the human within cycles of death and decay. The contemplation of a page of skin forces the human reader to consider the humbling nutritive utility of the buried or decaying corpse to worm life, to humus creation, to fertilization of plant roots. A manuscript page is thus a synecdochal slice of a vaster ecology that values the dead (and the dead human) as an essential part of its sustenance and reproduction. It reveals the reliance of human scribes, writers, and readers on external ecologies for the creative production of literature, as well as the reproduction and development of literary tradition.

If the boundary between the human and the animal is revealed as porous through contact with the skin of a manuscript page, the reader or copyist begins to understand the inextricability of the human body from the ecological matrix in which it participates. The recognition that the Skin Ego affirms the mortality and the materiality of human readers depends upon the projection of the dead human body. In this view the corpse, as a meditative image, extends beyond the human to the animal body. The affective reaction to the realization of this physical phenomenon further deceters the human from the egoistic hierarchy that places the human in the nucleus and the animal at the periphery. Instead, the human and animal are recast in an interlocking ecosystem that links the

57 Ibid., 17.
58 Ibid., 19
59 Ibid.
living and the dead: the present physicality of the body and its afterlife; and the symbolic meaning accumulated through juxtapositions of words, commercial practices, and the programmatic patterns of the text as a whole. British Library Manuscript60 Harley 2253 is an example of a manuscript that decenters a singular, human, author-centered approach to the text and instead requires that the focus of attention return to the material manuscript as well as the communities and ecologies that created it.

Much of the scholarship on BL MS Harley 2253 has focused on inquiry into the potential identity and social milieu of the manuscript’s main scribe. Following Carter Revard’s meticulous paleographic work, the Harley Scribe is thought by critics to have been a legal scrivener simultaneously acting as a chaplain for a wealthy household who worked in or around the Ludlow area in the first half of the 14th century.61 The manuscript he played the chief role in copying between 1326 and 1340 contains 116 texts of both poetry and prose in Latin, Anglo-Norman, and Middle English: lyrics (both secular and religious), saints’ lives and other devotional texts, political songs, romances, dream lore, fabliaux, and instructional texts. The political texts do not align with previous theories that hold the Mortimers as being the scribe’s continuous patrons.62 Given this fact and the unique inclusion of minor, local saints lives,63 Revard posits that the Harley

60 This title is hereafter abbreviated as BL MS Harley 2253 or Harley 2253 for the ease of the reader.
62 Revard, Carter. pp. 80-84.
63 Ibid., pp. 30: While St. Ethelbert of Hereford and St. Etfrid of Leominster are cultivated in large cathedral and Benedictine priories, respectively, Wistanstow, from which St. Wistan hails, is “merely a small village some ten miles northwest of Ludlow.”
Scribe was most likely employed by Laurence of Ludlow of the Stokesays of Ludlow, who lived just outside of Wistanstow, in northwestern England. The paleographic evidence, thus analyzed, provides critics with a serviceable persona for the still anonymous Harley Scribe: a modern day image of an independent author or compiler employed by a patron and free to travel locally in order to gather his texts and, importantly, working at other bureaucratic tasks. Although Revard’s conclusions are convincing, the Harley Scribe and his patron—if he had one—remain the subject of educated speculation, making it difficult to analyze the myriad texts of the complexly ordered manuscript within the bounds of a single scribal or authorial intent for the document’s use.

Because the manuscript is the product of more than one professional and may have been created in the interest of a patron, the intent of the manuscript must be considered the result of group work or an assemblage of intents. Taken as a whole, the manuscript is the work of four scribes, which complicates the determination of its intended function. The so-called Harley Scribe continued the work begun by a predecessor and he was assisted, potentially posthumously, by an apprentice. After the work of these two, another scribe—with whom the Harley Scribe collaborated in legal scrivening—contributed the fly-leaves of the manuscript. In a further division of the labor of textual production, the work of compiling the texts included in the manuscript may have been an endeavor accomplished by one individual, while the physical transcription of the ordinatio was

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64 Ibid., pp. 78-81.
65 See Susanna Fein in “The Four Scribes of MS Harley 2253,”: “Its main scribe is well-known, but less well recognized is how his labor is situated sequentially between the work of two others and how on the fly leaves it is conjoined with another scribe’s produce” (pp. 27).
66 Ibid., pp. 27.
67 the arrangement of texts in the miscellany.
certainly the work of the Harley Scribe himself. As David Birkholz notes, scholars of medieval literature have embraced a conception of authorship that diverges from the contemporary vision of a single mind creating a work of art in isolation:

Recent scholarly trends have inclined away from sharp divisions of labor, toward a recognition of the overlap among the functions that together constitute medieval ‘authorship’:

*patron, auctor, compilator, redactor, scriptor,* annotating *lector,* and--not least--operative textual community.

(Birkholz 199)

The critical acknowledgement that textual production was networked through many collaborating bodies and minds refigures the authorial entity as a group that creates through a process of communication as well as a tessellation of applied skills and desires. Divisions of labor become conjunctions of labor, but also of creativity and invention. The entity to which Birkholz refers as an “operative textual community” includes the creators of the text and the audiences who have heard or read either parts of or the entire manuscript since its creation. The poly-temporal textual community in which *Harley 2253* was gestated functions like a bee colony: scribes, whether religious or secular circulated in the Worcester area and beyond--to London and continental Europe, in the case of aspiring religious clerics. These roving scribes were exposed to a diverse range of texts and had the opportunity to collect poems and prose works as they travelled and communicated with members of their own and outside communities, much like bees

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69 An “operative textual community” includes the author of this essay and its readers as well—it is an intergenerational and poly-temporal group of minds.

70 Birkholz, Daniel. pp. 190.
circulating in the area around their hives, collecting pollen. The texts included within the manuscript are also the product of a constellation of writers, likely from the *familia* of the Harley Scribe’s household who would have travelled in the Ludlow area as well as throughout England and perhaps even internationally. Worcester scribes cross-pollinated the cultural-textual communities of which they were a part with texts exchanged, discovered, and composed by themselves and others of similar profession.

The textual community out of which *Harley* emerges draws upon the verses and prose composed in relative proximity to Hereford and Worcester. Like the scribes who compiled it, the texts included in the manuscript are imbricated in their environments, interconnected with their cultural, social, psychological, and geographical surroundings. Therefore, the manuscript is situated within an ecological matrix that informs its content, arrangement, and reception. It is embedded in the society, geography, and language of Hereford and, tangentially, the political concerns of continental Europe.

Because *Harley* 2253 evolved out of intersecting scribal interests, the logic of its *ordinatio* depends, in part, upon an identification of where the manuscript fits into patterns of existing patterns of purposefully constructed, compiled manuscripts. Whereas BL MS *Harley 273* and BL MS *Royal 12.C.xii*, which the Harley Scribe also copied in large part, were “made for devotional and instructive purposes,” the purpose of *Harley 2253* remains more of a mystery. Indeed, Revard notes simply that it is “an anthology carefully selected and structured to comprise a wide range of interests.” It does not fit

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71 Ibid., pp. 192.
72 Ibid. pp. 179: “the geographical mobility of those involved in our lyrics’ compilation—a process that includes their transmission to a Ludlow copying—has implications for what manner of community may be imagined for these poems.”
73 Revard, Carter. pp. 65.
74 Ibid.
easily into a clear intended function within late medieval traditions of book use. However, Revard’s identification of the manuscript as an “anthology” is important because such terminology transmits the critical opinion that the manuscript was intentionally copied in a carefully planned order.

While Harley 2253 has historically been considered a miscellany with little, if any, organizational strategy, more recent critical attention to the overlapping conceptual and linguistic threads in the manuscript’s compiled texts reveals strategic ordering. Because the manuscript is a collection of works by over a hundred anonymous authors, it is thus a collection of diverse voices from secular and religious traditions that will inevitably contest each other because of their varied origins. Critics now generally agree that the manuscript was compiled programmatically; it is an anthology with texts grouped by genre, language, and theme that evolve in the sequence from text to text. At the same time, however, there are some texts that disrupt the most obvious observable strategies that critics posit the Harley Scribe may have used in his ordering of the manuscript. Theo Stemmler posits that such disruptions are “ostensible exceptions” to the anthology’s


76 Revard, Carter. pp. 84; Stemmler, Theo. pp. 113; Scahill, John. “Trilingualism in Early Middle English Miscellanies: Languages and Literature.” Yearbook of English Studies, vol. 33, 2003, pp. 18., would rather use the term “miscellany” to describe Harley 2253 than “anthology,” but his choice of term is couched in a definition that comes close to Stemmler’s, although not quite as precise: “A miscellany has cohesion of some kind, which may either be external—directed towards some function—or internal, in which the relationship of texts with each other and the shaping of the whole are factors.”

grouping of genre specimens. However, the dialogic quality of much of the manuscript suggests that seeming exceptions reflect challenges to, or intentional refigurations of, the associative links within a quire, a group of genre-linked poems, or a debate carried forward by a sequence.

