J.R.R. Tolkien and Environmental Concerns in Mid-20th Century England By Drew Heiderscheidt UNIVERSITY OF NORTHERN COLORADO

On December 5, 1952, a haze descended upon London. On average, visibility dropped to below 500m, but in the center of the city it was less than 50m. The streets were dark, empty, and enveloped in silence. People stayed in their homes, avoiding going out as much as they could. Five days later, the smog lifted, and 4,000 were dead, according to one British official at the time. The Great Smog of London, as it later became known, was the worst incident of air pollution in British history, and was caused by a variety of different factors, including air inversion and low-quality fuel, which was overall largely a result of a growing trend toward industrialization. Despite the scale of this disaster, air pollution and other forms of environmental degradation were nothing new to England, which alarmed many.1 The alarm of those in England manifested itself in the artistic media of the time, notably in the works of J.R.R. Tolkien.

With the swift development of industry in 20th century England came a myriad of environmental problems such as deforestation and air pollution. As a result of the quick expansion of commerce at this time, people became more conscious of environmental degradation, something illustrated through the lens of literature and governmental regulation, such as The Clean Air Act of 1956. People generally considered the shift to mechanization in England detrimental, and many romanticized the times before any type of mechanization as a sort of "organic wholeness."² Environmental concerns such as these are present in the works of the British philologist J.R.R. Tolkien, most famously the author of The Hobbit and The Lord of The Rings. In Tolkien's works, there are a multitude of references to his environmental views, including the character of Saruman, a dark wizard who "sacrifices the value of permanence of sustainability for his grand scheme of domination and ownership."3 Tolkien's works were a representation of environmental worldviews in England during the 20th century, in which people were concerned with environmental degradation—particularly deforestation, air pollution, and industrialization. Not only this, but his characters reflected both industrialist and environmentalist mindsets.

Tolkien was fascinated by trees

throughout his entire life. He went as far as to call The Lord of the Rings "my internal tree."4 Tolkien's adoration of trees also led to an abiding fear of their mistreatment. "I am (obviously) much in love with plants and above all trees, and always have been; and I find human maltreatment of them as hard to bear as some find ill-treatment of animals," he wrote to the Houghton Mifflin Company in 1955.5,6 It was the neglect of trees that led Tolkien to consider himself a guardian of forests. In a letter to the Editor of the Daily Telegraph, Tolkien wrote that he would defend all trees against their enemies.7 Tolkien's fondness for trees is prevalent in his works, especially in the symbolic importance they take on. For example, the White Tree of Gondor in The Lord of the Rings is emblematic of the health of Gondor as a civilization. So, when the White Tree of Gondor is sick, Gondor as a whole is also in decline, and vice versa. Matthew Dickerson and Jonathan Evans observed Tolkien's apparent fear of neglecting trees when they noted how Treebeard, a wizened animated tree in The Lord of the Rings, posited that cutting down trees for necessities is distressing enough, but unnecessarily tearing down trees is unacceptable.⁶ It is apparent that Tolkien considered the felling of trees immoralso much so that the character of Treebeard acted as a mouthpiece for him to convey his thoughts on the subject. When Pippin, a Hobbit, asked Treebeard whose side he was on (i.e., good or evil), Treebeard replied he was on nobody's side because "nobody cares for the woods as I care for them, not even the Elves nowadays."

Tolkien's concern for trees in England was justified. The amount of forest felled from 1918 to 1945 totals up to 1,024,000 acres-over 3 percent of the total land area in England.² Tolkien mourned the loss of so many different trees in part two of The Lord of the Rings, The Two Towers. In response to the destruction of a large swath of forest, Tolkien wrote—through Treebeard—"Many of these trees were my friends, creatures I had known from nut and acorn; many had voices of their own that are lost for ever now. And there are wastes of stump and bramble where once there was singing groves."8 The agony Tolkien felt when trees were destroyed was apparent, and his personification of

trees in The Lord of the Rings as individuals was indicative of their importance to him. Tolkien's primary response to the obliteration of trees in the real world was the Old Forest. In it, Old Man Willow was the primary danger to Frodo-the story's Hobbit protagonist-and his companions. The first time Willow appeared was on the first leg of Frodo's journey to Mordor, the dark region ruled by the story's antagonist, Sauron, when they traveled through the Old Forest. When the Hobbits (Frodo, Sam, Merry, and Pippin) took a stop to rest, Old Man Willow attacked them and nearly suffocated Merry and Pippin.9 However, the Old Forest and Old Man Willow were not inherently malevolent, as they appeared on the surface; rather, the "Old Forest was hostile to two legged creatures because of the memory of many injuries."7 Thus, by virtue of trying to protect themselves from bipeds, the Old Forest and Old Man Willow were manifestations of the destruction of forests in the real world. Because in real life, "If someone starts hacking at a tree with an axe the rooted tree has to stand and take the blows," this was Tolkien's way of giving forests a defense mechanism in the face of environmental degradation.¹⁰

