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The Creation of the Mad Scientist in the Works of H. G. Wells

Doctoral Dissertation

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Prohlášení

Prohlašuji, že jsem dizertační práci vypracovala samostatně a uvedla v ní předepsaným způsobem všechny použité zdroje.

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What is this thing that builds our dreams Yet slips away from us?

-Brian May for Queen, "Who Wants to Live Forever" (1986)

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1. Introduction

The Study of Nature makes a man at last as remorseless as Nature. —H. G. Wells, *The Island of Doctor Moreau*¹

H. G. Wells created a number of stories that are recognizable by anyone with an interest in science fiction or horror and was retrospectively nicknamed the father of science fiction. His writings have been analyzed multiple times over the years, and depending on the critic, some works have stood the test of time better than others. Wells is most known for his scientific romances such as *The Time Machine* (1895),² *The Island of Doctor Moreau* (1896), *The Invisible Man* (1897), and *The War of the Worlds* (1898).³ They gave the world a terrorist, a twisted surgeon, and a story about a time machine that, although not the first one, is recognized in the English-speaking world as the story that popularized the idea of time travel. Wells also introduced an interplanetary threat whose dramatic radio adaptation by Orson Welles caused widespread fear and panic as it entered the American living rooms at the end of October 1938.⁴

Critics have had a complicated relationship with Wells's work as did a lot of his first reviewers, but the occasional controversy certainly contributed to the number of pages that have been dedicated to the analysis of H. G. Wells's imagination. His body of work is traditionally separated into two waves which are distinguishable from each other; the utopian works and the more fantastic scientific romances.⁵ The thesis turns its attention to the works that belong with a few exceptions into the second category that coincidentally could be said to have ended when the nineteenth century folded into the twentieth century. H. G. Wells's scientific romances include some of the above-mentioned works but the short stories are often sidelined. The analysis on the following pages includes the novels but it also explores the same features in the short stories, which arguably take more risk approaching similar ideas.

¹ See Wells ([1896] 2016, 164).

² Wells, H. G. 1895. *The Time Machine*. London: William Heinemann.

³ Wells, H. G. 1898. *The War of the Worlds*. London: William Heinemann.

⁴ Parrinder notices how Wells captured what would become real terror during the First and even more the Second World War (Parrinder [1972] 2002, 11). For a more detailed overview of studies of various elements that led viewers across the country to believe the radio adaptation of *The War of the Worlds* to be real, such as it being broadcasted on Halloween, see Herman (2013, 8).

⁵ Alternatively, J. R. Hammond (1979) distinguishes between the romances and the novels (vii–viii).

Certain patterns are expected to emerge in the body of work of any author with regards to themes, topics, style, or the portrayal of certain types of characters. For Wells, such patterns include a frequent use of a mad scientist character, but also a preoccupation with the human mind, its interaction with the environment, and the consequences of the said interaction. The fictional works are oftentimes connected in some way to science, but the disruption of mind is explored through other means as well. One example would be "The Red Room" (1896) which explores mind's submissiveness to superstition because it yields to the impressions from the environment that it has trouble comprehending. Both the longer and the shorter works of H. G. Wells, which are presented here, are connected to each other because of their themes but the core of the analysis will be centered around *The Invisible Man, The Island of Doctor Moreau*, and frequently also "The Chronic Argonauts" (1888).

Chapter two is an overview of the historical relationship between science, religion, society, and arts. The chapter contains relevant information that is tied to the topic of breaking boundaries which is one of the most distinctive features of the mad scientist character. It discusses the developments which generated tensions that lead real life scientists to live in seclusion and how science gradually managed to separate itself from the charlatans, the virtuosi, and most importantly alchemy which was responsible for the association with evil powers. The chapter also contains a brief overview of literary world's criticism of science up until the nineteenth century. This discussion introduces important features of Wells's work that will be repeatedly examined: time and space.

Perception plays a crucial element in story (de)construction undertaken on the following pages and the thesis therefore consults relevant literature of cognitive approaches. Studies of literature and cognitive studies can be connected in three main ways. First, there are literary scholars who take findings from cognitive sciences and apply them to literature, secondly, literary scholars who focus on bringing new insights into cognitive studies based on the analysis of literature, and lastly, cognitive scientists who analyze the literary texts (Troscianko and Burke 2017, 4). This work belongs into the first category because it adapts the mind-set and thinking borrowed from cognitive studies, but it borrows from already existing interdisciplinary work done in literature too. Troscianko and Burke (2017) further mention several ways to look at current prevailing topics in terms of cognitive studies in their introduction to *Cognitive Literary Science: Dialogues between Literature and Cognition*: embodiment, emotion, immersion, mental imagery, simulation,

and social cognition (5). The 2015 publication of *An Oxford Handbook of Cognitive Literary Studies*, which was edited by Lisa Zunshine, offers an alternative way of classifying of what falls under cognitive literary studies. It divides the individual studies into five subparts loosely tied to topics described by Troscianko and Burke but naming some of them more explicitly by their use in literary studies: narrative, history, imagination, emotions and empathy, the new unconscious, empirical and qualitative studies of literature, cognitive theory and literary experience (Zunshine 2015, v–viii). The work at hand would fit mostly within the category of narrative-centered application of cognitive studies. The main takeaway from looking at the categorizations above is that the present thesis blends the reader-focused⁶ and text-focused cognitive literary approaches. The work is necessarily interdisciplinary but aims to enrich the field of literary criticism, rather than the neighboring field of linguistics or other related cognitive studies.

Examining the development of criticism of science, Christopher Toumey (1992) distinguishes three "idioms of science [which] are used to symbolize the evil of science" (413): "(1) the physical paraphernalia of science, (2) scientific knowledge, and (3) the people who are scientists" (414). All three are represented and interwoven in the stories visually but also metaphorically. This dissertation re-examines these idioms of science by connecting cognitive literary studies with theories that already address the mad scientist character in literature within the specific genres of horror and science fiction. The overall methodology is constructed from different theories, namely mind-reading from Lisa Zunshine (2006) and Peter Rabinowitz (2015) from whom it also borrows an approach to narratology, conceptual metaphor theory by George Lakoff and Mark Johnson, cognitive approaches to categorization and the construction of prototype that have been discussed by Patrick Colm Hogan (2003), and some key concepts regarding the plot and metonymy from Noël Carroll ([1990] 2004). The fourth chapter revisits the construction of the mad scientists' appearance, their introduction in the story, and their impact on the mindreading which necessary requires the analysis of other important characters. Chapter five takes a closer look at the laboratory as a physical structure and a concept that is central to the story and the understanding of the mad scientists. Chapter six has a specific goal to observe how the Beast Folk conceptually and cognitively influence Prendick's mind and

⁶ I am using the term reader-focused broadly because I am only assuming what hypothetical impact the text can have on its readers, and because I am using a few theories from Noël Carroll whose work was also interested in the effect of fictional works on their consumers.

that of other characters. Some conceptual metaphors appear only in certain scenes and some have a larger role in the entire narrative. The first one, LIFE IS A JOURNEY,⁷ is discussed in chapter seven and broken down to its basic features which are then discussed separately and together. The next chapter is concerned with another metaphor, WAR IS A GAME which does not include only secondary sources from the studies of metaphor but from anthropological and game studies too. The metaphor expresses the alternative way these characters conceptualize their life besides the aforementioned LIFE IS A JOURNEY. Wells's style of writing imitates the scientific method and "questioning of current hypotheses is one of the most striking characteristics of . . . scientific romances" (Haynes 1980, 37), including The Invisible Man and The Island of Doctor Moreau, which will be appropriately addressed across the chapters. Chapter nine investigates the particulars of this construction by using Carroll's ([1980] 2004) approach to the plot. Chapter ten revisits the topic of madness and its meaning and introduces different ways in which Wells incorporates the images of madness, oftentimes alongside the emotion of fear. The final chapter examines alternative approaches to the mad scientist character and revisits Northrop Frye's Anatomy of Criticism ([1957] 1973) which labels the mad scientist an alazon figure. The dissertation hopes to convince its reader that the mad scientists are complex literary figures with meaningful characterization, despite Wells's lesser interest to build these characters fully in his scientific romances (Haynes 1980, 163).

⁷ Specific examples of conceptual metaphors will be written in capital letters, a system that is common in papers of cognitive linguistics discussing this topic.

2. Putting Topics in Perspective

The purpose of this chapter is to provide a brief but sufficient account of the relationship between the literary history of mad scientists and the climate in which they were born. This specific information will be connected to features that come to mind first when we imagine a mad scientist: a scientific knowledge, evil or unethical goal, and isolation from society. Even nowadays, religion and science do not always see eye to eye on issues such as evolution or ethics but they both prosper alongside each other. Modern science started forming and organizing as a field in the nineteenth century, but a scientific way of thinking can be traced centuries back to the ancient world and across the continents. Before separating into science and philosophy, natural philosophy was just one of "specialized branches of philosophy" (Haynes 1994, 6) which were referred to as science. The other ones were "grammar, logic, arithmetic, rhetoric, music, geometry, and astronomy" (6). This thesis will use the word science as an encompassing term to refer both to science as we understand it now and natural philosophy. Some of the early scientific ideas and knowledge, products, or techniques found their way to Europe through the routs from the East although it might be argued that they played a supplementary role; "through most of two thousand years Europe continued to see nature through Greek eyes" (Boas 1962, 6). Western science is therefore a mixture of ideas that came from different parts of the world and these were viewed both positively and negatively.

The first predecessors of what would later crystallize into a mad scientist character were inspired by the alchemists who are responsible for the image of the mad scientist that is being associated with evil attributes and isolation. Alchemy had roots in China (around the fourth century) (Levere 2001, 2) and found its way to Rome, Greece, and Arabic world via trade routes (4). Deriving the name from its Arab name alkimia, it was used to pursue the dream of eternal life and the philosopher's stone (Haynes 1994, 10) which is a concept that is important for the mad scientist literature for its theme of radical transformation of human or animal bodies. The Arabs translated the texts from Greek into Arabic (Levere 2001, 6), and subsequent translation into Latin from both Arabic and Greek allowed Christians to access alchemy too (Levere 2001, 7). The translation into Latin lead to different reactions from the Christian community and many thinkers subsequently tried to show that alchemy is compatible with the religion. Levere illustrates how Christianity mixed with alchemy on the example of Geber, a Franciscan alchemist from the thirteenth century,

for whom "alchemical success was God-given, an attitude that reinforced the spiritual aspects of medieval alchemy" (Levere 2001, 8). Similar parallels and connections to religion were also found in the ideas of Paracelsus (1493–1541) who thought of nature as an alchemist and aimed to use alchemy to make advancement in the field of medicine (Levere 2001, 10). Jan Baptista van Helmont (1579–1644) used Bible as an inspiration for his theories about basic elements (11). Even Sir Isaac Newton (1642–1727) who had very strong ties to alchemy (Haynes 1994, 50–51) did not necessarily see a contradiction between religion and alchemy because he viewed God as "forever working in nature, and . . . in part an alchemist" (Levere 2001, 13). Despite these efforts, the transmutation of metals was punishable by death until it was legalized in the seventeenth century thanks to one of Newton's contemporaries, Robert Boyle (2), although it was not for religious reasons but to avoid "destabilizing the economy" with artificially produced gold (2). Thus, science's history is a history of breaking boundaries either by the way of travel or knowledge which was also tied to economy. This topic appears in Cantor's (1999) critique of *The Invisible Man*, although the economy in question is concerned with capitalism and socialism.

Thus, the relationship between science and religion was not straightforward and often ambiguous. The church reacted to the translations with less enthusiasm and alchemy became a threat in its eyes (Haynes 1994, 10):

It was at this point that alchemy inevitably became associated in European thinking with the so-called black arts, with heresy and magic. . . . Within the strongly hierarchical hegemony of the Catholic church the story of the Garden of Eden was used to discourage independent thought about the causes and origins of phenomena, lest such knowledge constitute a rival authority. . . . Many alchemists lived in isolation, using a cryptic or cabalistic language, to escape persecution similar to that accorded to witches, and for similar reasons. (Haynes 1994, 10–11)

Thus, even when alchemists worked in a way that did not make religion obsolete, the Church did not accept them and their point of view easily. If alchemists were perceived as mingling with the devil, then showing that their knowledge was attained by nonthreatening means would surely help to improve the image of science. Bacon's new science and the foundation of The Royal Society in the second half of the seventeenth century tried

to achieve exactly such a separation from the negatively perceived alchemy and its charlatans (Haynes 1994, 30). Scientists would begin to work together following a scientific method (Spangenburg and Moser [1993] 2004, 146) and made new discoveries while the research progressed independently of religious views (146). As was the case with the alchemists, whose work inspired many con-artists that abused the claims made by the alchemists in order to steal gold and money,⁸ scientists and science had to deal with the existence of the virtuosi (Haynes 1994, 38). Unlike the fraudulent charlatans, the virtuosi⁹ were often also rich patrons who donated money to research to make themselves a part of this new adventurous world (38–39). Thus, people with different agendas called themselves scientists which ultimately also led public to distrust them. This variety is then naturally also reflected in literature.

This brief historical introduction covers the history with respect to themes that appear in fiction such as breaking physical and ideological boundaries as alchemy and Eastern ideas started getting integrated into European intellectual landscape. The development of science would not ever stop again, and artists reacted to the ideas of mechanization and life away from spirituality that it seemed to represent. The closer the pendulum swung towards pure science, the stronger the opposing tendencies reacted to it. On the surface, the attitude became increasingly positive and the eighteenth century seemed to welcome science with opened arms, "the world—in fact, the entire universe began to seem altogether knowable" (Spangenburg and Moser [1993] 2004, 145). The scientific world was moving forward at the speed of light and yet not everybody was convinced that something good could come out of "the idea of a mechanized universe, governed by the inflexible laws of physics" (163). One of the earliest examples of the mad scientist's predecessors was the figure of Faust which has had many reincarnations, including the one in the play *Doctor Faustus* by Christopher Marlowe (c. 1592). Later, satire became the weapon of choice with which to attack science's arrogant separation from God and the assumption that it could lead to a complete and fulfilling understanding of the universe.¹⁰ Discrediting scientists was seen as a great way to discredit science itself and hinder its further progress. The satirical attacks usually focused on three aspects that were

⁸ A famous literary example would be "The Canon's Yeoman's Tale" from *The Canterbury Tales* by Geoffrey Chaucer (c. 1400).

⁹ The term "virtuosi" was sometimes also used in reference to genuine seekers of knowledge (Houghton 1942, 54) but in most works on the topic the expression refers to the meaning discussed above.

¹⁰ In Frye's ([1957] 1973) own words, "in the warfare of science against superstition, the satirists have done famously" (231).

associated with scientists and which we also today commonly associate with a mad scientist character, "arrogance, delusion, and irreligion" (Haynes 1994, 65). One such example can be found in Samuel Butler's "Elephant in the Moon" ([1676?] 1835) in which a group of scientists gets ecstatic after discovering an elephant in the moon that is eventually revealed to be a mouse trapped inside the telescope:

To make discoveries strange news; And natural history a Gazette Of tales stupendous and far-fet; Believe no truths are worthy to be known, In vain strive Nature to suborn, And, for their pains, are paid with scorn. (Butler [1676?] 1835, 138)

The poem ridicules the scientists as know-it-alls who will go so far in promoting their fantastic discoveries that they will abandon the very thing for which they advocate; reason itself.¹¹ Fifty years later, according to Douglas Lane Patey (1991), Jonathan Swift's *Gulliver's Travels* (1726)¹² suggested that

the new scientists are as guilty as the old of using insignificant speech to frame explanations that do not explain. Swift chooses his examples for making this point carefully, from among the most celebrated subjects of inquiry by the new science: gravity, magnetism, and the new emphasis on the world's government by a few simple, regular laws of nature. (Patey 1991, 814)

Swift's way of describing the structure and integrity of the scientists' arguments reappears in Wells's mad scientist stories although it does not necessarily reflect on all scientists but the individual characters. Long explanatory dialogues between the characters and the mad scientists are more like monologues which are lengthy and yet the information contained in them is disarranged.

¹¹ For a more concise analysis of the virtuosi in literature see chapter three in Haynes (1994, 35–49).

¹² Swift, Jonathan. 1726. *Gulliver's Travels*. London: Benjamin Motte.

As the eighteenth century was drawing to a close, the writers of satire and critics of science feared that it "might indeed succeed in deriving a self-sufficient, purely mechanistic system, with no moral dimension and no need of God" (Haynes 1994, 67). The Romantics valued "visionary perception, intuition, the subconscious as accessed in dreams and even madness, and above all, the imagination" (79) and therefore it is not surprising that "the Romantic image of the scientist as cold, inhuman, and unable to relate to others" (91) was the one to emerge at this point in time. The mad scientists embody a lot of the above described qualities but in a twisted way. They are visionary because they follow their intuition and possess limitless imagination but everything they do is only in the name of science. Mary Shelley's novel *Frankenstein; or, The Modern Prometheus* (1818)¹³ shows a paradox that supposedly seems to be an unavoidable outcome of seeking knowledge in such way:

The intrinsic dilemma of Frankenstein resides in the irony that the mind, which can conceive of freedom from limitations, is also the source of man's most acute agony, because it perceives both its own restrictions (the more Frankenstein learns, the more aware he is of his own ignorance) and the bondage that it has itself constructed. (Haynes 1994, 99)

The consequences are not only unpredictable but also grave for the scientist who sees only benefits until it is too late. This irony is also at the core of Wells's mad scientist stories and as will be shown, it is likewise connected to the mind and metaphors which will be explored through a conceptual approach. *Frankenstein*, rich in Christian imagery that connects him to both God and Satan (Tannenbaum 1977, 112), portrays a horrific account of an experiment and its consequences for the individuals within the novel and emphasizes the tragedy of the scientist's innocent victims, including the monster. *The Strange Case of Dr Jekyll and Mr Hyde* (1886)¹⁴ by Robert Louis Stevenson introduced another mad scientist who experimented on himself instead on another being and split his personality into two separate entities. Parallel to these fictional experiments of Gothic horror, another type of

¹³ Shelley, Mary W. 1818. *Frankenstein; or, The Modern Prometheus*. London: Lackington, Hughes, Harding, Mavor & Jones.

¹⁴ Stevenson, Robert Louis. 1886. The Strange Case of Dr Jekyll and Mr Hyde. London: Longmans, Green & Co.

stories, which eventually crystalized into what is now known as science fiction,¹⁵ began to emerge and grew in popularity as the century was coming to a close.¹⁶ Brantlinger (2002) finds the name science fiction ironic because despite having the word "science" in its name, these early works are "typically more fantastic than realistic" and closer to Gothic romance than to realism (370) which flourished at that time.¹⁷ In general, Ruddick (2007) sees authors' return to Romanticism in the nineteenth century as a tendency "to encrypt their fictions in the fantastic mode" in order to address controversial subjects in a way that somehow felt ironically less threatening than realism (191) and to "bypass censorship" (205). Themes and devices of Gothic literature and Romanticism in Wells's *fin de siècle* works would nowadays place him at the very edge of the science fiction genre.

It is true that H. G. Wells's work is not a modern science fiction but it contains a basic characteristic which is described by Arthur B. Evans (2009): "just as 'fantasy' exists in some sort of defining relationship with magic, so 'sf' exists in some sort of defining relationship with science" (4). Robert M. Philmus ([1970] 1983) describes science fiction as "a rhetorical strategy . . . for bringing about a suspension of belief in some fantastic state of affairs by means of some more or less scientific explanation designed to justify fantasy" (20). Wells offers scientific sounding explanations of experiments performed by Doctor Moreau and Griffin and they are precise enough to not sound completely unbelievable and vague enough to avoid an assumption that they attempt to be science (Haynes 1980, 223). The aspect in which H. G. Wells's early works differ largely from science fiction is "the total absence from scientific romance of the myth of the Space Age" (Stableford 2006, 469). Therefore, although men in Wells's very own *The First Men in the Moon* (1901)¹⁸ do seek out to reach the moon and do so successfully, these trips are not true expansions on a large

¹⁵ The term science fiction was first used by William Wilson in 1851 although it took another almost eighty years until it began to be commonly used to describe a genre of literature that we know today (Ruddick 2007, 189): "Campbell says, that 'Fiction in Poetry is not the reverse of truth, but her soft and enchanting resemblance.' Now this applies especially to Science Fiction, in which the revealed truths of Science may be given, interwoven with a pleasing story which itself be poetical and *true*—thus circulating a knowledge of the Poetry of Science, clothes in a garb of the Poetry of life" (Wilson 1851, 138–140).

¹⁶ Scholars differ in their position on which works mark the beginning of science fiction in the Western literature, but the basic difference can be covered by briefly referring to the two main opposing views as the short or long history of science fiction (Roberts 2009, 3). The long history of science fiction stretches centuries or even millenniums back and the short history usually begins with Mary Shelley's *Frankenstein*, or later with H. G. Wells (3).

¹⁷ In the nineteenth century, literary characters of scientists also appeared in the works of realism, taking "scientific objectivity and epistemology as its analogue, model, or even method" (Brantlinger 2002, 370) in novels such as *Middlemarch* (1871–1872) by George Elliot. For a comprehensive overview of the portrayal of a doctor see Sparks, Tabitha. 2009. *The Doctor in Victorian Novel*. Surrey, UK: Ashgate.

¹⁸ Wells, H. G. 1901. The First Men in the Moon. London: George Newnes.

scale, "the initiation of an inexorable sequence of colonial expansion" (Stableford 2006, 469).

In order to put Wells's writings into some perspective, it might be best to compare them briefly to that of another famous father of science fiction to whom Wells has been likened perhaps most frequently; Jules Verne. Evans (2009) describes Verne's fiction as didactic while "the primary goal of the science in speculative/fantastic sf is more expositional: to facilitate plot progression, to help create special effects and reader estrangement, and to build verisimilitude" (17). Wells uses science to "enhance the verisimilitude and deepen the emotional impact.... [he] made his 'thought experiments' more plausible, allowing readers to focus more fully on the human ramifications of the story" (21). Bergonzi (1961) addresses the difference in the use of scientific themes between Wells and Verne and while it is supplementary to Evans's observations, he omits the adjective "scientific" and refers to them purely as "romances" thus seemingly going a step further, justifying this decision by claiming that "there are no 'scientific elements" in some of these works (16). Nevertheless, both approaches are essentially the same in their subsequent analysis of Wells's work and recognize the supplemental role of science. This dissertation continues to use the term scientific romances because it is more prevalent, and it prevents confusion that would hence arise with most other critical works on H. G. Wells.

Wells used a highly fictionalized scientific explanation or approach to literature which put him at odds with many critics who did not take him "seriously as a literary artist" (Bergonzi 1961, 16). Overall, *The Invisible Man* received a good amount of praise, "the author has conceived of his creation with a splendid mastery of detail" (Shorter [1897] 2002, 59), and Joseph Conrad (2002) called it "uncommonly fine" (60) in his letter to H. G. Wells on December 4, 1898. The reaction to *The Island of Doctor Moreau* that was published a year before was negative due to its themes but Wells "may have been a victim of a general climate of moral suppression epitomized by the Wilde trial of 1895" (Parrinder [1972] 2002, 10). W. T. Stead ([1898] 2002) referred to it as a book "which ought never to have been written, and which Mr Wells would consult his own reputation by withdrawing from circulation (61). The commentators such as Chalmers Mitchell ([1896] 2002) denigrated *The Island of Doctor Moreau* as "cheap horrors," (45) an unsigned reviewer noted its "still lower depths of nastiness" and "cruder manifestations of fantastic imbecility," (Speaker [1896] 2002, 50) and Basil Williams ([1896] 2002) saw it as an "artistic failure" (52). Generally,

these negative reviews questioned the worth of the work that according to them relied on its shocking themes. The value and longevity of fantastic stories was difficult to predict¹⁹ before the emergence of mass entertainment just about the time when Wells's career started and the establishment of the Daily Mail in 1896 (Parrinder [1972] 2002, 1). This development allowed many more stories to enter the market and reach an unprecedented number of people. This trend was viewed positively by some artists as H. G. Wells but less by those who saw it "with defensive mistrust and resigned themselves to addressing a small minority audience untouched by the general 'vulgarity'" (Parrinder [1972] 2002, 2). The end of the nineteenth century was a great source of fear because "it was felt that the normal life of society had continued too long in its predictable and everyday fashion, and that some radical transformation was overdue, whether by war or natural disaster" (Bergonzi 1961, 12). This "radical transformation" materialized in the form of "these fin de siècle cases" of art that "have, nevertheless, a common feature, to wit, a contempt for traditional views of custom and morality" (6). The end of the century saw bigger advancements in science and industrialism, the Romantic ideals were not so prevailing anymore, and the attention was turned towards "scientific materialism" (Haynes 1994, 106). The value of these fantastic works was immense because it allowed space for the stretching of imagination, questioning of the norms, and understanding of the humanity itself as it was changing on its way to the twentieth century.

Fantasy has a way of offering everything and nothing, new worlds and old, openings and closings, glimpse beyond the world and only the abyss. And this is not a binary, but a tension at the core of the fantastic that is productive for the literature, and importantly here, for its criticism, provoking debates about

¹⁹ The attitude towards fantastic works of fiction has a complicated history with critics in general. Richard Hurd's "Letters on Chivalry and Romance" ([1762] 2004) were written around the time of "explosion of interest in 'Gothic Primitivism'" (Sandner 2004, 24) and two years before the publication of Horace Walpole's *The Castle of Otranto* (1674) (24). They addressed some common concerns about the long-term validity of such works: "One thing is true, that the success of these fictions will not be great, when they have no longer any footing in the popular belief. And the reason is, that readers do not usually do, as they ought, put themselves in the circumstances of the poet, or rather of those, of whom the poet writes. But this only shows, that some ages are not so fit to write epic poems in, as others; not, that they should be otherwise written. It is also true, that writers do not succeed so well in painting what they have heard, as what they believe themselves, or at least observe in others a facility of believing" (Hurd [1762] 2004, 28). More than fifty years later, Walter Scott ([1827] 2004) expressed a similar problem concerning readers and the issue of believing in the supernatural in the face of "advancement of human knowledge" that continued to grow rapidly into the nineteenth century (52).

the function of the norm that bring us to the edge of meaning itself. (Sandner 2004, 5)

Wells's scientific romances were also not binary, they did not reject hesitation towards science at the end of the century, nor were they completely optimistic. They reconsidered the boundaries of how far a human mind can stretch while pursuing science before the pursuit becomes destructive even for the scientists and inventors themselves. The stories gifted readers an opportunity to get a glimpse into the world of the unknown, a world removed from ours in distance and in the type of creatures that inhabit it. These unknown worlds were either familiar places on Earth's surface made unfamiliar by its distance from what was considered to be a civilized Western world, or they were placed in spaces which were seemingly uninhabitable, such as another planet. At other times, they were provocatively placed at the very center of the civilization that we know. All these stories had one thing in common and that was questioning what influence these changes that took place due to scientific discoveries had on human mind and perception of the world. Realism of the nineteenth century was rooted in the experience of everyday life while scientific romances wandered more into the subconscious in its examination of these topics. A mad scientist became for H. G. Wells such a central figure through which these ideas were discussed.

3. Approaching Fictional Worlds

This chapter introduces the methodology and its approaches which are used for the analysis of H. G. Wells's works throughout the remainder of dissertation. Mad scientists, like all fictional characters, exist within a fictional world where they experience what then readers perceive to be the story that is being told through various narrative techniques. The methodology is based on an understanding that we can use cognitive literary studies to deepen our understanding of characters and their motivations. Monika Fludernik (2010) describes the situation in literary studies as follows: "One could argue that until the 1980s all literary theory, and all linguistics for that matter, was based on an analysis of *langue*, or the system of language or literature or text, to the detriment of parole, the practices, contexts, and negotiations of speakers, writers, and readers.... The formula could be summarized as no history, no ethics, no themes no aesthetics, and no context-period" (924). The current climate is very different and literary studies have embraced "all the items shut up in structuralism's Pandora's box" (924). The core of the analysis in the upcoming chapters relies largely on conceptual metaphor, metonymy, and theory of mind. These theories in their current form belong to the postclassical period which is characterized by the introduction of cognitive approaches that emerged with the advancement of science and eventually found their way into studies of literature, linguistics, or psychology (Meister 2011). The thesis takes a broader, less scientific approach, but it shows how these concepts help navigate through narrative and uncover valuable structures which can be hidden due to their relative mundanity. Wells's mad scientists are fitting targets for such exploration because it helps highlight their often-overlooked failure to strip themselves of humanity.

The analysis of a fictional work can be approached from several perspectives, starting with the story, plot, and narration (Abbott 2007, 40) with the last two put "together under a single heading narrative discourse" (40). The focus in this thesis is predominantly the study of narration, "the process of telling" (39), that focuses on narrator's "words, different emotional inflections, different perspectives and different details" (39). The story, as discussed here, will continue to refer to the order of events as they happened, and the plot to the order in which the events are presented to the reader.²⁰ This distinction is more traditional in a sense that these are the basic components discussed in literature classes. The dissertation approaches the individual parts more in the fashion which is described by

²⁰ For a more detailed overview see Abbott (2007), specifically pages 41–44.

David Herman in Basic Elements of Narrative (2009). Herman takes a different approach describes four elements of narrative, "situatedness, event sequencing, and worldmaking/world disruption and what it's like" (9) and uses them to describe the difference between various narratives not just fictional ones. This organization and description suit the studies that focus on the analysis of conceptual and cognitive experience. They reflect this approach already in their names, specifically the elements of what it's like or world making/disruption. The element of character is discussed as a part of what it's like which "conveys what it is like to live through this storyworld-in-flux, highlighting the pressure of events on real or imagined consciousness undergoing the disruptive experience at issue" (Herman 2009, 9). World making/disruption is a selfexplanatory element but what ties it to the topic at hand is the question of "how narratives represent disruption in storyworld . . . [which] depends on forming inferences about the kinds of agency characters have in those worlds" (20). The dissertation asserts that the agency does not necessarily need to be real but merely perceived to be real. Situatedness is an element that does not play a role in Abbott's description and refers to the context in which the story is being created, "how stories are grounded in . . . communicative occasions" (18) "and just as storytelling shapes the discourse contexts in which it unfolds, those contexts are what give any story its point or reason for telling" (74). The previous chapter briefly discussed what could be considered to be situatedness with respect to historical relationship between science and society, and the cultural climate at the end of the nineteenth century. Finally, when we look at event sequencing, we look at how "narrative representations cue interpreters to draw inferences about a structure timecourse of particularized events" (75) and Herman distinguishes several types such as describing, narrating, and explaining (75). All these different types of texts are cognitive activities (98) and fictional texts can contain all three types but by nature they have narrating qualities. The following chapters on rediscovering the mad scientists, companions, or laboratories rely on descriptions. However, mad scientists also engage in explaining when they talk about their research.

3.1 Understanding Minds

In the 1950s, Noam Chomsky's theories of universal and generative grammar started a revolution which marked a significant shift in the way that we think about human language and cognition. This eventually granted him a nickname of the father of modern linguistics. Chomsky's views contradicted what was at the time a leading behaviorist theory advocated for by B. F. Skinner. Skinner, who was preoccupied with predicting human behavior based on observable and testable reactions, presumed that language was supposedly learned from the environment by associating words with their meaning with the help of reinforcement from parents (Skinner 1957, 29–31).²¹ Chomsky, however, did not think such intervention was necessary:

It is a common observation that a young child of immigrant parents may learn a second language in the streets, from other children, with amazing rapidity, and that his speech may be completely fluent and correct to the last allophone, while the subtleties that become second nature to the child may elude his parents despite high motivation and continued practice. A child may pick up a large part of his vocabulary and "feel" for sentence structure from television, from reading, from listening to adults, etc. Even a very young child who has not yet acquired a minimal repertoire from which to form new utterances may imitate a word quite well on an early try, with no attempt on the part of his parents to teach it to him. (Chomsky 1967)

As this quote demonstrates, Chomsky argued against the conclusion of behaviorists about the nature of language learning. This ability to learn a language and create new constructions without intentional reinforcement of rules is significant because it puts emphasis on the independence from the environment and on a shared underlying mechanism that allows minds to perceive and decode the world around them in a systematic way. The buildability of language²² can also be connected to the existence of

²¹ For Chomsky's response to Skinner's methodology and individual arguments and theories, see Chomsky, 1967.

²² The buildability of language is what Chomsky (2016) refers to as the basic property of language: "Each language yields a digitally infinite array of hierarchically structured expressions with systematic interpretations at interfaces with two other internal systems, the sensorimotor system for externalization

what Lisa Zunshine refers to as the levels of embedded intentionality,²³ meaning, we can both decode and encode multiple mind-reading acts of various characters and build them into each other (Zunshine 2006, 31).²⁴ This mechanism can be repeated only a number of times before it gets confusing for the encoder or decoder of the said message.²⁵ The activity which is referred to as mind-reading by Lisa Zunshine in *Why We Read Fiction* (2006) occurs "when we interpret our own feelings based on our proprioceptive awareness" (6). It is also known as theory of mind which argues that people are assigned certain mental states and emotions based on how they appear to be, or act, to the observers (Gopnik 1999, 838–841). These theories can be theoretically linked to Chomsky because they presuppose that our mind has certain cognitive structures and concepts which allow us to build these complicated structures in thought and then express them in language; "I would want to regard language as one aspect of cognition and its development as one aspect of the development of cognition" (Chomsky 1983).