Especially considering the anonymity that permeates all levels of *MS Harley 2253*, from patron to scribe to anthologized composers, parsing out the cultural and linguistic heritages of the dialogic texts within the manuscript requires consideration of its situation within geographic and temporal terms. Worcester is situated on the margins of Anglo-Norman culture, far from urban centers that became assimilated into a developing Norman court culture after the Conquest of 1066.\(^\text{78}\) The erasure of what had previously been a largely Anglo-Saxon culture created an aesthetic bereavement as much as a colonial oppression. The imposition of spoken and written French in the stead of English forced literary forms of Anglo-Saxon cultural expression into dormancy.\(^\text{79}\) In the buildup to the late Middle Ages and in response to the disappearance of literary traditions that were distinctly English, poets began to compose lyrics that dealt with what Seth Lerer describes as a “metanostalgia”: poems “preoccupied with evoking a past already aware of the loss of previous achievements, conscious of the pastness of [sic] history.”\(^\text{80}\) The lyric genre, as it manifested in England, dealt as often with a longing to return to a familiar landscape as with a contemplation of death.\(^\text{81}\) Lerer argues that loss, in both

\footnotesize{\begin{itemize}
  \item \(^\text{78}\) Fein, Susanna. pp. 25.
  \item \(^\text{79}\) Ibid.
  \item \(^\text{81}\) Lerer, Seth. pp. 143.: “The trope of the grave, and of the body, as a house; the uses of the *ubi sunt* device; the predilection for listing possessions lost, beauties decayed, or torments suffered--all find their English voice in poetry of the first century and a half of post-Conquest life.”
\end{itemize}}
tropes, reveals the poetic awareness that that which one desires is already beyond reach. Poets meditate on ephemerality, explicating a desire for belonging in geographical place, which drives them farther from their human identity and into a landscape dominated by birds, beasts, plant life, and sensory profusion. They dissect the torments of the dead or dying corpse as it lays far from heaven, housed in the earth that it may have once owned and worked.

Like the displaced poetic bodies, most of the extant Middle English lyrics in Harley 2253 began their textual lives as marginalia to works in Latin or Anglo-Norman. Lerer notes that the liminality of these lyrics “speaks directly to the challenges of an English poetry seeking to find a space for vernacular feeling in conquered world.” Much of this marginalia survives in Harley, but by the point in the 14th century of the manuscript’s compilation, the scribes colligated the Middle English texts alongside the Anglo-Norman and Latin. These multilingual sequences demonstrate, not a defect within the ordinatio of the manuscript, but an assertion of the artistic potential of the vernacular through its inclusion as verse worthy of record, study, and solace. In fact, the scribes represent Middle English texts, whether lyrical or constitutive of other genres, in equal proportion to both the Anglo-Norman texts and Latin texts. This symmetry of linguistic representation in the manuscript resituates the visibility and audibility of linguistic heritage so that the language of conquest--Anglo-Norman and Latin—equals the language of the conquered. Thus, one cannot accomplish an examination of Harley

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82 Ibid.
83 Ibid., pp. 146.
as a whole without attention to the three linguistic heritages in dialog. The resistant and mourning voices of Middle English lyrics adapt textual authority by including the tormented voices of the conquered English poet in literary culture.

The anticipated past loss that provokes and is invoked by English lyrics often blurs the distinction between death lyrics and lyrics that deal with the longing to be a part of a landscape. Middle English lyrics utilize the subject of that which is normally inaccessible in order to develop a sense of identity; the poems reach out to that which is beyond the human in order to solidify the identity of the human as distinct. In terms of the death lyrics, this phenomenon had its origin in a much older monastic tradition of meditating on death in order to prepare for it.85 St. Benedict’s fourth Rule required the affective conjuring of an image of a corpse before one’s eyes as a daily practice. Through the descriptio of a decaying or dying body in poetic form, the representation of material “transience confers on things a poignant and beautiful vitality.”86 This meditative approach of the otherwise inaccessible is not limited to the death lyric.

The Harley lyric Lenten ys come with love to toune (fol. 71va) presents a clear example of the “poignant beauty and vitality” that emerges from a description of decay. While the poem overflows with the “rounes” (ll. 2 small sounds) and “notes” (ll. 5) of birds and beasts and growing things, the poem’s titular first line situates its speaker in a position of already anticipating the loss of and exclusion from vernal profusion as Lent arrives with the lust of spring. Not only does the ritual of Lent require one to meditate on the memorial of Jesus’s death, but it also anticipates his resurrection. Resurrection was

certainly the hope of pious medieval Christians. However, the materiality of the body and its decay after burial caused debate among theologians as to the condition of the revivified body upon resurrection on Judgement Day. In a sublunary diminution of the resurrection, the poet writes:

Wormes woweth under cloude,
Wymmen waxeth wounder proude,
So wel hit wol hem seme
Yef me shal wonte wille of on,
This wunne weole Y wole forgon
Ant wyht in wode be fleme.

(ll. 31-6: Worms make love underground; women grow uncomonly proud, as well it beseems them. If I shall lack the favor of one, such joyful abundance I must forgo and flee to the woods in exile.)

After a catalog of frolicking, mating, fecund animals and plants, the poet singles out the human couple from the natural ritual of spring reproduction. The line “Wymmen waxeth wounder proude” evokes the courtly lyric tradition wherein male desire is countered by feminine “pride” or resistance. If, the poet claims, a woman refuses him as a suitor or mate, he will be denied the “wunne” or joys enjoyed by the rest of the poem’s ecosystem. In response to this hypothetical lack, the poet will denounce human community. If one reads “waxeth” in its secondary meaning, to grow physically, the poet presents two alternate images of earthly activity: worms woo beneath clods, while women’s bodies expand in pregnancy. Thus, female pride alludes poetically to the growth and fertility

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that associates the female body with regeneration. Read in this way, the lines reflect the entirety of a life span that moves from the smallest and lowliest creature, the nonhuman to the human. The worm incongruously participates in sexual rituals despite widespread agreement in the Middle Ages that worms are asexual creatures, while the women’s sexual activity is revealed by her growing body. On the other hand and taking into account the next line in the stanza, the poet notes that the perception of the women’s pregnancy is an appearance. Paired with the image of the worms wooing, the “proude” woman’s invisible insemination is revealed as worms wriggle in the belly of her corpse, causing it to expand in decay (where their own asexual reproduction occurs). Within these few lines reproductive vitality overlaps and enshrouds graphic decay. On the flesh of the manuscript, too, the creative potential of the human, the written poem, obfuscates the dead animal flesh upon which it is inked.

The psychological sutures that connect the human and animal through the act of reading does not end with the binary human-animal. Once the human body dies, it decays with the help of worms, fertilizing the soil in which it is buried and feeding necrophagous animals. As the poet of Lenten ys come with love to toune suggests, to the various worms and larvae that thrive on rotting flesh, the human body is both sustenance and abode. Take, for example, the Gost’s explanation to the Body in In a thestri stude Y stod (fol. 57r-58v.):

Body, miht thou nout lepen to pleyen ant rage,

Wilde bueres bete, bynde lyouns savage,

Pore men to threte ant reven here heritage.

Wormes shulen ete thy flesh for al thyn heye parage.

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(ll. 29-32: Body, you’re not able to leap up to play and strut, to beat wild bears, bind savage lions, threaten poor men and steal their inheritance. Worms will eat your flesh despite all your high breeding.)

Despite the Body’s noble breeding, despite the supremacy over animals and poorer men that the (noble) man practices in life, the worm devours his flesh. The poem itself serves as an indictment of the immoral behavior of the nobleman who disregards spiritual imperatives to measured living; within that context, the action of the worm can be read as enacting God’s judgement of the libertine. Read only as such, a Christian paradigm overwrites the natural business of worms: to consume decaying material and cultivate putrefaction into a space of habitation and reproduction.89 Regardless of whether the Body has committed sins counter to expectations for pious behavior, he has lived as though his human body and his own desires take precedence over the bodies and desires of all other beings. The Body’s ego- and anthropocentrism, however, do not require reading the worms’ enjoyment of the corpse as punishment. Instead, the worms care as little for the Body as he did for the beings he utilized for his own gain; they take advantage of a source of nourishment and reiterate the similarity between the human and the animal. Both act in their own interests, and each takes its turn preying upon the resources accessible to them. The Body itself laments,

Wormes holdeth here mot, domes byndeth faste.

Maked he habbeth here lot on my fleyshe to caste.

Mony fre bodi shal roten—ne be Y nout the laste!”

89 Badke, David.
(ll. 26-8: Worms hold council here, fast-binding judgments. They have cast their lot on my flesh. Many noble bodies will rot — I’ll not be the last!)

The worms’ business within the Body also consists of holding “here mot” or holding their council, of reaching the decision to indulge in the freely rotting body. The word “mot,” however, holds an Anglo-Norman valence beyond Middle English. Used to mean “word” in Anglo-Norman, “mot” appears fifteen times throughout Harley 2253.\(^{90}\) It thus functions as an inter-lingual paronomasia: the worms hold their “words” in dead human flesh, taking their turn, or their “lot,” in creating from the corpse a corpus. Rereading the word “caste” as worms writing on cadavers also allows for another usage, wherein “caste” indicates writing or composing. The worms are makers who, not unlike human scribes, appropriate skin for their own use. The human body, in relation to the worms, becomes a text to be read and consumed.

Further, the Body is fixed and attenuated by the chastisement of the Gost, racked and bound in the mortal world of decay through its choice in life to weld itself to sin. In the dark enclosure of death, the Body lies flat on its bier, caught in tense debate with the Gost. The Body laments, “Bounden am Y hond ant fot Y ne may away” (ll. 19: Hand and foot I am bound so I can’t get away). Read in terms of funerary apparel, the binding that holds the Body hand and foot is literally the graveclothes wrapped around his corpse. However, read in terms of the Body’s skin, he is also bound, along with the Gost, within the mortal skin that will uncomfortably decay without releasing his soul. Read in the

\(^{90}\) Uses of “mot” as an Anglo-Norman word, listed consecutively: Art 1. *Vitas Patrum*, ll. 38, ll. 611, ll. 2582, ll. 2665, ll. 2668, ll. 2947, ll. 3676, ll. 4029; Art 2. *Herman de Calenciennes, La passioun nostre Signor*, ll. 139, ll. 853, ll. 1373, ll. 1835; Art. 8 *ABC de femmes*, ll. 140; Art. 36, *Epistle a Claudie l’emperour*, ll. 200; Art. 71, *Estoyres de la Bible*, ll. 848, l. 893-4; Art 79, *Un sage homme de grant valour*, ll. 73; Art. 115, *Contemplaction de la passioun Jesu Crist*, ll. 43.
context of meditation on the image of death, the “pyne stronge [that] maketh me thunne thryve” (ll. 8: strong pain that makes me thinly/barely thrive), further suggests that the poet is acknowledging the rigor and discomfort for the reader of such poetic image-making. At the same time, the word “pyne” functions as a pun that can be read as “pain” as well as a “pin” that binds the Body at hand and at foot, creating a tension that “maketh me thunne thryve,” or that thins the Body as his life drains away from his rigid body. Like a calf skin rooted by pins to a stretching frame, and thus attenuated, the Body lies in a similar state in its death, eternally bound in the mortal, material world. The animal skin, however, is bound to a book. The Body is transformed by the poet into one pale component of an ecosystem, one piece of skin upon which the indifference of nature is written.

