University of Colorado at Boulder

Evolution and Ecological Thought in The Island of Dr. Moreau

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16 April 2013

Abstract

Charles Darwin's theory of evolution revealed a profound interconnection among all life forms. Species could no longer be thought of as discreet and static entities separate from other life forms or the environment they inhabit. As such, the advent of evolutionary theory marked an important moment in the history of ecological thinking, as people were forced to consider their biological connection to each and every life form. In The Island of Dr. Moreau (1896), H. G. Wells presents an imaginative rendering of the implications of evolutionary theory. He describes a world where the boundaries separating humans, animals, and the environment become permeable. The novel's engagement with evolutionary theory effectively deconstructs an essentialist conception of identity, demonstrating how our biological connection to other life forms alters the way we think about ourselves and the planet. In this way, The Island of Dr. Moreau proves an important text for considering the profound shift in perspective that is required to think in a truly ecological manner.

Evolution and Ecological Thought in The Island of Dr. Moreau

Written forty years after Charles Darwin's groundbreaking work On The Origin Of Species (1859), H. G. Wells's The Island of Dr. Moreau (1896) presents an imaginative rendering of the implications of the theory of evolution. The novel tells the story of Edward Prendick who, after a shipwreck, finds himself stranded on an island populated with grotesque creatures exhibiting both animal and human traits. Prendick eventually learns that these creatures are the result of surgical experiments conducted by Dr. Moreau, a rogue scientist who has retreated to the island with his assistant Montgomery to make humans out of animals. The novel exemplifies how evolutionary theory challenged late-Victorian notions of life on the planet. According to Darwin, species were only "strongly marked varieties" (374), and their distinctions the result of a categorical imposition on the part of society. The grotesque forms of Dr. Moreau's creatures allowed Wells a way of demonstrating that Darwin's theory rendered an essentialist conception of identity obsolete. Under evolutionary theory, the identity of individual life forms necessarily includes a host of contextual factors, including other life forms and the environment. The novel reveals the vast interconnectedness in and among life forms through its deconstruction of traditional boundaries, both between species as well as between life forms and their environment. As a result, the text de-centers human perspective

and forces Prendick into an ecologically "minded" way of viewing the world. I argue that *The Island of Dr. Moreau's* imaginative engagement with the theory of evolution gives rise to an ecological understanding of reality, helping us to re-imagine ourselves beyond the confines of a pre-evolutionary paradigm.

An Evolutionary Identity

The profound social, political, and economic changes that Britain experienced in the nineteenth century altered the way people thought of themselves in relation to the world. By the end of the century, Britain had become the largest economic power and had colonized a quarter of the globe. Its own population grew by three hundred percent, as people migrated en masse to urban centers where they found jobs as industrial wage laborers. The rise in industrialization ushered in a consumer-based market economy, as new products and services became available to large portions of society. According to the Broadview Anthology of British Literature (Concise Edition, *Volume B*), "rail travel, the advent of the telegraph, daily newspapers, and the manufacture and import of goods via steamships from all over the globe collapsed time and space, and flooded the homes of the affluent with new luxuries and conveniences" (Black et al. 499, 500). The expanding market economy and rapidly globalizing world transformed the structure of everyday life in England, causing its citizens to reconsider cultural identities.

These fundamental changes in society led to rigidly defined roles based on gender, class, and race—roles that reflected the changing economic relations during this period that required individuals to perform specific tasks in specific locations. This represented a dramatic departure from the past agrarian social structure that demanded individuals perform several different duties throughout the day, and not necessarily in a single location. As a result, late Victorians began "to think about identity in terms of oppositions: male and female, rich and poor, black and white," and, more than that, to consider such identities as fixed and unchangeable (Black et al. 523). This essentialist conception of identity offered a clear sense of order and purpose during a time of monumental and unprecedented change.

In addition to these socioeconomic changes, advances in the sciences also influenced the way identity was viewed during this period. Rather than reinforcing an essentialist view of identity, however, many of these scientific discoveries actually challenged it. In particular, Darwin's theory of evolution, which posited that life forms change over the course of time according to natural selection, and proposed a common biological relationship among all life forms on the planet. Under evolutionary theory, humans could no longer see themselves as fundamentally distinct and separate from other species (Richter 3). Moreover, Darwin called into question the clear-cut demarcations underlying an essentialist worldview, challenging cultural

beliefs that served to organize and comprehend a world growing increasingly large and complex.

The possibilities and implications stemming from evolutionary theory invariably found their way into Victorian literature. According to Michael R. Page, Wells was the first writer to explicitly engage the theory of evolution in his series of scientific romances written in the last decade of the nineteenth century. Among these was *The Island of Dr. Moreau* (Page 149). Page attributes Wells's engagement with Darwin to the time he spent at The Normal School of Science in London between 1884 and 1887, studying under T. H. Huxley, a famed biologist and fierce advocate of Darwinian evolution. Wells himself wrote that Huxley and Darwin both "belong to the same aristocracy as Plato and Aristotle and Galileo" ("Experiment in Autobiography" 163). Huxley's vision of life in an evolutionary paradigm had a profound effect on Wells. According to Page, "it was the Huxleyan vision of the cosmos and humanity's place in it that was to drive his imagination during the period of the scientific romances and beyond" (Page 150).