Chomsky was one of the first and certainly the loudest voices at the time of the publication of generative grammar, but this was only the beginning. Soon enough, another school of thought that was inspired by Chomsky's universal grammar emerged and started to gain traction: cognitive linguistics. Panther and Thornburg (2017) summarize the main assumptions of cognitive linguistics theory and some points of departure from Chomsky's theory in their paper "Metaphor and Metonymy in Language and Thought: A Cognitive Linguistics Approach." A lot of these differences are important for the aspects of other studies but in literature some of them are less significant.²⁶ The first assumption which will be worked into the thesis is the approach of cognitive linguistics to categorization. Instead of relying on "necessary and jointly sufficient property or features" (Panther and Thornburg 2017, 275) cognitive linguists focus on how much an object is or is not close to a prototype

and the conceptual system for inference, interpretation, planning, organization of action, and other elements of what is informally called 'thought'" (Chomsky 2016, 89–90).

²³ Intentionality itself can be described as follows: "Perceptions, beliefs, desires and intentions and many other 'propositional attitudes' are mental states with intentionality.... Perceptions, beliefs, desires and intentions illustrate a basic duality of the intentionality of the mental: the duality between mind-to-world and world-to-mind directions of fit" (Jacob 2003).

 $^{^{24}}$ Zunshine (2006) gives the following example of a four-level embedded intentionality: "I believe that you think that she believes that he thinks that X" (28).

²⁵ Zunshine (2006) explored the possibilities of how far a mind can go before it starts to lose grasp of the intended meaning in the analysis of *Mrs Dalloway* by Virginia Woolf (1925) (27–35). "The cognitive zone of comfort" is at the fourth level (130).

²⁶ For example, the difference between the usage-based approach of cognitive linguistics versus Chomsky's introspective method is concerned about grammar of utterances produced by native speakers (Panther and Thornburg 2017, 274).

(Panther and Thornburg 2017, 275). Since a mad scientist is considered a certain literary stereotype, this becomes a useful methodology to discuss appearance and certain attitudes of and towards the characters.

The second important assumption of cognitive linguistics it that "in actual language use meanings and communicative functions are often not explicitly coded but speakers imply and hearers infer additional meanings and functions" (Panther and Thornburg 2017, 274). This assumption is important to theories that form a methodology of this work. One of these theories, which will be applied to the study of Wells's work, is borrowed from Peter J. Rabinowitz's essay "Toward a Narratology of Cognitive Flavor" (2015) which explores the dynamics of the special moments in the fictional text with respect to characters' experiences and their interactions with other characters, making it a tool to explore the parts of narrative that describe what it's like. Rabinowitz's analysis aims to identify "the configurations that we find in *representations* of mind reading" that belong to fictional minds (88). The term mind-writing is introduced to complement the already existing term mind-reading and refers to an "expression of inner thoughts" (88). The transmission and reception of the information does not occur without mistakes and the process is accompanied by many factors that can hinder accuracy (89). The following "complications" (89) can influence the quality of exchange between mind-reader and mind-writer: emotional valence, depth, reciprocity, multiplicity, angle, occlusion (sincerity and perspicacity), mode, and consistency (89–92). Emotional valence is the accompanying emotion, depth refers to the embeddedness of the information exchanged or produced, multiplicity to the number of participants involved, angle loosely refers to a point of view, occlusion to the transparency of communication, reciprocity to the degree of participation, mode to the actuality of information, and finally, consistency to the (in)accuracy of mind reading in different situations (89–92). Some scenes in later analysis were chosen specifically because of how they display these factors. For example, the subchapter on the use of sound consists of scenes in Wells's The Island of Doctor Moreau because it includes some special cases of mind-reading and mind-writing exchanges. It is not important to examine all these elements in every interaction but only the ones that affect the transfer the most. Unlike Zunshine's "noise" (2006, 39), Rabinowitz's complications are therefore

not connected to culture or society, and their norms (Zunshine 2006, 39).²⁷ Both types of interruptions occur usually in all types of fictional literary texts, only to a different degree. Individual complications are brought up in the analysis when they are relevant and supplement discussions about conceptual metaphors or metonymies, and their effect on the text. The scope of attention in this thesis narrows down the list of the most relevant Rabinowitz's complications mostly to occlusion, emotional valence, reciprocity, and multiplicity because they are most suited to explore the topic of isolation, characters' minds, and the dynamic of interaction. These terms will be referenced across the thesis.

3.2 Metaphor and Metonymy

Another theory that becomes a crucial methodological tool is the theory of conceptual metaphor and metonymy that was introduced to the world in 1980 by George Lakoff and Mark Johnson in *Metaphors We Live By*. This theory is incorporated into the methodology by assuming that conceptual metaphors and metonymies are also aspects that can be inferred or implied. This is based on a thought that conceptual metaphor and metonymy also rely on cognitive systems because of "our ability to make sense of the social structures in which we play a role, which undoubtedly reflects conceptual structures that have developed in the mind, and any number of other mental capacities" (Chomsky 1983). The methodology relies on metonymies and metaphors, and more specifically, on the conceptual metaphors and metonymies which become a tool for analysing the narrative elements of what it's like and also world/making and disruption because they relate to the characters' experience. Specific forms of metaphors and metonymies can be either explicitly spelled out or expressed in certain images that are in a particular relationship to each other. On top of that, some expressions apply to more than one argument which leads to the reappearance of certain metaphors and metonymies across various chapters. It might therefore be helpful to discuss some basic assumptions of this theory before the individual cases are presented later.

Traditionally, metaphor and metonymy used to be regarded merely as two figures of speech which were used in written text or rhetoric. Jakobson recognized their distinction

²⁷ The noise are extratextual cultural, socio-political, and other factors that influence our mind-reading, such as "phallic overtones.... Or the intrusion of rhetoric of economic exchange.... Or the vexed gender contexts" (Zunshine 2006, 39).

in his work "Two Aspects of Language and Two Types of Aphasic Disturbances" ([1956] 1987) based on the studies of aphasia:

Every form of aphasic disturbance consists in some impairment, more or less severe, of the faculty either for selection and substitution or for combination and contexture... Metaphor is alien to the similarity disorder, and metonymy to the contiguity disorder.... The development of a discourse may take place along two different semantic lines: one topic may lead to another either through their similarity or through their contiguity. The metaphoric way would be the most appropriate term for the first case and the metonymic way for the second, since they find their most condensed expression in metaphor and metonymy respectively. (Jakobson [1956] 1987, 109–110)

Jakobson claims that metaphor was more typical for the works of Romanticism and Symbolism, while "realist author metonymically digresses from the plot to the atmosphere and from the characters to the setting in space and time. He is fond of synecdochic details" (Jakobson [1956] 1987, 111): "In the scene of Anna Karenina's suicide Tolstoj's artistic attention is focused on the heroine's handbag; and in *War and Peace* the synecdoches 'hair on the upper lip' and 'bare shoulders' are used by the same writer to stand for the female characters to whom these features belong" (Jakobson [1956] 1987, 111). Jakobson's analysis reflects how a human mind picks up on metaphorical and metonymical function, in which these everyday objects, which are produced by humans or nature, stand for a specific feature of the female character. Thus, Jakobson observes how metaphor and metonymy influences the structure of the narrative world and how it is conceptualized.

Gerard Steen (2000) fittingly writes that "in the beginning was Aristotle. Then there were the Dark Ages, which lasted until 1980. And then there was Lakoff. There was a Johnson too" (261) when he discusses the significant role of George Lakoff and Mark Johnson who identified basic metaphors and metonymies through which we conceptualize different aspects of life. The main proposal of the conceptual metaphor theory is that "our concepts structure what we perceive, how we get around in the world, and how we relate to other people.... What we experience, and what we do every day is very much a matter of metaphor" (Lakoff and Johnson [1980] 2003, 3). This definition might seem intuitive because readers are probably already acquainted with concepts such as analogy or allegory.

Some definitions of conceptual metaphors refer to this similarity between metaphor and metonymy explicitly when they describe conceptual metaphor and metonymy respectively as "the mental skills of analogical thinking" and "associations among concepts" (Panther and Thornburg 2017, 274).

The challenge that comes with the study of fictional minds is connected to the challenge that lies at the very core of the study of human minds, which is the amount of information available for the analysis. Every second, the brain processes a large number of data, some of which we are aware of but most of it just bypasses our awareness. The large amount of information that is capable of being captured will be assorted with the help of theories that are designed for it.

4. Who Is a Mad Scientist?

The Invisible Man and Doctor Moreau inspired generations of writers and filmmakers alike to spawn their own versions of these characters who are oftentimes even more gruesome than the originals; a testament to how they stimulate imagination. On-screen, a mad scientist has a certain look that is easy for viewers to access, and if a part of the appearance is obscured or altered in a significant way, it is usually done in order to intentionally enhance a certain feature of the given character. Actors are cast based not only on their acting skills, but their appearance is seriously taken into consideration because what viewers see influences how they think of the character throughout a movie. The readers only gain access to what is available to them in words upon opening a book. Unlike in films, we do not always know what characters' ear shape is, if they have a long or a short neck, or what their facial expressions are, unless such detail is significant. Directors and their make-up and costume designers usually take a full advantage of this feature of film and create visually distinctive character designs. One such example would be the appearance of doctor Moreau (Marlon Brando) in John Frankenheimer's cinematic adaptation of the novel from 1996. Brando's doctor Moreau is seen to be clothed in an almost exclusively white costume, including his extremely white skin, wearing a pair of black sunglasses, and a weird hat with a veil (Frankenheimer 1996). We know that Wells's doctor Moreau only remotely resembled this cinematic interpretation; making his character appear rather plain in comparison. Doctor Moreau's appearance might be visually less eccentric on paper, and yet meeting him leaves a lasting impression. Haynes (1980) writes that Wells's "scientific romances . . . are concerned with character only as a secondary interest if at all, and indeed this was almost inevitable if they were to succeed in their purpose of focusing the reader's attention and interest on impersonal considerations" (163) such as the future evolution of mankind. Addressing readers' experience further, "the only sensations we feel are vicarious ones on behalf of the protagonist-the disgust, for example, of the Time Traveller at the Morlocks—but even here the emotion experienced is at one or two removes and thus considerably attenuated" (21). This is reflected in Wells's style and the choices he makes about narrators who help replicate the scientific method (225). Therefore, Wells creates credible narrators, inserts references to journalism, detective work, and generally relies on associations that we connect with objectivity (Haynes 1980, 225). The impersonal approach to character is something that can be reexamined if it takes into account conceptual or

cognitive theories that target people's perception of their environment. This chapter asks how Wells builds the mad scientist characters conceptually by focusing on mind-reading and mind-writing exchanges which will include commentary on metonymy and metaphor.

The emotional reaction which the characters or readers can have to mad scientists and/or the experiments can range from horror to fear to curiosity. Carroll's definition can help us understand how these emotions can be constructed:²⁸

I am occurrently art-horrified by some monster X, say Dracula, if and only if 1) I am in some state of abnormal, physically felt agitation (shuddering, tingling, screaming, etc.) which 2) has been *caused* by a) the thought: that Dracula is a possible being; and by the evaluative thoughts: that b) said Dracula has the property of being physically (and perhaps morally and socially) threatening in the ways portrayed in the fiction and that c) said Dracula has the property of being impure, where 3) such thoughts are usually accompanied by the desire to avoid the touch of things like Dracula. (Carroll [1990] 2004, 27)

Colavito's (2008) approach is more minimalist and describes horror as "a combination of fear and revulsion" as opposed to terror that would be defined as a mixture of "fear and anxiety" (13). From this perspective, the emotional reaction of characters oscillates between the two, because it does not contain the features that elicit horror simultaneously but at different points in time. However, looking at Carroll's definition, horror indeed seems as a better fit for the particular scenes in which such conversation is relevant. Elsewhere, "fear" is the preferred generic term.

Metonymy has an important function in the construction of appearance which subsequently influences characters' and readers' overall impressions. The previous chapter included an overview of the theory of metaphor and metonymy which sees them as a conceptual phenomenon. A specific variety of metonymy that will additionally be used here emerged from the study done by Noël Carroll ([1990] 2004) who noticed a particular way in which metonymy has been highly utilized in the genre of horror. Several monsterbuilding structures emerge from his study of monsters: fusion, fission, magnification,

²⁸ Carroll refers to art-horror as the emotional response to the works of art as opposed to the response we have to real-life events: "'Art-horror,' . . . is meant to refer to the product of a genre that crystalized, speaking very roughly, around the publication of *Frankenstein*—give or take fifty years—and that has persisted" (Carroll [1990] 2004, 13).

massification, and horrific metonymy (Carroll [1990] 2004, 42–52).²⁹ It is this last feature, horrific metonymy, that enlarges the definition of what encompasses character's appearance. In other words, we can look at it as a version of a conceptual metonymy that serves a specific purpose. Metonymy occurs when "a salient part of a single knowledge domain is used to represent or stand for the entire domain" (Gibbs 1999, 314) and its adjective "horrific" signals the emotion which it arouses. In other words, the monster is THE WHOLE and the objects surrounding it are PARTS OF THE WHOLE that amplify the horrific nature of the monster and its abstract features, such as danger and disgust (Carroll [1990] 2004, 52). In Carroll's ([1990] 2004) example, "great gobs of phlegm" (52) that surround zombies or the unclean and crawling things in Dracula's environment can be all identified as instances of horrific metonymy (52):

The fantastic being is not perceptually repulsive but is linked by metonymy to perceptually disgusting things. . . . Dracula strikes Harker as sickening though his appearance is not literally monstrous. In such cases, the association of such impure creatures with perceptually pronounced gore or other disgusting trappings is a means to underscoring the repulsive nature of being. (Carroll [1990] 2004, 51–52)

The thesis will use the term horrific metonymy in order to avoid confusion as replacing it with another term would not bring much value to the work at hand because it serves roughly the same function despite these works not belonging to the horror genre. The goal is to demonstrate how important it can be to consciously think of horrific metonymy as a tool for exploring characters outside of the horror genre, too.

The texts include a large number of different metaphors and metonymies, descriptions of appearances and actions that need to be sifted through. An instrument that helps with keeping the focus on the relevant features is saliency. The process of averaging

²⁹ The process of fusion "entails the construction of creatures that transgress categorical distinctions such as inside/outside, living/dead, insect/human, flesh/machine.... A fusion figure is a composite that unites attributes held to be categorically distinct and/or at odds in the cultural scheme of things in *unambiguously* one, spatio-temporally discrete entity" (Carroll [1990] 2004, 43). On the other hand, in the process of fission, "the contradictory elements are ... distributed over *different*, though metaphysically related, identities" (46). A perfect example would be werewolves (45–46). Magnification occurs when an object that is a source of fear, or a phobia, is presented several times bigger than it is usually (49). Finally, massing takes place when objects get multiplied (50). Thus, instead of one or two representatives of birds or spiders, thousands upon thousands emerge from beyond the horizon.

does not require to take into consideration every single feature of every man and use statistics to inquire what the average would be (Hogan 2003, 46). Instead, it relies on features that "are highly salient in that person's experience" (46). Saliency can influence the perception both negatively and positively because some features which distinctively stand out from the environment can be interpreted as inherently good or evil. Saliency is a process during which we take into account "experiential idiosyncracies" (46) and "their contrast with instance of some opposed category" (46). A difference between a prototypical man in different countries is an example of the first aspect (46) but it does not necessarily need to be a difference in distribution over an area but time too. A prototypical image of a scientist of the eighteenth century will be different from that of the twentieth century. The second aspect means that

being a man is, in part, a matter of not being a woman, and vice versa.... 'Manly' man will be more salient in defining the prototype for a man. As a result, the prototypical man will incorporate characteristics that are more highly contrastive with the prototypical woman than would result from simple averaging. (Hogan 2003, 46)

For example, Carroll's monstrous biologies ([1990] 2004, 42–58) are each an important defining feature that distinguishes a man from a monster which also depends on these aspects of saliency. For example, massing relies on the saliency of number, and fusion and fission on the saliency of the number of components that create the being. Thinking in terms of saliency helps navigate through hundreds of pages without having to spend hours collecting data that would in the end be irrelevant. Instead, saliency helps shift the focus towards the information that is relevant because it supposedly reveals something about the way minds process the world and what they consider to be important.

Historically, madness was thought to have been visually detectable, "folk wisdom has assumed that madness is as madness looks.... The insane have standardly been depicted as strange and dishevelled—as 'wild men,' with straw in their hair and their clothes threadbare, ripped or fantastical, or sometimes wearing barely a stitch" (Porter 2002, 63–64). People react to visual cues, seek the presence of that was is pleasant and desirable, and avoid that what is perceived as unpleasant or even dangerous. The examples from the animal kingdom show that what stands out might very well be poisonous and

should be avoided. This is referred to as aposematism and its purpose is to warn the predator that the prey might be harmful to them if consumed (McAuslane 2008, 239–242). Sometimes, humans rely on appearance to decipher what they perceive to be one's intentions too. Such information has salient features and is implemented into the subsequent creation of the person's mental profile. Humans become quickly alert if something or somebody is unusual, but we tend to be late in detecting any signs of danger if the object in question appears to be normal. Serial killers notoriously exploit human tendency to base judgement on appearances and use it against their victims who do not suspect anything until it is too late. People often describe the killers as not looking the part because their expectations are based on stereotypes that have formed in their minds which is partly a consequence of saliency and categorization.

What we understand a person or a literary character to be is constructed by "direct information and schemas³⁰-or, more likely, prototypes-cued by that information" (Hogan 2003, 129). This process is only relatively creative and the text itself "will limit the range of structure we are likely to activate for a given character" and from these structures the reader can further prefer one or the other (130). This complexity explains why two readers read the same characters differently. At first, this might seem discouraging as this process does not promise a definite conclusion but rather an infinitely deep pit of interpretations. It also means that any such any analysis of literary texts and interpretations is influenced to some degree by readers'³¹ own worldview. This quality of literature should be embraced even if it is intimidating at times. Another concept which helps us understand characters are domains. A domain is a set of entries which "share a superordinate category and a single type of relation" (Hogan 2003, 43)³² while "any lexical relation may generate a domain, including mere sequence" (43). For example, a chemist, a physicist, and a biologist, are entries that belong to the superordinate category of a scientist, and their relationship is being based on the study of nature using scientific methodology. Thus, when we learn from a description that a certain character is a scientist, we might also start to wonder, consciously or subconsciously, what kind of scientist they are.

The analysis in the two following subchapters relies on identification of salient features and how they come together regarding three mad scientist characters: Griffin

³⁰ "A schema involves a set of default properties and relations" (Hogan 2003, 130).

³¹ Being a reader here refers to anyone who is capable to read and understand texts, such as a casual reader of literature, an academic, or a critic.

³² For example, the domain of temperature includes entries for hot, cold, warm, and so on (Hogan 2003, 43).

from *The Invisible Man*, Doctor Moreau from *The Island of Doctor Moreau* and Dr Nebogipfel who features in an unfinished short story "The Chronic Argonauts." It should become apparent that Wells maintains what could be described as cognitive uncertainty for as long as possible which goes hand in hand with his style that imitates the scientific method. This means that he keeps the characters guessing about who the mad scientist is and whether and how much he is dangerous. At the same time, Wells also creates an environment that leaves space for empathy towards a mad scientist. The following sections separate the analysis of human characters into two main categories. The first category is that of mad scientists and the second group refers to the companions who may or may have not received an education in science. Andrew Tudor ([1989] 1991) names experts, victims, and monsters as the three "character resources" of horror, taking into account that "there may be some cross-over" (112). This classification fits better when one thinks of the entire genre but the analysis of Wells's specific scientistic romances benefits from the division as it stands here because a mad scientist such as Griffin could technically belong into multiple categories; the expert and the monster.

4.1 Mad Scientists

From today's perspective, the most stereotypically looking mad scientist was Wells's Dr Nebogipfel which is due to the appearance of his head. The depiction of the brain in the works of H. G. Wells was explored by Anne Stiles in *Popular Fiction and Brain Science in the Late Nineteenth Century* (2012). Stiles points out the connection between Wells's works and the contemporary ideas about madness, genius, and genetics as they appeared in various books or essays, as well as in the popular *Mind* journal. The research additionally focuses on Wells's incorporation of Lamarckian theories (Stiles 2012, 132) which differ from Darwin's in their view of evolution and its effect on the human body. Brain was discussed in the pseudoscientific theories such as phrenology and craniology which claimed to possess the ability to predict intelligence and personal traits based on skull measurements, as well as in the theories that suggested that frequently used organs will grow exponentially and those with limited use will start to deteriorate (120–122). Stiles saw that the brain changes and growth in Wells's work could be at the expense of emotional growth "as ruthlessly intellectual scientists like Moreau and Griffin morph into the amoral, top-heavy Martians and Lunar inhabitants" (Stiles 2012, 119–120).³³ Dr Nebogipfel from "The Chronic Argonauts" has "an un-human appearance almost" (Wells [1888] 2016, 575) and Wells dedicated a considerably more space to the description of this character's appearance than he did to Griffin's and Moreau's. This short story predates both *The Invisible Man* and *The Island of Doctor Moreau* and remains a great source for the analysis of Wells's style and writing tendencies despite being unfinished. Dr Nebogipfel's appearance does have a supplemental role because "it was his bearing and actions, however, much more than his personality, that won over believers to the warlock notion of matters" (575) but its role in building the atmosphere cannot be neglected. What follows is the description of Dr Nebogipfel's features that seem to equally contribute to his attraction and repulsiveness:

His aquiline nose, thin lips, high cheek-ridges, and pointed chin were all small and mutually well proportioned.... The same contributed to the sunken appearance of the large eager-looking grey eyes, that gazed forth from under his phenomenally wide and high forehead. It was this latter feature that most powerfully attracted the attention of an observer.... Dimensions, corrugations, wrinkles, venation, were alike abnormally exaggerated. Bellow it his eyes glowed like lights in some cave at a cliff's foot. It so overpowered and suppressed the rest of his face as to give an unhuman appearance almost, to what would otherwise have been an unquestionably handsome profile. (Wells [1888] 2016, 574–575)

While the bottom of the face below the eyes is described as proportionate, what is above the eyes is anything but proportionate. It is not the unpleasant parts on their own that leave such a lasting impression but their juxtaposition to the handsome and proportionate parts as the process of prototype construction and saliency postulates. The forehead becomes salient by being wider and higher compared to what would be prototypical. The emphasis on this area of his body is further accentuated by his "hair that hung unkempt before his eyes . . . by adding to unnatural altitude a suggestion of hydrocephalic projection" (Wells [1888] 2016, 575). Despite the use of the word "hydrocephalic," the abnormally large head here points rather to the correlation between the size of the head and human

³³ Stiles (2012) compared four works: *The Island of Doctor Moreau, The Invisible Man, The War of the Worlds,* and *The First Men in the Moon.*

intellect than to the medical condition. Stiles addresses some of these descriptions as "emphasizing the Lombrosian physical stigmata popularly associated with genius" (Stiles 2012, 136). The Lombrosian stigmata were described by Cesare Lombroso in The Man of Genius (1889) and the ones highlighted by Stiles (Stiles 2012, 129) are "elevation of the forehead, notable development of the flegia of genius" (Lombroso [1889] 1891, 16–17). It must be noted, however, that Lombroso also addresses non-appearance related features such as a wild behavior during childhood (17). Moreau's deviations are mostly unnoticeable because he blends well into the society until an exposé pamphlet about his experiments makes him an outcast. Even Griffin's albinism, which does make him atypical, is not presented as such an extreme case as Nebogipfel's outward appearance which is a combination of exaggerated features and symmetry of "what would otherwise have been an unquestionably handsome profile" (Wells [1888] 2016, 575). The mention of symmetry has two uses: one is to foreground saliency of the unusual features and the other to plant a seed of empathy, a sign that leaves space to think of him as a human being. The empathy is further reinforced when Dr Nebogipfel compares himself to the ugly duckling from "The Ugly Duckling" by Hans Christian Andersen (1843) which itself relies on the effect of empathy; many of us cannot appreciate what makes us different when it is not valued by the society. As the story comes to a close, the readers learn about his implied involvement in violent acts during his journey through time which suggests that the travels into future did not satisfy him. Stiles highlights those parts of the text that should make one feel empathy towards Dr Nebogipfel, but this reading is through the lens of Dr Nebogipfel himself. Stiles (2012) concludes that "Nebogipfel's intellect, and the social and physical defects that come with it, shut him off from the human fellowship he craves" (137) which makes him "misunderstood and socially awkward rather than malevolent" (138). The villagers try different methods to honestly engage with Dr Nebogipfel, some of them positive ("offer of assistance, suggestion of method" (Wells [1888] 2016, 575) and some of them negative ("sarcasm, irony, abuse," Wells [1888] 2016, 575), but he distances himself by choice, and it is implied that he is somehow involved in his companion's death.

The following analysis of *The Invisible Man* is organized in a way that parallels the gradual exploration in the novel. Griffin is introduced to the readers as "the stranger" who "came early in February, one wintry day, through biting wind and a driving snow . . . carrying a little black portmanteau in his thickly gloved hand. He was wrapped up from head to foot" (Wells [1897] 2016b, 225). Being fully and warmly dressed in this weather

does not arise any suspicion from the villagers' perspective, but some priming is in effect by using the expressions "the stranger" or "through biting wind and snow." The owner of the Inn, Mrs Hall, is unaware of her guest's extraordinariness and she is simply happy to have a paying customer in wintertime when business is slow. Her suspicion only begins to grow when he does not remove the layers of clothing even with the fire burning in his room. This unusual behavior that seems to have as a goal to conceal his appearance is accompanied by his refusal to participate in any common courtesy conversation. Therefore, the reluctance to remove clothes is perceived as unusual because it is so hot that having that many layers of clothes would usually make a person remove them. And because it goes against what is expected, it is also perceived as potentially intentional which sparks curiosity. This situation contradicts Griffin's desire to be ignored by others and blend in with the society. At this point, Griffin is still a stranger of whom little is known but this changes with further interaction. While the villagers' mind-reading processes are at his arrival subconscious, they become more conscious and intentional due to Griffin's suspicious behavior.

Eventually, Mrs Hall gets a better look at her strange guest but what she sees does not put her mind at ease; he is covering the lower half of his face with a serviette, wearing blue glasses, and the rest of what should be visible is covered with a white bandage, with the exception of "his pink, peaked nose" (Wells [1897] 2016b, 227). Griffin's odd appearance is described to be crowned with his "thick black hair, escaping as it could below and between the cross bandages, projected in curious tails and horns, giving him the strangest appearance conceivable" (Wells [1897] 2016b, 227). These features are salient due to the inferred meaning of being impure or evil. This description insinuates that the hair metonymically represents Griffin's evilness because of the metaphorical relationship in which strands of hair are tails and horns that are commonly associated with an image of a devil. Carroll's ([1990] 2004) definition of horrific metonymy was concerned with a metonymical relationship in which a feature that represents the whole is located outside the character (51). The examples above that highlight the particular details which cause characters to feel a particular way are the part of the character's physical body. From this perspective, the analysis enlarges the scope of what can be considered a horrific metonymy. This relatively small part of Griffin's appearance entails a rich exchange of information between the fictional characters, and between readers and the text. The appearance has a certain effect due to cognitive aspects of metonymy and metaphor. Metaphorical and

metonymical interpretations relate both to the character and to the world, a process which could be described as a merger of multiple conceptual relationships that increases the cognitive load. For example, not only do we recognize that horns can be a part of a demon and therefore interpreted as representing something demonic, we recognize that this something is the mad scientist who partially resembles a demon physically too. We then also recognize that the mad scientist is a part of a human race, one of us, despite being atypical, which can lead us to question our own good or the good of science. While the conclusion of these thoughts is more impersonal because it pertains to society, the beginning of the chain of thought concerns feelings of a personal threat and fear. Such contemplation can lead us to have certain emotions which can then impact any other further mind-reading. An example of such an emotion would be fear. Metonymy and metaphor can thus be interpreted as Rabinowitz's complication but also as Zunshine's noise if one is aware of the history between science and religion. All these processes merge which can possibly influence how our minds comprehend the given scenario, increase uncertainty, and mind's turmoil.

The bandages become the center of attention and gossip not only between the owners of the Inn but other villagers, too. They stand out as a salient feature because they are usually used as a part of an aftercare when one is injured, and because they cover a large part of his body, including his face. Mrs Hall suspects that a rather serious accident happened to her guest and she is prompted to indirectly ask about it to satisfy her mindreading cravings and get rid of the occlusion in Griffin's mind-writing. The bandages are a salient feature that makes Griffin an atypical man because a prototypical man would be assumed to be without injuries on such a scale or completely without them. Historically, any such extreme deformation that would be either congenital or acquired through an accident would put men at the edge of society.³⁴ The bandages, the serviette, or the glasses are a visual and tangible representation of Rabinowitz's occlusion because their function is to cover parts of a human body such as eyes, mouth, or facial muscles which are able to communicate mental states. This appearance "startled" (Wells [1897] 2016b, 227) Mrs Hall, she "shivered" (228), but it did not scare her to the point of experiencing horror and instead it acts as a catalyst for her curiosity. Curiosity is eventually promoted to paranoia amongst villagers, one of whom concludes that Griffin is "an Anarchist in disguise, preparing

³⁴ For example, soldiers who returned home from war with extreme deformities which were a result of combat-related injuries.
explosives" (Wells [1897] 2016b, 242). The uneasiness is maintained by constant introduction of new characters that meet Griffin and encounter the same issue with mind-reading him as characters who were introduced earlier. The repetition of these episodes could be seen as an example of how Wells's writing methodically imitates science (Haynes 1980, 7); "every scientific postulate has a tentative quality and certainty is, by definition, unachievable, for a theory may be disproved, but strictly it can never be proved" (7). However, these actions are not perfectly reflecting a scientific method because the villagers are simply doing what human minds tell them to do and that is to mind-read which is an imperfect process. When it comes to minor characters, they were for Wells "a mere caricature" (Haynes 1980, 166):

This appears to result less from an objective viewing of society than from an intention to vilify certain aspects of social tradition and convention. Thus, several of his [Wells's] minor characters are little more than embodiments of the more unattractive traits of the Victorian age as Wells chose to imagine it, distorted representatives of a system seen through the eyes of one prejudiced against almost everything inherited from the past. (Haynes 1980, 166)

It is certainly true that the villagers can be seen as nosy or exceptionally prone to gossiping but the lack of formal education does not prevent them from engaging in an investigation. Although mind-reading is not a perfect alternative to the scientific method, it imitates it in the way that the villagers are always searching for more evidence and not settling for the first conclusion. Eventually, Griffin's actions show that he is indeed dangerous which redeems the villagers.

The first part of *The Invisible Man* relies heavily on the mind-reading of appearance due to the scarcity of verbal interaction. Griffin's albinism can be used to advance the discussion about mind-reading and mind-writing, although this feature is not revealed to the villagers until the very end when he dies. Yet, the villagers begin to gossip when they observe a dark spot peeking from underneath the bandages. This catches their attention because his nose is white and the rest of his body should therefore be white, too. Multiple interpretations based on the same clues emerge, for example, some "accepted the piebald view or some modification of it" (Wells [1897] 2016b, 243), or they accepted that the skin discoloration might be a result of an "accident . . . which temporarily discoloured his face

and hands" (242), as Mrs Hall concluded from her conversation with Griffin (242). These interpretations make Griffin's skin another salient feature through the function of the first aspect of saliency which depends on a variation of a feature (skin) that an average man possesses. Initially, the skin was salient because it was covered with bandages and clothes in a situation that should prompt one to remove them. The skin then acquires even greater saliency when its tone on another part of the body does not match the color of his nose. Wells builds one salient feature on top of another, curiosity never gets satisfied and each question that is answered leads to a new and perhaps even more perplexing inquiry. In this sense, curiosity is the discomfort resulting from mind-reading and mind-writing exchanges that feel incomplete. The cognitive load that comes with metaphors and metonymies regarding his appearance is also increased by these unanswered questions stemming from the look of his skin and the process of categorization (a terrorist or a piebald or something else?). The mind thus remains in a state of constant alert as the interpretations appear to be negative rather than positive.

The topic of invisibility is central to the novel and does not involve only body but mind as well. Rachel A. Bowser's (2013) paper is concerned with the Invisible Man's individuality in a manner which is distantly related to the study of mind. It looks at the invisibility and the formation of the identity itself, and finds the process compromised: "In a very literal way, the matter of representing invisibility is a matter of absenting the body. To the extent that Griffin's invisibility represents an evolutionary leap, the leap is over the body. Invisibility seems, in fact, to erase the body. Once the body is erased, all that remains is intellect, the pure and intangible depth of the mind/body dichotomy" (26). On the occasion when Griffin is partially visible through the imprints in mud, for example, he "is a radically reduced version of a subject. . . . Reduced humanity" (27). Bowser's interpretation is not incorrect, but this point of view would benefit from the incorporation of mindreading and mind-writing analysis, conceptual metonymy and metaphor. This is an issue regarding the process of erasing the body once it becomes invisible. Griffin says that "visibility depends on the action of the visible bodies to light. Either a body absorbs the light, or it reflects or refracts it, or does all these things. If it neither reflects nor refracts nor absorbs light, it cannot of itself be visible'" (Wells [1897] 2016b, 309-310). In other words, invisibility is a matter of not having any observable features but this assumption is questioned throughout the novel. Contrary to Griffin's naive expectations, changing saliency of the human feature, being visible, is not enough to make him not a man in terms

of not being mind-readable anymore, and not enough to make him more than a man in terms of power that could come with not being mind-readable. It is only when he decides not to speak out, eat, do any audible movement, or interact with the visible objects, that he cannot be mind-read and ceases to exist as a participant in a communication. It would thus appear that being completely erased is possible if Griffin does not mind-write, which agrees with Bowser's conclusion but it might not be as radical as implied. Invisibility does indeed partially take away the ability to process his mind-writing features because they become visually undetectable. Consequently, such exchange of mind-writing and mindreading would appear to be one sided because it would only have one visible participant but Griffin does not actually remove himself from the interaction completely. All features would be absent only if his presence was to be completely undetectable but in order to remain alive, he must be on the move and engage with the world in some way. Furthermore, once a presence of the invisible body is revealed, the invisibility becomes a feature that indicates the lack of any features which is a feature in itself. This brings a lot of unwanted attention to Griffin's whereabouts because his movement is accompanied by seemingly strange occurrences that are quickly noticed by people and animals around him, such as his footprints in the snow or sounds that he makes despite his effort to be stealthy. These are all residual traces of a visible person that are however also available for mind-reading. This is not only because mind-reading does not necessarily rely solely on visual cues, but because of memory. The novel gradually shows people piecing together clues that they receive upon meeting the Invisible Man in both his visible and invisible forms. This applies to their own individual experience with him, their collective experience, but also to the experience of the reader. Thus, identity can be said to consist of these different recollections, which is essentially information that is gradually saved in the long-term memory. Thus, while the picture is incomplete, it seems to be not as radically incomplete as Bowser implies.