Further, like a stretched calf or lamb skin from which hair or wool is scraped, the Body is stripped of its outer coverings: “‘Wher ys thi muchele prude, thy veyr ant thi gris? . . . / Thou ne shalt with the beren’” (ll. 14-6: Where is your haughty pride, your fancy and gray fur? . . . / You’ll not bear them with you, wretch, where you lie). The Gost suggests that the Body’s vanity in wearing furs in life has no relevance in death and that pride itself has left the Body on earth. Demoted from nobility by its exclusion from heaven’s court, the Body can no longer wear the furs, the surrogate skins, that set the Body apart from the poor that it robbed in life. Wearing fur signals a distinctly human attribution of social status to the wearer, but that exhibition of social hierarchy requires donning an animal skin.

On one hand, wearing a fur suggests dominance over the animal whose fur is worn. On the other, wearing fur as a marker of nobility requires allying one’s human
identity to the identity of an animal body—the fur acts as a signifier, but carries its own baggage. The Body, in life, distinguished itself from others by utilizing “veyr ant gris,” differentiating itself from animals by donning their skins. As the Gost explains, the Body cannot “Wilde bueres bete, bynde lyouns savage.” Now, undifferentiated from the boar and the lion in death, the corpse represented as weakened. As it is stripped of affectation and cultural power, the Body’s animality is revealed in sudden nakedness and in the poverty of its shroud. As its furs are shucked, the Body’s human skin becomes an animal skin, stretched and pinned, thinned and exposed to the worms that hold their “mot” on his “whyte side” (ll. 35). All hierarchy of being disassembled—from the divine hierarchy in which the pious strive for recognition, to the social hierarchy of mortal men who distinguish themselves through expensive clothing, to the hierarchy of the natural world where man attempts to dominate animal, plant, and insect life—the Body becomes a reminder that hierarchy itself is arbitrarily designated by human taxonomies.

Looking beyond the affective, textual human-animal relationship to the material preparation of a manuscript affords a broader perspective of the ecological matrix it represents. An animal’s death prefigures the page, the skin is treated and stretched to make parchment, a scribe mixes ink and then writes. The creation of ink also includes its own ecology. Because they incorporate processed fragments of vegetable, mineral, and animal materials, inks are themselves decoctions of a literary ecosystem. The inclusion of ink complicates the relationship of the human to the symbolic representatives of the natural as they are encountered on the page. The act of reading, especially reading Vorte temprene asure (fol. 52 va) renders a multifarious stirring together of the physical and the imaginary. The little-studied recipe takes on new significance when contextualized within
the (mostly) literary component parts of MS *Harley 2253*. The piece is instructional and grouped with seven other recipes. As a recipe for azure ink, it calls attention to the manuscript as a composite artifact: the product of many bodies (it is one of the sections copied by the Harley Scribe’s apprentice), labors, and changes of form. The instruction begins:

> Yef thin asure is tin, tac gumme arabuk inoh, ant cast into a standys with cler watur, vorte hit beo imolten. Ant seththe cast therof into thin asure, ant sture ham togedere. Ant yef ther beth bobele
> theron, tac a lutel erewax, ant pute therin ant thenne writ.
>
> (ll. 2-4: If your azure is pure, take enough gum arabic and put it into a stand with clear water, until it melts. And then cast some of this into your azure, and stir them together. And if there are bubbles in it, take a little earwax, and put it in, and then write.)

Although the title privileges azure as the active ingredient, the color of which will illuminate illustrations and letters, the recipe incorporates gum Arabic, water, and even earwax into the final product. As a reader encounters the text, he or she cognitively experiences the process of creating the ink from mineral (azure), vegetable (gum Arabic), elemental (water and the fire that creates the heat that melts), and animal (human earwax) components. The visual encounter with these words, written in ink on the parchment, perhaps subconsciously reminds the reader of the final product. The reading experience, where the encounter of visual and sensory materiality and the cognitive processing of textual signification exist simultaneously, stretches the imperative in the instruction to “sture ham togedere.” Not only does the text invoke the phantom ecological
representatives on a narrative level, but it also calls forth those phantoms in its presence before the eye and the hand.

Additionally, the constituents of blue ink represent fragments of hierarchy within the ecology of natural philosophy and their intermingling works to decenter the human within the recipe as well as within the text. As Jeffrey Jerome Cohen imagines pigment, “color is not some intangible quality that arrives belatedly to the composition but a material impress, an agency and a partner, a thing made of other things through which worlds arrive.”91 The focus of the title upon the essence of the ink, azure, indicates to readers the primacy of the mineral in the hierarchy of active ingredients in the recipe. This focus privileges the visual reception of the color of the resulting ink: the distilled azure serves as the only visible trace of the process which produces the written word. Once a scribe follows the directive to write, readers can no longer detect the gum arabic, water, or earwax, let alone the fire that heated the entire mixture. The human moves from its place as the instigator of poetic invention and becomes an invisible prop for the transmission of color to the eye. Thus, the recipe Vorte temprene asure unsettles human primacy and resituates human and plant members of the ecosystem as invisible agents by which verbal meaning is physically constructed through calligraphic application of the tempered azure to the manuscript page.

BL MS Harley 2253, however, is written primarily in black ink, which serves as a metonym of another textual ecosystem. The lasting black lettering that permeates the Harley parchment is written in encaustic ink, the acidity of which eats into and penetrates

beneath the surface of stretched membrane. Encaustic black inks, in the 14th century, were made from oak galls crushed and boiled in wine and mixed with gum Arabic. While the components of such a recipe appear at first to derive from exclusively vegetable sources, the gall itself develops out of the reproductive activity of gall wasps. As oak flowers cross pollinate and fertilize and female gall wasps insert their ovipositors into the blossoms, depositing their eggs. Once the eggs hatch, the wasp larvae disrupt the development of the oaks’ plant cells, which produces the gall as they consume the proteins generated by the oaks’ apical meristems and the developing acorns. The resulting galls drop off as the seasons pass and the larvae emerge as they develop into adult wasps or the galls are harvested from the branch before they have a chance to drop. In either trajectory, they cannot come into being without the colonization of oak flowers by animal invaders. Words written in black encaustic ink are thus haunted by the nascent gall wasp as much as they are by the mutated acorn. The tannic and gallic acids that characterize an encaustic perform a function corollary to the penetration enacted by the gall wasp; just as the ovipositor bores into the oak flower, the quill of a scribe deposits onto parchment the acidic ink that burrows into animal skin. Both wasp and acorn develop together into gall as a coproduction and are joined by the agency of the human who crushes, decocts, and writes. While the scribe may figure most prominently and visibly as the creator of BL MS Harley 2253, he is only one of many co-creators; the manuscript is indeed, as Stemmler puts it, “a collection of representative specimens.”

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93 Ibid.
However, the genre of the manuscript’s specimens extends beyond the literary and into the genus and species of nonhuman bodies.

The linkage created between living forms through decay reenforces a sense of unwilled destiny shared among all material things. Just as Vorte temprenye asure decenters the human by privileging the mineral, Erthe toc of erthe (no. 24b, fol. 59v) centers the mineral agency of the earth and removes human action and power entirely from the narrative of the poem. Preceding Erthe toc of erthe are two short poems, Charnel amour est folie (no. 24, fol. 59v.) and Momentaneum est quod delectat (no. 24a, fol. 59v.), that preface human decentrality in their excoriating of human bodies, the first in Anglo-Norman and the second in Latin. Between them, the two poems enact the moralistic dialog of the Anglo-Norman works in Harley 2253—which focus on the question of human reproduction and sexuality in general—and the Latin—which invoke a paradigm of Christian didacticism. Charnel amour est folie (no. 24, fol. 59v.) works from an Anglo-Norman perspective that sees flesh as the site of sexual desire, the indulgence of which condemns man to “torment” after his body decays. The speaker of the poem insists that: “Qe velt amer sagement / Eschywe ce quar breve vie / Ne lesse dure longement.” (ll. 2-4: He who wishes to love wisely avoids it, because life’s brevity doesn't allow it to endure long). These lines encourage an abandonment of carnal love—read as either sexuality or love of material wealth—because human life and the enjoyment of pleasure are fleeting; “breve vie,” disallows endurance beyond an affective experience rooted in the body. The composer of Charnel amour quickly turns away from the ephemerality of the purely human body in the next lines, however, writing: “Ja n’ert la char si florie / Que a purreture ne descent” (ll. 5-6: Never did flesh exist or flourish that
didn't descend to rottenness). The “char” or *flesh* is not explicitly human, but any flesh or skin that “florie”; that which flourishes, flowers, or blossoms. “Char” is mortal and decays. Through the use of this verb, the poet reminds the reader that humanity is not exceptional; like any growing life that blossoms, allures, thrives, the human body will eventually “descent [come undone or decay]” and follow the flower and the fruiting tree into rottenness or putrefaction: “purreture.” The poet seems to discourage obsession with pleasures of the flesh and reminds readers that the sort of the “torment” experienced by the Body in *In a thestri stude I stod* will follow those who ignore this moral imperative. He does so, however, by reiterating the similarities shared between humans and non-humans. All will eventually die and decay in the same earth. Although the meditation on death requires an empathetic reaching toward the abject, the reminder that living beings are mortal does not just result in repulsion, but also a reimagination of the self within a larger ecological series of lifecycles. The ethical life within this ecology demands a conscious recognition of phenomena and existence beyond oneself; in the case of *Charnel amour*, that recognition extends to the spiritual afterlife as well as the nonhuman mortal world.