In addition to deforestation, air pollution was also a substantial problem in England during the 20th century. Factories in England released immense amounts of smoke into the air- something Tolkien observed in a letter to Rayner Unwin on October 24, 1952, when he wrote "This charming house has become. . . drenched with fumes," and "I regret to note that the billowing cloud recently pictured did not mark the fall of Barad-dur [Sauron's tower], but was produced by its allies."11 According to the environmental historian I.G. Simmons, air pollution in England at this time came in the form of "smoke from the quality of bituminous coal used, which was still about 40 million tonnes/yr."² The sheer amount of smoke released into the air was recognized by James Law, a combustion engineer, when he said that in thirty years he had "never seen conditions worse than those in industrial cities and towns of the north during the past two years." $^{\rm n22}$ There were major health concerns associated with the high quantity of coal being used in England at this time. In 1952, the English government

stopped rationing small-type coal, called "nutty slack", and as a result, "Sulphur dioxide [reached] the highest concentration recorded since detailed monitoring of this compound had begun in 1932." In the end, the Great Smog of London made possible by ubiquitous "nutty slack" led to the deaths of 4,000 people in Éngland.¹³ In the aftermath, the British Parliament passed the Clean Air Act of 1956, which regulated the amount of pollution that could be put into the air.¹⁴ Tolkien himself felt the effect of air pollution on his own health, when he wrote in a letter to his son Christopher, "I have been afflicted with what may be. . . a 'virus'. . . of which the risk is steadily mounting in this polluted country."15 To Tolkien, air pollution was ever-present, and impossible to ignore.

In one of the final chapters of The Lord of the Rings, Tolkien described air pollution in the native land of the Hobbits, the Shire:

There was a whole line of the ugly new houses all along Pool Side, where the Hobbiton Road ran close to the bank. An avenue of trees had stood there. They were all gone. And looking with dismay up to the road towards Bag End they saw a small chimney of brick in the distance. It was pouring out black smoke into the evening air.¹⁶

It is not by mere coincidence that Tolkien described the scene at Bag End in a way that highlights clouds of black smoke billowing through the air— it reflected his perspective that air pollution hindered England through its exacerbation of negative health impacts and interruption of the once bucolic aesthetic that the country held.

Industrialization, and Tolkien's views on it, existed throughout his works. His views of industrialization's effects are especially prevalent in the chapter "The Scouring of The Shire," in The Return of the King, where Saruman forced industrialization upon The Shire. In a description of the Shire as it was forcibly industrialized, Tolkien wrote:

The great chimney rose up before [Frodo, Sam, Pippin, and Merry]; and as they drew near the old village across the Water, through rows and rows of new mean houses along each side of the road, they saw the new mill in all its frowning and dirty ugliness: a great brick building straddling the stream, which it fouled with a steaming and stinking outflow. All along the Bywater Road every tree had been felled.¹⁶

Tolkien's description of the houses as "mean" and his characterization of the mill as "frowning" and "ugly" spoke to his opposition to industry and urbanization. It is unsurprising that Tolkien felt this way towards large industrial processes like iron or coal extraction, as the amount of land that was made unsuitable for any further

use was immense. By 1954, 173,000 acres worth of land in England and Wales had become unusable due to the iron and steel industries.² Indeed, in "The Scouring of the Shire," Tolkien illustrated the problems of mills and industry. "[The mills are] always a-hammering and a-letting out a smoke and a stench," Farmer Cotton (another Hobbit) complained, and added that they had polluted the nearby river.¹⁶ Likely, these mills were inspired by the ones Tolkien witnessed during his childhood.¹⁷ The extent of industrial development in England during the twentieth century was enormous, with sand and gravel production increasing from 127 million tons in 1950 to 192 million tons in 1960.² Tolkien bemoaned this very industry in "The Scouring of The Shire," when he wrote "Great wagons were standing in disorder in a field of beaten bare grass. Bagshot Row was a yawning sand and gravel quarry."¹⁶ Simply put, the Shire was almost entirely industrialized by Saruman. Even in Tolkien's descriptions of Saruman, there was an inherent opposition to industry. Saruman "has a mind of metal and wheels; and he does not care for growing things, except as far as they serve him for the moment," Treebeard complained in The Two Towers.⁸ For Tolkien, the threat of industrialization was forever looming on the horizon.