Huxley had a particularly "austere" vision of the cosmos. He posited the idea that "humanity may be just another biological mechanism in a cold uncaring universe" (Page 150). This sentiment is expressed also in an article published by Wells in 1891 titled "The Rediscovery of the Unique," one of his first writings to garner public recognition. According to the biographer John Hammond, the essay reflects the influence Huxley had on Wells's

evolutionary worldview and encompasses many of the attitudes Wells would hold throughout his life (34). In particular, Hammond cites the "troubled awareness of a universe in which there can be no certainties" as one of the main themes that would inform much of Wells's writing throughout his career (34).

While "The Rediscovery of the Unique" acknowledges a profound uncertainty in the universe, much of its discussion centers on how identity is perceived within such a universe. As alluded to in the title, the essay focuses on the unique constitution of each and every phenomenon. Wells asserts that "[a]ll being is unique, or, nothing is strictly like anything else. It implies therefore that we only arrive at the idea of similar beings by an unconscious or deliberate disregard of an infinity of small differences" ("Rediscovery" 23). Wells explains how each individual animal displays its own unique differences from all other animals of the same kind. He goes on to explain that all phenomena is unique, from "bricks, coins, marbles" to "the shape of the earth's orbit and the earth's velocity" ("Rediscovery 26). He laments man's tendency to group phenomena together through the use of language and numbers, arguing that evolution reveals a more dynamic and complex world in which each and every form is utterly unique: "The period of darkest ignorance, when men turned their backs on nature and believed in mystic numbers, has long passed away.... The work of Darwin and Wallace [makes] the clear assertion of the uniqueness of living things" ("Rediscovery" 30).

Wells claims that in an evolving world, where life forms change over time in an indeterminate manner, we are forced to recognize the unique and altogether singular constitution of everything.

Wells acknowledges that even if we know that life forms possess an "infinity of small differences," this doesn't mean we can perceive those differences. The closer we look at the world, he argues, the more it becomes mysterious and withdrawn from human perception, precluding the possibility of any absolute truth:

Science is a match that man has just got alight. He thought he was in a room...and that his light would be reflected from and display walls inscribed with wonderful secrets and pillars carved with philosophical systems wrought into harmony. It is a curious sensation, now that the preliminary splutter is over and the flame burns up clear, to see his hands lit and just a glimpse of himself and the patch he stands on visible, and around him, in place of all that human comfort and beauty he anticipated—darkness still. ("Rediscovery" 31)

This passage reflects what Hammond refers to as the essay's "troubled awareness of a universe in which there can be no certainties" (34). But Wells does not necessarily present this "awareness" in a negative light. Rather, he asserts that our recognition of the uniqueness of being will "restore providences and unverified assertions to the stock of credible things, and liberty to the human imagination" ("Rediscovery" 22). When we fail to acknowledge life's fundamental diversity, he writes, we "blind [ourselves] to the fact that every moment is a miracle and mystery" ("Rediscovery" 26).

Wells felt that evolutionary theory opened the door to an entirely different way of conceiving of life on the planet. The "awareness" that Hammond refers to extends beyond what the future might hold in an evolving world to include the very nature of identity in all life forms, man being no exception. For Wells, the understanding of life itself had become more enigmatic and shrouded in mystery.

At first glance, Wells's understanding of identity in an evolutionary framework might appear to contradict the proposition that all life forms share a common biological relationship. Indeed, his assertion of the unrepeatable uniqueness of each and every life form seems antithetical to any notion of commonality. But we have to recognize the difference between the uniqueness of forms, on one hand, and the differences and similarities that are selectively imposed by man. For Wells, language cannot convey life's "infinity of small differences"—differences that, in fact, elude our cognitive grasp. Instead, language causes humanity to "slur over uniqueness, and lump similar looking beings together" ("Rediscovery" 26). Distinctions among life forms, then, become convenient assignations and, to some extent, arbitrary. For Wells, language has no essential connection to what it presumes to represent. It falls short in its project to fully convey a vast and changing reality. This is made clear by the fact that he originally titled his essay, "The Fallacy of the Common Noun" ("Rediscovery" 22). Wells disparages "strictly logical people" who assume that "words...are reliable

tools, instruments of steel." Words, he explains, "are rather like a saw or an axe of ice when the thermometer fluctuates about zero centigrade" ("Rediscovery" 27). As they were applied in late-Victorian society, language and numbers only served to *obscure* the emergence of an evolutionary understanding, contributing to society's "neat little picture of a universe of souls made up of passions and principles in bodies made of atoms, all put together so neatly and wound up at the creation" ("Rediscovery" 30).