The Latin couplet *Momentaneum est quod delectat* (no. 24a, fol. 59v.) reiterates the final lines of *Charnel amour*, creating a repetitive echo of the sentence of the previous poem and crystalizing the more ambiguous and general “torment” of mortal sin potentially committed by anyone to the pain of Christ upon the cross: “*Momentaneum est quod delectat, / Set eternum quod cruciat*” (ll. 1-2: What allures is momentary, but what torments is eternal). While this short poem does write a Christian moral paradigm onto the time-scale of the momentary and the eternal, the human does not exist in the syntax of
the poem except, perhaps, as the suggested direct object of that which delights or crucifies. This implied objectification of the human further positions the subject of both verbal actions as an indefinite entity beyond the human: any subject who reads and internalizes this aphorism, thus continues a turn away from the explicitly human subject.

By imagining an end to life—not only human but also all organic life—these poems preface the famous *Erthe toc of erthe* as a poem that examines the activity and material agency of an elemental world beyond the human, animal, or plant. While scholars have historically read human social, sexual, agricultural, and religious narratives in the poem, their tendency to project humanity onto a poem that contains only earth as subject and object obscures the literal level of meaning in favor of allegorical treatments. Gillian Rudd, however, in her deconstruction of such traditional readings, urges us to read the poem in the terms the poet has set for us: “the poem’s dexterity with the word ‘erthe’ foregrounds our marked unwillingness, even inability, to read it as simply ‘earth.’”95 Rudd argues that most critical attention has tended to overwrite the literal *erthe* with narratives of the human in an attempt to make the nonhuman in the poem more accessible--more “humanly comprehensible and comfortable”—to a sermonizing thread that includes *Charnel amour* and *Momentaneum*. Although our inclination may be to overwrite a human context onto a text that radically lacks the human, we must focus our attention on a scaled vertical integration of the presence and abundance of earth, perhaps soil or perhaps the world, and conduct our analysis on it instead of on ourselves.97 The sort of meditative attention cultivated in *Charnel amour* and *Momentaneum* requires that

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96 Ibid., 27.
97 Ibid., 29.
readers of the poems look beyond themselves to the world beyond the human, the world without the human. I agree with Rudd’s conclusion, that “the resilience of many nature lyrics in the face of critical interpretation may in itself be an accurate rendition of the final unknowability of the phenomenal world.”98 However, she ends her own analysis prematurely and reads the earth again through the human—although through the history of human response to the poem—demonstrating that our responses to *Erthe toc of erthe* reveal the inaccessibility of the non-human, the unwillingness of the earth to yield itself to the creation of its own meaning. I take her conclusion a step further, sustaining focus on the “erthe” itself. Given that *Erthe toc of erthe* is included as the third in a trilingual group of mortality poems that warn readers against privileging human desires and human bodies, the compiler of BL MS *Harley 2253* appears to direct our attention to the absence of human bodies in the English finale to the triad.

Whereas the preceding poems imagine life ending with the human and only torment existing afterwards, *Erthe toc of erthe* serves as the alternative postscript to human existence:

Erthe toc of erthe erthe wyth woh;
Erthe other erthe to the erthe droh;
Erthe leyde erthe in erthene throh;
Tho hevede erthe of erthe erthe ynoh.
(ll. 1-4: Earth took of earth earth with woe; earth another earth to the earth drew; earth laid earth in earthen trough; then had earth of earth earth enough)

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98 Ibid., pp. 26-7.
The accumulation of earth in this poem counters the limitation and erasure of death implied by *Charnel amour* and *Momentaneum*. Instead of life ending with human death and only torment enduring, the body of the earth—the bodiless earth, in fact—persists and flourishes. The earth acts as an agent, no human in sight to dig a grave, to turn the earth in toil, to lay a lover, to redeem humanity’s sins. On the contrary, the earth moves to satisfy its own accumulation and equilibrium, which comes to rest when it has heaved/had enough of itself. Rudd notes that, “‘Droh’ has connotations of drawing down into sexual coupling, some of which also form part of the semantic range of ‘leyde,’ while ‘throh’ can mean specifically labour pains. It can also refer to death pangs, of course, and indeed also carries the meaning ‘coffin.’”\[^{99}\] These verbs (and noun), however, do not need to refer to a human life cycle. Indeed, the soil has its own cycles of life and death. It is fundamentally the composite or decomposite of living and dead bodies, as much flesh as it is mineral. At the same time, “erthe” is both subject and object within the syntax of the poem. It is the actor as well as the initiator of action, suggesting that the soil or mineral components of the world have their own activity, their own motivations, their own force. The human may be as absent as flora and fauna, but the earth remains and accumulates until it reaches sufficiency or equilibrium. The finality of “ynoh” does not obliterate the earth; its materiality is that which persists. “Ynoh” then can carry the signification of “abundance,” an accumulation as much as it refers as well to satiety. There is no human agent in the poem, only the earth. Earth is the mover, the drawer, the feeler, the force defining its own sufficiency in abundance. But there is a human component to the poem in that it is written by a human to be read by a human. Although the refusal to allow human entry into the poem forces us to focus our attention

\[^{99}\] Rudd, pp. 24.
beyond ourselves to the life of the elemental, the earth does not exist alone after all, but in the ecology of the manuscript, in the creative cognition of the poet, and in the resisting psyche of the reader.

Although, as noted above, critics have suggested an identity for the creators and milieu of the Harley Scribe, the manuscript remains anonymous and so lacks a clearly defined human creator. Instead, readers are left to engage directly with the textual ecologies beyond authorship. A focus on all that which surrounds and composes the manuscript reveals the influence of a developing a literary response to erasure and loss. This loss finds its expression in the relationship of the human to the landscape and to animals and plant life. However, throughout the anthology, the texts included in *Harley 2253* return readers to the ephemerality of individual experience. The reliance on the trope of mortality works in concert with a desire for an anthropomorphized landscape or ecology that works through its own agency, including, but not requiring the human for continuation. The fact that the body will die focuses attention, not only on the spiritual afterlife of the human, but also on the durability of the corpse, which is ultimately an animal corpse. Even as it contains poems that refer to the complexity and inclusiveness of ecological community, the artefact of the manuscript itself presents a representation of the interconnectivity of lifeforms in their material afterlife, as ink and as parchment.
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“The usual way to deal with weeds is to cultivate the soil. But when you cultivate, seeds lying deep in the soil, which would never have germinated otherwise, are stirred up and given a chance to sprout. Furthermore, the quick-sprouting, fast-growing varieties are given the advantage under these conditions. So you might say that the farmer who tries to control weeds by the cultivation of the soil is, quite literally, sowing the seeds of his own misfortune.”

--Masanobu Fukuoka, *The One-Straw Revolution*

“How many feet of whirlpools?
What is a year in terms of falling water?
Cylinders; kilowatts; capacities.
Continuity: $\Sigma Q = 0$
Equations for falling water. The streaming motion.
The balance-sheet of energy that flows
passing along its infinite barrier.

It breaks the hills, cracking the riches wide,
runs through electric wire;
it comes, warning the night,
running among these rigid hills,
a single force to waken our eyes.”

--Muriel Rukeyser, “The Dam” from *The Book of the Dead*

In his analysis of industrially instigated environmental harm, Rob Nixon theorizes “slow violence” as a mode of conceptualizing systematic damage that occurs on an extended timescale and renders the causal relationship between industrial practices and ecosystemic damage largely invisible. His analysis tracks causality and violence through deep time, contributing to a body of theory that facilitates critiques of the repercussions of systems and ideologies spanning centuries. He advocates that critics contend with “a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales.”

Similarly, Heidi Scott’s proposes that in order to understand energy industries and their rhetoric in the present, we need to go “retrograde,” examining past relationships to

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energy exploitation. I add to these theorists of the petromodern Stephanie LeManager’s concept of the “ultradeep” in oil culture as drilling or fracking that “court[s] significant and sometimes catastrophic risk. Yet going ultradeep implies an unprecedented potential for destruction because of where these last reserves are and the violence of the experiments necessary to get them. Ultradeep implies a disregard for climate security and for the world’s oceans, fundamentals of ecological health. Ultradeep also implies an unprecedented devotion, even love.” To pursue the ultradeep in the context of petroleum extraction is to prioritize greed and human economies--the love LeManager describes verges on obsession and possession. To pursue the ultradeep in literature, I argue, is to develop a stratigraphic perspective of rhetoric. By this I mean the ability to read economies of exploitation and ecological networks through time.

The chronological periodization of literature can serve to mask potential affinities among representations, cycles of cultural fixation, and recurring vulnerabilities to exploitative rhetorics. Patricia Yeager advocates for the reorganization of literature by its affinities for and engagements with energy economies. In collaboration with Yeager, Laurie Shannon and Vin Nardizzi reorient premodern energy economies around tallow and wood as predecessors to modern day oil regimes. Shannon’s and Nardizzi’s analyses provide poignant examples for reorienting readings of human relationships to energy exploitation. Within the discourse of cultural-industrial studies of energy

dependence, I argue that going ultradeep also means engaging strata beyond a single genre of representation or rhetoric. Engaging culture through a stratigraphical lens liberates cycles of behavior from chronology and thus causation. Applying an ultradeep reading to medieval literature also allows us to consider the impacts of rhetoric as potentially violent gestures; not acts of spectacular disenfranchisement or destruction, but as slow degradations of moral fortitude, of social standing, of capacities to sustain oneself. Such an approach also allows us to take seriously that medieval people consciously and dynamically interacted with their own energy economies--that, in other words, medieval people were aware to some extent of the impacts of the use and misuse of their environments. If we accept the ability of medieval people to respond, we modern people must also accept our own responsibility—not as authorities but as participants within changing ecologies.