Another argument is that there is more than one process that is responsible for the construction of identity. If we look at invisibility as a process of transformation, then it is also possible to see it metaphorically as a costume, a chemical clock of invisibility. Griffin is therefore wearing a fake mask and theatre make up which he previously stole from a shop in order to cover another mask, the invisibility itself, which can compensate for this reduced individuality. In terms of mind-writing, this mask should function as occlusion and prevent mind-readers from reading him as something unfamiliar that needs to be

questioned but he soon discovers that it draws more attention than would be desirable. This is because occlusion can be recognizable or unrecognizable (Rabinowitz 2015, 90) and in his case it becomes the former. He expects that such a mask would allow him to move freely because it is "'a mask of the better type, slightly grotesque but not more so than many human beings'" (Wells [1897] 2016b, 338). He has some doubts about it but at least it is "certainly not a physical impossibility" (339). Griffin might think that the mask is not grotesque more than people's own faces, but it does not function in the same manner as a face. He is unable to eat a meal in public because it would require him to put his mask away. He merely replaces one salient feature, invisibility, with a grotesque mask that is also negatively³⁵ salient. Nevertheless, the mask does keep him safe to a certain degree because it is capable of replacing appearance partially. The masks that are a part of theatre, a celebration, or even a masked robbery³⁶ share a similar function which could be described as follows: "The disguised or masked individual 'plays' another part, another being. He is another being. The terrors of childhood, open-hearted gaiety, mystic fantasy and sacred awe are all inextricably entangled in strange business of masks and disguises" (Huizinga [1949] 1980, 13). The various masking objects which Griffin uses are metonymical expressions of personality or individuality which is implied by their function that creates an illusion of a person. This metonymy would be THE FACE FOR A PERSON (Lakoff and Johnson [1980] 2003, 37) which "functions actively in our culture. The tradition of portraits, in both painting and photography, is based on it. If you ask me to show you a picture of my son and I show you a picture of his face, you will be satisfied. You will consider yourself to have seen a picture of him. But if I show you a picture of his body without his face, you will consider it strange and will not be satisfied" (37). Sirabian (2005) also argues that "Griffin mediates an existence through a game he constructs, one that offers him within its boundaries an identity that has meaning" (94) which is a function of metaphor. Thus, while Bowser observes that the text reduces the subject, the subject is able to find a way to hold onto itself or compensate for its partial loss metonymically and metaphorically. The appearance of masks supplies a new identity, albeit a fictional one, and this is further supplemented by Griffin's own game-like interpretation of the situation.

Griffin appears already on the first pages of *The Invisible Man* but *The Island of Doctor Moreau* starts with Prendick and his predicaments leading up to his stay on the

³⁵ Negatively from his point of view because Griffin does not desire it.

³⁶ Griffin robs several places with his cloak of invisibility.

island. Moreau's body is fully visible and observable but living on a deserted island puts his body and his actions out of sight of society and its supervision which gives him invisibility that Griffin craves. Moreau is old, has grey hair, and barely anything in his appearance and stature suggests that he deviates from a prototypical man: "He was a powerfully built man, as I have said, with a fine forehead and rather heavy features; but his eyes had that odd dropping of the skin above his lids that often comes with advancing years and the fall of his heavy mouth at the corners gave him an expression of pugnacious resolution" (Wells [1896] 2016, 116). Stiles (2012) reflects on this passage writing that "Moreau possess a 'fine forehead' bespeaking large frontal lobes and superior intellectual gifts" (138). This retelling of Prendick's description appears to be hyperbolic because the forehead does not seem to bear any consequence on Prendick's thoughts throughout the rest of the novel. The phrase itself is very short and suggests that while the forehead is salient, the saliency does not cross into area of horror.

The mood changes drastically once Prendick sees inside the enclosure and consequently experiences Moreau's peculiar level of strength: "He had gripped me by the shoulder with a hand that was smeared red. . . . He lifted me as though I was a little child" (Wells [1896] 2016, 140). The suggestion of something "red" implicating blood is an example of a horrific metonymy that may influence emotional valence because humans react negatively to blood when its presence indicates a horrific event as it does in Prendick's case. His mind-reading absorbs this information which then serves as a trigger for further investigation that Moreau desires to avoid. The effect is that opposite of occlusion because "red" reveals more than the mind-writer intended. Later, Prendick writes:

I looked at him, and saw but a white-faced, white-haired man, with calm eyes. Save for his serenity, the touch almost of beauty that resulted from his set tranquility and from his magnificent build, he might have passed muster among a hundred other comfortable gentlemen. Then I shivered. (Wells [1896] 2016, 168)

The last part references Prendick's reaction to the creature aboard Ipecacuanha which was "repulsive" (Wells [1896] 2016, 104) and which is now connected to the correct source of those feelings, Doctor Moreau. It is when this almost unnatural strength is contrasted to his otherwise prototypical appearance of an older man that it becomes salient because a

prototype of an old man is associated with the loss of strength compared to a prototype of a young man. This contrast is similar to that in Dr Nebogipfel's appearance. Moreau, unlike Griffin, inspires only a mild suspicion when Prendick meets him for the very first time and the signs of something evil are rather initially present only as a juxtaposition in the form of various animals and peculiar inhabitants. Prendick spends the first half of the book trying to decipher what secret the island hides by observing and investigating the environment.

Theses designs emphasize the unpredictability in the visual representation of the mad scientist character. The discussion of various features centered around metonymy, metaphor, and saliency which are processes that are happening unconsciously, whether we intend to use them or not, but they become pronounced in art. Wells's texts never allow interpretations stemming from mind-writing and mind-reading to reach a conclusion about the mad scientist until the very end, and even then, as Otis (2007) concludes about Moreau, we might not be sure whether we are correct: "In Wells's representation, however, readers cannot tell whether Moreau's London experiments were truly sadistic. It was the anti-vivisectionists who acted like cruel, baying hounds" (44). The chapter focused majorly on Griffin as it is in this novel where the appearance of the mad scientist is greatly utilized although in a non-traditional way that does not emphasize the brain. The analysis showed how the underlying cognitive processes maintain the instability and curiosity throughout the novel which is connected to Wells's writing style that was heavily inspired by scientific method. Villagers and other characters offer mind-reading perspective and amongst these, it is the companions that can serve an additional role.

4.2 Companions

The companions are characters who find themselves in the company of the mad scientists by a fluke of (un)luck and get exposed to their ideas and way of seeing the world. *The Invisible Man* and *The Island of Doctor Moreau* each offer a set of two distinguishable characters that could be labelled as companions: Mr Marvel and doctor Kemp, and Prendick and Montgomery.³⁷ Mr Marvel, doctor Kemp, and Prendick can be described as

³⁷ Dr Nebogifel has a companion in the character of Reverend Cook who is seemingly left no choice but to travel with the scientist in his time machine, unless he wants to face the angry mob that has decided to raid the house of Dr Nebogipfel. Detailed analysis cannot be performed because the story was left unfinished, but some details of his fate are revealed. We know that he is an ordinary man like most other companions, he probably dies as a consequence of time travelling, and we know that he speaks of some acts of violence in the future but the readers can only assume that they are all really committed by Dr Nebogipfel because he

ordinary men before they come in contact with the mad geniuses who challenge how they understand the world and themselves. The ordinariness of these companions simply means that their intellect and actions are not salient enough to significantly threaten the society.

Griffin picks up Mr Marvel from the roadside because he needs help from a visible man with matters that require visibility such as regaining the possession of the books which he left behind at the Inn. Mr Marvel is described in the following fashion:

You must picture Mr Thomas Marvel as a person of copious, flexible visage, a nose of cylindrical protrusion . . . and a beard of bristling eccentricity. His figure inclined to embonpoint; his short limbs accentuated this inclination. He wore a furry silk hat, and the frequent substitution of twine and shoelaces for buttons, apparent at critical points of this costume, marked a man essentially bachelor. (Wells [1897] 2016b, 263)

The roadside location and his appearance do not appear to differ in saliency from a prototypical man to a significant degree but they are slightly eccentric. Thus, he is not as atypical as Griffin but not so typical that he would easily blend with the crowd. Nevertheless, his visibility makes him a perfect candidate for Griffin's needs at that moment. Mr Marvel is not given much of a choice to agree or refuse to serve Griffin because it is implied that any refusal to help would result in violence: "'But if you betray me,' he said, 'if you fail to do as I direct you—'" (Wells [1897] 2016b, 268). He thus becomes the first but disposable companion until Griffin finds someone who is familiar and intellectually on the same level as himself. Mr Marvel represents somebody whom Griffin detests but he is also a representation of normalcy that Griffin so desperately needs which arguably makes him detest Mr Marvel even more. Some evidence supporting this claim is Griffin's excuse for not hurting Mr Marvel because he "'is an outcast like myself. This is the man for me'" (267), and yet, when he fails him, Griffin does not let him go and instead he gets angrier and angrier; "'I shall have to make use of you. You're a poor tool, but I must'" (Wells [1897] 2016b, 282). The second companion-like character is doctor Kemp whom Griffin knew from the time of his studies. He tries to sell him on an idea of being his right hand: "'What I want, Kemp, is a goalkeeper, a helper, and a hiding-place, an arrangement whereby I can sleep

confessed to the first one of them, "the knife his trembling son had dropped came to my hand" (Wells [1888] 2016, 586).

and eat and rest in peace, and unsuspected. I must have a confederate, with food and rest—a thousand things are possible'" (Wells [1897] 2016b, 343). Agreeing to become a companion would not necessarily protect Kemp in the future, but Griffin does trust him more than he ever could Mr Marvel. Doctor Kemp wants absolutely nothing to do with Griffin and pretends to be interested in this plan only to keep him in the house until the police arrive. Additionally, his connection with Kemp is based on familiarity, they are categorically closer to each other within the domain of "scientists." In this case, emotional valence which comes with aligning oneself with another member of the category helps one character to find out necessary information and causes the other to reveal too much for his own good.

Mr Marvel, doctor Kemp, and Prendick live quite ordinary lives which is not the case with Montgomery whose troubled life and mind made it easier for Moreau to persuade him to come to the island. Montgomery might have seen the island as a way to escape his life in London but witnessing the experiments amplified the effects of whatever had already troubled his mind. Subsequent escalation of Montgomery's mental instability can be seen as a consequence of being exposed to the experiments and the evil within Moreau which gives Montgomery a metonymical function. Prendick meets Montgomery for the first time aboard Ipecacuanha and describes him as "a youngish man with flaxen hair, a bristly strawcoloured moustache, and a dropping nether lip. . . . Watery expressionless eyes" (Wells [1896] 2016, 100) who was "large and long in his limbs" (102). The nether lip is salient and instantly noticeable which is why Prendick makes a note of it. This oddness once again functions metonymically and could represent Montgomery's crooked mind as is later revealed. It can also be juxtaposed to Moreau's own "dropping of the skin above his lids" (116) which establishes a visual connection between the two characters. On the other hand, a dropping lip is only a small odd part of the appearance in relation to the rest of his otherwise normal face and body, and as we eventually find out, Montgomery's worldview is not as extreme as Moreau's. His predisposition to drinking gives him another atypical feature, albeit in habits. This feature works as an atypical one because Prendick, who is an abstinent, makes a case of it to compare Montgomery to himself on a few occasions. It is also shown several times that Montgomery's drinking habits are self-destructive and must certainly affect his cognitive abilities in a negative way. Montgomery is an imperfect version of a man of science and a cautionary tale of what happens to a man who has to (or even

chooses to) withstand a prolonged exposure to the experiments that transgress the boundaries of status quo.

It is a good question to ask whether there are any other visual similarities between these characters if we were to line them up next to each other. Doctor Kemp is described as "a tall and slender young man, with flaxen hair and a moustache almost white, and the work he was upon would earn him, he hoped, the fellowship of the Royal Society, so highly did he think of it" (Wells [1897] 2016b, 290). He has a high self-confidence but unlike Griffin who distances himself from the culture of science, Kemp yearns to be a part of it. Kemp's white moustache and a light-yellow hair are also only a few degrees removed from Griffin's albinism if we consider colors on a scale. The domains can also include scalar domains such as that of temperature (Hogan 2003, 43) and different hair color could be another example of such a domain. Montgomery too, has flaxen hair, while Moreau's hair is grey. These colors might play some role but this link is overwhelmingly ambiguous. Nevertheless, if any such link were to be created, it seems that the juxtaposition of white and grey colors to the flaxen hair colors creates an impression that the companions and mad scientist are (dangerously) close to each other on the gradient scale. This means they share common features that indicate not only that companions can become like mad scientists but also that looking from the outside, the mad scientists were once very ordinary.

The companion characters only have a potential to gain a metonymical function, with the exception of Montgomery, who reflects this role visually too. The question that arises from this use of metonymy is which features a character must possess in order to gain it. A bond between the characters is only the first feature that is common for all metonymies. More importantly, the characters who have a metonymical function tend to be flat rather than rounded. This means that their function is to embody a feature, for example fear, or some sort of need (Zunshine 2011, 178). We do not know what exactly Montgomery craves but we do know that he regrets his past, "'haven't had any life'" (Wells [1896] 2016, 195), and has a need to bond with the Beast Folk as if he were one of them rather than a human being. Doctor Kemp, Prendick, and Mr Marvel are looking out for things that are in their own interest unlike Montgomery who will always in the end choose to serve Moreau. Nevertheless, Wells reveals enough about Montgomery that he does not become a flat character, nevertheless, such feature might be also graded on a scale. Companion characters fulfill several functions throughout the narrative but not every companion fulfills each role. The first one is to become confessionals to whom the mad

scientists explain their motivations and even struggles. They fulfill the function of a microscope that allows us to objectively observe as is typical for Wells's work (Haynes 1980, 16). Their second role is to metonymically represent a member of a society that comes under the influence of a mad scientist. The final role can be to metonymically represent the uneasiness of the mad scientist's mind.

5. The Laboratory

A laboratory could be considered a home of the mad scientist because it is where he spends a large amount of time but it is hardly a place of peace and safety, a place to be called home. On the contrary, the laboratory is a place of tensions, duality, and instability. This chapter explores the representation of the laboratory including both its contents and the architecture. The easiest and best way to spot inanimate objects of a metonymy as defined by Carroll is to look at the items in the immediate environment. The following example comes from "The Chronic Argonauts" and describes the arrival of Dr Nebogipfel's equipment:

The only thing that was inharmonious with this idea of severance from mankind was constant flux of crates filled with grotesquely contorted glassware, cases of brazen and steel instruments, huge coils of wire, vast iron and fire-clay implements of inconceivable purpose, jar and phials labelled in black and scarlet—POISON, huge packages of books, and gargantuan roll of cartridge paper, which set in towards his Llyddwdd quarters from the outer world.... Further than this, these arrivals, by their evident unfitness for any allowable mortal use, and inferential diabolicalness, filled the neighbourhood with a vague horror and lively curiosity. (Wells [1888] 2016, 576)

The bottles and other equipment fill the room in large numbers, transforming a part of the Inn into a laboratory. Obviously, those bottles marked poison will be threatening because they contain poison, but their sheer number amplifies suspicion about the nature of motivations too. Carroll ([1990] 2004) refers to a large accumulation of ordinary beings as "massing," which is a way some monsters are designed to elicit horror (50). The unusual number of vials can have a similar effect as the unnatural number of birds in Alfred Hitchcock's *Birds* (1963),³⁸ and so does the wildlife in the manse before it is occupied by Dr Nebogipfel which is described as being "in ever-increasing multitudes swarmed the blotchy toads" (Wells [1888] 2016, 573). Massing is thus not only a process involved in the creation of a monster but it also finds use in (horrific) metonymy. The increasing number of vials or

³⁸ Hitchcock, Alfred, dir. 1963. *Birds*. Featuring Rod Taylor and Tippi Hedren. Universal City, CA: Universal Pictures.

toads increases the saliency of features "danger" and "unclean" which enter into the mindreading process of the characters and readers as they observe the mad scientist at work. A chapter titled "The Thousand and One Bottles" in *The Invisible Man* (Wells [1897] 2016b, 236–241) is another explicit expression of this connection between contents of the laboratory and suspicious nature of the character. Griffin's belongings are a "very remarkable luggage.... There were a couple of trunks indeed, such as a rational man might need, but in addition there were a box of books ... and a dozen or more crates, boxes, and cases" (236) and when unpacked they contained

little fat bottles containing powders, small and slender bottles containing coloured and white fluids, fluted blue bottles labeled Poison, bottles with round bodies and slender necks, large green glass bottles, large white glass bottles, bottles with bungs, bottles with wooden caps, wine bottles, salad-oil bottles,—putting them in rows on the chiffonnier... everywhere. The chemist's shop in Bramblehurst could not boast half so many. (Wells [1897] 2016b, 238)

From the perspective or mind-reading, these instruments and vials visually represent occlusion because there is so many of them that one cannot really recognize what is going on inside the room which results in further confusion. They are hidden behind the laboratory's walls which the other characters cannot access, unless they take a short glimpse but they are never allowed to discuss or investigate them. Once we think of disorganization, we might see the bottles within the context of the room. At this point, metaphors start to play a role in the interpretation because an expression such as "a messy mind" emerges from the memory. Now, the bottles are connected to two conceptual processes as they are a metonymy but they can be triggers for a metaphor, too. The close connection between metaphor and metonymy that was present in the analysis of the scientist's appearance can also be seen here.

Curiosity in "The Chronic Argonauts" is not confined only to the appearance of the laboratory. The laboratory is a relatively large building that is known to everyone in the village where most inhabitants are inclined to have superstitious beliefs. The villagers only hesitantly accept Dr Nebogipfel's arrival because he moves into the house that is allegedly haunted. They are unaware of the time machine's existence but their fears are seemingly

justified metonymically. The installation of electricity which is unfamiliar to the villagers causes additional havoc that "sowed a whole crop of uncanny thoughts in the minds of these worthy folk" (Wells [1888] 2016, 578). Their negative interpretation of the events is projected to metonymically represent something dangerously evil in Dr Nebogipfel. All these elements influence mind-reading and villager's understanding of Dr Nebogipfel as a person. The villagers thus quickly come to the incorrect conclusion that he is responsible for murder when they find a dead body which belongs to a local hunchback called Hughes, "the unfortunate creature" (580).

The attitude of minor characters reflects some of those from the nineteenth century with regards to sensationalism. People were attracted to freaks whom they feared and were drawn to at the same time. The Freak shows were presented to be "therapeutic, cathartic, no matter what initial terror and insecurity it evokes" (Fiedler 1978, 31) but they reflected the curiosity which we also see in the portrayed need to peek inside the strange laboratories. The reason why freakshows supposedly had this effect is their function to tell the visitors that "'We are the Freaks,' the human oddities are supposed to reassure us, from their lofty perches. 'Not you'" (31). This desire to peek in is fueled by the need to eliminate the cognitive noise which prevents the satisfying results of mind-reading and to reassure people of their own space in the world as the non-freaks. Additionally, this curiosity also reflects the attitude towards science. "The Chronic Argonauts" was published in 1888 when scientific research was already located in specialized buildings but retained some connection to the "research of a dubious morality" (Willis 2006, 212) as far as the society was concerned. The sentiment that gathering behind these walls, seemingly out of the public eye, "was viewed as nothing more than the accumulation of power and influence for science itself" (213) is displayed in all three works.

Griffin goes through several workrooms throughout the narrative of *The Invisible Man*. Non-chronologically, in order of the plot, Griffin's first laboratory is the one that he sets up at the Inn from which he is forced to flee after the villagers find out that he stole money from the local vicar. Griffin's conversation with Doctor Kemp reveals that his first quasi laboratory was his childhood bedroom, then he used to study at a university where he had access to a real laboratory, and that he previously built a small one during his temporary stay in London. It was here that he managed to turn a cat and then himself invisible. He took a revenge on his landlord by blowing up this workspace which also concealed any traces of his experiment. The constant switching between laboratory (or

laboratory-like) spaces can be seen as a reflection of instability and if such instability is a feature of a laboratory then it can also be seen as the instability of the mad scientist character himself.

Willis (2006) makes a good case for H. G. Wells being a writer of fiction in which laboratory plays an important role in the chapter "H. G. Wells in the Laboratory" (201–234) and supplies information about the nineteenth century culture in England that enlightens the function of laboratories as presented in these works. Information found in Willis's chapter helps develop some of the ideas regarding conceptual role of the laboratories' architecture and their spatial dynamics. The laboratories of Dr Nebogipfel, Griffin, and Doctor Moreau are self-made and makeshift unlike those at universities. Working outside the university soil connects Wells's mad geniuses to other literary mad scientists of the nineteenth century; Frankenstein, or Dr Jekyll. Similarly, these mad scientists used to work in a professional setting but their personal goals required a return to the old ways of alchemists. Science was not an enigma during Wells's scientific romances portray it as if science was a mystery which is reflected also in the laboratory appearance and architecture.

Willis claims that both laboratories in Moreau are different from the time traveler's in *The Time Machine* (1895) which has "the gothic atmosphere" (Willis 2006, 206):

The first, while connected once again to the domestic space, is populated by several investigators rather than one. It is also place geographically in the metropolitan center, while the Time Traveller's is on the margins of London . . . and well enough known for it to become the subject of media attention. Moreau's second laboratory, while little closer to that possessed by the Time Traveller is still more in tune with a methodology of scientific research only fully developed toward the end of the nineteenth century. (Willis 2006, 206–207)

Moreau's second laboratory on the island appears to be large, "separated into specialist areas, and bound by tight security" (Willis 2006, 207) and placed in the natural setting of the island. Moreau populates the island with a great number of creatures while he transforms them by the way of his experiments. The creatures live in nature but they are

metonymically a part of the laboratory as its product and thus they metonymically represent doctor Moreau too. Their sheer number has once again a potentially horrific function of massing which shows how prevalent were these now classic tools of horror in Wells's work. The eventual collapse of the laboratory is a promise, albeit a false one, that the metonymy and metaphor which it represented might eventually die as did Moreau. Thinking conceptually, the storytelling takes the advantage of analogous thinking and a false presumption that if a part of the whole dies, then so must the whole.

Willis (2006) provided connection between contemporary events pertaining to science and Wells's novels such as The Island of Doctor Moreau. At the end of the nineteenth century, London was a center of anti-vivisectionist and animal rights debate (Otis 2007)³⁹ and the British Institute of Preventive Medicine was located not far away from Wells's home (Willis, 2006, 213). Willis sees Moreau's laboratory as "a parody of the scientific institutions being built in England" but also as "the reversal of common laboratory architecture" (229). By this he means that the set up and architecture of the fictional laboratory of doctor Moreau is the exact opposite of the two famous, and therefore it could be said prototypical, laboratories at that time in England; Cambridge and Chelsea (229). In real life, "the leading professor had the use of a small private laboratory" while Willis points out that Moreau's is almost the exact opposite; "the private space is enormous, leaving the little of the enclosure for Prendick or the domesticated beast people (230). Willis describes the working and living dynamic on the island as "a tripartite hierarchy" because each character has a different level of access to the laboratory and housing quarters (230). Prendick has the most restricted access while Moreau "enacts a dominant sovereignty over the laboratory. He holds all the keys, has access to every area, and his domestic space is not desegregated from the scientific space" (230). Moreau's space is physically relatively spacious but he is stuck on an island with a limited access to the supplies which he needs. The limitations put in place by the society on space that is available to be occupied do not exist on the island which might create the illusion of a greater space as Willis interprets it. The island's remoteness which makes it difficult to access the needed supplies makes its physical size almost irrelevant, however. The space is quite claustrophobic due to the accumulating number of the Beast Folk around Moreau who have nowhere else to go and limit Moreau's own freedom of movement on the island after becoming increasingly

³⁹ Otis (2007) analyses the influence of antivivisectionist debates on Wells and Wilkie Collins, specifically, the case of Doctor Ferrier.

aggressive. Prendick's arrival also negatively impacts Moreau's mental well-being because his mind-writing now requires conscious occlusion to maintain the secrecy regarding his work. Technically then, his laboratory could as well be a small space at a university due to these factors.

It is not, however, only the above described dynamic on the island that provides information about the position of a mad scientist with regards to the rest of the world. Our conceptual system allows us to "project our own in-out orientation onto other physical objects that are bounded by surfaces. Thus we also view them as containers with an inside and an outside" (Lakoff and Johnson [1980] 2003, 29). The island, the lands like England, as well as the sea can therefore be conceptualized as containers. Accordingly, moving between lands would be like moving from a container to a container, from one room to another. Willis argues that there are no multiple anterooms like in the Chelsea institute because there is no danger of inspection (Willis 2006, 230), but the physical absence of these traditional anterooms is arguably replaced by conceptual anterooms. The function of the sea is not only to keep Moreau away from people for the society's sake but to ensure that his work is undisturbed. Anyone who would want to reach Moreau on the island would need to board a ship or a boat and the openness of the sea would make them rather easy to spot which would in turn give Moreau enough time to prepare for any unannounced visitors such as Prendick.

The relationship between the laboratory and nature is a motif in *The Island of Doctor Moreau* and "The Chronic Argonauts." The manse that Dr Nebogipfel rebuilds as his laboratory right after his arrival undergoes its own transformation. This large "farmbuilding" was "at one time a residence of the minister of the Calvinistic Methodists" and then a family house that was abandoned after a family tragedy (Wells [1888] 2016, 572). Eventually, nature slowly takes over:

Rain and wind thus had free way to enter the empty rooms and work their will. . . . Fungi, sickly pale, began to displace and uplift the bricks in the cellar floor. . . . Wood-lice and ants, beetles and moths, winged and creeping things innumerable, found each day a more congenial home among the ruins. . . . [It] was Nature taking over. . . . 'The house was falling into decay.' . . . But it was destined nevertheless to shelter another human tenant before its final dissolution. (Wells [1888] 2016, 573)

A house which is falling apart can be found in Edgar Allan Poe's "The Fall of the House of Usher" (1839) but we can connect the laboratory also to a castle which is a staple imagery of the Gothic literature, famously in *The Mysteries of Udolpho* by Ann Radcliffe (1794) or *Castle of Otranto* by Horace Walpole (1764) which is considered to be the first Gothic novel. In accordance with the topic of science transitioning boundaries in a scientific romance, "a common feature of many Gothic castles is that they seem to distort perception, to cause some slippage between what is natural and what is human-made; they act as unreliable lenses through which to view history and from the other side of which may emerge terrors only previously apprehended in dream" (Punter and Byron 2004, 259–260). Romantic poetry was also rich in juxtaposition of human work to nature and decay. Percy Bysshe Shelley's sonnet "Ozymandias" (1818) includes the following excerpt:

And on the pedestal these words appear: "My name is OZYMANDIAS, King of Kings. Look on my works ye Mighty, and despair!" No thing beside remains. Round the decay Of that Colossal Wreck, boundless and bare, The lone and level sands stretch far away. (Shelley [1818] 2012, 321)

These sentiments are also reflected at the end of *The Island of Doctor Moreau* when the laboratory burns down following Moreau's death and the Beast Folk which saw him as a God, a king of kings, are becoming increasingly animalistic again. The mad scientists do conceive of their laboratories as places where something extraordinary is taking place; they too, are the kings. Goatly (2007) observes that conceptualizing buildings as power is common in the society when we take into account examples such as the Chrysler Building or the Empire State Building (37). He discusses height and its metaphorical relationship to "success, power, status and importance" and observes that "loss of these qualities is movement downwards" (38). The laboratories are not that tall and the power which they represent does not seem to be proportional to their size. Nevertheless, they hold a status of power which is reflected in the amount of attention that these buildings receive due to secrecy or association with a higher power (Moreau's house of pain) or with a claim to one (Griffin). Furthermore, their collapse represents the weakening or downfall of the mad

scientists' power and/or ideology, albeit a temporal one. The physical destruction of the metonymical relationship does not destroy the ideas that it represented which preserves the feeling of instability and unpredictability.

The portrayal of the laboratory in "The Chronic Argonauts" is in this sense presented in a reversed fashion because we initially see the greenery and the animal life find its place inside the old building falling apart because it does not belong to men anymore until the king, the mad scientist, returns. For the Romantics, the search of scientific knowledge was incompatible with Romantic ideals and Wells places what they looked down upon in the center of a picture-perfect romantic motif. A scientist rebuilds a house that was slowly being taken over by nature in order to utilize it for science. This transformation of the manse from the home of nature into that of humans appears to culminate with a strange phenomenon. This event is witnessed by "all eyes [that] were turned in astonishment to the Old Manse" (Wells [1888] 2016, 577):

Suddenly a strange whizzing, buzzing whirr filled the night air.... The house no longer loomed a black featureless block, but was filled to overflowing with light. From the gaping holes in the roof ... from every gap which Nature or man had pierced in the crumbled old shell a binding blue-white glare was streaming, beside which the rising moon seemed a disc of opaque Sulphur. (Wells [1888] 2016, 577)

The description of sounds highlights that it was not only seeing the visual transformation but hearing it as well that left a long-lasting impression on the villagers. The birds and other animals left the place quickly as they "vomited forth" (Wells [1888] 2016, 578), implying that such a movement is unnatural, fast, in large numbers (massing), and romantic ideals are soon to be replaced by a destructive power of a scientist.

The romantic descriptions are less obvious in *The Invisible Man* and *The Island of Doctor Moreau* in comparison to "The Chronic Argonauts" which demonstrates the development of the motif of the house as a makeshift laboratory. This seems to go hand in hand with the development of the appearance of the mad scientist which also moved away from the Romantic and Gothic style. There is also additional evidence that Nebogipfel's laboratory is consciously designed to give an impression of evil by Wells. The unstable makeshift laboratory can be contrasted with that of Davidson in Wells's short story "The

Remarkable Case of Davidson's Eyes" (1895). Davidson works in a shared laboratory at the Harlow technical College that is similar to what would be a very common laboratory space at the end of the nineteenth century. Davidson has colleagues and a partner who care about him which makes him unlike the other Wells's mad scientists. Thus, Wells did not design all laboratories in such an instable manner as he did in *The Island of Doctor Moreau* and *The Invisible Man*.

In the case of the representations of the mad scientists, however, the house is a part of the whole that is the natural sciences and the mad scientist in particular. This movement is accompanied by the description of sound, "whizzing, buzzing whirr," which would not be the last time that Wells used auditory cues to accompany a metonymy or a metaphor as the following chapter demonstrates.

6. The Mark of the Beast

Hi non sunt homines, sunt animalia qui nos habemus . . . vivisected.⁴⁰ —H. G. Wells, *The Invisible Man*

This section is dedicated to the Beast Folk in *The Island of Doctor Moreau* who have a significant metaphorical and metonymical function. Their existence will be briefly addressed in general term as well, but the chapter aims to look at their role in influencing Prendick's mind on the island and after he has left it. The Beast Folk would be an example of monsters which are created by fusion according to Carroll's monstrous biologies (Carroll [1990] 2014, 44) because every single specimen hosts human and animal features which can be observed simultaneously. The expression A MAN IS AN ANIMAL could be established as the main thematic metaphor of this novel which is represented by a duality because the existence of The Beast Folk plays with its physical alternative, AN ANIMAL IS A MAN. Besides their monster status, the creatures' existence can be connected to the function of a horrific metonymy in which the beasts represent Moreau's cruelty, amorality, and madness. Prendick is confronted with Moreau's human-animal hybrids almost continually from the point when he awakes on the Ipecacuanha until he returns to London. He meets one of them already on the ship and his reaction closely resembles one which would appear in a work of horror:

I had paused halfway through the hatchway, looking back, still astonished beyond measure at the grotesque ugliness of this black-faced creature. I had never beheld such a repulsive and extraordinary face before, and yet—if the contradiction is credible—I already 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. (Wells [1896] 2016, 103–104)

⁴⁰ "There are not men, they are animals which we have vivisected" (Wells [1896] 2016, 156).

I did not know then that a reddish luminosity, at least, is not uncommon in human eyes. The thing came to me as a stark inhumanity. That black figure, with its eyes of fire, struck down through all my adult thoughts and feelings, and for a moment the forgotten horrors of childhood came back to my mind. (110)

Prendick's reaction approaches horror but it is not fully realized as such because the being itself is not perceived as being threatening enough although he wishes to avoid it. Prendick does not have such an adverse reaction to Moreau at first, and lastly, Moreau is perceived still as a human. Later, Prendick is thrown off by the appearance of the island's other inhabitants, "there was something in their faces—I knew not what—that gave me a spasm of disgust" (Wells [1896] 2016, 117), and realizes that the root of this feeling is "the strangest air about them of some familiar animal" (132). Before Prendick gets to see the horrible secrets inside Moreau's enclosure, Wells also foreshadows these futures terrors by using sound which will be discussed in the first subchapter. The second subchapter then moves onto the topic of mind and the Beast Folk.