In this regard, Wells's critique of language anticipates Derrida's theory of deconstruction. Darwin also aligns with Derrida in the sense that his theory of evolution deconstructs a pre-evolutionary understanding of the structure of species. Darwin addresses this point in On the Origin of Species: "On the view that species are only strongly-marked varieties, and that each species first existed as a variety, we can see why no line of demarcation can be drawn between species, commonly supposed to have been produced by special acts of creation" (Darwin 374). Darwin demonstrated that species do not exist in and of themselves when put to the test of evolutionary theory. He found that in order for speciation to occur, the set of traits that will later characterize a new species must appear more than one time in more than one life form, before they can be said to constitute a new species. In effect, the search for the original moment when a species first appears equates to a search for the non-existence of that species, rendering its origin an absence. Ironically, what *On the Origin of Species* reveals is that there is no origin,

effectively dismantling the taxonomic structure of species by deconstructing its center (i.e. origin) and boundaries ("Ecology As Text" 6)

In the same way that evolutionary theory challenges essentialist conceptions of identity, Derridian deconstruction challenges the identity of texts. In both cases, the relationship between signifier and signified is called into question. As it relates to text, Derrida engages Saussure's structuralism to demonstrate that the meaning of words arises from its place in a larger linguistic structure. Words are meaningful only in relation to other words they stand in contrast to within that structure. This difference is what allows their meaning to exist. Thus, the structure of language becomes paramount in the production of meaning, as the signified behind the signifier is shown to have no intrinsic meaning. In other words, the context surrounding individual words becomes just as essential to the comprehension of the meaning of those words as the words themselves. Words and their meaning are always shaped by the context that surrounds them, making the meaning of each word unique and different depending on its context.

The importance of context in the comprehension of meaning is not simply a theoretical nominalism. In his essay "Ecology As Text, Text as Ecology" Timothy Morton discusses what is meant by deconstruction's illumination of the relevance of context. "The text-context distinction is only an interpretive convenience. It is not that texts refer to other texts, or coexist with them—rather, texts *are* other texts: texting is the differential process by

which and as which texts exist as such" (my emphasis) (2). Morton argues that context does not merely shed light on the meaning of a text, but rather it is an intrinsic part of that meaning. Thus, deconstruction does not render the boundaries between text and context obsolete; rather, it brings them into the fold. Boundaries become another part of the meaning-making process.

Morton describes boundaries as "thick, permeable, folded into [themselves], fragile, teeming with parasites, like skin" ("Ecology As Text" 2). As such, they serve an important purpose; they negotiate the reciprocity between the individual unit, whether that be text or species, and its context. It follows then that de-essentializing identity does not necessarily render it empty or vacuous, but rather opens up possibilities as to what it might be. For instance, the identity of life forms might include a host of contextual factors contributing to its existence, despite how they may appear to the perceptive faculties of humans. Both Wells and Morton recognize that identity is understood by and through its context.

In the final analysis, evolution reconfigures how the identity of individual life forms should be constituted. No longer discreet and static entities, life forms become part of the context that surrounds them. Such a view lends itself to the fundamental precepts of an ecological paradigm. Morton elaborates on this idea by turning to the theory of symbiosis, which explores "the relationships between different life forms at all scales. Symbionts exist within us, not just around us (endosymbiosis)—we are not

ourselves, if by that we mean independent and singular beings, but are made up of others" ("Ecology As Text" 7). In other words, "individual" life forms include other life forms in and around them in order to exist, revealing, in a straightforward material way, how any conceptualization of identity must account for this fact. Ecology, like evolution, requires an expansion of how we conceive of life on the planet. Whether we are looking at texts or life forms, identity includes a sense of the interconnections that define them.

Deconstructing Identity in The Island of Dr. Moreau

Insofar as the discovery of evolution revealed how interconnectedness among life forms changes how we think of identity, *The Island of Dr. Moreau* presents an ecological vision that is altogether different from that which positions identity and perspective *outside* of this interconnected reality. The novel accomplishes this by complicating traditional boundary distinctions, creating a world in which all life forms are entangled, demonstrating what happens when perspective cannot be separated from the context that constitutes it. John Glendening describes entanglement as it is presented in the novel:

It entails the commingling of objects, processes, and qualities that strike the mind as incompatible or antagonistic because they upset boundaries and categories; and it points to the limits of knowledge, since the mind, caught in the very processes it tries to understand, is continually confounded by contingencies. (41)

Consequently, as the novel "commingles" many of its "objects" and "qualities," the environmental context infiltrates Prendick's perspective. In this way, Dr. Moreau de-centers human perspective, forcing Prendick (and the reader) to acknowledge how an evolutionary paradigm implicates the very way in which we are able to think of the world. The contingency of the human species in an evolutionary framework applies not just to our existence as a species, but also to our ability to engage cognitively with the world. As part of an ecologically interconnected world, we're denied a vantage point outside of this intrinsic connection. As Timothy Morton states, "there is no meta-position" ("Ecological Thought" 17). Through the text's deconstruction of boundaries, then, Dr. Moreau reveals how our ecological interconnectedness informs the perspective we bring to the world we inhabit.