The alchemical con-game in Geoffrey Chaucer’s *Canon’s Yeoman’s Tale* provides an example of a text that examines a toxic rhetoric and its concomitant ideology that today continues to inform energy industries. While no critical response to the *Canon’s Yeoman’s Tale* has focused primarily on environmental and physical health as Chaucer represents them, many do note Chaucer’s preoccupation with the destructive capacity of alchemy. Charles Muscatine, in his book *Chaucer and the French Tradition*, contends that in the Tale, Chaucer represents the alchemists as men who renounce their place in both the human and spiritual worlds. He suggests that within Chaucer’s characterization of alchemists is a “germ of wry prophecy . . . whether already in the fourteenth century an acute consciousness could not have caught the future of
technology.”

Countering this sort of critique, which sustains a broad suspicion of science, Jonathan Hughes writes more judiciously about the history and practice of alchemy in the 14th century. He sees Chaucer’s vision in the *Canon’s Yeoman’s Tale* as a warning against misunderstanding the goal of alchemy and philosophy. In Hughes’ interpretation, Chaucer’s work in *The Canterbury Tales* is grounded in a representation of occult balance—that his entire collection of poems serves as an act of literary transmutation, the key to which is focalized in *The Canon’s Yeoman’s Tale.*

Joseph Grennan, who has written repeatedly about the *Canon’s Yeoman’s Tale,* also sees in Chaucer’s work a deep level of alchemical knowledge. He argues that Chaucer represents in his description and characterization of the yeoman a reversal of ideal alchemical philosophy and practice: that the alchemical quest to overpower nature reveals its perversion in the ailments the yeoman suffers. Although critics of the *Tale* hold differing perspectives regarding the cause of the imbalance and deviance of alchemists, they agree that Chaucer represents the canon’s and yeoman’s pursuit of the philosopher’s stone or the elixir of life as highly destructive. This essay explores the extent of the destruction embodied in their quest. The *Canon’s Yeoman’s Tale* helps us visualize the slow violence done by the rhetoric of technological greed and its material impact on the bodies of humans. In the first section of this essay, I argue that Chaucer locates institutional violence, individual harm, and environmental destruction in the rhetoric of

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alchemists and the canon’s and yeoman’s search for extra-fiat wealth, defined as currency that does not derive its value from a governing or ruling body. In the second, I explore the ways in which the rhetoric and laboratory practice of the *Canon’s Yeoman’s Tale* serves as a link to the rhetoric, practice, and destruction of Bitcoin mining operations. Examining these two iterations of extremely costly, faith-based deceptions, I argue, unveils a stratigraphy of flimflam rhetoric and its dangerous, continuing influence.

**Section 1**

The *Tale* is told by the canon’s yeoman, who, with his master the canon, interrupts the tale-telling pilgrimage of the *Canterbury Tales* to offer a semi-confessional testimony. The company of characters set out together from London on a journey to Canterbury Cathedral where pilgrims hope to find spiritual renewal. At the beginning of their pilgrimage, the “Hoost” of the Tabard Inn joins the group, whose company he enjoys, and proposes a story-telling competition. Each pilgrim will attempt to “telleth in this caas / Tales of best sentence and moost solaas” (ll. 797-8) and thus win a meal at the Hoost’s expense on the return trip. If a pilgrim chooses not to share a story to entertain the others, he or she must pay the traveling expenses for the rest of the company. While Chaucer contextualizes each character in the *General Prologue*, the canon and yeoman, as late-comers, do not appear. The yeoman, however, seems to intuitively grasp the stakes for joining the group and immediately shares his own story. His tripartite verse tale includes a dramatic, auto-biographical prologue about the pair’s alchemical endeavor to create the Philosopher’s Stone (*prima pars*); a story about a ponzi-scheme-style network of men whose belief in their ability to transmute metals leads them to use all of their
worldly goods on the overhead costs of pursuing that goal (*secunda pars*); and a conclusion to the tale that laments the practice of alchemy (undifferentiated except for the exclamation “Considereth, sires . . .” (ll. 1390). Although the yeoman uses the language of morality to curse his own exploiters, Chaucer’s introduction of a previously unintroduced, decontextualized character into the narration, deepens the layering of voices and reveals a pattern of behavioral red flags, voiced in material terms, that signal the approach and arrival of the flimflam man. Moral judgement recedes before sensorial and intellectual experience and it is a reversal of this phenomenon which the yeoman advocates as a preventative cure for the socio-economic ailments of exploitation. He craves an intellectual transmutation that perfects or purifies one’s ability to combat exploitation. It is his repeated demonstration that desire blinds and blindness wounds that mirrors contemporary utopian dreams of economic cure-alls and their costs. The yeoman’s narrative also reveals the destructive misinterpretation and misuse of alchemical philosophy as extending beyond the immediate human damage to an ecosystemic violence with cosmic implications.

The canon and his yeoman are autodidactic alchemists whose goal is to transmute base metals into silver, gold, and copper through the chemical mortification or stabilization of volatile mineral matter. They want to “concluden in multiplicacioun” (ll. 849), ending their work by attaining the late medieval stereotype of the alchemist’s most literal goal, to become incredibly wealthy and to prove their godlike power by

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turning mercury and sulfur into gold.\textsuperscript{112} Alchemists like Albertus Magnus and Arnold of Villanova, as well as most other scholars of alchemy, do assert the possibility of transmutation.\textsuperscript{113} However, they also spend most of their intellectual energy explicating the mysteries of the cosmos as evident in mundane materiality. They theorize transmutation as a purification of bodies decaying or compromised by earthly affiliation. That said, the elements by which purification of baseness may be catalyzed exist in all minerals, all humans. The canon and yeoman neglect completely the spiritual aspects of transmutational discourse and instead focus only on the potential of alchemy to make them wealthy. For alchemists of the 14th century,\textsuperscript{114} transmutation in the literal sense was not possible and so neither is the “conclusion” of the canon’s and yeoman’s work: they cannot actually create gold. In fact, the more resources they invest, the farther they seem from their conclusion:

\begin{verbatim}
For al oure craft, whan we han al ydo,
And al oure sleighte, he wol nat come us to.
He hath ymaad us spenden muchel good,
For sorwe of which almoost we wexen wood,
But that good hope crepeth in oure herte,
Supposyng ever, though we sore smerte,
To be releved by hym afterward.
Swich supposyng and hope is sharp and hard;
I warne yow wel, it is to seken evere.
\end{verbatim}

\textsuperscript{113} Ibid.
\textsuperscript{114} Although transmutation of metals into gold was theorized as possible in the Middle Ages, transmutation in fact was first realized in 1924 by Hantao Nagaoka via neutron bombardment.
(ll. 866-74: For all our industry, when we have completed everything, and all our ingenuity, he [the philosopher’s stone] will not come to us. He has made us spend a great deal of good[s], for sorrow of which we almost grow mad, except that good hope still creeps in our heart, ever supposing, though we sorely smart, we will be relieved by him afterward. Such supposing and hope is sharp and hard; I warn you well, it is to seek forever.)

Within the language of the yeoman’s dramatic prologue here, he dismantles his own agency as an actor with free will. He is in thrall to the “philosophres stoon, / elixer clept” (ll. 862-3: philosopher’s stone, called elixir [of life]). The yeoman removes responsibility from himself and his fellow alchemists by ascribing power of action to the idea of the philosopher’s stone. It has made the philosophers waste all of their financial and moral resources in attempting to conjure it. Further, his language reveals that he does not refer to himself as an individual capable of “supposing” differently: “Goode hope” creeps in “oure herte.” Chaucer leaves ambiguous the source of the yeoman’s plural identity. However, the title of the poem is the *Canon’s Yeoman’s Tale*,115 suggesting that the yeoman has been so brain-washed and exploited by the canon that he has lost his sense of himself beyond the yoke of his work. Alternately, he has become so “consumed” by his craft that his identity has been physically lost—no longer a man with a name or extra-professional history; he is his vocation, which is serving another—the canon—who has also become his vocation.

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115 Although the *Canon’s Yeoman’s Tale* is not included in the Hengwrt Manuscript, it does appear in the Ellesmere Manuscript. The scribe, gives the poem the title, “The chanons yeomanes tale,” on f. 192r.
The yeoman describes work that is so complex that no matter how much one studies, the knowledge of God’s mysteries slides away. The alchemists’ failure is due in part to the fact that the mineral bodies with which they work do not begin as stable materials. The attempt to mortify mercury and sulphur serves to reiterate that minerals are active and acting—not dead matter to be easily manipulated. Their “labour is in veyn” (ll. 777) and they cannot control the materials that they have corralled into relative stability: “materes that lyen al fix adoun, / Mowe in oure werkyng no thyng us availle, / For lost is oure labour and travaile” (ll. 779-81: materials that lie fixed down may not avail us at all during our work, for lost is our labour and toil). The yeoman notes that because their alchemical work is unsuccessful and they cannot create wealth for themselves, they must borrow and steal to make a living. The alchemists’ exploitation of the vulnerable extends through the life of the yeoman, victim of alchemical violence, and beyond, into his spiritual afterlife. The canon’s yeoman spends most of his tale expounding on how an evil canon seduces gullible people into investing their gold in his con game. The specific victim is a chantry priest who lives within a spiritual economy. He has no income of his own, but relies on his benefactress to pay his expenses. She has a spiritual investment in his payer on her behalf.

The yeoman, however, prefaces this criminality early in his prologue by way of their physical and social location in the geo-political landscape. When asked by the Hoost where the canon and yeoman live, the yeoman answers:

In the suburbes of a toun . . .