6.1 The Voice of Reason

The title of this subchapter is a paradox because Doctor Moreau should be a voice of reason because he is a scientist but the presence of sound conceptually conveys the opposite about him and his work. The following scene was picked for analysis due to its significance in terms of mind-reading and mind-writing and the difficulties that arise from the interaction. Waiting to be rescued from the island, Prendick is filled to the brim with an uncanny feeling because he hears the cries coming from Moreau's laboratory:

I found myself that the cries were singularly irritating, and they grew in depth and intensity as the afternoon wore on. They were painful at first, but their constant resurgence at last altogether upset my balance... and began to clench my fists, to bite my lips, and pace the room.

Presently I got to stopping my ears with my fingers.

The emotional appeal of these yells grew upon me steadily, grew at last to such an exquisite expression of suffering that I could stand it in that confined room no longer....

The crying sounded even louder out of doors. It was as if all the pain in the world had found a voice. Yet, had I known such pain was in the next room, and had it been dumb, I believe—I have thought since—I could have stood it well enough. It is when suffering finds a voice and sets our nerves quivering that this pity comes troubling us. (Wells [1896] 2016, 128)

The crying of the puma provokes such an intense emotion that it eventually becomes to manifest as Prendick's own bodily pain as he bites his lips and becomes weak. Emotional valence, which as a complication has consequences on mind-reading and mind-writing, can thus be converted into a bodily sensation which forces the mind-reader to abandon the conversation. The sound represents the pain of puma's physical transformation which is so extreme that it gets communicated through its environment to Prendick over a large volume of space. In its own way, this passage explores what later became a massive success in the horror of the 1960s, the body horror:

A heady mixture of themes surrounding the profound advances in medical science, including reproductive technologies, genetic manipulation, and cloning, which left the body a foreign and vulnerable commodity ripe for horror's exploitation. It also deals heavily in the postmodern rejection of science and objective knowledge, which denied the power of reason in favour of Romantic notions about the supremacy of emotion and physical experience. (Colavito 2008, 284)

This is reminiscent of the reaction of literary world at the beginning of the nineteenth century to the emerging discoveries and inventions of then emerging science and its many fields. Wells does not rely on horror as the main emotion in his stories, but at times comes close to it by using now well-known strategies of horror literature to evoke the dread from the characters.

The function of sound in *The Island of Doctor Moreau* conveys something about boundaries. The sound of puma comes from inside the laboratory which has clear margins indicated by the walls and closed doors that Prendick should not cross, but the cries are heard even far away from the property. In terms of mind-reading, the sections with sounds are emotionally charged because it is impossible to ignore them. This creates a paradox,

because Moreau does not allow Prendick inside and yet the sounds spread uncontrollably over the island. The screams of the animal metonymically represent the horrific nature of Moreau's mind and their spreading beyond the boundaries of the room has a threatening effect that could make Prendick go mad. His mind naturally desires to know more but the mind-reading only allows one angle, from behind the doors, which is controlled by Moreau and not by the creature. At the same time, the discomfort is unbearable and heightened by the fact that Prendick can hear what is happening on the inside but cannot communicate his discomfort to the other side and make it stop. The puma does not speak a human language but its purpose is to communicate and its participation in mind-writing and mindwriting exchange is still valid because it is perceived as functional due to its effect on Prendick. This disturbance is just one of the several other exchanges that mix the human and animal experience together which is one of the novel's main themes.

Another similar example in this vain is the sound of animals aboard the Ipecacuanha intermingling with the sound of men which foreshadows the existence of the Beast Folk: "Overhead came . . . the low growling of some large animal. At the same time the man spoke again" (Wells [1896] 2016, 100). Prendick pays close attention to these sounds that distract him as he is recovering from nearly dying in the dinghy. "Yelping of a number of dogs" (101) and a growling puma would surely trigger survival instincts. This would not be unusual as he is in a strange environment and at this point has not even left his room. He is located under the deck surrounded by clear boundaries that separate him from the rest of the world, and yet, the sounds demonstrate the instability of such boundaries. Instead of using a visual representation, Wells relies on the auditory transmission of the message as the form of mind-writing and mind-reading. The sounds are produced by animals which also presents a complication because it is a type of communication unlike a human language. The puma is expressing pain, the intention is simply the expression of the pain itself. Aboard the ship, the sounds of animals seem threatening, and the sound of men is muffled which means he cannot decipher their intentions either. Prendick only knows that he is on a ship and that he was saved from certain death. He does not know who the men on the ship are, why the animals are angry, or where the ship is going. The emotion that complicates the mind-reading is fear and uncertainty that stay with Prendick even as the novel comes to the conclusion.

Once on the island, Prendick meets Moreau and the rest of the Beast Folk. Prendick's mental state can be understood better by finding answers to questions such as

why Prendick got confused in the first place and why his confusion remains after his return to London. These questions are on a surface level connected to society's reaction to the development of science and theories of evolution but they are also a reflection of the basic structure of human mind which is why cognitive approaches can help enlighten Prendick's predicament. Psychoanalytic approach can be considered a cousin to the cognitive studies of mind because it deals with the analysis of the self, identity, and perception. Redfern (2004) addresses the issue by applying Julia Kristeva's theory of abjection and writes that abject and abjection "are the safeguards of the subject confronted with the annihilation of the self, allowing the subject to maintain its identity at the border where meaning collapses" (38). The above-mentioned analysis of sound shows that Prendick struggles with sound that breaks boundaries which makes him feel out of place and utterly uncomfortable. The conceptual boundaries that are broken by the sheer existence of the Beast Folk cause an even greater disturbance and all "safeguards" seem to fail him.

Hamilton (2003) addresses Prendick's feelings upon his encounter with the Beast Folk by incorporating categorization (Mervis and Rosch 1981) and conceptual blending (Fauconnier and Turner 1998). Mervis and Rosch (1981) were interested in addressing processes related to categorization, especially the ones which are connected to prototypes. Hamilton turns to categorization because he seeks to answer why Prendick struggles emotionally when he meets the Beast Folk and argues that Prendick's emotions are a result of the inability to categorize them; they do not fit any familiar categories (Hamilton 2003, 31).⁴¹ For example, his mind resists categorizing M'Ling as a human which elicits "a strong emotional response" (29). The aspect of categorization that interests Hamilton the most is how our minds sort objects into categories and how they distinguish between them (30), quoting Mervis and Rosch (1981), "the items that have most attributes in common with other members of their own category also have fewest attributes in common with related contrast categories" (99). A similar process takes places when the companions meet the mad scientists but it is nowhere near as pronounced as with the Beast Folk because Moreau's appearance and language are unmistakably human. Therefore, after coming to the island Prendick is comparing the strange folk's attributes to the category of a man and an animal and struggles emotionally even as his mind settles on viewing them as men

⁴¹ Jackson (2006) approaches the topic similarly by highlighting the link between language and confusion: "The origin of Prendick's confusion—his inability to hold a fixed image of ideal humanity due to a 'shiftiness' of language—is also that of Moreau's failure" (28).

(Hamilton 2003, 31). The problem is resolved when Prendick is able to make a "categorical shift" (31) and accept the existence of an animal that is made to emulate a human being, which is also reflected in attaching names to the creatures; Ox-Boar Man, the Ape man, and others (32). Hamilton further argues that the process that is responsible for this categorical shift and Prendick's relative peace of mind is conceptual blending (32) which was described by Fauconnier and Turner (1998, 138):

In blending, structure from the input mental spaces is projected to a separate, "blended" mental space. The projection is selective. Through completion and elaboration, the blend develops structure not provided by inputs. Inferences, arguments, and ideas developed in the blend can have effect in cognition, leading us to modify the initial inputs and to change our view of the corresponding situations. (Fauconnier and Turner 1998, 133)

The result of blending is unique, meaning, the blend "contains emergent structure not in the inputs" (Fauconnier and Turner 1998, 138). The two inputs would be "the animal" and "the man" and the resulting unique structure created by conceptual blending would be the hybrid which Prendick's mind accepts and he is ultimately able to "overcome the limits of his imagination" (Hamilton 2003, 33). This presumably means that "the human mind is adaptable to novel environments even if that adaptation takes time" (33). According to Hamilton's interpretation, "Prendick is deeply troubled" (33) after his return to London but this has more to do with being able to remember the terrible experience and perhaps the shift was indeed not as successful as the name change of animals would suggest (30). Hamilton's analysis does however feel incomplete when it deals with Prendick's experience after he returns to London which needs to be addressed. Redfern (2004) also suggests that "with the death of Moreau the law that abjects the 'natural factor' of the Beast Folk collapses" (45) but "he [Prendick] finds himself unable to construct sensible boundaries in order to protect himself from being consumed by the symbolic order of late-Victorian British society" (46). While more undetectable, the uncanny feeling persists and Prendick's mind cannot shake off the thought that the humans of London are potentially animalhuman hybrids despite his life not being in an imminent danger anymore:

They say terror is a disease, and anyhow I can witness that for several years now, a restless fear has dwelt in my mind, such a restless fear as a half-tamed

lion-cub may feel. My trouble took the strangest form. I could not persuade myself that the men and women I met were not also another, still passably human, Beast People, animals half wrought into the outward image of human souls; and that they would presently begin to revert, to show first this bestial mark and then that. (Wells [1896] 2016, 219)

Categories might be shifted as Hamilton implied but emotions which Prendick felt seem to only have changed in nature. This can be observed already while Prendick is still on the island. He might have figured out what previously gave him the uncanny feeling but now that he knows more about the Beast Folk, they remain a threat due to their unpredictable behavior and his observation that they "did not decline into such beasts as the reader has seen in zoological garden.... There was still something strange about each" (Wells [1896] 2016, 213). The fear and confusion which Prendick felt when he met the Beast Folk emerges in a modified version after he returns to civilization. On the island, Prendick could at least visually recognize that something was odd and uncanny about the beasts when he was directly interacting with them but humans in London do not possess any such physical features and his fears are manufactured in his mind and appear without warning. The triggers, the physical beings of the island, are left behind but the fear is ever-present, and perhaps even more terrifying because he cannot hide from it like he could not escape Puma's screams. Prendick needs to adjust his thinking multiple times during the course of his adventure. First, he is forced to accept the vivisection on men, and then a twisted vivisection of animals which gives them some human qualities. Back in London, the situation is reversed because he needs to accept that people are not the Beast Folk but the challenge becomes more abstract. Prendick recognizes that fear is located only inside the mind in the absence of the real physical manifestations and receives help from "a mental specialist" who he claims "has helped me mightily" (Wells [1896] 2016, 219). Nevertheless, he admits that his fear is still present only "it lies far in the back of my mind" (219), emerging occasionally, "when the little cloud spreads until it obscures the whole sky. Then I look about me at my fellow men. And I go in fear" (219). It seems that once the categories were disturbed in such a profound manner, it also becomes more difficult to eliminate fear that they caused. In Prendick's mind, humans and not animals now become horrific metonymies and metaphors, albeit without physical manifestations of such a relationship, and represent something sinister, an animalistic part of humanity itself. Hamilton seems too quick to skip

the importance of these returning visions and feelings. It appears that once the metaphor MAN IS AN ANIMAL is activated, it struggles to be stable and accepted by the mind because it is controversial in the society. This ending makes it difficult to agree with Hamilton that the novel portrays mind's adaptability (Hamilton 2003, 33), or at least it poses a question how many times such adaptability can happen. This limitation is reminiscent of Zunshine's (2006) embedded intentionality which is concerned with the limits of embedding mindread mental states into each other (31). The answer seems to be that if adaptability does happen, it very likely cannot be repeated indefinitely and the stability of mind is decreasing with each new attempt at adaptation if it requires a challenge to status quo.

7. A Journey Towards Knowledge

The quest for the philosophers' stone came to be seen as a metaphor for the salvation of the soul, and alchemical imagery increasingly used Christian metaphors, including references to death and rebirth. The destruction of qualities—for example, "stripping" lead of its metallic properties—corresponded to death; the alchemical production of gold was then a kind of resurrection. —Trevor H. Levere, *Transforming Matter*⁴²

The last section of the previous chapter was dedicated to implications stemming from a close relationship between a human and an animal. Metaphor MAN IS AN ANIMAL causes disturbance in *The Island of Doctor Moreau* because it questions society's and individual's perception of the self. Other metaphors were also discussed as independently as possible without making the leap that will take space here. Some of the narrative's conceptual metaphors are only relevant at a particular moment but some of them are overreaching and traceable throughout the entire work. For example, an island was previously conceptualized as a container but the container metaphor can be a part of greater conceptual metaphors which will be discussed here. This section will begin with an overview of metaphors' role in our culture which will be followed by an analysis of space, time, knowledge, and power within the conceptual metaphor LIFE IS A JOURNEY.

Gerard Steen (2011) distinguishes four types of metaphorical models (55–56) that are differentiated from each other by circumstances under which they originate and how they are incorporated into culture. Official metaphorical models, as their name indicates, originate in official discourses and become firmly established in formal education until they are perceived as "culturally sanctioned models of reality" (55). Contested metaphorical models are metaphors that are controversial and at first "potentially (in)adequate or (in)appropriate" (55) and found in political, racial, or LGBTQ rights discourses (55). Steen calls the third group implicit metaphorical models because they are metaphors which are a part of our culture covertly and get expressed in its artistic products, such as literature, paintings, music, and so on (55). The last group of models are those that "typically emerge in other types of social interaction," (56) they can belong to the any group above but also "in embodied experiences of reality representing correspondences between image

⁴² See Levere 2001, 8.

schemas and abstract thinking" (Steen 2011, 56). The disruption of status quo could occur due to metaphors moving from one category into another and not only because they represent some new or unacceptable ideas. This pull between metaphorical models becomes apparent when different minds each represent contrasting metaphorical models, or when characters experience some structural change in their web of conceptual metaphors. Within the context of horror and occasionally science fiction genre, this change is triggered by a special set of circumstances, for example, monster or alien invasions. These are the physical representations of the approaching change which will test the strength of individuals and culture. All metaphors that are involved in the advancement of the narrative do not belong to the same category. Sometimes, change is connected to the category of implicit metaphorical models which are an inconspicuous part of our culture and everyday lives.

7.1 Transcending the Boundaries

The journey that takes over the narrative can be seen represented in various ways: a physical journey of travelling from one point to another in space, or time, but also a journey from one mind set to another. The first major literary experiments with language, text, time, space, and perception which utilized the stream of consciousness emerged a few years after Wells's most famous scientific romances. A general distinction between the works of realism in the nineteenth century and the modernist works of the twentieth century is space that is "filtered, like time, through the perceptions of protagonists" in the modernist work (Bridgeman 2007, 56) while "in postmodernist fiction, the idea of a 'world' is itself destabilized, and different spaces multiply and merge" (55). Wells's scientific romances do not use the perception of protagonists in this specific way because their story is narrated by characters other than the mad scientists but time and space are unstable concepts portraying the instability of mind. Bernard Loing (2004) highlighted time in Wells's work by comparing him to Jules Verne. Loing gives Verne the title of the writer of space and Wells the writer of time (5). Verne is given his title because although his characters transcend the boundaries, "the exhaustive topology of the Vernean universe ... remains within the Euclidian framework, a three-dimensional world" (7). Time represented in Verne's work is "absolute, static and unalterable in its nature" (10) while in Wells's work "time is infinitely flexible and relative, it can move and change, shrink and accelerate. It is the time of biology,

the time of the fourth dimension" (Loing 2004, 10). This chapter revisits time and space and rediscovers these attributes from the conceptual perspective which highlights Wells also as the writer of space and not just time.

Jason Colavito refers to the existence of horror creatures in the opening section on biological horror in Knowing Fear (2008) with respect to "their struggles to navigate the uncharted space between the world of humankind and the mythically charged realm" (65). Wells's 1911 short story "The Door in the Wall" portrays a man stuck between the world of men and "the mythically charged realm" behind the green doors. Wallace's lifelong dream is to revisit a garden which he found as a child after entering a green door in a white wall. The door is a gateway between two spaces, the real world of his everyday life and the unknown world. The emotions associated with this garden are those of happiness and "a sense of lightness and good happening and well-being" (Wells [1911] 2016, 558) because Wallace "forgot all hesitations and fear, forgot discretion, forgot all the intimate realities of this life.... There was a keen sense of homecoming in my mind" (559). Wallace decides to resist the appeal of this fantastic place because he does not want to forego opportunities that life has to offer. A crucial distinction between the mad scientists and Wallace is that his decisions do not threaten the established status quo in any way and only his own future is at stake. Wallace might not be a scientist but his mindset undergoes some of the same challenges, including a life journey powered by a thirsty ambition which chains him to this world while he yearns to overcome his earthly desires and exist at a place that does not have a firm footing in this world.

The door preserves the illusion of its supernatural quality by constantly changing its location: "Odd!' said I to myself, 'but I thought this place was on Campden Hill. It's the place I never could find somehow—like Stonehenge—the place of that queer daydream of mine'" (Wells [1911] 2016, 567). One day, Wallace's body is found without signs of life in "a deep excavation" (570) and two explanations are offered. The first one asserts that he died after wandering recklessly at night, searching for the door, when the lights and shadows of the night played a game on him (571). The narrator concludes the story with an explanation that cracks the door open to a possible second interpretation of Wallace's journey: "But did he see like that?" (571), in the end "to him at least the door in the wall was a real door, leading through a real wall to immortal realities" (557). Here too, like the magical world of Narnia (*The Chronicles of Narnia* by C. S. Lewis 1950–1956) or the rabbit

hole in *Alice's Adventures in Wonderland* (1865), the place is only accessible at certain unpredictable moments.

Wallace's story does not directly deal with knowledge as a source of society's fears of science but its occupation with obsession and paths of life is something that it shares with the mad scientist stories. It illustrates the metaphor LIFE IS A JOURNEY by portraying the conscious decision-making process of a man who is about to derail from his journey which is dictated by society's demands and expectations. The metaphor is not explicit and almost too ordinary to be considered significant enough to warrant much attention. We simply accept its existence and yet it can be an excellent starting point for analysis exactly because our culture considers it to be such a basic component. Every metaphorical expression has attributes that are important to its meaning and focusing on their relationship with each other can help us reveal how Wells constructs mad scientists' features such as selfishness, isolation, potentially inherent evilness, or lack of empathy and care for others (Haynes 1994, 5).

The first aspects that are going to be analyzed in detail are isolation and movement within the story world. Mad scientists are breaking boundaries of knowledge but physical boundaries also serve to distort or frame the narrative. In The Island of Doctor Moreau, Prendick does not realize that he transcended boundaries of what he considers the ordinary familiar world until much later. The central events are framed by a journey on a ship and the first major journey is the one which Prendick takes on the sunk Lady Vain. The ship itself can be conceptualized as a container, a mode of transportation, which is a feature that is a frequent part of a journey. Overall, Prendick has to board and then disembark three small boats and three ships in order to live to tell the story. Compared to the green door which is the only physical thing that separates Wallace from the garden, Prendick is not only a step away from the civilization, but multiple. The sinking of Lady Vain puts Prendick into a precarious position but a stroke of luck helps him survive on a small dinghy because the two other passengers, who intend to harm him, accidentally kill each other. Placing Prendick in the middle of nowhere disturbs his mind because he does not know answers to basic questions such as where he is located and how to improve his situation. This implies that he is not in charge of his journey which in this particular case also implies death. Luckily, Prendick is found and picked up by another ship, the Ipecacuanha, which is named after a plant that can be found in Brazil and which produces a drug of the same name:

Small doses of ipecacuanha act as a stimulant to the secretions of the mouth, stomach, intestine and liver. The drug, therefore, increases appetite and aids digestion. Toxic doses cause gastro-enteritis, cardiac failure, dilatation of the blood-vessels, severe bronchitis and pulmonary inflammation closely resembling that seen in ordinary lobar pneumonia. (Encyclopedia Britannica, 737)⁴³

Consumed in small doses, the plant can have positive or even lifesaving effects, while too much of it may be harmful. Correspondingly, regulated knowledge has been viewed as something that can bring positive change but unregulated knowledge has been received with hesitation. The ship's name foreshadows the fictional journey portrayed in the novel. She is a vehicle that takes Prendick on a voyage that will make him feel overwhelmed and sick; a warning that comes true. Like the drug from this exotic plant, the unidentified drink served by Montgomery which "tasted like blood, and made me [Prendick] feel stronger" (Wells [1896] 2016, 100) also represents a transcending stage perhaps not unlike the one experienced by Alice as she drank the potion marked "DRINK ME'" (Carroll [1865] 1866, 9) that would have allowed her to enter the garden had she not forgotten the key. Chapter two of The Island of Doctor Moreau is titled "The Man Who Was Going Nowhere" (Wells [1896] 2016, 100) which brings attention to journey's odd destination. Prendick cannot leave the island because he must wait until another ship appears in the area and takes him away. Meanwhile, he is more often than not forced to remain vigilant in order to protect himself from psychological and physical damage. Thus, the novel takes advantage of the uncanny effects known from horror because it largely utilizes fear "of being unexpectedly and unpleasantly stuck" (Bennett and Royle 2005, 37). Prendick is stuck in ships, dinghies, and on the island itself which reflects how fear limits the element of freedom within the conceptual metaphor LIFE IS A JOURNEY and specifically freedom to choose a direction in life's journey. This also signifies a fear that one can be forced into a certain mind set, which is something that happens to the Beast Folk as they get hypnotized. Prendick subsequently falsely fears that he might be forced to live in a vivisected human-animal form. Generally, he is pushed to reevaluate the morality of Moreau's vivisection and his own humanity. This

⁴³ Encyclopaedia Britannica, 11th ed. (1911), s.v. "Ipecacuanha."

restriction negates the implicit metaphorical model FREEDOM IS A SPACE TO MOVE (Goatly 2007, 58) which is felt by all characters in the story, including the Beast Folk. Moreau's freedom would be restricted if he stayed in London and so he found a space where he could move freely.

The depiction of time as well as space also helps express the idea that the journey described in the novel is transcendental in a sense that what follows is not footed in a familiar world. Time can also represent displacement even though it is seemingly the transition between spaces which is embedded in the concept of travel that depicts this idea. Bowser's paper (2013) was already discussed regarding invisibility and identity but it explores the same topic by analyzing "uncertain and inconsistent timeline" too (22). Bowser addresses the very beginning of The Invisible Man by noticing three different "temporal registers" (22): calendar time, seasonal time, and the railway time (22). Wells's decision to write multiple passages that describe the same scene of arrival shows intentionality which requires minds to question the reliability of characters' assessment of one another in the text. With regards to the specific representations of time at beginning of these chapters and the slight discrepancies in the narrative concerning the arrival of the characters, Bowser sees their function as a "temporal revision.... In order to revise and contradict its timeline" (Bowser 2013, 23). The first chapter describes "the stranger [who] came early in February, on wintry day ... walking from Bramblehurst railway station" (Wells [1897] 2016b, 225) while the third chapter begins with "so it was that on the ninth day of February, at the beginning of the thaw, this singular person fell out of infinity into Iping Village" (236). According to Bowser (2013), Griffin arriving by train means that "the first formulation is predicated on precision and aggressively synchronized schedules due to the railway system. The latter formulation references a temporal concept that defies any system of measurement" (24) because he simply "fell out of infinity" (Wells [1897] 2016b, 236). It must be stated here that another version of the text contains the date "twentynineth day of February" (Wells 1897, 22) which is a version that Bowser quotes as her source.⁴⁴ In this case, it can be also said the leap day is another "manifestation of the incompatibility of all the temporal registers invoked" (Bowser 2013, 23). The expression, "fell out of infinity," that expresses immeasurability can refer to the infinity of both time

⁴⁴ Bowser references the 1998 edition edited by Leon Stover. Wells, H. G. *The Invisible Man*. Edited by Leon Stover. Jefferson, NC: McFarland. The same version of the chapter opening also appears in the 1897 version which is referenced here.

and space. It implies that this man could have come from anywhere, he is a stranger from an unknown place that is definitely not from *here* from the point of perspective of a villager, but rather from *the other* space both physically and metonymically. In "Chronic Argonauts," Dr Nebogipfel's arrival is treated similarly:⁴⁵

There was no intelligence of the advent of a new inhabitant in quite Llyddwdd. He came without a solitary premonition out of the vast unknown into the sphere of minute village observation and gossip. He fell into the Llyddwdd world, as it were, like a thunderbolt falling in the daytime. Suddenly, and out of nothingness, he was. Rumour, indeed, vaguely averred that he was seen to arrive by a certain train from London. (Wells [1888] 2016, 574)

Directly juxtaposed to this excerpt is a description that casts doubt over reliability of the source:

but then the same fertile source of information also hinted that he was first beheld skimming down the slopes of steep Pen-y-pfll with exceeding swiftness, riding, as it appeared to the intelligent observer, upon an instrument not unlike a sieve and that he entered the house by the chimney. Of these conflicting reports, the former was the first to be generally circulated, but the latter, in view of the bizarre presence and eccentric ways of the newest inhabitant, obtained wider credence. (Wells [1888] 2016, 574)

The function of these passages in both works is to portray the merger of the mad scientist's world with that of the other characters while also highlighting their incompatibility. These recollections are collected rather than directly narrated by those who experienced them. They are also narrated retrospectively and thus it seems that the second explanation is perhaps retrospectively tailored to match the subjective impact which the arrival left on the characters' minds. Thus, the nature of these travel descriptions reflects the movement of conceptual boundaries which was a consequence of the Invisible Man's and Dr

⁴⁵ The expressions "fell out of infinity" (Wells [1897] 2016b, 236) from *The Invisible Man* and "out of the vast unknowns" or "suddenly, out of nothingness, he was" from "The Chronic Argonauts" (Wells [1888] 2016, 574) are close in meaning which once again serves to show that Wells worked with some features on a conscious level.

Nebogipfel's existence and behavior. This process is reversed in *The Island of Doctor Moreau* because Prendick is the one who is entering Moreau's world and not the other way around.

Arriving by train would seem relatively normal but that changes if we take into account the context of the nineteenth century. In terms of railway travel, Bowser (22) refers to Wolfgang Schivelbusch's The Railway Journey ([1977] 1986) in which Schivelbusch explains how the understanding of what it meant to travel changed during this period. People were already used to movement in carriages or on horses, but trains were faster and could thus move a person further away in a lesser amount of time than ever before without inconveniences that came with the travel powered by horses (Schivelbusch [1977] 1986, 33–34). The change was so fundamental that it "permitted the traveler to perceive that space as a living entity" (36) and "annihilated space and time" (36) by having such profound impact on "the traditional space-time continuum which characterized the old transport technology" (36). The harsh realities of rural and urban life became one of the themes widely popular in the literature of the nineteenth century. Railways were "seen to symbolise destiny" (Mullan 2014), a transition, a journey between two realms or spaces that are different from each other. Railway travel would be a common image in literary realism (Mullan 2014)⁴⁶ but here it symbolizes the arrival of a figure that is more fantastic. In terms of transcending the boundaries by a railway travel, Dr Nebogipfel moves from a cosmopolitan London to a place where an explanation which includes an unbelievable or even a fantastic element has more credentials than a rational one. He comes from the atmosphere of the advancement and realism into the atmosphere whose description resembles works of fiction that are associated with the supernatural. The long distance between the rest of the world and the secluded island of Doctor Moreau has a similar effect that is enhanced by the lack of any data that could confirm the existence of such an island in the area. Thus, the reliability of the story is questioned, "this narrative is without confirmation in its most essential particular" (Wells [1896] 2016, 95). What these stories share is that at least some part of the journey is obscured which adds mystery that arouses suspicion. The function of Wells's treatment of the perception of time and space is to invite doubt into the minds of readers and characters by making the boundaries of space and time fluid. The transformation of the time and space relationship which was seen as a

⁴⁶ Mullan (2014) focuses on railways in the fiction of Thomas Hardy, Charles Dickens, George Elliot, or Arthur Conan Doyle (specifically the Sherlock Holmes stories).

progress and helped with "the rapid urbanization" (Goatly 2007, 58) does not actually work in favor of the mad scientists because they travel away from the cities whose power rose according to the metaphor IMPORTANT IS CENTRAL (58). This is one of the many paradoxes that are a part of the mad scientist figure. Travelling away from the cities means that they are travelling away from their resources. Therefore, mad scientists become the antithesis of progress which is the opposite of what they would like to represent.

Another aspect of LIFE IS A JOURNEY is travelling towards a certain goal. For Wallace, life's opportunities always trumped the benefits that were potentially hidden behind the doors. He doubted their existence and hesitated just before he would be brave enough to cross to the other side; life in this realm had a strong hold on him. Wallace's goal is to be somewhere while Griffin's and Moreau's goal is to do something and their actions are not tied to a particular place; they need a laboratory but they can built it anywhere themselves.⁴⁷ The action of obtaining knowledge does not only refer to the execution of the process itself but it must also be successful, remain stable, and under control. Reaching this goal becomes the main driving force to such a degree that the mad scientists begin to conceptualize their environment mainly as LIFE IS A JOURNEY TOWARDS KNOWLEDGE. This is evident in various sacrifices on their way towards achieving their goals. They forego those aspects of their lives that society views as healthy and good, including comfort, family, other personal relationships, and sometimes even their physical bodies, like Griffin. Moreau seems to accept this bargain with relative ease because he is unmarried and "had indeed nothing but his own interests to consider" (Wells [1896] 2016, 124). Griffin's mind has some difficulty dealing with these constraints but not necessarily because of morality or ethics but because he is naturally short tempered. Moreau and Griffin possess narcissistic tendencies that make such sacrifices easier⁴⁸ and continuously attempt to adapt to any change in the course of their journey and refuse to abandon the goal even in the face of death. Moreau sees himself superior to other men, including his fellow scientists, and dismisses their achievements, "'I'm puzzled here why the things I have done here have not been attempted before'" (Wells [1896] 2016, 160). He attacks their goals and their conceptualization of the world because their work is in agreement with the official

⁴⁷ Dr Nebogipfel wants to *be* somewhere but in order to get there he needs *to do* something, to create the time machine.

⁴⁸ A connection which they share not only with mad scientists like Dr Jekyll or Frankenstein but also with another significant fictional character that explores human duality through a type of an agreement with the devil, Dorian Gray from Oscar Wilde's *The Picture of Dorian Gray* (1890).
metaphorical models and never transgresses the boundaries of what constitutes societyapproved knowledge. These fictional fellow scientists are like Newton and his contemporaries who tried to find common links between science and religion in order to create a safe space for scientists to practice their craft without being shunned or punished for it, but Moreau is almost the exact opposite because he willingly exists outside scientific institutions, society, or religion, and is not concerned about other opinions.

Moreau might go further in his research than others would be willing to but as a scientist he is not as superior as he believes. The metaphor THEORIES (and ARGUMENTS) ARE BUILDINGS (Lakoff and Johnson [1980] 2003, 52) enables us to take a closer look at the mad scientists' knowledge, arguments, and their structural integrity. Generally, Moreau's arguments about his experiments might be rejected by the society, but he is confident because he has managed to pursue his goal. However, he is not a part of an actual scientific debate anymore despite his perception that his arguments are strong and undebatable: "And the great difference between man and monkey is in the larynx, he said, in the capacity to frame delicately different sound-symbols by which thought could be sustained. In this I failed to agree with him, but with a certain incivility he declined to notice my objection. He repeated that the thing was so, and continued his account of his work" (Wells [1896] 2016, 162). For similar reasons, Moreau also dismisses Prendick's concerns about the "abomination" (165) and says that he has "never troubled about the ethics of the matter" (165). Doctor Moreau does not make any efforts to engage not only in a fruitful conversation, but by extension, in exposing himself to new knowledge and criticism. He defines his life as a journey towards knowledge but in reality, he does not wish to be educated by someone else and remains closed off in a laboratory, a solitary container on a journey which symbolically cuts him off from science.

Moreau is forced to leave London and all its conveniences such as access to any equipment in the modern laboratories and relocate to an island with only a single helping hand to create his make-shift laboratory there. Montgomery makes arrangements and brings animals, which indeed saves Moreau time because he does not have to occupy himself with these tasks that can take weeks as a result of the island's seclusion from civilization and traditional trading routs. This position creates a certain paradox in which the mad scientist needs to work faster but due to experiments' controversial nature, or the implied requirement to work solo, it can only be done in conditions that are less than ideal and slow the work down. Griffin and Dr Nebogipfel are in similar position as they are chased

by the curious minds of the villagers. The faster and smoother the mad scientists want to work, the slower and more irregularly they can actually work. They cannot speed up the process as the success would require, and their lack of patience towards the end proves fatal for Doctor Moreau and Griffin. SUCCESS IS SPEED (Goatly 2007, 52)⁴⁹ is a metaphorical concept that remains unfulfilled. The next part will look at the relationship between work and time.

Studies which look at society and its relationship with time and labor can help shed some light at the analysis of time with regards to achieving a goal. The labor is understood as all the necessary steps that need to be taken in order to obtain knowledge and they are all time dependent. Time is an important concept for human beings as we wake up, work, and go to sleep, our modern lives start with a sound of an alarm clock, work time ends at the end of the shift, and we go to bed counting how many hours of sleep we have left before the cycle starts again. In "Time, Work-Discipline, and Industrial Capitalism" (1967), E. P. Thompson asks "if the transition to mature industrial society entailed a severe restructuring of working habits . . . [and] how far is this related to the changes in the inward notation of time" (57). It has been previously noted that coming to Iping or leaving for a deserted island has removed mad scientists from the industrial urban society. Their working organization likewise does not resemble contemporary practices. Important for Thompson's (1967) argument is the distinction between two types of work orientation which govern the day of a working man: a working day that is task-oriented and timeoriented (60–61). In task-oriented labor, the work is considered to be done only when the task is finished, while time-oriented labor is focused on doing as much as possible within a certain time frame (60-61). Thompson additionally describes three characteristics of a task-oriented labor:

First, there is a sense in which it is more humanly comprehensible than timed labour. The peasant or labourer appears to attend upon what is an observed necessity. Second, a community in which task-orientation is common appears to show least demarcation between "work" and "life." Social intercourse and labour are intermingled—the working-day lengthens or contracts according to the task—and there is no great sense of conflict between labour and

⁴⁹ Goatly (2007) analyses this and other varieties of this metaphor such as DEVELOPING/SUCCEEDING IS MOVING FORWARD, INTENSE ACTIVITY IS SPEED, COMPETITION IS RACE, and so on (51–60).