An important way the novel accomplishes this task is by focusing on Prendick's identity. Prendick's identity is initially presented as something empty or vacuous. In the introduction, Prendick's nephew Charles describes how his uncle is thought to be "demented" after returning from his year on the island following the shipwreck of *The Lady Vain*: "the psychologists who looked at his case considered it a curious instance of the lapse of memory consequent upon physical and mental stress" (5). Charles mentions that Prendick himself "alleged that his mind was a blank from the moment of his escape from the *Lady Vain*," (5), suggesting an absence or a state that is yet to be formed. His identity appears even less certain when in the first chapter

he does not divulge his name, and later on he refers to himself as "human flotsam" (17). To the extent that Prendick is introduced without a clearly defined sense of self, his identity becomes a "blank" for the story to be written on. As Kimberly Jackson argues, "Prendick's experiences are things which are injected or inserted into him" (23). This foreshadows how the novel will showcase boundary transgressions between Prendick and his environment.

We first see the crossing of traditional boundaries when Prendick is in the lifeboat with two other men following the shipwreck. Out of provisions, they decide to draw straws in order to determine which of the three will be cannibalized so that the others may survive. After one of the men draws the short straw, he begins to fight the third man, causing them both to tumble out of the lifeboat to their deaths. Prendick laughs, only to wonder why: "the laugh caught me suddenly like a thing from without" (9). As something from "without" that suddenly "caught" him, the laugh functions to momentarily dissolve the external/internal boundary as it applies to Prendick's identity. Subtle as it may be, this moment illustrates how Wells upsets boundaries in the novel. In this instance, the boundary in Pendrick's mind between "within and without" becomes permeable, forcing the reader to reconsider Prendick's relationship to his context.

The disruption of traditional boundaries becomes even clearer as

Prendick continues to recount his experience aboard the lifeboat:

And even as I lay there I saw with no more interest than if it had been a picture, a sail come up towards me over the skyline. My mind must have been wandering, and yet I remember all that happened quite distinctly. I remember how my head swayed with the seas, and the horizon with the sail above it danced up and down. But I also remember as distinctly that I had a persuasion that I was dead, and that I thought what a jest it was that they should come too late by such a little to catch me in my body. (9)

This passage complicates several boundary distinctions. Prendick's mind "wanders," but not absently because he claims to remember what happened "quite distinctly," giving the impression that Prendick's identity has separated down Cartesian lines. His mind, not his body, surveys the scene from a distance, while his corporeal head moves in unison with the sea. The horizon, something that usually provides a stable reference point, "dances" vertically up and down. All of this leads Prendick to make the confusing and contradictory statement that he is simultaneously dead and "caught" in his body. On the surface, this scene works to convey Prendick's altered state of mind and near-death experience. But it's done in such a way as to transgress the boundaries separating mind, body, and environment. The suggestion here is that Prendick's identity cannot easily be distinguished from what is taking place around him.

Another way the novel foregrounds the disruption of traditional identity boundaries is through Dr. Moreau's vivisection experiments. His creatures represent an amalgamation of human and animal forms, defying conventional categorical distinctions and challenging Prendick's conceptual

boundaries. As much as the creatures can be defined as both man and animal, they also exist as neither. Prendick registers this paradox when he first encounters one of the creatures, even though at the time he is unaware it is anything but human: "I had never beheld such a repulsive and extraordinary face before, and yet—if the contradiction is credible—I experienced at the same time an odd feeling that in some way I had already encountered exactly the features and gestures that now amazed me" (14). The contradiction Prendick registers is credible to the extent that species do not exist as discreet and static entities in an evolutionary framework, since there is nothing essential organizing their taxonomic differences.

The contradiction Prendick experiences reflects Freud's idea of "the uncanny." In his 1919 essay by the same name, Freud examines how the uncanny bears the imprint of both the familiar and unfamiliar. Freud ventures that "[t]he uncanny effect often arises when the boundary between fantasy and reality is blurred, when we are faced with the reality of something that we have until now considered imaginary" (151). He adds to this that "only if there is a conflict in judgment can the feeling arise" (156), explaining that "the uncanny arises from superannuated modes of thought" (157). Prendick experiences the uncanny insofar as he registers two different species at the same time, challenging his conception of what is possible in reality. This is the conflict in judgment that Freud describes. The "superannuated modes of thought" are the pre-evolutionary modes of

thinking that regard species as distinct and separate entities. The novel highlights Prendick's uncanny experience as a way of illustrating the profound shift in thinking required of evolutionary theory, namely, the acknowledgment that the appearance of distinct and separate species belies their interconnectedness.