Lurkynge in hernes and in lanes blynde

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116 The idea that lively energy exists in all bodies, whether animate or not, was hylozoism and was a key aspect of alchemical philosophy according to Charles Muscatine, pp. 217.
Whereas this robbours and this theves by kynde
Holden hir pryvee fereful residence
(ll. 657-60: In the suburbs of a town . . . Lurking in alcoves and blind lanes just as these robbers and thieves by nature keep their secret fearful residence)

The canon’s and yeoman’s liminal existence is necessitated by their poverty, since they have spent all of their wealth in the attempt to create more via alchemy. Although he claims that they dare not reveal themselves as alchemists for fear that they will be killed for their secret knowledge of the divine, the yeoman also immediately begins confessing the wickedness of their activity. Perhaps not coincidentally, he begins his confession when the company is roughly five miles from Canterbury, where they hope to receive spiritual renewal, impossible to achieve in a Christian world without confession. Paradoxically, he confesses the enormous amount of money that he has lost in his endeavor to discover the elixir. In addition to their evident indigence, their locality also reveals their intimacy and association with the occult, especially the criminally occult.

The yeoman admits that they dwell in the remote corners of an anonymous town, “lurkynge” or hiding in “blynde” lanes. Chaucer’s description here figures the occult existence of alchemists as appropriately placed in the most “occult” urban area. The blind lanes hide the canon and the yeoman from the notice of other citizens. The yeoman also associates himself and the canon with robbers and thieves by means of their residence in the same alleys. Although the surface implication of the last two lines of this section—“Whereas this robbours and this theves by kynde / holden hir pryvee fereful residence”—is that robbers and thieves are distinct from the canon and yeoman, the yeoman’s
discourse itself reveals the thievery of the alchemical trade, which itself if “fereful” and “pryvee” in its occult focus. Jonathan Hughes also notes that alchemists were stereotypically viewed as deceivers and criminals.\textsuperscript{117} In this cultural context, the yeoman essentially admits the criminality of alchemists.\textsuperscript{118}

Proximity is not direct evidence of criminality, of course. There is plausible deniability seeded throughout the \textit{Canon’s Yeoman’s Tale} as the identity of the canons is multiplied and thus blurred. The tendency to “dar nat shewen hir presence” and their reliance on “privitee” certainly leaves room for clandestine criminality, which can be publicly advertised as philosophical engagement. The yeoman describes the work of the canon and himself as “sleight” and “cursed craft” and alchemists as “folk [who] bitrayen innocence” (ll. 897). However, he also attempts to distance himself and the canon in his \textit{Tale} from his reading audience: “But worshipful chanons religous,/ ne demeth nat that I sclaundre your hous,/ Although that my tale of a chanon be.” (ll. 992-4 But worshipful, pious canons, do not think that I slander your profession, although my tale is about canons). In attempting this distance, however, the yeoman also reveals that the ponzi scheme of the tale, of unsuccessful alchemists, affects the lives of countless other interchangeable canons and their gullible victims.

Although the more noble philosophical goal of purification through transmutation lingers as a higher motivation for the canon’s and yeoman’s work as suggested by the


\textsuperscript{118} Chaucer perhaps intends a pun when the yeoman uses the language of the occult to describe his dwelling place. Although the alchemists spend their time investigating and interrogating the “occult,” they actually attempt to discover the hidden truths of the universe via the word of God (“God” applies to the Christian, Jewish, or Muslim divinity, depending on the which Western alchemist is examined. There is a long and intricate tradition of South and Southeast Asian alchemy, but I have restricted my alchemical research to theorists Chaucer might have encountered in his reading.). The yeoman’s focus on the physically occult may be one more example of his misreading and misunderstanding of alchemical philosophy.
third section of the *Tale*, the main goal of the alchemists described in the *secunda pars* is to launder money. Alchemists, the yeoman demonstrates, want to increase their wealth in a way that, when described abstractly, is not dissimilar to financial speculation: if one invests in alchemical work by directly providing pure precious metals, the alchemists will provide a miraculous return on that investment by “creating” more of the precious metal from base metals. He provides an example in the story of a dastardly canon who dupes a gullible priest into believing that he can create silver from quicksilver. He claims that if the priest himself must use his own hands to work under the canon’s instruction so that he will know that he is not being tricked—he will see how he too can create silver from quicksilver or mercury. But, as the yeoman reiterates, the canon works to blind the priest and hide his deception from the priest’s sight. The priest wipes off the dust and sweat of his labor with a cloth and so cannot see that the metal generated by their work is fraudulently planted. They do not make anything new and in fact create waste.

Having discovered a way to convince others that they can mint their own money from scratch, they now seek investors. The Yeoman hedges this goal in loftier terms in the *prima pars*, by framing their destructive activities as miraculously profitable:

I seye, my lord kan swich subtiltee--
But al his craft ye may nat wite at me,
And somwhat helpe I yet to his wirkyng--
That al this ground on which we been ridyng,
Til that we come to Caunterbury toun,
He koude al clene turnen up-so-doun,
And pave it all of silver and of gold
(ll. 620-26: I say, my master [the canon] is so capable of subtilty--although you cannot confer his knowledge onto me, and I still assist him in his endeavors even now--that all this ground on which we have been riding, until we arrive at Canterbury town, he could cleanly turn it upside down, and pave it all in silver and in gold.)

The yeoman claims that the canon can turn the road and ground beneath them “upside down” and transform it into gold and silver. He uses the adverb “clene” to modify this hypothetical action and in doing so, imbues his suggestion with the language of alchemy. “Clene” has valences of mineral purity, meaning unalloyed or unpolluted,\(^{119}\) as well as the moral and legal valence of being free of crime.\(^{120}\) The yeoman’s tale reveals the alchemy practiced by a supposedly fictional canon as both criminal and involving the use of alloys, making his advertisement of alchemy highly suspect. Given his statement, that “somwhat helpe I yet to his [the canon’s] wirkyng,” the yeoman reveals the sort of rhetoric he and other profit-hungry alchemists use in order to dupe their prospective customers.

Moreover, the miraculously profitable capabilities of the pair are also framed as disruptive to the spiritual and psychological infrastructure that facilitates pilgrimages. The yeoman’s imaginative excavation is a violent turn of his rhetoric. As he suggests that alchemy can create material wealth out of the road of pilgrimage, Chaucer alludes to the economic and rhetorical investment that binds the pilgrimage and propels the group

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\(^{119}\) “clene (adj).” *Middle English Compendium*, University of Michigan. quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED7950/track?counter=2&search_id=1844906. Accessed Aug. 2019.: “(a) Free from admixture, pure, unmixed, unalloyed, unadulterated, unpolluted; also *fig.*”

\(^{120}\) Ibid.: “(a) Morally clean, righteous, pure, innocent, guiltless (of a sin or crime).”
toward Canterbury. The yeoman “transmutes” the physical journey into an imaginative one, and thus undermines the spiritual work of pilgrimage. We find here a flavor of the rhetoric used by the “wikked” alchemist in the yeoman’s tale—with the secret knowledge and highly specialized, scarce skillset the canon has, one can generate wealth outside of monarchical or bureaucratic oversight as well as outside of society’s ethical frameworks. In other words, the hypothetical gold or silver would exist outside of the fiat currency circulation, but still be valuable within it. Alchemy in these terms destroys the road that leads them to a reinvestment in their ethical framework. This excavation of the road in turn is designed to redirect the pilgrims from moral reflection and regulation of desire toward greedy pursuit of destructive wealth. The yeoman seems to want to either recruit pilgrims to become his own yeoman in alchemical work or to weasle gold from them in order to “multiply” it.

The excavation of the earth is also a very basic description of the environmental impact of mining and smelting that alchemy claims to make obsolete. By the fourteenth century, mining operations were confined to surface digs, even though previous Roman mine shafts still dropped hundreds of feet into the earth.\footnote{Nef, John. “Mining and Metallurgy in Medieval Civilisation.” The Cambridge Economic History of Europe from the Decline of the Roman Empire, vol. 2, Cambridge University Press, Cambridge, 1987, pp. 725. In a more extensive study one might argue that the alchemists’ work fills a void—at least in the literary imagination of Chaucer—in the generation of currency still evident in the landscape.} Slag heaps, mine shafts, and quarries from which the mining and smelting industries drew their ore were hard to miss in the 14th century, especially as one moved through the countryside.\footnote{White, Graeme J. The Medieval English Landscape 1000-1540, Bloomsbury, London and New York, 2012, pp. 69.} Chaucer, too, refers to evidence of mining as an industry both contemporary to him and as evident from the labor of earlier civilizations. He writes in a short poem, “The Former Age,” that
“cursed was the tyme, I dare wel seye, / That men first dide hir swety bysinesse / To grobbe up metal, lurkinge in derknesse” (ll. 27-9). Archeological researchers today continue to uncover and study the contents of ancient mines and smelting sites.

Instead of directly acknowledging the cost that alchemists internalize in their production, the yeoman notes three times that the “sluttish” appearance of both himself and the canon--or any alchemist--is due to the danger of revealing their profession visually because the power of the knowledge they have gained is worth killing for:

Why they been clothed so unthriftily,
They right anon wol rownen in his ere,
And seyn that if that they espied were,
Men wolde hem slee by cause of hir science.
Lo, thus this folk bitrayen innocence!
(ll. 893-7: The reason they are clothed so wretchedly they will momentarily murmur in one’s ear, and say that if they were recognized, men would slay them because of their knowledge. Lo, thus these people [alchemists] deceive innocence!)

Even as he glorifies alchemists’ observable decrepitude, he explains that such mystification is the rhetoric alchemists use to validate and disguise what, in practice, is fraud. In fact, the Yeoman tells us that before he met the Canon, he

. . . was wont to be right fressh and gay
Of clothyng and of oother good array,
Now may I were an hose upon myn heed;
And wher my colour was bothe fressh and reed,
Now is it wan and of a leden hewe.

(ll. 725-9: . . . was used to being clean and cheery of my clothing and of other various accoutrements, now I wear a stocking upon my head; and where my color was both fresh and red, now it is pale and of a leaden hew.)