"passing the time of day." Third, to men accustomed to labour timed by the clock, this attitude to labour appears to be wasteful and lacking urgency. (Thompson 1967, 60)

The concepts of task- and time-oriented labor and the way time has been conceptualized in life can aid in understanding the mad scientists' anxiety about their research. On the basic level, their daily task is to work on science until the experiment is fully successful as was described earlier. The second feature that characterizes such a task-oriented working day, "social intercourse and labor are intermingled" (Thompson 1967, 60) is only partially true. The mad scientists avoid social interaction, but if it occurs, then it could be viewed as being intermingled with the work that they are doing because they barely leave the laboratory unless necessary and the conversation revolves around their work. The third point, however, that such a work is "wasteful and lacking in urgency" does not apply here at all. In a traditional sense, a worker who performs a time-oriented labor will only work a set number of hours until he can rest but urgency becomes a necessary part of the daily work once the scientist loses control over the experiment. Griffin and Moreau work around the clock and try to chase more time, rather than wait until the working time runs out; they want more working time rather than less of it. Therefore, traditionally, their work is task oriented, but it is also time oriented due to the constant attention that is dedicated to the (lack of) time. Chapter two of The Invisible Man contains a scene in which Griffin's work is interrupted by Mr Henfrey who comes to repair the clock in the room. A clock measures time quantitatively as opposed to qualitatively (Goatly 2007, 62)⁵⁰ which "manifest[s] in the conception of time as homogenous linear space, either through metaphor or through the metonymy by which the clock's dial is subdivided into hours, and later minutes and even seconds" (62). The multiple retellings of Griffin's arrival indicate that time is perhaps not as homogenous and that each person's mind focuses on its different aspects which is symbolized by the broken clock. Griffin agrees to have the clock repaired but it is clear that he did not even notice that it did not work. At first, he does not comprehend the situation because he was interrupted in his research: "Look at the clock?' he said, staring around in a drowsy manner... getting more fully awake, 'Certainly'" (Wells [1897] 2016b, 232). Moreau and Griffin perceive time with regards to their scientific endeavors and while they

⁵⁰ Qualitative measurements are "the differences between day and night, autumn and summer, saints' day holiday and working days" (Goatly 2007, 62).

are aware of the quantitative time, qualitative time characterizes their work principally. The qualitative aspect survives in a warped perspective because the time moves forwards but also backwards if there is a setback and the experiment has failed to deliver a desired result. In other words, time is characterized by the value of the work's current state which oscillates between success and failure. This means that time is also cyclical (Goatly 2007, 60), as it would be in the Sisyphus mythos, and is then juxtaposed to the linear time of railway or ship travel in the novels.

Mad scientists are not sacrificing only their own time but also that of their companions. Thompson (1967) writes that the idea of the two different concepts becomes complicated if the person does not work alone but has employees; then, even a task-oriented work becomes time-oriented because "the employer must *use* the time of his [employee's] labour and see it is not wasted" (61). Montgomery and Mr Marvel are such employees but their treatment slightly varies. Montgomery has some privacy and he does not need to tend to Moreau around the clock, while Marvel's only function is to become a temporary albeit a full-time servant. Their value is different, as Goatly (2007) writes: "if time is money, it does not follow that my time is worth the same amount of money as yours" (69).

Wells's mad scientists' works also reflects on the value of time. Generally, the value of time can increase to the point when it becomes a currency and "it is not passed but spent" (Goatly 2007, 61). Griffin represents this relationship more overtly because of his obsession with monetary rewards. Moreau is less concerned with money and yearns to earn a superior position in the universe by completing his task. Nevertheless, they are specific examples of a conceptual metaphor TIME IS MONEY which can also be connected to the metaphor SUCCESS IS SPEED. Goatly suggests that the reason why we tend to work faster might be that "once we are paid for our activities, then, as time is a commodity or money, measured by the hours, a premium is put upon completing tasks quickly. This produces a tendency to think that better is faster" (58). The mad scientists hope that the faster they work the sooner they will reap the rewards. Cantor (1999) writes that "though Griffin's invisibility has scientific causes, it largely has economic effects—above all, on the movement and transfer of money. To put it bluntly, the chief use Griffin makes of his invisibility is to rob people of their cash" (91). Griffin's need for money and fame is however gradually replaced by revenge for revenge's sake. Moreau is more confident in himself and does not need external justification. He is more interested in achieving the scientific

progress for the progress itself and seems to be self-efficient (the topic of money is not really discussed within the story). In his case, the pressure is mostly internal as he does not necessarily need to work drastically faster because he is not chased like Griffin. The pressure of the Beast Folk becoming aggressive presents a certain time-related challenge but it is less radical.

As can be seen, having an abundance of time and utilizing every second becomes a necessity and mad scientists detest wasting it, which is exactly what Moreau says to Prendick after his failed attempt to escape the island: "As it is, you have wasted the best part of my day with your confounded panic'" (Wells [1896] 2016, 158). Neither Moreau nor Griffin know how much time they have left to finish what they started. Their success, while definitely being dependent on their knowledge, is also largely dependent on time which they have left for their research. They do not accept that the issue could be rooted in their inability to solve the problem, so instead of looking introspectively, time and people become their enemy. This is when the conceptual metaphor SUCCESS IS SPEED rises in importance. It is not motivated solely by passion but by pressure to prove that they can fix their experiments successfully. In *The Invisible Man*, a certain urgency to work faster is felt before the experiments take place because Griffin lacks his own private space to work uninterrupted but the pressure increases exponentially after he becomes invisible. Crucially, connected to knowledge and power is failure to achieve success which impacts the minds of the mad scientists regardless of society's judgement. Moreau and Griffin are convinced that they will reach their goal but instead they experience disappointment and frustration even when they partially achieved what they imagined. This discrepancy between expectations and reality pushes mad scientists to spiral out of control as the narrative progresses. Griffin achieves his ambitious goal, but he is now threatened by its permanency due to the many hardships which are a consequence of turning invisible, and he wishes to resolve the problem by attempting to reverse the process. Doctor Moreau yearns to master a skill that would enable him to permanently stabilize the brains of the Beast Folk in their human-like form. In terms of journey, one is tracing his steps back and the other one is finding an alternative. The experiments are imperfect, unstable, and they are an embodiment of disruption.

Griffin's reign of terror and Moreau's rules for the Beast Folk are temporary attempts at regaining control. Physical penalties and punishment will befall on those who refuse to cooperate:

"His is the House of Pain. His is the Hand that makes. His is the Hand that wounds. His is the Hand that heals." (Wells [1896] 2016, 149)

"Evil are the punishments of those who break the Law. None escape." (Wells [1896] 2016, 150)

Moreau's name is not explicitly mentioned in these chants which effectively provides some emotional distance between him and the Beast Folk and makes punishment seem impersonal. Griffin's speech about the reign of terror is comparably more explicit and personal and speaks of death rather than mere punishment: "And it is killing we must do, Kemp. . . . Not wanton killing but a judicious slaying. . . . And that Invisible Man, Kemp, must now establish a Reign of Terror.... He must take some town like your Burdock and terrify and dominate it. And all who disobey he must kill, and kill all who would defend the disobedient'" (Wells [1897] 2016b, 344). Griffin also speaks of himself in the third person, implicating his superiority in a similar way as Moreau, but he uses a specific name, the Invisible Man, rather than just a pronoun. Moreau manages to uphold his status and respect for some time, unlike Griffin, who never gains it despite his violet attempts at establishing dominance. The difference between them lies also in the nature of the crowd which they need to control; humans versus the Beast Folk. The Beast Folk are conditioned to fear Moreau as if he were a deity because he needs them to stay away from the enclosure and not because he desires their worship. This highlights their irrelevancy because the rules are not there to provide them with a purpose like a religion would for people.⁵¹ Their inability to properly learn a language reflects their cognitive (in)ability to recognize manipulation through mind-reading. Therefore, they are easier to control compared to actual human beings which Griffin must face.

⁵¹ Christianity does use fear but the ultimate goal is to become worthy of going to heaven. The Beast Folk do not have a real grasp of why they are being punished and what the real reward would be, they only wish to avoid pain.

The conceptual metaphor LIFE IS A JOURNEY is being targeted by the possibility of its termination before it fits into the plans of the mad scientists and it could therefore be described as the following thought: LIFE IS A JOURNEY with an end that is imminent and outside one's control. The repeated failure at regaining power and the increasing amount of lost time drives Griffin and Doctor Moreau to take drastic measures that will cost them their lives and the lives of others: Moreau runs after the puma that is enraged by pain which he caused it to endure, and Griffin decides that he alone can take on an entire town. These acts are expressions of the inner pressure and stress which is reflected in their suddenness.

Companions and other characters want to postpone the ending of a mad scientist's journey that would culminate with successful completion of the experiment. They do it in order to protect the society but also their own lives and minds. Therefore, knowledge and LIFE IS A JOURNEY are significant for the analysis of companions' experiences as well. Meeting the mad scientists has negative connotations because they make other characters feel powerless. The companions are initially curious and want to know more about inventions and discoveries which they thought impossible. In terms of mind-reading and mind-writing, the mad scientists are characterized by the lack of interest to engage in discussions that would benefit both parties. As a result, the companions are stripped of power because they continue to struggle with processing new information and changes that are taking place. They are temporarily able to reclaim some level of power and fight for their survival but they either die (Montgomery, Reverend Cook) or survive feeling powerless (Prendick, Kemp). In their case, life is not a journey towards power that sets a person free. The only exception is Mr Marvel but he is described as a simple ordinary village man who is unable to fully grasp the consequences that come with the knowledge of invisibility and thinks he would be different: "I wouldn't do what he did; I'd just-well!' He pulls at his pipe. So he lapses into a dream, the undying wonderful dream of his life'" (Wells [1897] 2016, 370). This ending is unsettling because it shows that even a man who is not interested in science will be tempted to use its power.

7.2 Seeing is Knowing

Wells's texts contain a number of metaphor-based references to the act of seeing because observation is a crucial part of the scientific method. The subchapter focuses on the metaphor SEEING IS KNOWING from two standpoints. The first one questions the validity

of this metaphor in *The Invisible Man* and the second one focuses on the metaphor in conjunction with the topic of travel. This second part includes examples from Wells's short stories whose ideas are more experimental and fantastic than invisibility and vivisection, which shows how well Wells explores the same topic from various perspectives.

Knowledge, or the activity of knowing, is often represented by objects or concepts that are associated with seeing. Such association also exists in folk tales and legends about characters seeing what they should not have or peeking into the rooms which they were not supposed to open. The examples of the older variations are Pandora peeking into the box, or people staring directly into Medusa's eyes. The connection to the folk stories featuring secret chambers is addressed explicitly within The Island of Doctor Moreau which refers to the laboratory on the island as "a kind of a Bluebeard's chamber" (Wells [1896] 2016, 122). When discussing the relationship between science, the laboratory, and public in chapter five, it was brought up that (the lack of) transparency played a role in the perception of science. The villagers of Llyddwdd are not amused when Dr Nebogipfel covers the windows of the house which would normally allow them to see its contents: "He . . . engaged in the curious occupation of nailing sheet-tin across the void window sockets of this new domicile" (Wells [1888] 2016, 574). The expression "the void window sockets" which is used in the passage is a result of conceptualizing the manse as a human head. This personification can be linked to the expression EYES ARE WINDOWS TO THE SOUL. The soul of the house is made up of both the animate and inanimate contents that define its allegiance with either good or evil. If the channel to observe them is closed off, the tips of the scales tip over to the conclusion that something evil is probably happening on the inside; why else would the windows be covered. This physical occlusion motivates villagers to know more and their reactions inform us about their attitude towards knowledge. The concept of knowledge and knowing does not only pertain to curiosity, whether scientific or gossipy, but also to our attitude when we are confronted with a physical evidence that contradicts our belief systems.

Religion requires believers to believe in the invisible despite insufficient evidence which is the opposite of science that demands questioning. The issue of seeing and how invisibility challenges the metaphor SEEING IS KNOWING becomes interwoven into the fabric of *The Invisible Man*. The attitude towards the existence of the Invisible Man is described as follows: "It is so much easier not to believe in an invisible man; and those who had actually seen him dissolve into air, or felt the strength of his arm, could be counted on

the fingers of the two hands" (Wells [1897] 2016b, 269). The villagers' suspicion culminates when money is stolen from the vicarage which prompts them to confront Griffin but the confrontation takes an unexpected turn:

It was worse than anything. Mrs Hall, standing open-mouthed and horrorstruck, shrieked at what she saw, and made for the door of the house. Everyone began to move. They were prepared for scars, disfigurements, tangible horrors, but *nothing*! (Wells [1897] 2016b, 257)

The villagers are caught off guard because they see nothing, but they eventually manage to calm each other down and remind themselves that the thief needs to be apprehended despite his seemingly supernatural (dis)appearance. Kemp dismisses the stories and simply thinks to himself: "I can't imagine what possesses people. One might think we are in the thirteenth century'" (Wells [1897] 2016b, 290). His mind questions how much SEEING IS KNOWING even when he meets Griffin face to face and hands whiskey over to the invisible hand: "He let go by an effort; his instinct was all against it . . . 'This is—thus must be hypnotism. You must have suggested you are invisible'" (300). Thus, both the educated and the uneducated are struggling to comprehend the situation which challenges their knowledge of the world. Wells "treats villagers comically" (Cantor 1999, 93) but does not completely give in to the stereotypes associated with their intelligence as much as he did in "The Chronic Argonauts."⁵² Paradoxically, Dr Kemp feels that he is forced to adapt to the line of blind faith if he accepts that Griffin is invisible, which goes against his scientific thinking. He is holding onto a familiar understanding of the world and is being as stubborn in following what he knows as he accuses the villagers to be. It could be argued that Kemp's doubt is just a scientific hesitation but due to his commentary about villagers, "Asses!" (Wells [1897] 2016b, 291), it is more likely a refusal to admit that he was wrong. Kövecses (2015) provides what could be called a sister metaphor to SEEING IS KNOWING, which would be UNDERSTANDING IS SEEING (134). As can be deducted from the examples above, this metaphor is often negated within these works. People would be able understand the Invisible Man if they could see him but they cannot which also makes knowing difficult. The

⁵² The villagers in the story of Dr Nebogipfel associate the strange phenomena inside the house with demonic powers. For example, women of the village associated the oven of the bakehouse and its "snorting, panting bellows, and intermittent, ruddy, spark-laden blast" with Leviathan "whose breath kindleth coals and out of his mouth is a flame of fire" (Wells [1888] 2016, 578–579).

characters, including the mad scientists, can describe, deduct, and experiment but their understanding and knowledge are nevertheless incomplete.

Wells experimented with the metaphor SEEING IS KNOWING by focusing more directly on the mechanism of seeing too. "The Remarkable Case of Davidson's Eyes" (Wells [1895] 2016) tells a story of an experiment which goes awry after a lightning strikes a laboratory just as Davidson is working with an electrometer. Suddenly, the visual information that is being processed through his eyes does not reflect his actual surroundings. Instead, the scenery which he sees appears to come from a remote island while his physical body remains in London. This leads to terrifying experiences, for example, being wheeled into the ocean in a wheelchair while his physical body is in the streets of London. Here, he sees fish and other various creatures which make him feel as if "a horror came upon me. Ugh! I should have driven into those half-eaten things. If your sister had not come" (Wells [1895] 2016, 602). The second story which also approaches time travel nontraditionally is "The Crystal Egg" (Wells [1897] 2016a) in which a crystal egg enables Mr Cave to see a foreign land, speculated to be Mars, without him leaving his home on the planet Earth. The egg becomes a source of new information that cannot be accessed by anyone else but Mr Cave because he refuses to share it. He becomes addicted to the act of observation and the egg is implied to be involved in his death: "He had been found dead in his shop in the early morning, the day after his last visit to Mr Wace, and the crystal had been clasped in his stone-cold hands" (Wells [1897] 2016a, 664). The ending is reminiscent of Wallace's who died while searching for the green door. The egg appears to have its own egg counterpart in the Martial world and each of them is both a receiver and a transmitter of what is to be seen around them. Mr Cave eventually figures out how to at least change the angle from which the world can be viewed, but the location is fixed. These eggs physically and metaphorically represent mind-readers and mind-writers and the mechanism of angle. The physical manipulation that needs to be performed with the egg in order to change the perspective expresses the limits of mind-reading. This interpretation can then be extended to include the definition of scientific exploration which is gradual and limited by knowledge and technology available at that time.

Davidson's story does not end tragically, and his eyesight slowly starts returning back to normal and he sees less and less of the other world which prompts him to starts exploring it more. At this point, he can visually be in two places at once; in London and at the other location. He ceases to feel threatened by this strange ability once it shows signs

of leaving him. Once a time limit which is available for the journey through this unknown space is set, Davidson's interest in the exploration increases as well. On the contrary, Mr Cave, who is also obsessed with observing the world, unknowingly has less and less time left to live. Dr Davidson and Mr Cave act obsessively in accordance with the metaphor SUCCESS IS SPEED which ties them to Griffin and Doctor Moreau. The story does not penalize Dr Davidson for the ability which he has briefly acquired perhaps because it was not a result of his conscious pursuit to grasp it and because he manages to stay grounded in society and within the academia.

8. Playful Wars

Wells's *Floor Games* (1911) humorously contemplated on the imaginative incorporation of the floor during games and *Little Wars* (1913) presented a set of rules for war-like gameplay. Finding game metaphors and references in Wells's work is therefore not surprising considering his interest in them. *The Island of Doctor Moreau* and *The Invisible Man* contain sections which are implicitly or explicitly constructed as a play of different sorts. The theoretical background for this chapter comes from previous research in literature, anthropology, and games studies. The goal is to highlight the play aspect in conceptualizing processes. Bruce Beiderwell (2005) analyses game references to explore the expressions of grotesque within the novels. Games become relevant to the analysis of the strange and familiar because chasing and trapping Griffin represents the community's unity during its fight "against a common foe" (119). The metaphor which will be used to assess Griffin's actions is WAR IS A GAME.

Robert Sirabian (2005) applies specific theories from anthropology's view on play to gain access to Griffin's mind. Despite Sirabian's own claims that "'game' as it is used here, takes on meaning beyond its function as metaphorical comparison" (93), Sirabian develops an analysis in the direction of conceptual studies of metaphor because he effectively writes with a notion that metaphor is not a mere figure of speech. Kemp's conceptualization "reflects Huizinga's notion of play" (93) while Griffin's conceptualization of events "challenges Huizinga's notion of play as separate from everyday life" (94). Here, Sirabian references Homo Ludens: A Study of the Play Element in Culture (1955) by Johan Huizinga and Jacques Ehrmann's "Homo Luden's Revisited" (1968). Huizinga defines play as "a free activity standing quite consciously outside 'ordinary life.'... It proceeds within its own proper boundaries of time and space according to fixed rules and in orderly manner" (Huizinga [1949] 1980, 13). Sirabian (2005) asserts that Kemp differentiates between a game and real life, as does the policeman Ayde, when he says that the traps which are designed to catch Griffin are "unsportsmanlike" (Wells [1897] 2016b, 347) (Sirabian 2005, 93). These characters interpret Griffin's game as dangerous not only due to its violence but "because it is separate from real life, his game threatens the social and moral order of society" (93). Kemp's and Ayde's plans to arrest Griffin show that "the game ideology . . . has strong cultural influence on how individuals process the world in which they live" (93-94) which ultimately helps them deal with the aggressor because they start thinking

strategically as they adapt to the situation (Sirabian 2005, 94). Griffin's mind, however, does not make this distinction which is supported by Ehrmann (94) who describes the relationship between play and real life as follows: "Play is not played against a back drop of a fixed, stable, reality, which would serve as its standard. All reality is caught up in the play of concepts which designate it. Reality is thus not capable of being objectified, nor subjectified" (Ehrmann 1968, 56). Sirabian (2005) ensures to mention that Griffin's mindset about reality sets him free within the context of contemporary culture which valued "structure and order" (94) and perceived plays as "frivolous" (94). Discussing Wells's utopias, Haynes (1980) highlights how order is important for Wells because it is a "remedy for virtually all social maladies" (22) although this was not static but a dynamic order; "order means, for him, ordered change" (22). Wells's view of order is thus located somewhere in-between total freedom and constraint which means that Griffin's freedom does not necessarily have a positive value. In fact, even if Griffin's conceptualization of war as a game sets him free, his vision of order is "'a Reign of Terror'" (Wells [1896] 2016b, 344) which kills anyone who disobeys him. This is certainly not the order that Wells had in mind. Furthermore, Griffin might not feel the effects of freedom because he is a prisoner of his own mind and how it conceptualizes the world around him. This is another example that negates the metaphor FREEDOM IS A SPACE TO MOVE but this time, the discussion is about a mental state and a self-imposed constriction that Griffin thinks preserves his own wellbeing. Admitting the difference between play and reality would mean admitting that he might not be as powerful as he thinks despite acknowledging some of invisibility's drawbacks.

Analyzing Griffin's conceptualization only as a game would mean skipping the importance of the impact that conceptualizing war as a game has on culture. Griffin, Doctor Kemp, and Ayde might use game references but what is happening is not an innocent playful matter because people do get injured and killed. In games, a person's injury or death is merely accidental, while in a war it is not unexpected and often desired: "Ever since words existed for fighting and playing men have been wont to call war a game. We have already posed the question whether this is to be regarded only as a metaphor, and come to a negative conclusion" (Huizinga [1949] 1980, 89). Sirabian does recognize that this is only a delusion on Griffin's part but the closing arguments steer away from engaging with play theories further and Sirabian continues to discuss the issue within the context of the importance of "the imagination and reason, hypothesis and fact" for the scientific method

(Sirabian 2005, 95). The analysis of Griffin's mind could be enriched further by spending additional time with metaphorical concepts and anthropological theories which also include play's functional goals.

In "The Playful and the Serious: An approximation to Huizinga's Homo Ludens" (2006), Hector Rodriguez writes about game design and functionality with regards to game playing. Huizinga ([1949] 1980) writes that games are played because they are fun (3). If we take into account the metaphors GAME IS A WAR and WAR IS A GAME, the first one maintains the playful element easily. The second one implies that if games are played for the sake of playing, wars can also be played for the sake of being at war. Thus, while Griffin seems to use "his intelligence to obtain the rewards and privileges that society has been denying him. Griffin is out to prove something" (Cantor 1999, 100), the real danger is that he reaches a point when he simply enjoys fighting and killing for the sake of fighting and killing. This mind-set develops slowly towards the end of the narrative which supports the notion that play and reality are for him the very same thing. The core of Ehrmann's critique was not only to suggest that "the game is inseparable from everyday life" (Sirabian 2005, 94), it also criticizes Huizinga for inconsistencies within his views that relate to culture:

It now appears evident that the relations of play and culture are for these authors based on two "acknowledgements": on the one hand that man becomes more and more civilized, on the other that civilization becomes less and less play-like in the course of history. Therefore, if play has a civilizing influence (that is their thesis!), it becomes impossible to reconcile the contradictions implicit in such a point of view. Indeed, if play is essential to culture, civilization should become, not less and less play-like, but constantly and consistently more so.⁵³ (Ehrmann 1968, 51)

The presumed presence of the play element in war is also questioned when one considers the function of war with regards to fairness. Griffin's invisibility might not have given him the advantages that he imagined but a certain advantage exists regardless of this perception. He can sneak upon and spy on his enemies as he does when doctor Kemp tries

⁵³ Ehrmann does not focus only on Huizinga and the expression "these authors" is aimed also at Roger Caillois.

to send messages to town and is unaware that Griffin stands near-by. This advantage means that the game lacks the feature of fair play:

We can only speak of war as a cultural function so long as it is waged within a sphere whose members regard each other as equal or antagonists with equal rights. . . . This condition changes as soon as war is waged outside the sphere of equals, against groups not recognized as human beings and thus deprived of human rights—barbarians, devils, heathens, heretics and 'lesser breeds without the law.' In such circumstances war loses its play-quality . . . and can only remain within the bounds of civilization in so far as the parties to it accept certain limitations for the sake of their own honor. (Huizinga [1949] 1980, 89–91)

Griffin does not treat people around him as equals which is why he gets so upset when his research is postponed because of other people's needs. Characters are forced to take part in Griffin's games without fair-play, which according to Huizinga's definition, places him outside of culture and society. The problem is that not only has it been suggested that play is reality for Griffin but also that Kemp, Ayde, and others seem to accept these limitations by accepting his invisibility and by engaging in the conflict on his terms. Griffin therefore remains to be a part of culture and society while at the same time he is placing the playfield outside of culture. Towards the end, it is the villagers who treat him as a barbarian and therefore they too violate the rule of war which would have a cultural function and ultimately become not unlike Griffin.

A reference to game is made again as Griffin dies: "A stranger coming into the road suddenly might have thought an exceptionally savage game of Rugby football was in progress. And there was no shouting after Kemp's cry,—only a sound of blows and feet and a heavy breathing" (Wells [1897] 2016b, 366–367). Eventually, Griffin begs for "'Mercy! Mercy!'" (367) but it is too late to save him. The conclusion is almost anticlimactic when the life returns to normal as if Griffin was just another criminal: "Someone brought a sheet from the Jolly Cricketers; and having him covered, they carried him into that house. And there, on a shabby bed in a tawdry, ill-lightened bedroom, ended the strange experiment of the Invisible Man" (368). Moreau's final scene is also represented metaphorically but not as a result of a game but a fight: "Moreau and his mutilated victims lay, one on another.

They seemed to be gripping one another in one last revengeful grapple" (Wells [1896] 2016, 198). War/game and journey metaphors share a common feature which is that the end of each might be accompanied by death, giving us expressions such as DEATH IS/IS NOT AN END. This expression further underlines the dual nature of these stories which kill the mad scientist but their ideas continue to live because the seed of their existence was already planted in the minds of the characters. Death ends life but it cannot be conceptualized as an end if we think of knowledge. Cantor (1999) describes Wells as an author who "was used to plotting his novels carefully so as to maintain struct control over the structure" (989), "the author takes responsibility for tying up all the loose ends before he reaches the conclusions" (99). The previous analysis implies that Cantor's conclusion does not hold if we look at these mad scientist stories conceptually. Especially *The Invisible Man* leaves some strings untied by keeping some information about Griffin's method with Kemp and the books with all his secrets, albeit encrypted, in Marvel's hands.

8.1 The Games We Play

All games do not share identical features, for example, they differ in pace, in the minimum and maximum number of participants, or how they determine the winner. Roger Caillois ([1961] 2001) decided to look at games typologically and arrived at four basic categories: competition (agôn), chance (alea), simulation (mimicry), and vertigo (ilinx) (11–26). Each of these appear in the narrative and contribute to destabilization in cooperation with already discussed metaphors and metonymies.

As the analysis of mad scientists' goals demonstrated, the competition does not need to be between two parties of individuals, but it can be between an abstract concept, such as time, and an individual character who fights it alone. A perfect example of a game of chance, or alea, would be the game of dice after which it is named (Caillois [1961] 2001, 17). Not only do the participants lack control but "alea signifies and reveals the favour of destiny" (17). Competition involves a lot of suspense but suspense can be increased if competitions also involve an element of chance. ⁵⁴ A game of chance is seemingly associated more with the companions than the mad scientists. Prendick, for example, loses when he happens to be on the ship that sinks and then when he risks leaving the island

⁵⁴ Generally speaking, some confrontations are competitions but at the last minute the winner is decided through a game of chance, a deus ex machina.

without knowing if any ships are present in the area. Montgomery openly tells Prendick that his rescue was "'a chance . . . as everything is in a man's life'" (Wells [1896] 2016, 109). Reverend Cook also takes a chance by hopping onto the time machine with Dr Nebogipfel, Thomas Marvel is lucky enough to find brave men at The Jolly Cricketers, and doctor Kemp hopes that he can somehow outrun the Invisible Man and find help in town. But mad scientists who think they are unbeatable also participate in games of chance. Moreau is relying on pain and hypnotism to keep animals under control despite them having technically more strength and larger numbers. The same can be said about Griffin who runs enraged into the town knowing that he will be confronted with his enemies and armed officials. Overall, the mad scientists are involved more in competition and when they rely on chance to win, they never perceive it as such, while the companions are very aware of the fact that they are not in control. It can be argued that a competitor or a skilled warrior relies more on the years of training or experience but minds can perceive it otherwise. In the end, we often catch ourselves saying "good luck" or "break a leg" because there is always a small chance that something unforeseeable will influence the outcome.

A good example of a game which mixes chance with competition is a card game which is juxtaposed to hunting Griffin. An armed man at The Jolly Cricketers shoots at Griffin which is described as follows: "'Five cartridges,' said the man with the black beard. 'That's the best of all. Four aces and the joker. Get a lantern someone, and come and feel about for his body." (Wells [1897] 2016b, 295). The shooter is confident in his abilities and knows he has good cards because each bullet has a potential to hurt or kill. The one which does either is the joker because to win is to shoot the Invisible Man. Griffin's invisibility is increasing the chance element which in this case works in his favor because it seems to have saved him from a certain death. Amusingly, Griffin's description of the events portrays the situation in a different light; "'some fool I'd never seen fired at random'" (301), knowing well that the reason he was shot at was his attempt to kill Mr Marvel. The Island of Doctor Moreau contains a competition that simulates a hunt. Becoming a victim is an idea that accompanies Prendick from the moment that Lady Vain sinks until the very end of his story but explicit signs of conceptualizing these acts as a play are missing. The competition between the hunter and the hunted can be detected in scenes when Prendick is being chased by an unknown creature on the beach, or when he is on a run from Montgomery and Moreau. Interestingly enough, this second situation is perceived as such only by

Prendick which reflects how differently can one conceptualize the situation based on faulty mind-reading.

The next two types of games, mimicry and vertigo, are more explicitly connected to the body and the individual. Furthermore, mimicry differs from alea and agôn in its lack of firmly established rules:

The continuous submission to imperative and precise rules cannot be observed—rules for dissimulation of reality and the substitution of a second reality. Mimicry is incessant invention. The rule of the game is unique; it consists in the actor's fascinating the spectator, while avoiding an error that might lead the spectator to break the spell. (Caillois [1961] 2001, 22–23)

Acting might be an obvious example of such a game as it is essentially based on pretending to be or believing to be somebody else. *The Invisible Man* contains references not only to masks, but Griffin's idea of himself is very much removed from reality compared to Doctor Moreau. He is staying on land surrounded by people and constantly needs to pretend to fit in by wearing a costume. He needs to reinvent his appearance and actions on many different occasions in order to maintain the illusion of normalcy so his work can advance without people questioning him, but he fails at it repeatedly. This was discussed in-depth in chapter four and therefore it is mentioned here only briefly.

Vertigo is a type of game that has the closest relationship to chaos and disequilibrium. The goal of vertigo is to "attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic upon an otherwise lucid mind" (Caillois [1961] 2001, 23). In "The Chronic Argonauts," the vertigo manifests when a character describes the time machine as follows: "The thing was not square, as a machine ought to be, but all awry: it was twisted and seemed falling over, hanging in two directions, as those queer crystals called triclinic hang; it seemed like a machine that had been crushed or warped; it was suggestive and not confirmatory, like the machine of a disordered dream" (Wells [1888] 2016, 584). This is not the only description of the machine within the story. Another character, Reverend Cook describes it as a platform made of "pure ivory and gleaming nickel and shiny ebony" (588). The descriptions of the physical object, the time machine, which implies vertigo are different because they are subjective. Reverend Cook is rather terrified by Dr Nebogipfel's sudden appearance than by the machine itself, unlike

the narrator of the first description who was more terrified by the appearance of the time machine itself.

Another form of vertigo can be represented as a physical experience, which is closer to its original meaning, such as when Griffin transforms his body to become invisible: "'But it was all horrible. I did not expect the suffering. A night of racking anguish, sickness and fainting. I set my teeth, though my skin was presently afire, all my body afire; but I lay there like grim death. . . . I sobbed and groaned and talked'" (Wells [1897] 2016b, 319). Using the time machine and becoming invisible are potentially dangerous and deadly activities because they are new experiences which were not previously tested. Vertigo can be physical and psychological and express "the desire for disorder and destruction, a drive which is normally repressed" (Caillois [1961] 2001, 24). In the chapter "The Furniture That Went Mad," Griffin's manifestation of such a destructive vertigo is accompanied by a comedic tone when he tosses the furniture but because he is invisible, it appears as if the ghosts have taken over the room at the Inn: "'Tas sperrits,' said Mrs Hall. 'I know 'tas sperrits. I've read in papers of en. Tables and chairs leaping and dancing! . . . He's put the sperrits into the furniture—My good old furniture! 'Twas in that very chair my poor dear mother used to sit when I was a little girl. To think it should rise up against me now!" (Wells [1897] 2016b, 252). Vertigo can be one specific manifestation or a large-scale instrument that expresses a generic overreaching category that is referred to as disequilibrium. From another perspective, vertigo can be an experience of change in conceptual metaphor and metaphorical models as when Prendick faces the Beast Folk. Thus, Carroll's monstrous biologies of fusion can be described as being a physical representation of vertigo because we have two different entities being mixed into one. Returning to Wells's writing style, all these different types of games create an engaging mad scientist narrative and help simulate the instable nature of making a scientific discovery.