Dr. Moreau's expressed motivation behind his experiments also reveals the fallacy of an essentialist understanding of identity. Moreau sees vivisection as a way to explore the latent possibilities inherent in a non-essentialist framework of evolutionary theory. When explaining the purpose of his experiments to Prendick, he states: "It all lay on the surface of practical anatomy years ago, but no one had the temerity to touch it" (71, 72). Wells himself discusses these possibilities in a scientific article titled "The Limits of Individual Plasticity," published a year before *The Island of Dr. Moreau*:

We overlook only too often the fact that a living being may also be regarded as raw material, as something plastic, something that may be shaped and altered, that this, possibly, may be added and that eliminated, and the organism as a whole developed far beyond its apparent possibilities. (36)

This passage mirrors Moreau's explanation of the purpose of his experiments. Again, speaking to Prendick, he states: "These creatures you have seen are animals carven and wrought into new shapes. To that—the study of the plasticity of living forms—my life has been devoted" (71). He reiterates this sentiment later: "I wanted—it was the only thing I wanted—to find out the

extreme limit of plasticity in a living shape" (75). Moreau's desire to explore plasticity, coupled with his view of individual species as "raw material," reflects an understanding that the boundaries used to distinguish among species are permeable. In this light, identity no longer exists as something fixed, independent, singular and stable. "External" factors are also part of its composition.

Once the boundaries separating species become permeable, all the traits normally associated with individual species become mutable. Species, then, cannot necessarily be expected to look or behave in any specific manner. Both Wells, in his article on plasticity, and Dr. Moreau, in his explanation of his experiments, address the possibility of changing the mental and psychological structure of life forms. In fact, the following passage can be found in both the essay and the novel: "we find the promise of a possibility of replacing old inherent instincts by new suggestions, grafting upon or replacing the inherited fixed ideas" ("Moreau" 73, "Individual Plasticity" 39). The ability to change "instincts" and substitute "inherited fixed ideas" nullifies an essentialist conception of species, challenging many of the stringent Victorian views regarding identity. In an evolving world, species can no longer be counted on to signify specific physical and mental traits.

In this way, Dr. Moreau's vivisected creatures also convey the frightening and unknown possibilities inherent in an indeterminate universe. At one point, Prendick recognizes this: "that these man-like creatures were in

truth only bestial monsters, mere grotesque travesties of men, filled me with a vague uncertainty of their possibilities that was far worse than any definite fear" (8). Prendick recognizes that when life forms do not exist as distinct and separate entities, their behaviors are unpredictable. Wells draws attention to this aspect of evolution through the vivisected figure of the monster, which evokes a sense of the uncanny. Monsters are composed of familiar features, but the configuration of these features is unfamiliar. Wells's choice to use the figure of the monster aligns him with both Darwin and Derrida insofar as they also use the monster to convey a similar meaning.

Colin Nazhone Milburn discusses both Darwin's and Derrida's use of the monster figure. He argues that they "enact a critique of artifactual constructions of nature that disrespects boundaries and emphasizes the deviancies, the perversions, the mutations, and the monstrosities of the world" (604). Milburn reads Darwin's use of the monster as a way of representing how the process of natural selection operates:

Darwin's main concern is ultimately not with radical variations like monsters, but rather with the small gradual differences that accumulate over generations and by which he understands evolution to have been accomplished historically. But his argument needs the monster as evidence observable in time, as a phenomenon of extreme transmissible difference not requiring the imagination of millennia to suggest the movements of evolution: it supplies a sort of freak-show vividness and tangibility to his argument. (607)

The "freak-show vividness" Milburn refers to is exactly what Moreau's creatures provide in the novel. Their multiple, un-categorizable identities force Prendick and the reader to acknowledge that life forms do not necessarily have to look or behave in any specific manner, and that preevolutionary conceptual boundaries fail to reveal an accurate depiction of reality. As the conception of identity expands, it becomes more inclusive of what Milburn calls "the perversions, deviancies, and mutations." These features take on a greater significance in terms of understanding the complexity of an evolving world.

Milburn praises Derrida's use of the monster to the extent that it exemplifies the project of deconstruction: "At once outside nature and inside nature, the monster is a perfect deconstructive icon, collapsing distinctions with impunity" (605). Derrida himself speaks to this issue: "one must produce what in fact looks like a discursive monster so that the analysis [of norms] will be a practical effect, so that people will be forced to become aware of the history of normality" (386). Moreau's grotesque monsters work to this end. They reveal to us that our understanding of a singular and independent self is predicated on a system of categorization based on essentialism—a structure that minimizes the unique features of all that surrounds us. *Dr. Moreau* suggests that identity is not only multifaceted, but that it extends beyond the essentialist concept of a discreet self to include the environmental context in which it exists. Specifically, Moreau's monsters demonstrate how

a pre-evolutionary paradigm obscures the profound interconnection among all life forms.

De-Centering Perspective in an Ecological Paradigm

In his comparison of evolution to the theories of Marx and Freud, Morton states that all three "describe processes taking place behind our backs. We can't see evolution, or the secret of the commodity form, or the unconscious" ("Ecological Thought" 65). In other words, we can never gain a complete picture of the mechanics of how evolution operates; we can only view the results in retrospect. If we categorize and name what we perceive without recognizing that a portion of what we see eludes us, we run the risk of asserting false claims on a world we presume to know. Like Prendick, we'll stand dumbstruck when we encounter the contradictions that deconstruct the reality we thought we knew.