Because, he says “I blowe the fir til that myn herte feynte” (ll. 752: I blow into the fire (to stoke or fan the fire) until my heart faints), his health has deteriorated. In the pursuit of either an elixir that is supposedly a panacea or pure wealth, the yeoman has become sickly, poor, and of “wittes thynne” (ll. 741: weak minded). He leads a reader to connect the exploitation of the priest's borrowed wealth to the yeoman’s own losses, including the deflation of his health. Although the yeoman at times suggests that he understands that he has been tricked into his losses by the very rhetoric he perpetuates, he also attributes those losses to the slippery and paradoxical nature of alchemical knowledge. No matter how fervently he or any alchemist pursues their study, they cannot approach their goal of multiplication. The blame, then, gets rhetorically externalized, erasing again the cost to the alchemist and by the alchemist.

The harder that he and the other alchemists work and the more intimate that they become with their materials, the more debauched and identifiable they become. Perhaps partly because of the blinding quality of their sulphurous work, they are most easily identified by their odor:

And everemoore, where that evere they goon,

Men may hem knowe by smel of brymstoon.

For al the world they stynken as a goot;
Hir savour is so rammyssh and so hoot
That though a man from hem a mile be,
The savour wole infecte hym, trusteth me.
(ll. 884-9: And evermore, wherever they go, men will know them [alchemists] by the smell of brimstone. Through all the world, they stink like a goat; their savour is so rammish and so hot that though a man be a mile away from him, the savour will infect him, trust me.)

Despite all of their rhetoric and reframing, the reality of their practice is that they announce their presence viscerally. They broadcast their vocation, obsession, and greed to others as a sort of viral, sensory infection. John Grennan notes the infernal quality of the rammish alchemist who smells of sulphur.123 Although there is a Christian morality implicit in the association of a human with a stinking ungulate or devil, the odor of an alchemist is also that of the substance with which they work most closely, sulphur. Again, the humanity of the alchemist is reduced in Chaucer’s verse to being indistinguishable from the mineral matter they attempt to overpower. Instead, the opposite sort of transformation takes place and they become mineral. They appear as the victims and exempla of their own greed, corruption, fraud, or—to put it more mildly—lack of critical thinking.

Section 2

In essence, the dream of a viable, unregulated currency that could be generated outside of governmental control, also led to the conception of Bitcoin. This section investigates Montana’s bitcoin mines in terms of the rhetoric of their directors and their connection to patterns of bitcoin mining in the Northwestern United States through the lens of slow violence rhetorics begun in Chaucer’s Canon’s Yeoman’s Tale. The rhetorics cloak, however, the extreme environmental, infrastructural, and sensory impacts that bitcoin mining operations actually generate. Bitcoin is one of many cryptocurrencies currently being “minted” or “mined.” Like alchemical philosophy, which seeks the answer to occult mysteries, the cryptographic theory behind Bitcoin involves the attempt to solve and generate code. The cryptocurrency itself is generated by an open-source software that is run and supported through all servers that join the network of servers that mine bitcoin. The software outputs an equation called a “hash function” that each computer then solves, competing with others in the network to find the solution first. The owner of the server that finds the correct solution is awarded a chunk of code that represents the “proof of work” in its generation and thus its reality as a commodity: a bitcoin. Originally, the value of Bitcoin was determined by the energy consumed through the act of mining. Later, value was translated to computing power required to extract a single coin as the network grew and bitcoins became scarce --i.e. how many servers must mine at a given moment? However, as it has evolved and gained the backing of investors who see potential in cryptocurrencies, Bitcoin also functions like a

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124 Bitcoin as a concept and collective currency is denoted by the spelling with a capital B. When it functions as a unit of currency or is referred to in the singular, it is spelled with a lowercase b.
126 Ibid., pp. 137.
commodity in the stock market—the value ultimately fluctuates based on the faith placed in it via its purchasing ability.\textsuperscript{127} As more people believe that Bitcoin can function as a currency, the higher the cost of a single bitcoin becomes. Through this speculative relationship, advocates for Bitcoin have generated rhetorics that inflate the faith people put in it. Like the canon’s pitch to his marks, cryptocurrency relies on an economy of confidence. Bitcoin is variously described: as a libertarian’s dream currency, enabling individuals and organizations anonymity of transaction; as creating jobs and building local economies; as data storage or server hosting services; as an industry that builds the viability of renewable energies.

One example of Bitcoin’s inflation via rhetoric is its birth as the digital currency of libertarian cyberpunks, one that could not be regulated by governments in the way that traditional fiat currencies are. As Bitcoin grew into a viable currency, many of its developers hoped to donate bitcoins to causes like Wikileaks and to help strengthen activists that opposed oppressive political regimes.\textsuperscript{128} These ideas failed to reach fruition, however, because Bitcoin was still too insecure as a non-fiat currency. Developers feared that if they took sides in global politics—especially if they supported resistance movements—Bitcoin’s public image would be a revolutionary one and would be likely to be quashed by the US government.\textsuperscript{129} Although Bitcoin promoters still pay homage to the original liberarian myth of the currency’s founding, they use this creation narrative to emphasize the anonymity of Bitcoin transactions. The anonymity and difficulty in tracking non-fiat currencies, makes them a vulnerable target for the desperate or the criminally minded. Like the yeoman’s alchemy, the rise of Bitcoin also involved a

\textsuperscript{127} Ibid.
\textsuperscript{128} Ibid.
\textsuperscript{129} Ibid., pp. 72-3.
preference for anonymity. Bitcoin’s initial adoption as a digital currency was cemented by its ability to facilitate anonymous transactions within the black market via the website Silk Road.130 Because blockchain technology was in an early stage at that point, law enforcement agencies had not yet learned to decrypt the transaction records associated with Silk Road transaction records and so the illicit commerce--and Bitcoin by proxy--boomed.131 Thus, users were able to buy and sell products like heroin and cocaine with less fear of being caught and punished. Similarly, Bitcoin is often the currency of choice for exploiters of ransomware and has landed several early bitcoin entrepreneurs in prison for facilitating money laundering and financial fraud.132

Like the alchemists in The Canon’s Yeoman’s Tale, Bitcoin operations have dispersed from tech and urban centers to rural locations where overhead costs are lower and energy cheaper.133 CEO and founder of Hyberblock, Montana’s first bitcoin mine, Sean Walsh, has been harried by legal improprieties despite attempts to distance himself from them. Former Missoula Independent journalist, Derek Brouwer tracks Walsh’s career from his involvement in the subprime mortgage boom through a chapter 11 bankruptcy that forced him to close his first Bitcoin mine; to the arrest and imprisonment of his business partner for money laundering; to late 2017, when he began to gain political and economic support for his second Bitcoin mine.134 Although Walsh’s business partner is serving a prison sentence that will see his release in 2022, Brouwer

131 Brouwer, Derek.
134 Brouwer, Derek.
includes statements on-the-record, from Hyperblock’s property manager, that he has been involved in phone meetings to strategize the expansion of the mine and to recruit investors.\textsuperscript{135} Again, because mining bitcoin requires an inflated energy cost it must be done on an industrial scale: “[A]nyone with a computer could profitably mine in the early days, but as more people joined the race and manufacturers started developing specialized mining computers, only industrial-scale operations stood a chance to win the rewards.”\textsuperscript{136} The Bitcoin mine in Bonner, Montana is one example and a 2017 article published in the \textit{Independent} tracks the criminality of at least one half of the founding partnership, who, at the time of the article’s printing was in prison, although the organizations’ current website leads an outsider to believe that he is out and working again as the COO.

This organization has, like the canons in \textit{Canon’s Yeoman’s Tale}, multiplied itself through what appear to be various shell corporations: Montana Data LLC, Global Big Data LLC, Project Northwest, Project Spokane LLC,\textsuperscript{137} and now Hyperblock, which suggests--although it does not prove--that bitcoin is being used to create tax shelters. Hyperblock (at the time, Project Spokane) has applied for two tax funded grants since it has established itself in Bonner. In his application for the first $26 million grant Walsh promised to create 65 new jobs in the following two years. As a contract, the grant made him responsible to those terms, including public scrutiny.\textsuperscript{138} After years of complaints from Bonner residents about the noise pollution created by the mine, Hyperblock (again, at the time, Project Spokane) applied for Tax Increment Financing to pay for a fleet of

\textsuperscript{135} Ibid.
\textsuperscript{136} Ibid.
\textsuperscript{137} Ibid.
\textsuperscript{138} Ibid.
replacement fan blades that, according to a Helena acoustics expert, would reduce the aural impact on the community and wildlife in the area.\textsuperscript{139} Although the board in charge of TIF decisions denied their application, company representatives insist that they are eligible for funding since they do contribute to the tax base via property taxes.

Why a company that “competes on a global scale” and boasts the profitability of its product as the wave of the future, would need to apply for a relatively small amount of public money\textsuperscript{140} raises serious questions about the longevity and legitimacy of both Hyperblock and Bitcoin in general. Despite Hyperblock’s claims that it “was built to withstand risk and thrive within the volatility of the crypto market,”\textsuperscript{141} it may be heading for a fall. Between December 31, 2018 and April 30, 2019, HyperBlock applied for and was granted a Management Cease Trade Order by the Ontario Securities Commission.\textsuperscript{142}

As can be expected of any communication regarding cryptocurrencies, details about the MCTO are limited pending an audit. However, the company has made sure to let reporter Tondik know that “the issuance of a management cease trade order generally does not affect the ability of persons who have not been directors, officers or insiders of the Company to trade in their securities.”\textsuperscript{143} The public is free and encouraged to continue to invest in the company. Like the yeoman, who perpetuates the ponzi-scheme rhetoric of


\textsuperscript{140} See Erickson, David. for details about the tax moneys dispute: the proposed bill for new fans amounts to $135,000 or 18 bitcoins (at the time of the article).