8.2 The Magic Circle

This subchapter focuses on the idea of a magic circle which helps highlight the importance of the concept of space within the mad scientist narratives and is thus in a way an extension of the section which analyzed space from the perspective of LIFE IS A JOURNEY. The following analysis leans on the work of Johan Huizinga ([1949] 1980) and Hector Rodriguez (2006) who reconsider the boundaries of play from the perspective of game studies. The

idea is to specifically explore a game-like function of container metaphors and how magic circle influences the perception of mad scientists' power and their position within society.

From Huizinga's ([1949] 1980) perspective, "inside the circle of the game the laws and customs of ordinary life no longer count" (12) and we can reimagine this magic circle as a container with boundaries defined by time and/or space. Huizinga's notion that ordinary life and play are separate was previously disputed but we can use the concept of the magic circle in the literary analysis when there is a change of established norms, especially if such change is connected to a building or an area. The most obvious example of a magic circle defined by space is a laboratory. The island of Doctor Moreau serves as a large-scale example although in this case the boundaries are expressed as a body of water. These instances might be of a different sort, firm walls versus the body of water, but they are both tangible and relatively easily identifiable. This does not hold true of all magic circles. Hector Rodriguez (2006) ponders on the representation of boundaries in games that are enlightening also for written fiction. Huizinga's supposition is that the play within a magic circle "proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner" (Huizinga [1949] 1980, 9). Rodriguez (2006) contests this definition by offering an example from game design called "paranoid gaming" that relies on unclear boundaries which can make the player question their existence. If the boundaries are no longer defined and can be moved around freely then the resulting paranoia or stress can potentially intensify the impact of whatever might be already going on in the story. The minds crave stability and the desire for it is directly proportional to how much is its absence highlighted. One objection against Rodriguez's (2006) view that these games are incompatible with Huizinga's description of the magic circle is that the absence of rules might be viewed as a rule itself; in other words, the rules are that there are not rules or boundaries. Some fictional stories do little to resolve this argument because they rely on this precise effect. In The Island of Doctor Moreau, however, the beginning gives us a sense of boundaries which are then being broken and extended.

This additionally explains why Prendick retains the fear that human and animal are occupying the same physical body even when he is back in London. Although Moreau is dead and his laboratory burnt down, the island's magic circle and its rules, which allowed the possibility of mixing the animal and the human, cannot be physically destroyed. These ideas and rules of the magic circle, referred to as the island of doctor Moreau, remain inside Prendick's mind as he returns home. When Prendick got stuck in the dinghy at the

beginning of the narrative, he hoped that he was still within the realm of society that protects him from being killed but he found out that other occupants in the boat had decided to create new rules, a new magic circle in which killing one of them was acceptable. The creation of the magic circle is represented by the game of chance which was supposed to decide who dies—they would "draw lots" (Wells [1896] 2016, 98).

The companions can find themselves accidentally in the mad scientist's magic circle without being invited to enter it and without the possibility to leave as they please, and they are required to play by its rules. The conversation which takes place between Montgomery and Moreau as they discuss Prendick after he is brought to the island demonstrates the consequences of this process. They discuss his future without giving him a chance to become an equal participant in the conversation with a right to refuse their solution. Moreau asks Montgomery: "And now comes the problem of this uninvited guest. What are we to do with him?' and Montgomery argues that "'he knows something of science'" (Wells [1896] 2016, 121) which can be beneficial. Moreau openly refers to Prendick as an uninvited guest which would be impolite but such societal conventions do not apply here because he is about to enter Moreau's magic circle. Moreau allows Prendick to remain in the magic circle but that does not mean that he automatically considers him to be a part of the team; "We certainly can't take him into our confidence just yet" (121). Listening to the two characters discussing his own fate erases Prendick's power and gives him a subordinate status which is a sign that Moreau's magic circle, too, lacks fair play and therefore is positioned outside of culture. Prendick's reaction is to remain humble by saying "'I'm in your hands," (121) and thus agreeing to participate in Moreau's game. Moreau continues speaking rather directly, reinforcing the tension that was established earlier when he spoke about Prendick as if his presence was of little worth: "I am sorry to make a mystery, Mr. Prendick—but you'll remember that you're uninvited. Our little establishment here contains a secret or so, is a kind of Bluebeard's Chamber, in fact. Nothing very dreadful really—to a sane man. But just now— as we don't know you—'" (122). Moreau makes his explanation sound reasonable but the tone of this exchange changes significantly once he uses a rather horrific comparison, which is that of a Bluebeard's chamber, a story which he knows Prendick must recognize. Almost immediately, he denies this however, and claims that what is happening on the island is not horrible at all, if Prendick is "a sane man." The sane man would in this case refer to one that Moreau can count as a member of his group. These interactions are like a game in which Moreau tries to intimidate Prendick only to tell

him that everything is actually ordinary. Moreau knows that Prendick will recognize the Bluebeard's story but it is not the act of recognition alone that is crucial but what will be inferred from it. Related to conceptualization and metaphor is the idea of projection, which is the act of projecting one story onto another (Turner 1996, 10), a process that often results in a parable (5). This reaffirms Moreau as the ruler of the magic circle because he can also control how the player, Prendick, thinks and feels. Thus, the readers and Prendick who know the story will project it on Prendick's current situation and the rest of the narrative when the text supplies them with cues to do so. Bluebeard is a common folk story about a man who murders his wives and hides their bodies in a room that is supposed to be off-limits to his current wife who is eventually overcome with curiosity and opens it.⁵⁵ We see this story projected on Prendick's situation at least three times. The first time was the situation just discussed, the second time is when Prendick hears the screams coming from behind the doors, and finally, when Prendick first enters the laboratory and sees the puma. Essentially, the first situation evokes a possible threat in the future based on the parable and projection of one story onto another, the second one introduces evidence that Moreau is indeed hiding something terrible and the parable might not be merely metaphorical, and the third situation is the discovery that Moreau is not lying and the parable is true in a sense that there is a mauled body of a victim hidden behind the doors. In this case, this projection of one story onto another is another way to create suspense that depends on a specific cognitive ability.⁵⁶

Prendick is limited in his options to escape which puts him into a situation where he needs to become a part of the group in order to survive on the island. Beiderwell (2005) discusses Prendick's analysis of his own humanity when facing "an especially hideous slothman" (119) and reconsiders the scene from the point of view of inclusiveness. According to him, Prendick is "seeking acceptance into a community" (119): "Prendick may choose to be a 'man alone,' but both he and the Invisible Man discover that a 'man alone' is a contradiction in terms. Man can only be identified as a creature within a group and that group encompasses a frightening breadth" (119). Moreau himself is an outsider in society's eyes, but he has created his own permanent place on the island where he is not a runaway outsider anymore, unlike Griffin. What for Moreau seems to have softened the blow of an

 ⁵⁵ Bluebeard is a famous folktale that has been adapted multiple times. See, for example: Perrault, Charles.
1921. "Blue Beard." In *The Blue Fairy Book*, edited by Andrew Lang. Philadelphia: David McKay Company.
⁵⁶ Wells also employs this strategy in "The Chronic Argonauts" when Dr Nebogipfel compares himself to an ugly duckling, and in *The Invisible Man* when Griffin speaks of knowledge as Delilah (Wells [1897] 2016b, 340).

uninvited man coming to the island is Prendick's status as a student of science. A similar attitude towards men of science can be seen in *The Invisible Man* when Griffin shares some of his ideas only with a fellow scientist, Kemp. Griffin's magic circle is very unstable when it comes to other people's perception of it and its rules. Even as he speaks to Kemp, he is inside Kemp's house, with people loyal to Kemp. The weak structure of Griffin's magic circle might be due to its existence in direct contact with society while Moreau's is separated from it not only physically but also metaphorically by many anterooms as discussed earlier. At least in these cases, the distance from society is directly proportional to the apparent strength of the magic circle.

A disruption of the society's magic circle has fatal consequences for Griffin and the reason can be once again reconsidered from the perspective of playful culture within the magic circle. Reciting can be part of rituals but also games in a sense that it resembles counting-rhymes both of which have a function other than the game itself. Functional function of plays can be picked up and used to "enhance social adaptation and regulate human contact... a tool to engineer docile citizens in the service of hierarchical institutions ... the motivation and productivity of their workers.... Playing becomes a tool and an obligation" (Rodriguez 2006). Counting rhymes and recitation can bring order to chaos and make the members of society act in a certain way which is exploited by Moreau in the way that he treats the Beast Folk. While his punishment is real, he gives them rules to recite all over again, like a chant, a ritual to slow their regression, and to keep them away from his work in the enclosure. Moreau thus uses play as an instrument of control within his magic circle. The Beast Folk are not aware of this manipulation but Prendick is able to conceptualize what is happening and hence also take advantage of it after Moreau's death by establishing himself as his successor.

It is during gatherings, parties, or other types of social interaction that the difference between the mad scientist and society is accentuated. Holidays and rituals have an important place in society because they allow people to escape the mundanity of everyday life that is filled with obligations and hard work. Griffin's position as an outsider is enhanced when he interrupts a holiday celebration that is important to the people of Iping who have been looking forward to Whit Monday "for a month or more" (Wells [1897] 2016b, 269). In general, "the relationship between feast and plays is very close . . . both are limited as to time and place; both combine strict rules with genuine freedom" (Huizinga [1949] 1980, 22). The villagers view this day as a special location in time and space, a magic

circle, which allows them to position themselves outside of reality, even if this is only a false illusion. If on holidays "ordinary life is at standstill" (Huizinga [1949] 1980, 21) it is even more so on the Whit Monday after Griffin reveals to the villagers that he is invisible. Despite it being a holiday, and even with celebrations resumed, "people, sceptics, and believers alike, were remarkably sociable all that day" (Wells [1897] 2016b, 269) which comes across as denial in the face of danger. People are more sociable because they are traying to re-establish Whit Monday as a day when all worries are forgotten. When Griffin interrupts celebrations, which are dedicated to playful activities as described above, he also disrupts actual games of children who "ran races and played games" (269) and establishes himself even more as an outsider in the eyes of the villagers. Interrupting holidays and taking the playful element out of religious chants and play are an offense that disturbs the culture and peace. The destruction of their magic circle enhances the disequilibrium that he already caused by coming to the village in the first place. Even bloody rituals that were parts of the culture were supposed to bring benefits to the society (Huizinga [1949] 1980, 21) but society denies that it would benefit from Moreau's or Griffin's research.

9. Plot Structures

Commonly, when speaking of genre, we consider that genre "directs the ways in which we write, read, and interpret texts.... Prescribes artistic practices.... Genres help us to evaluate literary works" (Pyrhönen 2007, 109). The existence of genre fiction itself was new when Wells was writing his scientific romances but common genre plot structures connect them not only to science fiction but horror as well. This chapter dives more into the readers' perception of fictional works and tension within the text. The discussion starts with Noël Carroll's ([1990] 2004, 97–125) plot structures and the impact of their composition. These structures are a fitting starting point because Wells's mad scientist stories are some of their early examples. They ultimately aid in understanding how plot construction reflects Wells's style that emulates the scientific method. The instability and tension that is present in the mind-reading and mind-writing exchanges is expected to be reflected in the overall narrative structure as well. A similar classification was proposed slightly earlier by Andrew Tudor ([1989] 1991). Unlike Carroll, Tudor has "three fundamental horror movie-narratives" (81) that each include some basic oppositions around which the narrative revolves (81). These three "narrative subtypes in broad order of their temporal significance" are "the Knowledge Narrative, second, the Invasion Narrative; and, finally, the Metamorphosis Narrative" (83). Moreau and Griffin would most likely belong to the first subtype although the crossover with the third type is also possible due to the metamorphosis element (animal-human hybrids, invisibility) (97). Carroll's work goes further in its attention to individual plot parts within only two systems and was thus chosen for the analysis here. Plot patterns and Carroll's definition of suspension are two features that will be used to revisit Wells's works. The theoretical introduction to Carroll's theories is followed by the incorporation of ideas that appear in Rabinowitz (2015).

The two main horror plot patterns described by Carroll ([1990] 2004) in *The Philosophy of Horror* are the complex discovery plot and the overreacher plot. The complex discovery plot comprises four stages: onset, discovery, confirmation, and confrontation (99–118). Like the complex discovery plot, the overreacher plot can have four basic elements: "preparation for the experiment; experiment itself; the accumulation of evidence that the experiment has boomeranged; and the confrontation with the monster" (120; 118–125). Carroll refers to the overreacher plot as the plot of the mad scientist subgenre specifically (118), although it can of course be found in other stories too: "the

overreacher plot is concerned with forbidden knowledge—of either the scientific or the magical sort" (Carroll [1990] 2004, 118). The difference between the two is that the complex discovery plot shows the monster or discoveries that would elude even scientists (118) and the overreacher plot shows that "there is some knowledge better left to the gods (or whomever)" (118). Carroll describes the basic configuration, narrative prototypes; however, the parts of the plot can be shuffled around to create a variation of these basic plot patterns. The individual segments of the two main plot structures can also be fully omitted which reduces the number from four down to three, two, or even one segment.⁵⁷ Following the plot influences readers in a certain specific way that is separate from the story. This effect is hypothetical because of individual information in readers' cognitive structures but there are certain processes that are expected to have a priming effect.

Bruner (1990) argues that stories "find an intentional state that mitigates or at least makes comprehensible a deviation from a canonical cultural pattern" (49–50). This intentional state can be discovered by questioning that occurs in individual plot structures. Carroll ([1990] 2004) says that plots are then being advanced by a specific type of questioning, the erotetic narration, "a question/answer model" (130),⁵⁸ which produces "a series of questions that the plot then goes on to answer" (130): "the idea of parallel narration describes a temporal relation in a fiction, as does the idea of a flashback, while the question/answer model describes the rhetorical-logical relation of scenes in the narrative" (134).⁵⁹ The existence of these questions gives rise to an inquiry about the underlying process which leads to these questions and which should imitate the scientific method but remain personal at the same time. Rabinowitz's (2015) list of complications assisted the exploration of mind-reading and mind-writing exchanges but he additionally also defines "three aspects are extensions, revisions, and patterns (93). Extension is a slow recognition which he defines as "it slowly dawned on him" (Rabinowitz 2015, 94) moment.

⁵⁷ For more combinations and variations of the complex discovery and the overreacher plot see Carroll ([1990] 2001, (108; 118).

⁵⁸ Carroll distinguishes between "the micro-questions which organize the small scale events in the plot" (Carroll 1990, 136) and "macro-questions" which "structure the plot" (135). He notes however, that microquestions also "carry forward the macro-questions in the story" (136).

⁵⁹ Andrew Tudor ([1989] 1991) notices a similar relationship but speaks of individual events without highlighting the questions-answer model as much as Carroll: "Macroscopically, there is an overall rise throughout the whole narrative, ending in the movie's formal resolution. Microscopically, this pattern is composed of a series of shorter sequences of events, each following the suspense/ shock tension-resolution pattern. As each microscopic section is built up and then climaxed we are, ideally, drawn further into the continuing cycle. Each phase pushes us a little more; each shock gives another tum to the screw" (108).

Revisions occur when "it takes time for the flavor to register. . . . The sense of flavor, which we thought we had fully captured [and] changes significantly with the passage of time, usually with the accumulation of new evidence" (Rabinowitz 2015, 94). A pattern is simply a "large-scale sequence of flavors over the course of a narrative" (93). Rabinowitz demonstrates the last aspect on an example of a Klopstock moment fusion text which "follows a very general flavor trajectory, beginning with a gap between mind-writer and mind-reader and aiming toward (or moving toward) fusion" (96) although the text does not have to successfully reach this moment (97). Like the rest, Rabinowitz's large-scale Klopstock fusion pattern can be applied to any story, not just horror or SF, while Carroll's examples are genre specific. Carroll's plot patterns are something that concerns readers rather while Rabinowitz's patterns (as well as the other two aspects) can be shared between characters and readers. Both systems, Carroll's and Rabinowitz's, depend on a series of questions that our minds produce as we are getting through the text. The next step is to comment on Carroll's views of plots and suspension by using some of Rabinowitz's approach to narrative studies.

To summarize what has been said so far, plot and erotetic narration are responsible for how we perceive the narrative. A difference in design, other than these plots sections being rearranged or dropped, is the distance between the individual plot sections in a similar way as the erotetic questions can be removed from each other. For example, sometimes, the confirmation might be the longest part and sometimes the confrontation and so on. This can sometimes happen because getting the answer to the individual questions might be a slower or a faster process which in turn depends on the smoothness of the information exchange about mental states or actions between the mind-reading and mind-writing characters. Thus, every works has its inner tempo, or dynamics, and some parts might be perceived as slower or faster. Prendick would have had the answer to the question why Moreau needs the animals earlier, had Moreau not been a mind-writer that consciously uses verbal and physical (locked doors) occlusion to conceal information and postpone the answer. This generates suspense because Prendick feels that something amoral might be happening and readers might feel the same kind of anticipation. Griffin also does not reveal the truth until he feels that it is relatively safe to do so and even then he is careful, "he refused to accept Kemp's word that his freedom should be respected.... Drew up the blinds, and opened the sashes, to confirm Kemp's statement that a retreat by them would be possible" (Wells [1897] 2016b, 304). Haynes compares Wells's short stories

to that of Edgar Allan Poe and Arthur Conan Doyle because they are "compact, symmetrical in composition and economically written" (Haynes 1980, 235). The symmetricity can be challenged from a certain perspective if Carroll's and Rabinowitz's plot aspects are taken into account because it seems that Wells enjoys fast confrontations but indulges in the explorations that proceed them (discovery and confirmation within the complex discovery plot, gathering of evidence within the overreacher plot).

The novels' mind-reading and mind-writing activities include some version of an aftertaste as both Prendick and villagers in The Invisible Man find out that their assumptions and mind-readings were correct but also wrong. They were correct in assuming that the mad scientists will cause physical or other damage, but they were incorrect in assuming the full extent of Griffin's and Moreau's actions (invisibility and humanizing the animals by the way of vivisection). There is a significant amount of extension moments that are characterized by the lack of confirmation of that flavor, which gives such events their suspenseful taste. In both novels, this allows Wells to extend the span of sections that precede the confrontation in different ways. Prendick has a lot of space and time to observe the creatures but he barely gets to participate in mind-reading activities because Moreau and Montgomery are concerned with their own affairs, and the Beast Folk cannot participate because they are not human enough. In The Invisible Man, many characters spend time around Griffin, but the mind-reading and mind-writing exchanges are short and distributed amongst many individuals. Thus, readers get to see the full picture, but the characters do not have that advantage which allows for the discovery/gathering of evidence to be repeated until Kemp has the opportunity to converse with the Invisible Man for a longer amount of time. Wells postpones the satisfaction of knowledge as long as possible but despite these long repetitive sections, he manages to *"just* exhaust their themes without ever loading or boring the reader by repetition" (Haynes 1980, 235). Extending the anticipation moments forces readers to make certain assumptions based on the environmental evidence as they also follow the gossip, speculations, and conclusions of the fictional characters.

The erotetic questions and the repetitive moments that gradually feed information to the characters and readers have a dynamic effect and like in science itself, the line of questioning never ceases. In both *The Island of Doctor Moreau* and *The Invisible Man*, the confrontation plot segments are relatively insignificant with regards to conclusion. Carroll argues that "suspense may also eventuate from the way in which various plot functions are

woven together" such as when "the overreacher's creation goes berserk, suspense arises concerning the issue of whether it can be effectively confronted and subdued" (Carroll [1990] 2004, 128). He also sees suspense as "a subcategory of anticipation" (137) which is connected to the (erotetic) questions that arise from the plot: "I am suggesting that, in the main, suspense in popular fiction is a) an affective or emotional concomitant of a narrative answering scene or event which b) has two logically opposed outcome such that c) one is morally correct but unlikely and the other is evil and likely" (138). A sort of an exception happens when "in confrontation with the monster, the audience begins to feel what might be called sympathy for the devil" (142). As was mentioned, this sympathy argument was brought forward by Stiles (2012) and Otis (2007) who reconsider these mad scientists as victims of the mob mentality. Carroll's definition implies that the emphasis is not only on the result itself but on the process that precedes it. Herman (2009) adds that narrative can be described as "a kind of discourse scaffolding for formulating reasons about why people engage in the actions they do, or else fail to engage in actions that we expect them to pursue" and how to comprehend the equilibrium (20). Suspense might be connected to anticipation but curiosity could be added to this equation as a necessary element without which there would be no anticipation or suspense. It might be argued that this is already implied by the addition of erotetic narration. However, we can imagine a scenario in which questions could be asked but they are not because we are not interested in them. Curiosity is what eventually leads to anticipation and suspense as described above. In other words, curiosity is the desire to know more which is the main common theme of these stories and it should hardly be a surprise that it is ever-present. One of Rabinowitz's proposed patterns that arise from mind-reading and mind-writing is the aforementioned Klopstock moment which means that those who participate in these cognitive activities desire to reach a moment which will result in transparency, honesty, and hopefully an understanding of characters' motivations. Most people around the mad scientists want to reach the Klopstock moment but the answers are rarely offered. Overall, the text is then dominated by different types of questions, the ones about the temporal organization and the rhetorical-logical questions, the second of which are largely dependent on cognitive/conceptual activities which engage with curiosity. When this thirst for answers gets relieved, for example, when Prendick finally gets to see the inside of the laboratory, or when the villagers see the Invisible Man, it has does not have a satisfying effect. The

constant generation of new questions, the long-lasting anticipation, and suspense which barely get elevated are a trademark of Wells's mad scientist fiction.

10. The Images of Madness

The treatment of madness in literature reflects human ambivalence toward the mind itself; madness comprising its strangest manifestations, is also familiar, a fascinating and repellent exposure of the structure of dream and fantasy, of irrational fears and bizarre desires ordinarily hidden from the world and the conscious self.

-Lillian Feder, Madness in Literature⁶⁰

On a surface level, madness is the single most salient feature attached to the character of a mad scientist which is why it became included in the name. Generally, the term madness can refer to a medical condition but we often simply refer to people as mad if their behavior is out of the ordinary, unpredictable, or when they are unable to participate in the world as social expectations dictate. Controversially, Thomas Szasz (1974) argued that madness was a psychiatrist's myth which was fabricated in order to profit from the ill and to advance professional growth, and questioned the very existence of mental illness: "I have argued that today the notion of a person 'having a mental illness' is scientifically crippling.... The concept of mental illness also undermines the principle of personal responsibility, the ground on which all free political institutions rest" (262). Szasz's criticism concerns medical madness but the commentary on personal responsibility rings true for fictional characters as well. According to Bracken and Thomas (2010), both Szasz and Foucault discuss mental illness as a cultural construct, but Szasz's approach is more black-and-white: "Unlike Szasz, Foucault is not telling us how we should understand madness or whether there is a legitimate medical dimension to madness and distress. He wants us, as a society, as a culture, to engage with the way in which madness is encountered in all our lives. He is seeking a different sensibility toward madness" (Bracken and Thomas 2010, 223). Although Bracken and Thomas are relatively mild towards Foucault, Roy Porter does not make much distinction between them: "Szasz's and Foucault's provocative formulations-which stand traditional progressive ('whiggish') history of psychiatry on its head, recasting its heroes as villains—have in their turn been robustly rebutted.... Mental illness is no mere label or scapegoating device, but a real psychopathological entity, with an authentic organic basis"

⁶⁰ See Feder, 1980, 4.

(Porter 2002, 4). Feder also criticizes Foucault for representing only the cases of mistreatment and neglecting to report on the reforms that were at the time enacted by practitioners who tried to help the patients and "reform contemporary practices that included prejudice and errors" (Feder 1980, 30). Another point of Feder's critique was that "Foucault idealises the condition of madness as essential freedom constrained" (33). Despite criticism and perhaps some shortcomings, questioning the image of madness is certainly beneficial for individuals and the society. This is what prompts Foucault or Szasz to write upon the subject of madness versus status quo and of society's treatment of those whose behavior it perceives as different. Literature occupies itself with these issues in various ways and nowadays it is not unusual that madness is indeed reimagined as freedom rather than restriction and those who would once be considered mad (geniuses) become admired protagonists.⁶¹ The collection of essays edited by Branimir M. Rieger, *Dionysus in* Literature (1994), deals with madness in the context of the relationship between writers' works and their genius and analyses various depictions of madness in literature ranging from mental illness in One Flew Over the Cuckoo's Nest by Ken Kesey (1962) and the works of Shakespeare to that of Dostoyevsky. In the essay from the collection, "Literary Theories and the Concept of Madness," Robert de Beaugrande writes:

Though recognizing "madness" as the "other side" of "sanity" is a liberating insight, it does not necessarily bring us closer to a definition, because "sanity" itself is so seldom openly defined or described. Instead, "sanity" simply operates as a framework based on the acceptance of a prevailing world-view and its "reasonable" norms of conduct, and these are acquired more often by imitation than by indoctrination. "Sanity" usually becomes a point for discussion only as the background when some activity is judged a violation. To actually *foreground* sanity would thus be to change its status and function. (Beaugrande 1994, 19)

⁶¹ The treatment of madness outside of the mad scientist genre was not positive in the nineteenth century, see for example *Jane Eyre* (1847) by Charlotte Brontë or "The Fall of the House of Usher" (1839) by Edgar Allan Poe. For more information check Valerie Pedlar's *"The Most Dreadful Visitation": Male Madness in Victorian Fiction* (2006) or Hellen Small's *Love's Madness: Medicine, the Novel, and Female Insanity*, 1800–1865 (1996).

The process itself is reminiscent of categorization and prototype creation based on saliency. The first question that should be answered is how Wells's work portrays sanity and insanity in relation to each other. We can look at the mad scientist figures in this context and see their madness as something that is perceived only once the norm is violated. This norm can be defined as the laws of the country, common courtesy, and other behaviors or appearances. Griffin's madness is perhaps easier to be judged against sanity because he is surrounded by people and we get to judge his interactions by getting familiar with the characters' testimonials. Doctor Moreau is more of an enigma but Prendick describes his actions and personal history from his own recollections and from dialogues with Moreau. It would be a mistake to say that we can be more assured of Griffin's madness because it is witnessed by more people which makes it is seemingly verifiable with greater ease. In the end, Prendick spends more time with doctor Moreau without his mind-reading being interrupted by society's noise and gossip.

Psychoanalytic literary criticism has been used in horror studies but it can offer some interesting ideas about mad scientists, too. A good example of such an approach is Julia Kristeva's abjection which was a central topic in Nick Redfern's analysis of *The Island of Doctor Moreau* (2004). He highlighted how Kristeva's definition of abject "could have been written for Moreau" (Redfern 2004, 40):

The abject is perverse because it neither gives up nor assumes a prohibition, a rule, or a law; but turns them aside, misleads, corrupts; uses them, takes advantage of then, the better to deny them. It kills in the name of life—a progressive despot; it lives at the behest of death—an operator in genetic experimentations; it curbs the other's suffering for its own profit—a cynic (and a psychoanalyst); it establishes narcissistic power while pretending to reveal the abyss—an artist who practices his art as a "business." Corruption is its most common, most obvious appearance. That is the socialized appearance of the abject... An unshakable adherence to Prohibition and Law is necessary if that perverse interspace of abjection is to be hemmed in and thrust aside. (Kristeva [1941] 1982, 15–16)

It would indeed be almost impossible to deny the power and suitability of this description when it comes to Moreau. Barbara M. Benedict described a mad scientist using absolute

expressions which resemble Kristeva's style: "He is conceited, self-absorbed, deeplyschooled yet contemptuous of conformity; preoccupied by inventions either impractical or destructive; credulous yet learned; alienated from humans and human concerns, particularly sex; male; messily incapable of controlling his own body yet ravenous for absolute power; hungry for immortality" (Benedict 2004, 60). The description is of the eighteenth century representation but these words seem too harsh considering even those earlier representations of the mad scientist. Redfern's suggestion that the description of the abject fits the mad scientist's profile would reflect the complicated nature of the character that he was designed to embody. But Kristeva also writes that the abject is "essentially different from 'uncanninness,' more violent, too, abjection is elaborated through a failure to recognize its kin; nothing is familiar, not even the shadow of a memory" (Kristeva [1941] 1982, 5). It is true that everything in the description quoted above seems to apply to Moreau and his work but there are at least a few scenes in *The Island of Doctor Moreau* that make us reconsider the degree to which abjection can be claimed by either Moreau. These events relate to the recognition of kin, memory, and desire. Moreau does not want to abide by the law and cannot therefore live freely within society and must go to a remote island if he wishes to continue his research. He is aware of his position in the universe and thus does recognize his kin and is aware of the world, culture, and history. A mad scientist has a life "sustained by desire" (6) to attain knowledge, which was defined in chapter seven, but "desire is always for objects" not abjects as defined by Kristeva (6). Next question is whether Moreau became an abject at some point in the story. Moreau's death happens outside of the view of any character or the reader and there is no way of knowing if perhaps the fight between the puma and Moreau could make him a seat of abject. More information is given about Griffin. He dreams about his father, shares emotional memories of his pre-London life, recognizes a girl from the village where he grew up, and so on. The first clue that he might be undergoing a transformation into an abject is when he starts referring to himself in the third person and instead of only using "I," he refers to himself as "he" and "the Invisible Man" (Wells [1897] 2016b, 344). The transformation can be speculated to culminate shortly after Griffin escapes doctor Kemp's residency:

The Invisible Man seems to have rushed out of Kemp's house in a state of blind fury. . . . No one knows where he went nor what he did. . . . One wonders what his state of mind may have been during that time, and what plans he

devised. No doubt he was almost ecstatically exasperated by Kemp's treachery, and though we may be able to understand the motives that led to that deceit, we may still imagine and even sympathize a little with the fury the attempted surprise must have occasioned. (Wells [1897] 2016b, 349)

It is during this time period that Griffin kills a local man, whose body is later discovered, which made "the theory of madness is almost unavoidable" (Wells [1897] 2016b, 351). The murder is described as "a murderous frenzy" (351) due to the dead body's terrible condition which shows that Griffin "beat down his feeble defences, broke his arm, felled him, and smashed his head to a jelly" (351). The narrator, however, speculates that the act might not have been without consequences and perhaps it was this defining moment in Griffin's life that could have made him an abject: "There is a story of a voice heard about sunset by a couple of men. . . . It was wailing and laughing, sobbing and groaning, and ever and again it shouted" (352). This information remains unconfirmed and thus once again it cannot be said that a mad scientist becomes an abject although it can be assumed that upon reaching a breaking point, which cannot be identified in time or place with certainty, both Moreau and Griffin become the abject, "a deep well of memory that is unapproachable and intimate" (Kristeva [1941] 1982, 6).

Some of the previously discussed topics, such as Griffin's perception of life through game, foreshadowed how madness is a significant part of the novel's fabric because Griffin's tendency to maintain the illusion of a game can be viewed as madness. Wells does not shy away from addressing the issue of insanity in *The Invisible Man*. The doctor from Iping, Mr Cuss, warns people to "save yourself! He's gone mad. . . . He's fighting mad! Mad!" (Wells [1897] 2016b, 279). But neither Griffin nor Doctor Moreau represent a man suffering from a medical form of madness and it is their actions that brand them mad because of their consequences on society. Wells himself reacted with hesitation to the 1933 movie adaptation of *The Invisible Man* directed by James Whale because it presented Griffin as being truly mad: "But instead of an Invisible Man, we now have an Invisible Lunatic!" (quoted in Skal 1998, 146). Wells might not have been happy with this particular interpretation of his work but it is not surprising that one could reimagine Griffin as a mad man. Griffin explicitly states that "'I've been mad, I think'" (Wells [1897] 2016b, 302) even though this has largely to do with his anger management issues. Moreau acknowledges the dichotomy of sane/insane by indirectly claiming sanity when he postulates that if Prendick

is like him then he will deem the experiments acceptable; like "a sane man" would (Wells [1896] 2016, 122).

Sometimes, what earns someone a badge of insanity is related to displacement. Dr Nebogipfel, for example, compares himself to an ugly duckling from Christian Andersen:

"Even when I read that simple narrative for the first time, a thousand bitter experiences had begun the teaching of my isolation among the people of my birth,—I knew the story was for me.... From that hour forth, I dreamt of meeting with my kind.... Only once among all those millions of wondering... faces that I met with ... looked *one* upon me as I desired....

I discovered I was one of those superior Cagots called a genius—a man born out of my time—a man thinking the thoughts of a wiser age." (Wells [1888] 2016, 590)

"The Ugly Duckling" story portrays the journey of becoming your own person whose differences can become greatness rather than a negative sign of otherness. Dr Nebogipfel's life journey should have stared at a later point in time which he assumes would be more appropriate for him because humans will presumably evolve in relation to the passing time. In a way, Dr Nebogipfel sees this misplacement as an error of time in LIFE IS A JOURNEY. It is therefore natural that he would build a time machine. In contrast, doctor Moreau does not find any period particularly promising. He is dismissing the work of people who came before him and concerns himself with what he can do now and does not yearn to fit in. Therefore, his only requirement is to find a place where he can work undisturbed now and that only requires finding a remote spot, in this case an island. Moreau is therefore displaced specially. These two examples demonstrate how madness can find an expression in a displacement in time or space.

Container metaphors were previously a part of a discussion concerning spaces but they have their place in addressing madness, too. Mind can be conceptualized through a generic metaphor MIND IS A CONTAINER (Goatly 2007, 15; Lakoff and Johnson [1980] 2003, 46; 148) because the walls of skull that house our brain and mind. Chapter seven briefly discussed Wells's short story "The Door in the Wall" in terms of transitioning between two different worlds and therefore would also fit criteria for spatial displacement. This story also contains an artistic interpretation of the metaphor MIND IS A CONTAINER:
"You say I have success—this vulgar, tawdry, irksome, envied thing. I have." He had a walnut in his big hand. "If that was my success," he said, and crushed it, and held it out for me to see.