Wells addresses this issue in "The Rediscovery of the Unique." He begins by critiquing the methodology of late-Victorian science that privileges aggregates and averages in its formulation of results. This bias overlooks the minute variations and unique differences that underlie the slow process of evolution. What's more, the methodology operates in such a way as to present its results as absolute. Wells describes how this works:

We may call attention to the unreasonable width of "margin of experimental error" allowed to scientists. They assert, for instance...[that]

hydrogen and oxygen invariably exist in the definite and integral ratio of one to eight. Any truthful chemist, if the reader can get one and "heckle" him, will confess that the most elaborate and accurate analyses of water have given fractional and variant results. ("Rediscovery" 28)

For Wells, these "fractional and variant results" confirm the unique character and constitution of phenomena. Late-Victorian scientific methodology, he argues, fails to acknowledge and consider the presence of variation in any meaningful way, resulting in a distorted worldview.

In *Dr. Moreau*, Wells calls attention to the limitations of knowledge through his use of negative imagery. Morton defines a negative image as an "absence of something 'there'" that "evokes a sense of sheer space," ("Ecology Without Nature" 46). We find an example of this in one of Prendick's descriptions of Dr. Moreau's creatures: "I saw with a quivering disgust that it was like the face of neither man nor beast, but a mere shock of grey hair, with shadowy over-archings to mark the eyes and mouth" (60). Prendick defines the creature in the negative, as neither man nor animal. Instead of having strange eyes and a mouth, it has an obscured semblance of what should be a mouth. Prendick can't find the words to describe its unique and strange qualities. This incomplete definition illuminates its altogether unique composition.

Another form of negative imagery in the novel can be found in what Kimberly Jackson describes as "textual vivisection". Jackson argues that vivisection "happens both within the story, in Dr. Moreau's laboratory, and as the 'operation' of the text itself. As Moreau works upon the creatures' bodies, so the text performs vivisection in the language that constitutes it" (21). This textual vivisection occurs in a number of ways, Jackson explains, including the manipulation of punctuation. Jackson counts "at least sixty-seven ellipses and almost 250 hyphens" in the novel (23). The ellipses and hyphens break up the smooth flow of the narrative and convey the idea that something cannot *quite* be described. A good example of this occurs in the chapter "The Crying of the Puma." When Prendick questions Montgomery about the strange features of one of his servants, his dialogue becomes hesitant and disjointed:

"He's unnatural," I said. "There's something about him...Don't think me fanciful, but it gives me a nasty little sensation, a tightening of my muscles, when he comes near me. It's a touch...of the diabolical, in fact." (37)

In this passage, Prendick never does describe any specific detail about the creature, yet the implications of what he means are available to Montgomery and the reader. His description is presented in the negative, evoking the incomprehensible strangeness of the creature as experienced by Prendick.

Morton discusses how an abundance of negative imagery can create its own rhythm within a text. He explains that "[j]ust as words come in phrases, imagery comes in clusters," and "[g]aps between stanzas, and other kinds of broken lineation, create tone out of sheer blankness" ("Ecology Without

Nature" 45). The abundance of negative imagery in Dr. Moreau, manufactured through descriptions of the creatures as well as the manipulation of ellipses and hyphens, creates a tonal resonance that communicates an underlying uncertainty. A good example of this can be found in the aforementioned passage in which Prendick first encounters one of Moreau's creatures. In his description of his experience, the phrase "if the contradiction is credible" is offset with hyphens. The reader recognizes that Prendick cannot fully comprehend what he sees, both because of what he says and the "broken lineation" that characterizes how he says it. The tonal quality created by the novel's negative imagery provides a kind of eerie background music that reminds readers of what they do not know or cannot see.

Indeed, uncertainty lies at the heart of what this novel explores, namely, the implications of Darwinian theory and all the unknowns and possibilities that follow—possibilities that Wells makes tangible in the "freak-show vividness" of Moreau's creatures. This is not to say that the creatures represent literal life forms that evolution might produce, but rather that they signify the principle of uncertainty inherent in the evolutionary process.

In the same way that Wells confuses boundary distinctions separating man and animal, he also blurs the conventional lines of demarcation separating man and animals from their environment. This occurs most

prominently in the chapter "The Thing in the Forest" when Prendick ventures into the thick forest and encounters a number of Dr. Moreau's "failed" experiments. The chapter begins by emphasizing the abundance of vegetation in the forest:

I strode through the undergrowth that clothed the ridge behind the house, scarcely heeding whither I went, passed on through the shadow of a thick cluster of straight-stemmed trees beyond it, and so presently found myself some way on the other side of the ridge, and descending towards a streamlet that ran through a narrow valley. (39)

The long meandering sentence ushers both Prendick and the reader into the dense forest. Prendick catches a glimpse of one of Moreau's creatures but the thick vegetation obscures his view, limiting his visual perception. The features of the environment, traditionally presented as background setting, move into the foreground, preventing Prendick from gaining any clear perspective on either his surroundings or the strange creatures that lurk there. Gradually, the forest environment begins to affect not only his vision but his mental state as well. At one point, he states, "it was too hot to think elaborately, and presently I fell into a tranquil state midway between dosing and waking" (39). Wells locates Prendick's state of mind "midway" between sleeping and waking, complicating the boundary separating the conscious from the unconscious, by blurring the distinction between his thought and the heat of the forest.