\textsuperscript{142} Tundik, Zoltan. “HyperBlock Granted MCTO.” The Blockchain Examiner.com, May 3, 2019, theblockchainexaminer.com/blockchain/2019/05/03/1105/hyperblock-granted-mcto/?doing_wp_cron=1573083654.1120860576629638671875. Accessed Nov. 2019. According to Thomson Reuters Canana, an MCTO (management cease trade order) prevents a company or individual from trading in securities. They may be issues for failures to disclose required information or documentation or when wrongdoing is suspected and required further investigation.

\textsuperscript{143} Tundik, Zoltan.
the canon, the directors of HyperBlock want potential investors to ignore the history of financial malpractice and on-going debts\textsuperscript{144} and to invest in HyperBlock with trust.

Although this anonymity and affiliation with past criminality certainly do not illegitimate the company’s current state, they do not add much good faith in the legitimacy of bitcoin as a currency. Unlike the canon and the yeoman, however, Bitcoin has enough investors and participants in cryptocurrency exchange that faith in the stability and value of the currency does not seem to matter as much as it did even five years ago when the volatility of the market was more disparate. There are enough powerful and wealthy users of Bitcoin that there is too much invested for the users to let it fail. Unfortunately, that appears to mean that the concatenation of power that Bitcoin has affected over the last decade will continue to consume exorbitant amounts of resource energies.

The exorbitant cost and consumption of energy in both the alchemical con game of the \textit{Canon’s Yeoman’s Tale} and in Bitcoin mining is unsustainable, deleterious, and requires rhetorical gymnastics in order to make it palatable to those its waste affects and exploits. Like the alchemists, Bitcoin miners also announce their presence publically, despite their ethic of anonymous transaction. While alchemists offend the nose, bitcoin miners offend the ears. The server farms that are used in industrial mining operations use so much energy and generate so much heat that fans and cooling systems must be run constantly. In Bonner this amounts to an environmental impact that affects animals, people, and the local economy. Residents note that “Hummingbirds are gone. Our dogs

\footnote{144 Brouwer notes that at the time of the writing of his article, Walsh and Aquifer, LLC, owed hundreds of thousands of dollars to investors and legal representation and those remittances seem as if they still stand unpaid. The property managers for the mine site are currently footing a $15,000 bill for which they expect to be reimbursed.}
cannot stay outside very long.” Bees appear to have disappeared and property values have dropped. It can be heard for miles around, amplified by landscape and carried by the wind. A bitcoin mining startup, Bit Power, was forced to change their plans for the purchase of an abandoned elementary school in Anaconda due to worry about backlash against noise pollution. However, there are at least two mining operations setting up outside of Butte, Power Block Chain, LLC, and CryptoWatt, LLC, both of which hope to multiply the power usage and thus the value of Bitcoin and the “largeness” of their data centers by at least 1000%. All the while, the earnings of a Bitcoin mine are stored virtually, sequestered among an already powerful few, and ultimately used out of town, out of state, offshore.

Furthermore, the energy cost of Bitcoin mining from just one company—Hyperblock-- makes up one third of the energy use of all of Missoula county. The energy itself comes from Energy Keepers, the tribally owned corporation of the Confederated Salish and Kootenai Tribes that manages the Séliš Ksanka Qĺispé dam. Hyperblock publicly claims to utilize 100% renewable energy and that the total meta

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146 Ibid.
148 Matt Vincent, the Chief Communications Officer for CryptoWatt, states in a brown bag lunch lecture in Butte, that the size of a Bitcoin mining operation is determined by the amount of energy used. See Butte-Silver Bow Public Archives. “Matt Vincent talks about CryptoWatt.” Youtube.com, May 2018. www.youtube.com/watch?v=9RiC7EE2zQQ. Accessed Nov. 2019. He hopes to mine 1,800 bitcoins per day.
149 Power Block Chain LLC is “housed” in Orem, UT; HyperBlock is a subsidiary of a Canadian corporation; and CryptoWatt is apparently based in Ukraine.
150 Kidston, Martin. “Missoula County Regulates Cryptocurrency Mining; Businesses Fear Loss.” The Missoula Current, April 5, 2019. www.missoulacurrent.com/business/2019/04/cryptocurrency-mining-2/. Accessed Nov. 2019.: “I don’t know the number, but it was substantial,” said Nelson. “I know sometimes those bills in the very beginning are sometimes $50,000 or $100,000 a month. NorthWestern Energy needs that deposit to make sure they’ve got enough up front to be covered if they don’t stick around.”
151 Brouwer, Derek.
wattage used by the mine totals about 20 MW, “one of the USA’s most efficient datacenters.”\textsuperscript{152} If the energy usage numbers advertised by Hyperblock are compared with the energy production numbers published by Energy Keepers, Hyperblock gobbles up a full 10% of the total energy produced by the dam’s hydropower infrastructure.\textsuperscript{153} Further, the computer power it takes to create one token consumes “at least as much electricity as the average American household burns through in two years.”\textsuperscript{154} To reiterate, that energy produces a dubiously trustworthy digital currency and maintains the Bitcoin network. Such statistics about energy use undermine claims of “efficiency.”

In an environmentally conscious consumer culture, however, the word “efficient,” especially when it is used in a discussion of energy, is a shibboleth that invokes an image of appliances and machines that use and require a significantly lower energy input than older, standard models. To claim that one’s industrial mine is energy efficient when it demands exorbitant energy consumption is a blatant and intentional misdirection.\textsuperscript{155}

In 2018, the cost of industrial, hydroelectric energy was roughly 3 cents per kilowatt.\textsuperscript{156} However, Hyperblock, aka Project Spokane, only opted for this open market purchase of renewable (although not infinite) energy after being charged a deposit on

\textsuperscript{152} Hyperblock.


\textsuperscript{155} For an example of this sort of misdirection, see “Rocketfrac Announces Former NASA Senior Executive Hon. Ronald R. Spoehel Appointed Chairman of the Board,” \textit{Rocketfrac}, Jun 10, 2019. www.rocketfracservices.com/2019/06/10/2/. Accessed Nov. 2019. RocketFrac claims that they are: “a privately-held company developing an environmentally safe, proprietary fracing tool using solid rocket fuel.” The newly appointed Chairman of the Board, Ronald Spoehel, is also the Independent Director of Hyperblock.

\textsuperscript{156} Brouwer, Derek.
county energy sources like Coal by Northwestern Energy. Although Hyperblock’s lawyer claimed in April that the lower carbon footprint was a deliberate choice made to support the local community, stimulate the economy, and attend to climate change concerns, Hyperblock only employs 19 people while using enough energy for 35,000 homes. Hyperblock may not be asking the residents of those 35,000 homes to blow into their fire to increase their profits, but they are exploiting and putting pressure on Missoula County’s resources and residents, while maintaining a rhetoric of innovation and progressivism. Furthermore, their use of Seliš Ksanka Qlíspé energy at such a reckless pace perpetuates exploitation of indigenous resources and at no point in any of their promotional materials do any representatives of the company acknowledge the source of the energy they use. Instead, they claim to be located only vaguely “in the Pacific Northwest.”

**Conclusion**

For the alchemists described in the *Canon’s Yeoman’s Tale*, technology and understanding that facilitated truly profitable alchemical transmutations was unattainable: “that science is so far us birforn,/ We mowen nat, although we hadden it sworn, /It overtake, it slit awey so faste” (ll. 680-2: that science [knowledge] is so far before us, / We may not, although we have sworn to, / Overtake it, it slides away so fast). For 21st Century cryptocurrency investors, however, the profits of their endeavors are astronomical, although just as volatile as alchemy. Mt. Gox and other Bitcoin exchanges are examples of the pitfalls of releasing money from the rules and regulations that govern

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157 Kidston, Martin.
158 Ibid.
159 *Hyperblock.*
other kinds of currency. 45% of Bitcoin exchanges had gone under as of 2013.\textsuperscript{160} Bankruptcies and changes of limited liability registration continue today. \textit{Financial Times} writer Izabella Kaminska, who has been a vocal critic of cryptocurrencies notes, that:

the only way to stabilize the system is to rid it of the ‘cheating incentive’--that being the incentive that encourages the ‘prisoner’ to take the high-risk, selfish strategy. Most of the time that depends on establishing a system of enforced protocols or regulations that penalise rulebreakers above and beyond the benefit of cheating.\textsuperscript{161}

But here one encounters a risk similar to the dilemma of potential victims in the \textit{Canon’s Yeoman’s Tale}: is the promise of infinite wealth ever going to be less enticing, especially in Late Capitalism, than the alternative?

The \textit{Canon’s Yeoman’s Tale} ends with a series of morals, including the sentiment that no profit is to be attained through the blind pursuit of desire. As long as they are allowed, alchemists “kan nat stynte til no thyng be laft” (ll. 883: cannot stop until nothing is left). So, too, Bitcoin miners will continue to disproportionately consume energy and hoard coins until all 21 million coins have been released. Although the viability of Bitcoin as a currency that will actually disrupt global economies enough to displace fiat currencies is unlikely, it has concentrated power, wealth, and greed both above and outside of regulatory agencies. Ultimately, countering the seduction of bitcoin as a currency requires eschewing the blindness of greed and the cultivation of critical thinking about the material realities of cryptocurrencies. But how can we attempt to punish or disincentivize the most powerful--those who have opted for a system that rewards piracy

\textsuperscript{160} Popper, Nathaniel. pp. 323.
\textsuperscript{161} Ibid., pp. 398.
with impunity? Chaucer’s poem does not provide an answer for the creation of policy for such disincentivization. However, the *Canon’s Yeoman’s Tale* offers the yeoman’s testimony as a pattern of warning signs, contingent on attentive reading. He concludes by advocating that like “the beste [devil], lete it goon” (ll. 1475). In Chaucer’s context, deception by an alchemist can be remedied through individual shrewdness. In the context of contemporary Bitcoin mining, however, action must come collectively. The promise of industry returning to rural areas may be a tempting prospect for investment. Careful observation reveals that digital currency does not circulate to the communities whose resources its mining drains.
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