An interesting comparison may be made between the Shire at the beginning of Lord of the Rings to the one at the end. At the beginning, Tolkien described Hobbits as loving "peace and quiet and good tilled Earth: a well-ordered and wellfarmed countryside was their favorite haunt. [Hobbits] do not and did not understand or like machines more complicated than a forge-bellows, a water-mill, or a hand-loom.9 This was evocative of English sentiment before industrialization, when the most impressive technology was no more advanced than a hand-loom. By the end, the Shire was transformed at the hands of Saruman into an industrializing wasteland, blanketed by smoke and pockmarked with mills and quarries. However, the Shire was not defined by mills that pour out black smoke, but by vinevards, corn fields, woods, by vegetables like turnips and carrots, fruits like apples and plums, and flowers like snapdragons and daffodils.18

In The Two Towers, Tolkien painted a picture of the spread of industrialization through the use of the fortress of Isengard, home to the dark wizard (and one of the primary antagonists of Lord of the Rings), Saruman. In his speech about Sauron, Saruman, and Isengard at the Council of Elrond in The Fellowship of the Ring, the great wizard Gandalf evoked imagery reminiscent of

industrialization. "I looked on [the valley Isengard is located in] and saw that, whereas it had once been green and fair, it was now filled with pits and forges," Gandalf said. He then added that around all of Saruman's projects "a dark smoke hung and wrapped itself about the sides of Orthanc [Saruman's tower]."9 It is obvious that Isengard was in the midst of a similar development to that of Britain in the 19th century. This industrialization is noted by Dickerson and Evans in Ents, Elves and Ériador-a book about Tolkien's environmental worldviewswhen they wrote that Isengard "is shown in the image of industrial smokestacks: vents and shafts spouting and belching fire and foul fumes."6 Tolkien noted the harm of industrialization when he described the land around Isengard: "No trees grew there, but among the rank grasses could still be seen the burned and axe-hewn stumps of ancient groves."8 From Tolkien's description, the reader visualizes the stumps of trees, the putrid smells, and other traces of a place in the midst of industrialization. Treebeard described the situation, when he said, "Orcs came with axes and cut down my trees. I came and called [the trees] by their long names, but they did not quiver, they did not hear or answer: they lay dead."8 This description of the pain caused by cutting down trees showed Tolkien's anxieties of industrialism. Saruman personified an anthropocentric worldview-he used nature to increase his own power, at the expense of all living things.6 Tolkien juxtaposed the stillindustrializing land of Isengard with that of the already-industrialized Mordor, Sauron's abode.

Mordor, the home and fortress of the primary antagonist Sauron, is the most debased region in Tolkien's legendarium, with the word "shadow" being regularly used as a descriptor. When Frodo and Sam arrived at the outskirts of Mordor, it was described as truly terrible. "[Frodo and Sam] had come to the desolation that lay before Mordor. . . A land defiled, diseased beyond all healing, Tolkien wrote of the Dead Marshes.8 The fact that Tolkien used "desolate," "defiled," and "diseased" to highlight the status of the land that Frodo and Sam entered shows how badly damaged it was. Dickerson and Evans echoed this when they wrote, "The ground in Mordor is not only 'fire-blasted,' as with bombs, but also 'poison-stained,' as when factories' toxic refuse contaminates the earth, water, and the air."6 Tolkien's description of the Dead Marshes (on the outskirts of Mordor) is telling:

[In the Dead Marshes] nothing lived, not even the leperous growths that feed on rottenness. The gasping pools were choked with ash and crawling muds, sickly white and grey, as if the mountains had vomited the filth of their entrails upon the lands about. High mounds of crushed and powdered rock, great cones of earth fire-blasted and poisonstained, stood like an obscene graveyard in endless rows, slowly revealed in the reluctant light.⁸

This portrayal has a counterpart in Charles Dickens's descriptions of the industrialization of England during the 19th century, especially in his novel Hard Times. However, the word choice used by Tolkien here warrants further analysis. The fact that nothing lived in the area is reminiscent of the derelict land in Dickens's descriptions of industrializing England. And the land in the Dead Marshes (on the outskirts of Mordor) could easily be used to describe that same dilapidated land across vast swathes of English land. As a way to describe Mordor, Tolkien used imagery he had gained from "war, industrialization, and urbanism," to demonstrate how Sauron had destroyed the land.⁶ Tolkien expanded upon the desolation in Mordor when he illustrated the land surrounding Frodo and Sam in Mordor as "ruinous and dead."16