As the boundaries between Prendick and his environment become confused, the environment takes on a more prominent role, complicating Prendick's ability to navigate the forest. When one of Moreau's creatures begins to stalk him, Prendick tries to locate it in the forest. But looking for the creature, Prendick sees only the forest. At this point, the boundaries separating the creature from the forest blur as well. Prendick cannot differentiate between the presence of the creature and the presence of the forest: "The thicket about me became altered to my imagination. Every shadow became something more than a shadow, became an ambush, every rustle became a threat. Invisible things seemed watching me" (41). Wells anthropomorphizes the environment, endowing it with agency. It is capable of watching Prendick: "I turned suddenly and stared at the uncertain trees behind me. One black shadow seemed to leap into another" (45). As the creature continues to stalk Prendick, it blends in almost imperceptibly with the environment: "Then, suddenly traversing a little glade, I saw with an unpleasant start two clumsy legs among the trees," and "the head and body were obscured by a tangle of creeper" (43). What Prendick sees here is an image of hybridization—half creature, half creeper.

Prendick describes the relationship between the forest and the creature as an "interlacing network," and eventually he describes everything as a "green confusion" (43). The "green confusion" speaks to the prominence of the environment in what Prendick perceives. The environment is not

merely an inert backdrop. Rather, it dominates the foreground, erasing distinctions between itself, Prendick, and the creature. Prendick alludes to the disruption of boundaries around him when he states: "I could see nothing—or else I could see too much" (45). The idea that seeing "nothing" equates with seeing "too much" underscores Prendick's inability to distinguish among all the phenomena before him, his own perspective included.

The "green confusion" experienced by Prendick is one of many images of formlessness found in the chapter. In each case, the formlessness is enacted through a confusion of boundaries. As night begins to descend in the forest, Prendick fears "the idea of being overtaken in the open by the darkness, and all that darkness might conceal." He describes how "[c]olour vanished from the world, the tree tops rose against the luminous blue sky in inky silhouette, and all below that outline melted into formless blackness" (44). Here, Wells describes a world losing its distinction, as Prendick is indeed "overtaken" by his context. Everything around him melts into the dark. In this way, Prendick resembles the man at the end of "The Rediscovery of the Unique" who only finds darkness in his attempt to illuminate the truth of the world he inhabits. Thus, the contingency of his perspective is exposed. This is consistent with an ecological paradigm where everything is situated in relation to everything else.

This chapter brings to light an important distinction involving the way we experience the world. When boundary distinctions blur, we too perceive the world as a kind of "green confusion." The language we use to organize the world is not necessarily flawed simply because it is used in such a way as to obscure or distort the fundamental interconnectedness of life forms. Rather, our interconnectedness demands that we acknowledge the way in which our perception and understanding of the world are in fact part of the interconnectedness. We distinguish between life forms and elevate these distinctions with the authority of language, all the while implicitly asserting some degree of objective truth. But this tends to overlook the vast complexity of each and every unique phenomenon that we seek to categorize.

Wells includes images that demonstrate that while the contingency of perspective precludes us from understanding the world absolutely, what we do see and experience provides endless possibilities of exploration. In a world where identity becomes expansive, each life form reveals its connection to other life forms as well as to the environmental context that surrounds it.

Wells illustrates this in the forest scene when Prendick becomes overwhelmed by the "green confusion." In the midst of all the confused boundaries and formlessness that he experiences, he pauses momentarily to examine a fungus: "I was startled by a great patch of vivid scarlet on the ground, and going up to it found it to be a peculiar fungus branched and corrugated like a foliaceous lichen, but deliquescing into slime at the touch"

(41). This striking image illustrates the way life forms are interconnected. Many fungi maintain important symbiotic relationships—either mutualistic or parasitic—with plants, animals, insects, and even other fungal species. The "branched" and "corrugated" formation indicates the way the scarlet fungus reaches out and connects with the world around it. The image here is clear and detailed. The words used to describe it—"foliaceous" and "deliquescing"—underscore the complexity and sophistication of this particular life form.

There is another moment in this chapter when Prendick pauses to notice the particularity of life forms. Shortly after he remarks that he wants to escape the forest and "get a clear space about me," he begins frantically moving through the bushes in order to find his way out. Again, though, he stops to observe the various life forms that surround him:

I stopped just in time to prevent myself emerging upon an open space. It was a kind of glade in the forest made by a fall; seedlings were already starting up to struggle for the vacant space, and beyond, the dense growth of stems and twining vines and splashes of fungus and flowers closed in again. (41)

Just prior to this moment, Prendick had encountered a number of Moreau's creatures that he described in detail: "They were naked, save for swathings of scarlet cloth about their middles, and their skins were of a dull pinkish drab colour...They had fat heavy chinless faces, retreating foreheads, and a scant bristly hair upon their head" (41).