"Let me tell you something, Redmond. This loss is destroying me. For two months, for ten weeks nearly now, I have done no work at all, except for the most necessary and urgent duties. My soul is full of inappeasable regrets. At nights—when it is less likely I shall be recognized—I go out. I wander. Yes. I wonder what people would think of that if they knew. A Cabinet Minister, the responsible head of that most vital of all departments, wandering alone grieving—sometimes near audibly lamenting—for a door, for a garden!" (Wells [1911] 2016, 570)

This passage that describes exchange between Wallace and his good friend Redmond has metaphorical interpretations. The walnut which Wallace holds in his hands can stand for a human skull with a walnut seed inside representing the human brain. The cracking walnut then symbolizes the victory of reason over imagination because Wallace has always chosen this world over the magical one. His choices, however, do not bring him happiness and instead crush him. The walnut could also represent a soul which resides in the container and is slowly being crushed under the weight of regrets. The emotional needs and needs of a rational man are crushing Wallace at the same time. His state of mind verges on madness as he succumbs to the pressure of life by having a rewarding career but failing to fulfill his greatest wish. Wallace becomes desperate because he now believes that he might have missed all chances to enter the garden behind the door. The whole story is a paradox realized; what should make him sane is a source of madness and what is seen as a nonsense would bring him happiness and sanity.

Mind's instability and unpredictability can be expressed as natural forces at play which highlight the vulnerability that comes with inability to be shielded from disturbing thoughts. Prendick's inquiry into possible vivisection of men "shot like lightning across a tumultuous sky; and suddenly the clouded horror of my mind condensed into a vivid realisation of my own danger" (Wells [1896] 2016, 141). Prendick would rather avoid having to experience such thoughts but he does not have a choice. Weather allusions in expressions such as "clouded" or "shot like lightning across a tumultuous sky" express a

state of mind and the suddenness with which ideas can emerge. Madness can therefore also occur equally as fast which is a disturbing realization. The awareness of one's situation is accompanied by emotional reaction to this danger. Montgomery's first meeting with Moreau had life-altering consequences and the weather metaphor is also used here to express a state of mind. The image of foggy London was popularized in the nineteenth century (Bargainnier 1978, 21) and fog was commonly used as the proper atmosphere for activities of a sordid nature (22). It obscures Montgomery's vision, hinders recognition of shapes and forms, and Montgomery associates it with a turning point in his life: "It was that infernal stuff led to my coming here. That and a foggy night. I thought myself in luck at the time when Moreau offered to get me off. It's queer'" (Wells [1896] 2016, 126). Montgomery admits that his decision-making skills were impaired which Moreau exploited. He conceptualizes his mental state through the fog that appeared on that particular night in order to justify his decision to follow Moreau. Wells's phrasing reinforces Montgomery's association of fog with his demise by providing it with an agency when he claims that it was alcohol and a foggy night which guided him on this journey and not a sober mind. This ties back to the determinism and chance in Wells's writings because he "believed that few people had either the chance or inclination to change their situation in life" (Haynes 1980, 170).

The Invisible Man also contains reference to mind and weather. It is stated that Griffin didn't see drawbacks related to his experiment because "'to do such a thing would be to transcend magic. And I beheld, unclouded by doubt, a magnificent vision of all that invisibility might mean to a man,—the mystery, the power, the freedom'" (Wells [1897] 2016b, 312). Conceptualizing mind through its relationship to weather and sky can have other meanings than expressing some kind of an influence on decision making. Skies can be clear or populated by clouds, they can be dark or bright, and contrary to a container, they are perceived to be without boundaries. Taking into account the historical relationship between science and culture, this expresses the idea that although knowledge itself has no boundaries, a human mind, which is a container represented by a skull, might not be capable of containing the unlimited knowledge within its physical limits without it negatively impacting sanity. Thus, paradoxically, we perceive our mind and imagination as being both borderless and having limitations. Influenced by euphoria which accompanies the birth of Griffin's vision, he initially experiences the former, too.

Fear is an important factor that is in a close relationship with madness because it can be its cause or a result. The suddenness with which madness can occur is just one factor which causes emotional disturbance. Another underlying cause could be the assumption that madness is potentially infectious. Goatly (2007) took a closer look at metaphors and their connection to ideologies including those related to disease: "Disease is invasion.... This constructs disease of any kind (whether caused by bacteria/viruses or not) as an attack by invaders 'viruses or bacteria,' or foreign bodies from outside" (49). This version of a metaphor was a development of a previous process that saw "disease as imbalance that can be traced back to Hippocrates" (49). Goatly (49) refers back to Sontag who connects the emergence of military metaphor to the "identification of bacteria as agents of disease" (Sontag 1978, 66).⁶² Prendick notes at the end of the novel: "They say that terror is a disease, and anyhow I can witness that for several years now a restless fear has dwelt in my mind—such a restless fear as a half-tamed lion cub may feel" (Wells [1896] 2016, 219). If a mind fails to adapt, it might die, because in the case of madness, the changes brought on by the infection are likely irreversible. That is why Montgomery who "had been strangely under the influence of Moreau's personality" (195) is unable to leave the island and why he dies together with the Beast Folk. It is after Moreau's death that we get to understand how troubled Montgomery is about his place in the universe: "Ten years here! What's it all for, Prendick? Are we bubbles blown by a baby?'... 'What's the good of getting away? I am an outcast. Where am I to join on?'" (195). The infection metaphor is largely represented in The Island of Doctor Moreau and the following examples come from this novel. Its presence is not as overt in The Invisible Man besides its biggest example, the Invisible Man himself, who literary accepts the invasion of a foreign liquid into his body to make himself invisible.

⁶² The metaphorical relationship is also reflected in Wells's short story "The Stolen Bacillus" (1894). This partly humorous story involves an anarchist who steals a sample of cholera bacillus from a bacteriologist with an intent to spread the disease into the city's water system. Fortunately, the bacillus of cholera is actually a new species of Bacterium that causes blue discoloration on the skin of animals. The humorous ending is accompanied by the bittersweet implication that had the bacteriologist not lied about the contents of the glass tube, the results would be catastrophic. The Anarchist has a similar selfish reason as Griffin to unleash the infection: "The world should hear him at last. All those people who had sneered at him, neglected him. . . . Death, death, death! They had always treated him as a man of no importance" (Wells [1894] 2016, 621). When the vial breaks before he is able to infect the water, few drops escape, and he decides to drink what is left because "it was better to make sure" (622). While the story does not include a mad scientist character, the anarchist is essentially a mad man who will abuse science if given the opportunity. "The Stolen Bacillus" concerns itself with the potential danger of scientific research used by a terrorist but at least in this story the tragedy is prevented by terrorist's own mistake.

Infection can also be represented by a metaphor that relates to the binary representation of clean versus dirty. The ship Ipecacuanha is a container and a container can metaphorically represent a human mind as was previously mentioned. In this case, it also represents society because it is an area where people live together, eat together, and form hierarchical relationships; a container is a microcosm, its own world. The captain complains to Montgomery: "'My ship,' . . . 'was a clean ship. Look at it now.' . . . 'Crew,' continued the captain, 'clean respectable crew.' 'I wish I'd never set eyes on your infernal island. What the . . . want beast for on an island like that? Then the man of yours . . . Understood he was a man" (Wells [1896] 2016, 106). The animals and Moreau's hybrid creature who are accompanying Montgomery are a horrific metonymy of Moreau's madness expressed through the function of the metaphor DISEASE IS INVASION and MIND IS A CONTAINER as the filth takes over the ship, the mind, and the microcosm of society.

So far, the representations of an infection that have been described were the negative ones but that is not always the case. Moreau is "itching to get to work again— with this new stuff.... His eyes grew brighter" (Wells [1896] 2016, 121) because he welcomes the infection of knowledge, even though this knowledge is perceived as a disease of madness by others. Prendick suspects Moreau "infected their [Beast Folk's] dwarfed brains with a kind of deification of himself" (149) which is later confirmed by Moreau who confesses to altering their minds through mesmerism; "they had certain Fixed Ideas implanted by Moreau in their heads.... They were really hypnotized" (169). That certain ideas can spread like an infection will come as nothing new to a reader who has grown up with modern media and with an understanding of indoctrination and propaganda.

Emotion can become a visible representation of a reaction to madness which can be conceptualized as ANGER IS HOT LIQUID IN A CONTAINER (Goatly 2007, 245). A scene featuring Prendick comes to mind which describes his reaction to the two men who drown as they fall from a dinghy trying to fight for survival; "the laugh caught me suddenly like a thing from without" (Well [1896] 2016, 99). Laughter itself can be indicative of many emotions, here for example, the situation should not be funny at all because people are dying. The human body is a container which means the laughter and the emotion which is coming from the inside should be a part of a person. Prendick, however, does not automatically identify with the emotion and its representation and calls it "a thing from without." At the same time, he needs to accept that such emotions are trapped in a vehicle,

which is a certain type of a container, which is in the sea, a liquid container itself. Water had some significant connection to a mind that was a little bit mad, "folly, water, and sea, as everyone then 'knew' had an affinity for each other" (Barchilon [1961] 1988, vi). Foucault ([1961] 1988) begins his *Madness and Civilization* addressing this relationship by looking at the Ship of Fools which were common in Renaissance (7). The role of these ships was to ensure that mad men would be kept away from the cities, sailing the seas, which would separate them from the land of the sane (Foucault [1961] 1988, 10–11). Depicting Prendick in a ship with his mad laugh marks his entrance into the magic circle of madness on a device which is as a whole reminiscent of these Ships of Fools.

The following three short stories, "The Moth" ([1895] 1962), "The Red Room" ([1896] 1962), and "In the Avu Observatory" ([1894) 1962] were already discussed in the paper on "Misleading Minds and Playing with Senses in the Works of H. G. Wells" (Briatková 2016) which looked at the progression of fear from the perspective of mind-reading and mind-writing. The stories concern themselves with that which can or cannot be seen while questioning the reliability of human sight and perception. These short stories also incorporate the metaphor SEEING IS KNOWING but they are placed in this chapter because of their interesting depiction of the relationship between madness and fear. The above-mentioned paper focused on darkness and its role as an occlusion factor that interferes with the mind-reading process and how "it creates a barrier and characters cannot extract enough information" (Briatková 2016, 37–38). Here, a greater focus is put on the nature of madness, its representation, and the magic circle.

Wells's "Moth" ([1895] 1962) portrays a tragic end to a quarrel between two scientists and explores madness from a medical perspective, too. The quarrel begins when Pawkins refuses to accept Hapley's classification of a new species and the scientific community alternatively sides with either Hapley or Pawkins. Finally, Hapley writes a valid criticism of Pawkin's paper on Death's-Head Moth, effectively destroying the man's career. Pawkins dies of pneumonia before he can defend his research which consequently sends Hapley into a spiral of madness. The process starts slowly but ends with Hapley being institutionalized. Wells combines a playful undertone with a mysterious one when Hapley sees a strange looking moth during his holidays. He becomes obsessed with catching this species only to find out that he is the only one who can see it. The moth represents Pawkins not only figuratively, but it also starts to resemble him physically as "something about the head and body of the insect became singularly suggestive of Pawkins" (Wells [1895] 1962,

121). The moth is playing with Hapley, teasing him with a false promise that discovering this new genus would bring him fame. But these are all just mind tricks, "'this,' said Hapley, 'is the reverse of mimicry. Instead of a butterfly looking like a stone, here is a stone looking like a butterfly!'" (123). It is a dangerous game to play and Hapley is defeated as he helplessly watches his sanity slipping away. Unlike other stories, this one speaks of madness partially as a medical condition although it seems to be triggered by an unhealthy obsessive behavior not unlike that of a mad scientist proper. Madness is represented by a mostly nocturnal species which flies quickly and can only be caught with difficulty. This is in agreement with Wells's tendency to portray mind and sanity as something that has a fleeting quality; like time that Moreau and Griffin struggle to conquer. Compared to Moreau's Beast Folk, a moth is a normal part of nature which further accentuates that madness can go unnoticed until it is perhaps too late to restore one's sanity. However, like the morphing faces of the Beast Folk, the moth is also a mimicry that stands for madness and transgresses the boundary between play and reality.

In "The Red Room," fear and madness are mostly confined to a single room rather than being portrayed as being ever-present. The walls function like a magic circle where the rules are different than in the rest of the world because it is a place which is supposedly tied to supernatural occurrences. This is symbolized by the repeated use of the phrase "'it's your own choosing'" (Wells [1896] 1962; 211, 212) which functions like a consent before starting a game. The phrase is directed at the character multiple times which is followed by his consent to enter at his own risk. He examines the room and feels uneasy about the shadows which are cast by the candles within the room: "By this time I was in a state of considerable nervous tension, although to my reason there was no adequate cause for the condition. My mind, however, was perfectly clear" (Wells [1896] 1962, 214). He gathers additional candles to improve his situation and invite more light inside. The situation changes after midnight when one by one the candles appear to go out as if by a power of an unseen entity. Fighting back by relighting the candles, the character's actions reveal features that he shares both with the mad scientists and their companions: the frantic effort to reestablish the status quo and escape the grasp of madness and desperation that seem to be getting to him. His fast reactions have an opposite effect than he desires and "the faster he moves through fear, the darker it gets ... fear increases darkness, and darkness increases occlusion which increases fear" (Briatková 2016, 38). The main character is saved from becoming insane by accidentally falling down and losing

consciousness because when he awakes, he is in the care of the custodians. Something can be inferred from this about the boundaries of fear, madness, and a magic circle. The transition to the magic circle is being portrayed as the room's physical separation that is represented once again by the door, similarly as in "The Door in the Wall": "I glanced over my shoulder at the black Ganymede in the moonlight, and opened to door of the Red Room rather hastily, with my face half turned to the pallid silence of the corridor. I entered, closed the door behind me at once, turned the key I found in the lock within" (Wells [1896] 1962, 213). This physical transition is also accompanied by the transition between parts of the day. The character enters the room at night and the whole ordeal ends when he hits his head and opens up his eyes the next day. This existence of this boundary is supported by how differently he perceives the custodians from the previous evening compared to the next day. In the evening he described them in the following manner: "There is, to my mind, something inhuman in senility, something crouching and atavistic; the human qualities seem to drop from old people insensibly day by day. The three of them made feel uncomfortable, with their gaunt silences, their bent carriage, their evident unfriendliness to me and to one another" (212). Now, his impressions are different and he sees the custodians as caring and friendly, the old woman "pouring out some drops of medicine from a little blue phial into a glass" (217) and the man "spoke no longer as one who greets and intruder, but as one who grieves for a broken friend" (217). The character was primed to fear already outside of the perceived physical magic circle because of the expectations and the results from mind-reading the custodians. From a storytelling perspective, such priming also helps escalate the emotion to an almost unbearable degree within a limited number of pages. While the room itself is not haunted by anything other than infectious "fear that will not have light nor sound, that will not bear with reason, that deafens and darkens and overwhelms" (217), it still works as a magic circle because it is only within its confinements where the escalation from a simple fear to a more extreme sanity-taking fear takes place, and within which a rather twisted game of vertigo is being played. In the evening and during the night, the character does not perceive this circle as being his own creation. Instead, it is outsourced to the environment as a possible supernatural entity. It is only in the morning when he realizes that his own mind was responsible for his experiences and how it interacted with the environment. He assigned personality to fear and essentially made it a mind-writer (Briatková 2016, 39). The whole room represents

MIND IS A CONTAINER, with the light symbolizing sanity and dark symbolizing insanity, despite this conceptualization not being rooted in reality because the ghost does not exist.

"In the Avu Observatory" takes a slightly different approach and places the horrific events in the middle of a peaceful environment where excited scientists explore the night sky. The observatory is described as "the little circular building, with its mushroom dome" (Wells [1894] 1962, 50) which is situated in a Borneo forest and surrounded by its wildlife. The hut of the chief observer, his assistant, and the huts that belong to the native inhabitants are located nearby. On the night of the incident, the chief observer Thaddy is sick and his assistant Woodhouse finds himself alone in the observatory. He enters a different but positive state of mind "as he watched he seemed to himself to become incorporeal, as if he too were floating in the ether of space. Infinitely remote was the faint red spot he was observing" (51). Initially, the surroundings are described in a manner that feels calm and mysterious:

now and then voices and laughter came from the native huts, or the cry of some strange animal was heard from the midst of the mystery of the forest. Nocturnal insects appeared in ghostly fashion out of the darkness, and fluttered round his light. (Wells [1894] 1962, 50)

The transition from the peaceful atmosphere is fast paced:

Suddenly the stars were blotted out. A flash of blackness passed. . . .

... and immediately after the great tube shivered as thought it had been struck.... The observatory resounded with a series of thundering blows. The stars seemed to sweep aside as the telescope swung round and away from the slit in the roof. (Wells [1894] 1962, 51–52)

The movement ceases but then speeds up again as Woodhouse decides to light a match out of curiosity to see this unexpected visitor but he can barely get a glimpse before the animal attacks him. The encounter eventually leads to a point when fear escalates in a fight for life until Woodhouse manages to stab the creature with a broken glass. Woodhouse's emotional reaction ascends and then descends. First, "he was horrible scared" (Wells [1894] 1962, 53), "the suspense was beastly" (54) but perhaps due to the loss of blood and the animal being seemingly "in retreat" (54), "somehow he did not feel very frightened or excited now. He felt a curious sinking sensation inside him" (54). He soon faints and wakes up being surrounded by Teddy and the local men who make an observation that it was perhaps one of the local creatures, nothing fantastic or unusual, which attacked him, "a Big Colugo, a Klangutang. . . . It does not often attack man, but I suppose you mate it nervous" (55). The shape of the observatory is another container that can represent a human mind, while the sky above it is a source of unlimited knowledge, and the opening in the roof that allows one to observe it becomes a metaphor for curiosity. Woodhouse eventually describes this near-fatal meeting as a conversation which "was intimate, so to speak, and yet not confidential" (55). If the dome represents the mind then this encounter can be reimagined as an internal dialogue with a dangerous thought, or alternatively, the unforeseeable consequence, a near madness, that can occur when scientific investigation approaches uncharted territories, or a new frontier.

In "In the Avu Observatory," the sanity is represented as the peaceful nature, and to it the insanity is foregrounded in the figure of the unknown animal. In the "Red Room," there is little difference between sanity and insanity during the night, which changes only at the end of the story, when the day is compared to the night. "The Moth" shows a transition of mind that goes from being able to recognize a contrast between sanity and insanity to having trouble conceiving of reality. These last examples offer more illustrations of a phenomena discussed in previous chapters but with a greater focus on the description of fear. We can approach madness not only as a desire to discover or invent what others would not dare to dream about, but also as a momentary experience in the face of fear. The metaphors for mind, weather, and a container create many mental and physical representations of madness. The analysis therefore supports the important role of metaphors in mind-writing and mind-reading processes that in turn influence mind's stability.

11. Revisiting the Mad Scientist

Different versions of mad scientists have become staple figures of written fiction and films in the last two hundred years which can be largely attributed to the figures that emerged in the nineteenth century. Every couple of years, different incarnations become more popular than others, oftentimes reflecting significant historical and cultural changes.⁶³ Currently, the examples of popular versions of a mad scientist would include Doctor Who from the Doctor Who TV show (1963-) or Doctor Manhattan from the critically acclaimed Watchmen by Alan Moore, Dave Gibbons, and John Higgins (1986–1987). Everyone's mind contains certain images of mad scientists⁶⁴ which arise from exposure to fictional or realworld individuals with characteristics such as interest in science or obsessive attitude towards knowledge which is sometimes accompanied by a particular appearance. A good amount of information stems from the representation of scientists in arts as it was surely the case at the end of the nineteenth century.⁶⁵ We are aware of this process on some level but its specifics can be discussed further. Patrick Colm Hogan begins his section on "Construing Character" with a claim that the development and understanding of a character is "perhaps the most obvious use of cognitive structures" (Hogan 2003, 129). The process of creating a character is described as a reciprocal exchange of information in which "authors form characters based on types and we recognize types, or rather, given certain cues, we subsume characters under types" (Hogan 2003, 129). This process can also be applied retrospectively during analysis when we reflect back on the text which results in the study of character types. Similarly, Uri Margolin (2007) writes that "the cognitivepsychological approach views characters as just that: text-based mental models of possible individuals, built up in the mind of the reader in the course of textual processing" (76). When constructing a character, authors can use a direct description that tells us information about the characters, or provide this information indirectly, through their actions or behavior towards others (76). Building a character model occurs in several stages and starts with first identifying "a referring expression in the text as designating a character"

⁶³ These changes vary also cross cultures.

⁶⁴ In 1957, Margaret Mead and Rhoda Metréaux conducted a survey amongst American high school children in order to find out what these young children thought of a career as a scientist. The conclusion was that "this image in all its aspects, the shared, the positive, and the negative, is one which is likely to invoke a negative attitude as far as a personal career or marriage is concerned.... The positive image of very hard, only occasionally rewarding, very responsible work is also on which, while it is respected, has very little attraction for young Americans today" (Mead and Metréaux 1957, 387).

⁶⁵ Perhaps surprisingly, or not at all, it was a non-fictional figure that has influenced the image of a twentieth century scientist; Albert Einstein (Frayling 2005, 19–20).

(Margolin 2007, 78). Second, a mental map is created for this distinct entity (78). Third, information is collected about its properties that "often activate a general knowledge structure stored in long-term memory under which these properties can be subsumed, structured, and integrated into a character model" (78). It is this third stage that is the focus of the literary analysis. The image is stored in our memory and undergoes constant changes as it is being updated by new information. This also means that a certain version of a character has a shelf life because new examples change and update it. The nature of the work at hand was essentially rooted in a conscious reconstruction of this mental map of a character model, namely its third step.

Eventually, our minds will learn to recognize some characters that share similar features and organize them into categories. This opens up a question about prototypes, stereotypes, and archetypes which are terms that are a stable part of literary criticism when it comes to looking at particular character types such as a mad scientist or a damsel in distress. A mad scientist can be described as a prototype, stereotype, or an archetype. The position which is adopted here is mostly intuitive but appears to be sufficient in the context of this work. A prototype is a "schema in which all the defaults are in place" (Hogan 2003, 46) and which is acquired by the process of averaging (46), meaning, a prototype would be an illustrative example. The term stereotype reflects our attitude towards a conventional use of the character across the body of literature. The attitude is predominantly negative because it means that we perceive this character as not undergoing any change. Thus, we see it as being predictable and subsequently perhaps even boring. An archetype is a prototype that has gained prominence by being widely used and recognized. This definition is similar to one described by Frye ([1957] 1973) who sees archetype as "a symbol, usually an image, which recurs often enough in literature to be recognizable as an element of one's literary experience as a whole" (365) and "most easily studied in highly conventionalized . . . naïve, primitive, and popular literature" (104).

Griffin, Doctor Moreau, and Dr Nebogipfel have been discussed thoroughly in the previous chapters. The analysis will now be used to reconsider the mad scientist within the previously established characterization. One of the most encompassing classifications of a scientist figure in literature was done by Roslynn D. Haynes (1994) who composed a list of six types of a scientist in Western literature: the alchemist, the stupid virtuoso, the Romantic depiction, the heroic adventurer, the helpless scientist, and the idealist (Haynes 1994, 3–5). The alchemist, the Romantic depiction, and the helpless scientists are the ones

who are connected to what would be called a mad scientist the most. As the names indicate, this characterization is based on characters' actions or inspirations. The alchemist seeks power "that carries suggestions of ideological evil" (Haynes 1994, 3) and while his early incarnation is that of Faust, for example, Haynes also includes "a sinister biologist producing new (and hence allegedly unlawful) species through quasi-magical processes of genetic engineering" (3). The Romantic depiction is that of a scientist who is "cold, inhuman, and unable to relate to others" (91) while the helpless scientist "has lost control either over his discovery . . . [or] over the direction of its implementation" (3-4). Although neither Moreau nor Griffin use genetical engineering in a modern sense, their process could be considered to be an early stage of those ideas that were later realized in genetic engineering because they both strive to alter the inner make up of a living being and not just its physical appearance. Haynes's goal was not to create an exhaustive list but to bring structure to the studies of the representation of all scientists in Western literature. There is perhaps too much overlap between individual sections which was recognized also by one of the reviewers, W. Warren Wagar (1995, 118). Nevertheless, without an organized knowledge of these types, it would be more difficult to delve into topics at hand which are based on some preconceived notions about these characters.

Haynes's classification is broad because it encompasses any scientist figure in literature. Goodrich (1994) focuses solely on the mad scientist character and describes "three models [that] predominantly influence the convention" (73). Each model is named after its most famous representative of the type, the Modern Prometheus, Faust, and Shakespeare's Prospero (74–76) to which Goodrich adds a fourth one that is represented by Merlin (77). Both the Modern Prometheus and Faust transgress the ethical and the moral (74) and suffer from inflated egos. A mad scientist "tends to envision himself as a titan yet misinterprets or altogether fails to perceive the full moral and ethical dimensions of his experimentations. His failure in foresight radically flaws his power of forethought. The gift's giver and its recipient both suffer unforeseen and mortal consequences" (74). According to Goodrich, in the Modern Prometheus stories "both magic and empirical science are morally ambivalent; one may be equally saved or damned by their application," (74) while the opposite is true for Faust, whose discovery "is not merely ambivalent or presumptuous but damnable ... [and] abuses the secret of creation itself from society's point of view" (74). The Faustian mode is therefore comparably more connected to evil than the Promethean mode, "the devilishness is passed on . . . to his monster" (Goodrich

1994, 74) and "the monster catches his maker's disease" (75). As we can see, this theme of infection is present also in Wells and was discussed in the previous chapter by focusing on the metaphor DISEASE IS INVASION. The third lineage is the Prosperian one which is included due to Prospero's acquired magic powers but it also differs from the other modes because of the important role of the family-like relations (76). The boundaries between these three models seem, however, to once again overlap with each other which Goodrich recognizes (77). He claims that Victor Frankenstein is a representative of both the Promethean and Faustian lineage (74) because he "proves that the power to create is as inherently entropic as the universe" (74) through "ethically questionable spirit" (74). Goodrich's contribution lies in identifying Merlin as the fourth character of the mad scientist lineage because "insanity drives him to separate himself from society, which simultaneously seeks him out for his insight or foresight. Yet his supernatural perception can also be an unwelcome gift, since it repeatedly leads to the discovery of flaws in society (such as adultery) and his re-expulsion from human companionship" (78). As it was in Frankenstein's case, Goodrich elevates Merlin to be a model that incorporates all three previous ones:

He is like Prometheus in his half-divinity, cunning and foresight, his intermediary status as light-bringer to a benighted society and his interminable imprisonment. He is like Faust in his unquenchable curiosity and human imperfection, penchant for tricks, susceptibility to erotic desires and damnable connection to the demon world. And he combines these similarities with the positive example of Prospero, who learns through bitter experience to reconcile his own appetites and attainments with the workings of Providence and the demands of society. (Goodrich 1994, 82)

Goodrich focuses on characters who he thinks contributed the most to what we now describe as a mad scientist character. Naming all types of mad scientist characters by their most famous (or first) representatives might be confusing if they blend together so easily. Toumey criticizes approaches which predominantly focus on character's names in order to

describe mad scientists at large because they offer a "static view" (Toumey 1992, 417).⁶⁶ In particular, he takes a stance against "the simple habit of calling each mad scientist narrative another version of the Faust story" (417).⁶⁷ Wells himself was also vary of a tendency to categorize:

Wells mistrusted labels under which, on the basis of similarity, similar entities were grouped and thereafter tacitly considered to be identical. He then proceeded to argue that this mistrust was a necessary basis of the scientific method which repudiated tradition and authority in any guise.... Unlike orthodoxy in other fields, scientific method makes no claim to infallibility and refuses to rest content with results it has obtained in the past. (Haynes 1980, 37)

Wells's and Toumey's attitudes are similar in a way that they urge us to keep an open mind when it comes to categorization and resist the tendency to follow the categories blindly. Goodrich's classification is characterized by characters' relationship to society and their distance from it which "connotes mental isolation, and implies madness because it removes the figure from behavioral norms and consequences which define 'sanity.' His isolation also encourages the scientist's functional abuse of his abilities" (Goodrich 1994, 83). Wells's mad scientists' behavioral norms, however, stay within the limits of normalcy in terms of how they conceptualize the world, and therefore they remain one of us. Haynes's and Goodrich's analysis both focus on the presentation of scientific powers and the scientists' relationship with the society. It is not surprising that the discussion around science would dominate such classifications and descriptions of the mad scientists. However, this possibly means that we might consider them as characters set in stone which can discourage us from further exploration of the novels unless the research topics are tied to politics, culture, and so on.

⁶⁶ Alan Palmer (2004) issues a similar warning about discussing a character explicitly through their experiences of the world and about the risk is associated with "a tendency to force particular narratives into a straitjacket that does not necessarily illuminate them" (29).

⁶⁷ Toumey's (1992) paper focuses predominantly on the studies of film but his conclusion can be well applied to non-audiovisual media as well. Toumey's list of examples includes "the antirationalist Faust of Spies, others from the conflicted Faust of Marlowe, different ones from the heroic Faust of Lessing, still others from the man of action, that is, the Faust of Goethe" (418).

These classifications of a (mad) scientist character provide an overview but the downside is that they remain bound to certain more recent genres. The character can however also be approached from within the larger scope of literature as was done by Northrop Frye in his major work Anatomy of Criticism ([1957] 1973). The work includes an archetypal approach and establishes a trackable lineage of common genres and characters in literature. Frye organizes the body of literature in a way that evokes mind's ability to interpret the world and its meaning metaphorically. For example, the book interprets the cycle of literary modes as the cycle of seasons in a year because "the fundamental form of process is cyclical movement" (158).⁶⁸ The four main fictional genres (mythoi) feature a main character that defines them. The distinction between each relies on a degree of difference between the hero and the prototype of a standard man: "Fictions, therefore, may be classified, not morally, but by the hero's power of action, which may be greater than ours, less, or roughly the same" (33). Morality plays a considerable role in the classification of mad characters by Haynes and Goodrich. Following Frye, in order for the comparison to work, we must realize that "than ours" requires us to define which powers are prototypical for us in relation to this hero. From the character's own point of view, a mad scientist like Wells's Griffin has powers greater than his human peers due to his genius and invisibility. This might be interpreted as having a power over nature but Griffin suffers at the hands of nature because cold and hunger still affect him and it quickly becomes clear that he does not gain that much advantage by becoming invisible. Towards the end, Griffin has less power than people around him who do not need to fear the weather or hunger because they do not starve to stay invisible due to the amount of time that it takes for food to be assimilated by Griffin's digestive system which exposes his presence. Towards the end, being visible is valued higher than not being visible because it allows villagers to defeat Griffin. Thus, although his power is actually not decreasing because he does remain invisible, he loses the power to control his own faith as he must remain off the main roads and run because everybody is looking for him. Griffin sees himself as a tragic hero which is a feature of alazon, an "impostor, someone who pretends or tries to be something more than he is" (39). They are frequently found also in other Gothic thrillers "with their wild or

⁶⁸ Northrop Frye ([1957] 1973) speaks of "mythoi or generic plots" which are "broader than or logically prior to, ordinary literary genres": the romantic, the tragic, the comic, and the ironic or satiric (162). These mythoi are then metaphorically conceptualized as a one part of a year cycle with comedy being the mythos of spring, romance the mythos of summer, tragedy the mythos of autumn, and finally irony and satire as a mythos of winter (158–239).

piercing eyes and their dark hints of interesting sins" (Frye [1957] 1973, 40) but Frye directly assigns this category to the mad scientists too (40). Frye describes a tragic hero as being "typically on top of the wheel of fortune, halfway between human society on the ground and the something greater in the sky" and gives Prometheus as one example (207). Thus, from Griffin's point of view, the story of his life is that of a hero in a tragedy but it gradually moves towards something else, "the result ... is not tragedy so much as the kind of melodrama which can be defined as comedy without humour" (40). We can observe this in The Invisible Man which includes the elements of grotesque (Beiderwell 2005), "the unexpected, incongruous, and disorienting oppositions.... [That] suspend the reader between a sense of playful exuberance and a sensation of the grimmest terror (116). Similar elements are also found in The Island of Doctor Moreau albeit the playfulness does not have such a significant role. This dissertation advocates for an approach that would look at a mad scientist character first as an alazon because it is already such an established but broad character definition, as shown by Frye, and only then as something else. Alazon being a person who pretends also plays well with the analysis that focused on the conceptualization of wars as games.

Haynes (1980) writes: "This firm belief in the uniqueness of every entity was, in Wells's case, derived from Darwinism. It is arguable that, by dissolving the Linnaean distinctions between categories, and showing that species were located along a continuum, Darwin had demonstrated the inadequacy of categories and labels and thus, by implication, affirmed the uniqueness of every entity" (36). We must therefore ask to which degree are classifications helpful and to which degree do they harm our understanding of a literary character. The harm in being focused on categorization is that the characters might become viewed as static in our eyes which influences their impact on readers who retrospectively pigeonhole them. Nevertheless, that does not mean that there is no place for individual static characters within the story as Wells's mad scientists indeed demonstrate. In terms of saliency, the two most prominent features are knowledge and curiosity which could visually be reimagined as a horizontal x-axis and vertical y-axis respectively. The characters' development with regards to these features can then be placed along these axes. The mad scientist would always be the character which has the most knowledge and most curiosity and this description indeed remains static. The villagers are for the most part very curious but lack the mad scientists' level of knowledge. The companions are a mix of these attitudes. Mr Marvel is closer to villagers however his knowledge and curiosity grows once he is in

possession of Griffin's books. Prendick and Doctor Kemp would be grouped together as having knowledge but their curiosity is limited to stay within the society-approved boundaries which means they would be further down on the x-axis. Montgomery has less knowledge than Moreau or Prendick but a significant amount of curiosity, so he approximates Moreau's position on the vertical y-axis. Such visualization can be done for any character and is subject to change over time. Finally, this leads us to the commentary about the movement of these characters along the axes. Montgomery, Doctor Moreau or Griffin are figures that are formed before the companions encounter them, while the others are more dynamic either passively (the information is forced upon them) or actively (they seek it out). As readers, we are trying to recognize where on the different axis the characters are placed. From this perspective, the mad scientists are static characters and the others are moving closer to them or further apart. The question is whether the analysis of their conceptualization on the previous chapters is enough to be considered as an argument against Wells's weaker characterization, especially since we never gain a direct access to the mad scientists' thought processes. My answer is that the lengthy analysis of the characters' conceptualization, mind-writing processes, and mind-reading of their appearance and behavior give mad scientists as much dynamics and characterization as possible without the direct access to their thoughts.