Part of the inspiration for Mordor was the First World War. Tolkien was a veteran of the First World War, specifically the Battle of the Somme, which was one of the largest battles of the war. By the end of the battle, both sides lost 1.2 million men combined, and by the end of the war as a whole over 10 million people died. $^{\rm 16,19}$ "The Dead Marshes and the approaches to the Morannon," Tolkien wrote to L.W. Forster, "owe something to Northern France after the Battle of the Somme."²⁰ The Battle of the Somme, and other battles, considerably destroyed the forests of Europe. In the novel The Somme, A.D. Gristwood noted that "not a green thing survived the harrowing of the [artillery] shells. Constant barrages had churned the land into a vast desert of shell-craters, one intersecting another like the foul-pock markings of disease."21 Indeed, the First World War decimated the forests of France almost entirely, surely witnessed during his tour there. The landscape went from huge swathes of European beech trees, to almost total devastation.^{22,23} In the Revue des Eaux et Forets during the First World War, one contributor remarked how not only the artillery was destroying the forests of France, but also the militaries there: "Vicious [military forest] exploitations' left stumps cut too low and felled plantations before they reached maturity."²⁴ Because of the war, the ecosystem of France (and other parts of Europe) changed entirely, with a diverse polyculture being turned into a monoculture dominated by Conifers.²²

Despite having never explicitly taken

the mantle of environmentalism, Tolkien imbued his best known creation—Hobbits with strong environmentalist views. In the view of this author, environmentalism falls on a spectrum, ranging from passive to active. Those on the passive side support actions to protect the environment without taking action themselves, whereas those who are active take initiative to protect the environment. Ultimately, Hobbits fall on the extreme action side of that spectrum.

In a letter to Milton Waldman some time in 1950, Tolkien explained Hobbits collective environmentalism, when he wrote that Hobbits were "represented as being more in touch with 'nature' (the soil and other living things, plants and animals)."25 The fact that Hobbits love the earth puts them in a similar category to environmentalists, who try to protect the earth. Both Dickerson and Evans took note of this when they wrote that "Hobbits are close to the earth, and they are closely associated with the material substance of the soil. They wear no shoes, and their walking around barefoot keeps them in direct physical contact with the earth," essentially meaning that Hobbits were closer to the earth than other creatures in Tolkien's legendarium because they were constantly in physical contact with it.6 From their introduction, it was clear that Hobbits were connected with nature and realized that they did not have dominion over the environment.26

Tolkien was an avid gardener, and this was a trait that he projected onto Hobbits, particularly Bilbo Baggins (the protagonist of his earlier work, The Hobbit), Frodo, and Sam. In a letter to his son Christopher, he described his love for the garden. "When a gleam of sun (about 11) got through [the garden, it] was breathtakingly beautiful. . I stood in the garden hatless and uncloaked without a shiver, though there must have been many degrees of frost," Tolkien wrote, in awe.27 This close relationship with the environment was seen in environmentalists of the time, especially those who believed that rural England was one of "enduring values."2 Throughout The Lord of the Rings, Hobbits have an inherent love for anything that grows. Bilbo and Frodo Baggins, both wellto-do Hobbits, never hired a housekeeper, a maid, or even a cook-and yet, they hired gardeners. And, if that were not enough, Tolkien named many Hobbits after flowers: think of the Hobbit women who appear sporadically throughout the series, all of them bearing names like Rose, Daisy, or even Marigold.⁶ Rather, Hobbits lived in harmony with their natural surroundings.

Of all the Hobbits, Sam Gamgee is the most prominent environmentalist—his profession is even gardening. In The Return

of the King, Sam believes Frodo is dead because he was stung by a giant poisonous spider, Shelob (although he was actually paralyzed). As a result, Sam took the One Ring. And, whereas Sauron or Saruman saw ultimate power when they had the ring, Sam saw only one thing: a garden so large that it could be its own country.16 In Tolkien's universe, this makes Sam the true hero of the story, and he wrote that it was "absolutely essential to the study of his (the chief hero's) character, and to the theme of the relation of ordinary life (breathing, eating, working, begetting) and quests, sacrifice, causes, and the 'longing for Elves,' and sheer beauty."25 Indeed, Sam was representative of people's views in post-industrialized England: they missed the beauty and connection with nature of England's past. When J.R.R. Tolkien began work on

The Lord of the Rings in the 1937, after the publication of The Hobbit, environmental degradation was on his mind. Almost fifteen years later, upon publication, The Lord of the Rings represented environmental concerns in mid-twentieth century England. People were concerned about deforestation, particularly after two World Wars, which decimated England's forests; about air pollution, especially after the Great Smog of London in 1952; and industrialization, which many felt irrevocably changed the environment in England. Tolkien represented this in his descriptions of Middle-earth, filled with pristine environments, like the Shire, as well as degraded environments such as Mordor. Not only this, but Tolkien's characters often reflected both environmentalists (think: Hobbits, Treebeard, and others), and industrialists like Sauron and Saruman. In Treebeard, and others), and doing so, Tolkien created a microcosm that was reflective of environmental worldviews in 20th century England.

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