This is an important moment for Prendick in that he thinks he realizes that Moreau's vivisection experiments involve turning men into animals. Ultimately, his realization will prove incorrect, further demonstrating how his experience in the forest only leads to more confusion. Prendick's perplexity is extended beyond the "green confusion" in the forest to include the nature of Moreau's experiments. At every turn, it seems, he cannot reach a satisfactory understanding of his circumstance. His anxiety manifests itself in the dramatic shifts of perspective that characterize the chapter. Prendick's perspective vacillates between the general and the particular. One moment he's trying to untangle the "green confusion" and parse out the individual features of the forest. The next moment he's examining the minute details of a specific and singular life form. In both cases, he is unable to gain any conclusive knowledge about anything.

The juxtaposition of these different perspectives demonstrates an important point regarding an ecological perspective according to Morton. In an interconnected world where our perspective is situated from within, "We can't see everywhere. We can't see everywhere all at once....When we look at x, we can't look at y" ("The Ecological Thought" 22). Prendick examines the forest and he examines the fungus, but he cannot examine both at once. Whereas he can perceive a creature as either man or animal, he is unable to see it as both at the same moment. This lies at the heart of what confounds him throughout the novel. It reflects Morton's point that evolution occurs

slowly over time, and we can only understand it in the abstract. That being said, our perceptual experience of material reality is no less "real" than the reality of the evolutionary process. What we have to recognize is the degree to which the incompleteness of our perceptual experience informs our understanding of the world. Since we cannot see everywhere at once nor see the evolutionary process, we must relinquish altogether the possibility of a meta-position from which to organize and understand the world, rather than simply positing it in terms of some future possibility. Because our understanding of reality includes the perspective that constitutes it, this necessarily de-centers human perspective. But not just nominally. A decentered perspective reveals not that we don't have access to a meta-position, but that there isn't a meta-position. The absence of a meta-position, then, precludes any absolute essentialist claim on reality.

In lieu of an essentialist conception of reality, ecological interconnection re-contextualizes *how* we understand identity as it relates to ourselves, other life forms, and the environment we inhabit. Without the aid of a meta-position, we must allow for each and every feature of reality. We must adjust our thinking to the flux—the endless unfolding of phenomena. Morton describes how ecological thinking is "thinking big—as big as possible, and maybe even bigger than that, bigger than we can conceive" (The Ecological Thought 20). This kind of perspective includes a willingness to

incorporate more and more within its purview, acknowledging that this process of inclusion will continue indefinitely and never conclude absolutely.

Morton questions the overly positive and celebratory tone of a lot of environmental rhetoric when he asks: "where does this leave negativity... ambiguity, darkness, irony, fragmentation, and sickness? Are these simply non-ecological categories?" ("Ecological Thought" 16). He critiques a way of thinking that seeks to weed out any elements or aspects that don't present the natural world in a beautiful and positive light. Wells, on the other hand, highlights these features. Fungus, monsters, darkness, negativity, and fragmentation all bear on the perspective of Prendick.

In its exploration of the implications of evolutionary theory, *The Island of Dr. Moreau* asserts an inclusive ecological perspective. In the words of Glendening, the text opens itself up to the "chance", "contingency", "indeterminacy", and "confusion" that an evolutionary worldview embraces. But it does so in a way that does not cast the elements in a purely negative light. Rather, they are presented as necessary components of the evolutionary process as perceived by humans. Whereas late-Victorian society wrestled with the threat evolution posed to its essentialist paradigm, Wells believed Darwin's theory represented nothing less than "man's final emancipation from rigid reasonableness" ("Rediscovery" 29). For Wells, evolutionary theory marked the restoration of liberty to the human imagination" ("Rediscovery" 22).

As we might expect, the novel ends on a note of ambiguity, leaving the reader with a sense of inconclusiveness and indeterminacy of meaning. The last we see of Prendick, he is looking into the dark immensity of the night sky, ruminating on his change of perspective in the wake of his experience on the island with Moreau's creatures—emblematic of the shift in worldview necessitated by Darwin's theory of evolution. Back in England now, Prendick decides to abandon biology in favor of chemistry and astronomy in his pursuit of the "vast and eternal laws of the universe" (131). His choice of chemistry and astronomy is noteworthy inasmuch as it recalls the forest scene in which he shifted perspective between the particular and the general. The image of Prendick in darkness also calls to mind the man at the end of "The Rediscovery of the Unique" who lights a match in the dark only to find "in place of all that human comfort and beauty he anticipated—darkness still" ("Rediscovery" 31). Any "human comfort and beauty" that accompanies an absolute understanding of the world seems no longer possible.

But the light of the match does illuminate something: the match striker catches "a glimpse of himself and the patch he stands on" ("Rediscovery" 31). An image of man and his environment. A suggestion, perhaps, of the illumination cast upon the world by the light of evolutionary theory and all the possibilities it may hold. For Prendick, the darkness that surrounds him represents "a dim suggestion of the fathomlessness of the unique mystery of life" ("Rediscovery" 30). It is there, he thinks finally,

where "whatever is more than animal within us must find its solace and its hope" ("Moreau" 131).

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