12. Conclusion

This dissertation explored H. G. Wells's scientific romances and the mad scientist characters by applying theories stemming from the studies of mind and other cognitive approaches. The main target were the mad scientists that appear in the novels *The Invisible Man* and *The Island of Doctor Moreau*. The other short stories were chosen as supplementary illustrations of the topics at hand because they imaginatively portray intense emotions, madness, and obsession. One of the main inspirations for this thesis was Haynes's assessment of Wells's interest in characterization as secondary to the portrayal of ideas which he wanted to express in order to start a dialogue about the future of science and mankind.

The first mad scientist figures were inspired by the alchemists which is why the dissertation began with a brief history of science and its relationship with society. It showed how the themes that are a part of the many mad scientist stories were a consequence of alchemy's arrival in Europe and the subsequent evolution of scientific thought. The most relevant feature of this history is the breaking of boundaries in a physical way, by the distance that these ideas had to travel, and in an abstract way by bringing in new ideas that competed with Christianity. The mad scientists that predate Griffin and Moreau have a stronger connection to alchemy and spiritual evil. Wells's work also does not attack science in a way the satire did with Jonathan Swift's *Gulliver's Travels*, for example. Nevertheless, H. G. Wells had to face harsh criticism too, after the publication of *The Island of Doctor Moreau*. Despite this criticism, he is now known as the father of science fiction, and perhaps few would nowadays find the ideas presented in the novels as shock inducing.

Chapter three outlined the methodology which was chosen in order to approach the minds of fictional characters and which eventually lead to the creation of a conceptual profile of the mad scientists' minds. The methodology relied on the theory of mind and on the process of mind-reading as it was described by Lisa Zunshine. This theory was enriched by Peter Rabinowitz who introduced the accompanying process of mind-writing and complications which make the exchange of mind-reading and mind-writing difficult. Reciprocity of the mind-reading exchanges was for the mad scientists associated with paranoia and for the companions with curiosity, while the mad scientists tried to control when and where the exchange would occur. They also consciously attempted to avoid being mind-read. Multiplicity was significant in *The Invisible Man* due to the number of

villagers, but these exchanges were not always reciprocal. The emotional valence, even when fear and horror were involved, did not result in an incorrect conclusion regarding the mad scientists' moral code. The inquiry is further built on the conceptual metaphor theory which was introduced in *Metaphors We Live By* by George Lakoff and Mark Johnson because metaphor and metonymy were included in the process of mind-reading. The mechanism of categorization and saliency aided in narrowing down the amount of metaphors, metonymies, mind-reading and mind-writing exchanges. Each chapter indeed offered evidence that reading these scientific romances emulates scientific methodology, and specifically, its attitude towards the process of looking for questions and answers which asks scientists to keep an open mind.

The fourth chapter was divided into two main parts for the separate analysis of mad scientists and companions. Griffin and Doctor Moreau are both mad scientists but Wells approaches their stories in a different manner. Griffin's story is told in the form of recollections from several characters who do not spend a lot of time in his presence, while Moreau's story is told by a single person, Prendick, who spends weeks on the island as he is waiting for a ship to take him home. This means that the conclusion based on mindreading cannot lead to a reliable picture of the mad scientist but this is not a problem because the objective truth does not matter if it is not what our minds deduct from the environment. What influences us is what we mind-read, what we perceive to be real.

The chapter focuses largely on Griffin, because the impact of appearance, or the lack of it, is at the very core of the novel. Griffin's outward appearance was shown to be very salient in more than one way and became a significant factor that increased curiosity which turned mind-reading from a subconscious into a more conscious process as the villagers seek to solve the mystery of the strange guest. Bowser assumes that invisibility weakens Griffin as a subject but it was shown that this is not as extreme as Bowser implies. This is supported by the function of the conceptual metonymy THE FACE FOR A PERSON and the use of masks which are a substitute for the face. Griffin is thus able to compensate for features that he has lost. Overall, Wells does incorporate enough contrast into his construction of the appearances but choses to do it in a different manner for each of his three famous mad scientists. In Dr Nebogipfel's case, the contrast is visible on his face, which is partly appealing and partly unpleasant, if not detestable. Griffin's contrast is him being an albino, which is not prototypical, as well as being invisible. Doctor Moreau is

visually the least antithetical character because the contrast is metonymically present in the Beast Folk.

The second part of this chapter focused on companions who are in a position to potentially gain a metonymical function but most of them escape this faith. The only exception is Montgomery whom we meet when he already has this function because he has been exposed to Moreau's ideas and experiments for a long amount of time. The companions also serve as an instrument for saliency and categorization when we compare their appearance to that of the mad scientists. This comparison emphasizes that any person's mind possesses features that can make him go mad if they find themselves in the right circumstances. The mind-reading exchanges, which are focused mostly on outwards appearances, make it clear that the characters in The Invisible Man ask many questions which makes them curious in a similar way as the mad scientists. They even arrange situations to test their hypothesis about the cause of Griffin's strange appearance and behavior. The emotional impact is similar but not identical to horror when the villagers metaphorically and metonymically read Griffin's appearance as something evil. For Prendick, the role is taken over by the Beast Folk who are the closest in becoming a fullfledged horror monster, at least in their impact on Prendick's conceptualization of the world.

The appearance of the Beast Folk in the novel caused a large controversy mostly due to the scandals related to vivisection and the implication of the theory of evolution. Their presence raises questions about the stability of human mind when it needs to deal with the unimaginable. Their physical appearance ties them not only to horror but to its specific subcategory of body horror that emerged in the twentieth century. This is also reflected in Wells's used of sound, and specifically its use in escalating tension and discomfort. Craig Hamilton proposed that Prendick is disturbed because he struggles to comprehend what their uncanny appearance suggests to his mind. The concept that helps Prendick find some balance is supposed to be conceptual blending which is a theory that Hamilton borrows from Gilles Fauconnier and Mark Turner. Hamilton, however, only briefly addresses that the mind does not in fact remain stable which eventually forces Prendick to move out of London after he returns back to society. Taking into account the limits of embedded intentionality (Zunshine), the thesis argues that the process of adaptability was compromised because the situation required Prendick to adapt to more than one severe change. The imperfect process of The Beast Folks' reversal back to their near-animal forms

and the human faces that warped into animal ones back in London force the adaptation process to go back and forth. Human brain might simply not be able to withstand such profound change in concepts.

Eventually, it becomes clear that even though Wells might have intentionally created villagers as embodying features unwanted in the men of the future, they do actually show a great deal of willingness to learn and accept new ideas, perhaps, even more than the educated men, which has been shown on the example of Doctor Kemp. The mad scientists are, however, no exception when it comes to ignorance, which was supported by the usage of the metaphor THEORIES (and ARGUMENTS) ARE BUILDINGS. The evidence of this metaphor can be seen in Doctor Moreau's and Griffin's incomplete arguments and in the eventual destruction of their laboratories. Across the chapters, the laboratory was analyzed using different metaphors and metonymies which showed that it plays a very central role in the construction of the mad scientists' character profile from the conceptual perspective. The laboratory's contents are an occlusion in the mind-reading process which triggers the curiosity once again. Willis sees Moreau's laboratory as a seat of power which is in accordance with the metaphor IMPORTANT IS CENTRAL that is identified by Goatly and which often embodies ideological power, especially when it comes to buildings. The application of the container metaphor, however, allowed to disprove Willis's idea that the position and the layout of the laboratory reflect Moreau's power and superiority because the island and the laboratory negate the effect of the metaphor IMPORTANT IS CENTRAL. Moreau might be in power in a sense that he controls everything on the island but his distance from the society impacts his work negatively. The analysis also led into the incorporation of the laboratory into the long history of (collapsing) castles or buildings of the Gothic and Romantic literature.

The whole dissertation is interwoven with single instances of different metaphors but that are two of them which are overarching the whole narrative. The first of them is the metaphor LIFE IS A JOURNEY an the second one would be WAR IS A GAME. Both of these metaphors are an example of implicit metaphorical models (Steen) because they exist without disturbing our notion of the world. The in-depth analysis of the metaphor LIFE IS A JOURNEY showed that time is a crucial concept which haunts the mad scientists. They are obsessed with it because the progression of time emphasizes their failure to finish the experiment and make it function properly. The feature of travel which is a part of LIFE IS A JOURNEY is integrated to reflect instability and unpredictability. Time and space are fluid

concepts which can be interpreted differently by each character, hence why Wells offers two different recollections of Griffin's arrival, and why Moreau's island is not located on any maps and it is a chain of events out of Prendick's control that lead him to it. The simultaneous existence of quantitative, qualitative, linear, and cyclical time only serves to further strengthen the feeling of uneasiness and uncertainty which can come with an exploration of new territories of knowledge.

The portrayal of space is similarly unsettling when it marks the entry to a magic circle, an area that is under control of the mad scientist. The concept of the magic circle appeared in Johan Huizinga's work on play and culture, *Homo Ludens*, which contemplates on the relationship that these two concepts have with each other. The circle marks the territory of the mad scientists but only Moreau is partly successful in upholding it, while Griffin's magic circle is chaotic and interacts with the magic circle of society which aggravates people even further. The boundaries of the magic circle are represented to be unstable and movable, which is a function not unlike that used for paranoid gaming (Rodriguez). The comprehension of the boundaries depends on the mind-reading activities of characters and the strength of their minds which is why Prendick suffers so much when he returns to London. The tight relationship between play, culture, and ordinary life means that the mad scientists are simultaneously seen as being outside of culture but also as one part of it and one of us. Huizinga's concept of fair play echoes this conclusion when the characters chose to play unfairly in order to defeat Griffin at his own game. This game metaphor was chosen because it seems to be connected to the delusion that the mad scientists have about themselves. Sirabian likewise approaches The Invisible Man through the analysis of game that Griffin plays but emphasizes the freedom which such conceptualization brings him because it relocates Griffin outside of society's strict rules. Arguably, however, Griffin (and Moreau) is not truly free because he is forced to uphold this delusion, doing otherwise would mean to admit defeat.

Roger Caillois described several specific types of games which can also be detected in Wells's scientific romances. The research suggests that the mad scientists perceive that they are in competition, for example with time, but they rarely admit to being influenced by the concept of chance. On the contrary, the companions are very aware that they are participants in such a game which causes them to feel overwhelmed and powerless. The games of mimicry find expressions in the appearance of different characters and the depiction of overall chaos and instability.

Chapter seven was dedicated to the plot structures, specifically Carroll's plot patterns and his question/answer model which is concerned with rhetorical questions that advance the plot. To this I applied Rabinowitz's occlusion and plot patterns to show that Wells's design reflects his interest in the process of discovery, confirmation, and the gathering of evidence rather than in the confrontation with the mad scientists. This ties back to the myriad of questions and observations from the villagers or Prendick. As a result, the narrative is heavily built on suspense which never gets lifted and the works end with a lot of unanswered questions about morality, ethics, and the progress of science.

The penultimate chapter focuses on the definition of madness itself. Madness in this context is not a medical diagnosis but both concepts have in common the attitude that people have towards a person they consider to be mad. Michel Foucault tried hold the mirror up to society and its treatment of the mad but parts of his work were criticized by Lilian Feder who found that his ideas were built on idealizing madness as freedom. The examination has indicated precisely the opposite, that mad geniuses are not set free by their intellect but bound to a delusion in order to avoid admitting defeat. They are unable to conceptualize life around them in a way that would not lead to their deaths. The chapter further looked at Redfern's theory that the description of Kristeva's abject can be applied to doctor Moreau. The mad scientists have memories and desires which would imply that they do not confidently fit this definition. Admittedly, however, such transformation is possible shortly before their deaths but it cannot be confirmed as we never witness them directly and neither do the characters. Wells also seems to have some preference to depict madness with a container, weather, and invasion metaphors. I have also decided to look closer at the short stories "The Moth," "The Red Room," and "In the Avu Observatory" which showed a preference to juxtapose madness to fear while they all had characters that were interested in attaining a certain type of knowledge.

The final chapter reflects on the efficiency of popular classifications of the mad scientist character, namely that of Roslynn Haynes and Peter Goodrich. Both offer a relatively detailed overview of the history of the mad scientists although from a different perspective. Haynes focuses on the depiction of all scientists, not just the mad ones, and Goodrich focuses specifically on the mad scientist figure. Together, these approaches create a genealogy of the mad scientist but their disadvantage is that the individual categories tend to overlap to a great degree, and some of the definitions seem to depend on a subjective point of view, which is not sufficiently recognized and rectified. For example,

Haynes's Romantic depiction is that of an unfeeling scientist but whether a character is devoid of emotions is a matter of perspective. Even Doctor Moreau, who is detached from society, is shown to be emotional which the analysis of mind-reading and conceptual metaphors showed. He fears time and his own failure which we witness when he chases a creature in a blind rage, or when he gets upset if he must cease the work in his laboratory. Alternatively, I suggest that when one approaches the mad scientist, the character should be first recognized as an alazon, a character type that already Northrop Frye assigns to the mad scientist category. The next steps might focus on the nature of delusion, the quality of mind-reading and mind-writing exchanges, and so on. This approach is not aimed to replace the ones proposed by Haynes or Goodrich, but it allows us to see the depth beyond the surface level characterizations based on dichotomies such as good/bad, mad/sane, social/antisocial, emotional/unfeeling.

Wells's novels *The Island of Doctor Moreau* and *The Invisible Man* are built on the representation of fluidity and instability of the concept of time and place, and mental awareness. The readers witness a line of questioning, discovery, and denial, while the boundaries between life and games merge into each other as the minds of ordinary people and mad scientists alike try to navigate their journey through the events. This shows that while mad scientists are relatively static in that they do not undergo a significant change of character, the interaction with them reveals they are complex beings who become overwhelmed by their desire to know more.

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Resumé

Název: Vytváření šíleného vědce v díle H. G. Wellse

Šílený vědec je jednou z nejpopulárnějších postav literárního či filmového světa a tato práce reflektuje jeho znovuobjeveni v dílech britského spisovatele H. G. Wellse z pohledu kognitivních studií, a to zejména těch, které se zabývají analýzou metonymie, metafory, a teorie mysli (theory of mind). Roslynn Haynesová popisuje Wellse jako spisovatele, který se ve svých vědeckofantastických dílech příliš nereflektuje na charakterizaci a vývoj postav, protože se soustředí především na filozofické otázky týkající se budoucnosti společnosti. Ačkoli je tento postřeh výstižný, přesto se dá namítnout, že *Neviditelný* (1897) a *Ostrov doktora Moreaua* (1896) jsou v mnoha směrech v rozporu s tímto tvrzením.

Mary Shelleyová publikovala roku 1818 román Frankestein, který je dodnes považován za začátek moderní historie postavy šíleného vědce. Než mohl ale Frankenstein, Griffin, nebo doktor Moreau vzniknout, musela započít historie vědy, která darovala těmto postavám charakteristické črty jakými jsou šílenost, osamělost, nebo sobeckost. Z tohoto důvodu má práce začíná stručným přehledem historie vztahů mezi vědou a náboženstvím, poznáním a uměním. Z množství dostupných informací jsem se zaměřila na ty, které se pojí k posouvaní hranic poznatelného a k postavení vědce v společnosti. Posouvaní hranic bylo součásti historie vědy, a to hlavně po příchodu alchymie z Číny a arabského světa s inovacemi, mezi které patřili elixír života, homunkulus, nebo metalurgie zaměřená na proměnu běžných kovů ve zlato. Křesťanství se muselo vypořádat i s myšlenkami, které z pohledu církve zpochybnily existenci Boha a jeho všemocnost. Vývoj vědy však neměl komplikované vztahy jenom s náboženstvím, ale i s uměním. Sedmnácté a osmnácté století kritizovalo vědce-alchymisty mezi které se počítá i Faust, který je po Frankensteinovi další významnou postavou šíleného vědce. Jednou z populárních adaptací této německé postavy je divadelní hra Doktor Faustus (c. 1592) z pera dramatika Christophera Marlowa. Později se vědecké myšlenky kritizovaly prostřednictvím satiry, například populární Gulliverovy cesty (1726, 1735) Jonathana Swifta nebo báseň "Slon na Měsíci" (c. 1676) z pera Samuela Butlera. Romantici na přelomu osmnáctého a devatenáctého století odsuzovali zejména domněnku, podle níž věda může vést k úplnému poznání světa. Publikace v devatenáctém století se zaměřily spíše na zahájení dialogu o pozitivním přínosu vědy a potencionálně negativním dopadu těchto myšlenek na jednotlivce a společnost. Wellsovy vědecké romance vznikají na přelomu devatenáctého a dvacátého století, kdy literatura zobrazovala

mnohem více pozitivních než negativních vyobrazení vědců. Podstatou vědecké romance není realistické vyobrazení vědy a experimentů, ale pokračování dialogu o vědeckém bádání.

Tento dialog je součástí textu románů Neviditelný a Ostrov doktora Moreaua, což se projevuje ve vyobrazení různých procesů a rozhovorů se šílenými vědci. Metodologie této práce vychází z kognitivních literárních přístupů, které byly samy ovlivněny zejména kognitivní lingvistikou a teoriemi Noama Chomského. Chomského práce byla víceméně v přímém rozporu s behaviorismem a prací B. F. Skinnera, jedním z jeho nejvýznamnějších propagátorů. Chomského přístup k jazyku a lidské mysli se odráží v teorií Lisy Zunshinové a to konkrétně v pojmu embedded intentionality. Tento pojem se zabývá strukturami jazyka a myšlenek a vzájemné zasazovaní výpovědí do delších struktur. Od Zunshinové pochází také pojem mind-reading, který lze charakterizovat jako variaci na teorii mysli. Teorie mysli je založena na faktu, že součástí komunikace je čtení neboli odvozovaní informací, které jsou druhou osobou pouze implikovány. Tento termín Petr Rabinowitz doplnil jeho protějškem, mind-writing. Výměna informací, které člověk implikuje pomocí mind-writing a dekóduje pomocí mind-reading, není za většiny okolností jednoduchým procesem. Často do něj podle Zunshinové zasahují jiné informace, např. životní zkušenosti jedince, nebo takzvané komplikace, které definuje právě Rabinowitz. Nejvýznamnější roli hraje v této analýze nepochybně takzvaná clona (occlusion), kterou je jakákoliv vědomá nebo nevědomá aktivita skrývající informace. Součástí analýzy mind-reading jsou z mého pohledu i konceptuální metafory a metonymie. Za zrodem konceptuální teorie těchto prvků stojí George Lakoff a Mark Johnson, kteří v roce 1980 publikovali Metaphors We Live By. Tato práce znamenala průlom v teorii metafory a metonymie, které přestaly být vnímány pouze jako součást literatury a rétoriky, ale jako způsob, díky němuž lidská mysl chápe okolní svět. Následné zkoumání literárních díl za pomoci těchto teorií je pak dodatečně ještě filtrováno pomocí kategorizace a takzvané saliency na podkladě výzkumů a textů od Patricka Colm Hogana, Carolyn Mervisové a Eleanor Roschové.

Analýza postav začíná dekonstrukcí prvních střetnutí mezi šílenými vědci a jinými postavami, a to zejména těmi, které formálně nazývám společníky. Tento rozbor potvrzuje, jak různorodé jsou Wellsovy příběhy šílených vědců, co se vyobrazení šílenosti týče. Z analýzy dále vyplývá, že žádný mind-reading nemůže vést k absolutnímu poznání osobnosti vědce. Nejvíc se táto kapitola zaobírá právě Griffinem, protože jeho vystupování je středobodem pozornosti víceméně po celou dobu románu. Tento román ukazuje, do jaké

hloubky vyobrazení neviditelnosti zasahuje bez toho, aby úplně zbavilo Griffina veškeré identity.

V další podkapitole se stručně zaměřuji na postavy společníků, které nám jako čtenářům umožňují bližší přístup k myšlenkám šílených vědců. Mezi šílenými vědci a společníky existuje zjevné silné pouto, které může vést k tomu, že společníci částečně získají funkci Noëlem Carrollem definované horrorové metonymie. Šílenost vědců je také zvýrazněna jejich juxtapozicí k postavám z řad obyčejných lidí, která je založena na podobnosti. Poslední funkcí společníků je tedy také metonymicky reprezentovat člena společnosti, a ponechat tak otevřenou otázku, zda je možné, že šíleným vědcem nebo člověkem se může v tomto významu stát každý z nás.

Metonymickým prvkem je rovněž i laboratoř a konktrétně její různé pomůcky a chemikálie. Tento obsah a vnějšek laboratoře sehrávají roli v mind-reading, což má za následek vzrůstající napětí a zvědavost okolí. Willis vidí Moreauovu laboratoř jako relativní opak laboratoří v Londýně a vyzdvihuje Moreaouvu jednoznační autoritu. Následná analýza, která je založená na vnímání laboratoře a moře pomocí metafory nádoby, mě ale přivádí k pochybnostem ohledně Willsovy interpretace. Na centrální postavení laboratoře nahlížím jako na koncept, který podobně jako dnešní mrakodrapy reprezentuje podle Andrewa Goatlyho jistou mocenskou ideologii. Destrukce laboratoře se i proto následně dá zařadit do historie (rozpadajících se) budov a zámků v kontextu gotické a romantické literatury.

Zvířecí lidé jsou snad nejžhavější téma románu *Ostrov doktora Moreaua*, a proto se jimi zaobírám z velmi specifického pohledu. Jejich existence je pojí k hororovému subžánru body horror, který ve své práci opisuje kupříkladu Jason Colavito. První část se věnuje specifickým zvukovým jevům, které prolamují bariéry fyzické i abstraktní, a jejichž míšení slouží také jako hororová metonymie. Jejich dopad na mind-reading umožnuje klasifikovat zvuk jako komplikaci, čímž se rozšíří Rabinowitzův seznam. V druhé části se zaměřuji na následky konceptualizace Zvířecích lidí, čímž navazuji na práci Craiga Hamiltona, která se nechala taktéž inspirovat výzkumem kategorizace. Hamilton sice za pomoci mechanismu conceptual blending od Gillesa Fauconniera a Marka Turnera vysvětlí, jak se Prendickova mysl vypořádá s existencí Zvířecích lidí, nedostatkem jeho práce je však malá pozornost věnovaná stavu mysli po návratu do Londýna. Z mého rozboru vyplývá, že Prendickova adaptace není stabilní a také ji není možné donekonečna opakovat z podobného důvodu, jako není možné podle Zunshinové do sebe vkládat nekonečné množství informací získaných přes mind-reading. Lidský mozek a mysl nejsou na tyto složité operace vybaveny.
Gerard Steen rozeznává několik druhů metafor v závislosti na jejich vzniku, vývoji, a společenské roli. Metafora ČLOVĚK JE ZVÍŘE patří k modelům sporných metafor (contested metaphorical models) zatímco ŽIVOT JE CESTA je příkladem modelu implicitního. Pomocí této druhé metafory vnímáme život jako cestu za určitým cílem. Bernard Loing označuje Wellse za spisovatele času, což analýza metafor podporuje, avšak poukazuje také na to, že rovněž místo, a nejen čas, je ve Wellsových dílech vyobrazen dynamicky a symbolizuje nestálost. Kapitola se cíleně osobitě zaměřuje na každý prvek metaforického modelu, čímž jsou konceptuální vyobrazení cestování, času, a cílů. Rozbor zpochybňuje, což nepochybně byl i Wellsův zaměř, že šílený vědec je příkladným vědcem v takovém rozměru, jak se on sám vnímá.

Proces cestování má za účel označení hranic, počáteční bod změny, kterou šílený vědec reprezentuje. Čas je v románech nestabilním, fluidním prvkem, což se ukazuje také ve vztazích mezi vědci a časem samotným. Důležitými metaforami k porozumění těchto vztahů patří ÚSPĚCH JE RYCHLOST a ČAS JSOU PENÍZE, které sehrávají opět částečně ideologickou roli, jak píše Goatly. Tyto metafory je možné historicky spojit s industriální revolucí a změnou vnímaní pracovního času. Závěr kapitoly se zaměřuje na vyobrazení aktivity pozorování, která je součástí vědeckého bádání a je implicitně vyjádřena za pomoci metafory SEEING IS KNOWING. Tato část se zaměřuje také na povídky od H. G. Wellse, "Křišťálové vejce" (1897) a "Pozoruhodný případ Davidsonových očí" (1895), ve kterých je cestování a pozorování umožněno za pomoci mimozemských nástrojů a nepřirozených jevů. Zajímavá je podobnost těchto mechanismů a moderního vynálezu, jakým je možnost video hovoru přes internet. Současně poukazuji na paradox, podle kterého je to v *Neviditelném* právě vzdělaný muž, doktor Kemp, jehož mysl má největší problém se vypořádat s Griffinovou neviditelností, a ne občané vesnic, jak by se dalo očekávat.

Druhým výrazným metaforickým systémem neboli konceptem jsou hry. Jako teoretický podklad posloužily pro analýzu studie z antropologie a teorie her. Tou první skupinou jsou práce od Johan Huizinga, Jacques Ehrmanna, a Roger Cailloisa, kteří se zaobírají propojením mezi realitou a herními elementy v kultuře. Tyto teorie pomáhají pochopit do jaké míry je schopen šílený vědec zdeformovat své vnímaní světa, jen aby nemusel odkrýt clonu sebeklamu. Analýza je posunuta ještě dál za pomoci metafory VÁLKA JE HRA a konceptu fair play, který absentuje, což má za následek zničení hranic kultivované společnosti. Zároveň však zpochybňuji míru, do které je existence mimo kulturu pro šíleného vědce podle Roberta Sirabiana osvobozující. Roger Caillois pojmenovává hned

několik typů her, které jsem následně identifikovala v textech. Ze zkoumání se dá odpozorovat, že z pohledu šílených vědců převládá typ soutěže, zatímco společníci vnímají nejvíc hry založené na náhodě, a až pak ty založené na soutěžení. Své postavení v soutěži navíc šílení vědci vnímají jako suverénní. Hry vertiga (závrať) a mimikry jsou také důležité a týkají se často pocitů chaosu a prezentace vizáže.

Teorie magického kruhu od Johana Huizingy je doplněna kritikou od Hectora Rodrigueze, a v jistém smyslu navazuje na předchozí konverzaci ohledně metafory nádoby. Tento abstraktní kruh zahrnuje prostředí, které se dá vnímat jakoby pod nadvládou šíleného vědce, ale pouze v širším smyslu, protože ne každý vědec má skutečnou kontrolu nad děním v magickém kruhu. Zatímco kruh doktora Moreaua je relativně stabilní, Griffin je pouze vizuální reprezentací prezence magického kruhu, ale postrádá skutečnou kontrolu. Společnost má také svůj magický kruh, který je znatelný zejména v průběhu oslav a svátků. Griffin svým konání naruší slavnosti v městě Iping, čímž zničí elementy hry, které lidem pomáhají zapomenout na útrapy běžného života, a zpečetí tak z pohledu běžných lidí svoje postavení mimo společnost.

Jednu kapitolu věnuji příběhu za použití dějových struktur a rétorického modelu otázek/odpovědí popsaném Noëlem Carrollem. V aplikaci zacházím do větších detailů za pomoci Rabinowitzovi clony a vzorů, které vycházejí z mind-readingu a mind-writingu. Z této analýzy vyplývá, že i v rámci těchto narativních konstrukcí Wells imituje vědeckou metodu. Fyzická konfrontace se samotným vědcem tvoří jen velmi malou až nevýznamnou část románů. Nejdůležitějšími částmi jsou ty, které Carroll nazývá objevovaní a konfirmace nebo sbírání důkazů. Ze závěru lze odvodit, že Wells nikdy nepřipouští, aby napětí (suspense) vyústilo v úlevu, i když je šílený vědec po smrti.

Diskusi o konceptu šílenství a jeho vnímání jsem záměrně ponechala na konec práce, protože se jedná o diskusi, která se zčásti zakládá na argumentech z předcházejících kapitol. Šílenství je pojmem, který nese v tomto kontextu jiný význam než v tom medicínském, a přesto sdílí některé jeho črty, zejména to, jak je někdo, kdo je nazván šíleným, vnímán svým okolím. Michel Foucault se kromě reakce na institucionalizaci zaměřoval na vztah společnosti k šílenství, za co byl kritizován kupříkladu Lillian Federovou, která ho viní z idealizace šílenství jako prostředku svobody. Navzdory těmto různým názorům lze konstatovat, že je Foucaultův přístup na místě, zejména co se týče šílených vědců. Moderní čtenář může mít tendenci vnímat tyto postavy jako okolím nepochopené jedince, kteří se narodili v nesprávný čas (Stilesová) nebo se nacházejí na nesprávném místě jako Moreau a

Griffin, kteří opouští velkoměsto, aby se mohli věnovat svým experimentům. Součástí definice šílenství tak může být forma přemístění (displacement) v čase nebo prostoru. Šílenství může být dále chápáno v spojitosti na abjekt Julii Kristevové, který do definice šíleného vědce zařazuje Nick Redfern. Moje analýza tento závěr částečně zpochybňuje, i když připouští, že se šílený vědec abjektem stát může, ale pouze krátce před smrtí. Wells používá ke zahájení dialogu o strachu a šílenství také metafory nádoby, počasí, a invaze. Metaforu invaze přebírám od Goatlyho, který se inspiroval Susan Sontagovou. Kapitolu uzavírám návratem k metafoře vidění a k emocí strachu, která může vyústit v šílenství ve Wellsových povídkách "Mol" (1895), "Červený pokoj" (1896) a "Hvězdárna v Avu" (1894).

Závěrem dizertace je návrat k definici a kategorizaci šíleného vědce na pozadí Wellsovy konstrukce této postavy. Tato práce se snaží prokázat, že šílení vědci jsou jako postavy dynamičtější a komplikovanější, než je zřejmé z klasických kategorií, které sestavili Roslynn Haynesová nebo Peter Goodrich. Oba pohledy jsou naprosto akceptovatelné a přínosné, protože vykreslují genealogii šíleného vědce, můžou však zároveň negativně ovlivnit interpretaci individuálních případů této postavy. I z tohoto důvodu se navracím k terminologii ze studie Anatomie kritiky Northropa Frye, a to konkrétně k archetypu alazona. Chápaní šíleného vědce pomoci této relativně široké definice je prospěšné, protože se zaměřuje na sebeklam a tragikomický konec postav. Důvodem, proč by tato definice mohla být preferována je ten, že nás nenabádá ke škatulkování tak, jako některé další kategorizace. Na úplný závěr se vracím k tomu, zda je vhodné nazírat na postavu šíleného vědce jenom jako na postavu statickou. Z mého pohledu je tento pohled částečně správný, protože jako čtenáři nikdy nemáme přímý přístup ke vzpomínkám šíleného vědce, a proto se zdá, že je tato postava neměnná a s jednoduchou charakterizací. Navzdory tomu je mind-reading těchto postav velice dynamický, plný domněnek a informací ze života šíleného vědce, což jim dodává jistou hloubku, i když nám tyto informace nikdy nesdělí samotný vědec.

Annotation

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Abstract:

This work focuses on the mad scientists in the scientific romances of H. G. Wells, namely Griffin from The Invisible Man (1897) and Doctor Moreau from The Island of Doctor Moreau (1896). The analysis aims to show how profoundly they can impact the minds of other characters in the fictional world which enhances their characterization that Haynes describes to be weak. The readers do not have direct access to Griffin's or Moreau's thoughts and intentions and rely on the narration and recollections of other characters. The profile of the mad scientist thus depends on information which is received from the process of mind-reading as it was defined by Lisa Zunshine. The methodology includes the conceptual approach to metaphor and metonymy which was introduced by George Lakoff and Mark Johnson. The dissertation incorporates metonymy and metaphor as processes that influence mind-reading and can sometimes act as an occlusion which is one of the complications defined by Peter Rabinowitz. The conceptual theory and the definition of horrific metonymy by Noël Carroll helps us approach the laboratory as an important concept which also metonymically represents the mad scientist. The Invisible Man was received positively at the time of its publication but The Island of Doctor Moreau was seen as a work that should never have been published due to its depiction of vivisection and the human-animal hybrids. One of the metaphors in this second novel is MAN IS AN ANIMAL whose variation is integrated into the novel as a twisted vivisection which creates the Beast Folk. This metaphor belongs to a group which Gerard Steen defines as a contested metaphorical model. Both novels contain a plethora of other metaphors but the two main ones are LIFE IS A JOURNEY and WAR IS A GAME. The features of the first metaphor are

journey, time, and a goal, which can be considered to form a certain ideology. Works of Johan Huizinga, Roger Caillois, or Hector Rodriguez assist in the exploration of the conceptualization of game in the mad scientists' minds. The conclusions from chapters are a testament to Wells's design that imitates scientific methodology that he valued greatly. The penultimate chapter focuses on the definition of insanity itself and its depiction through the weather, container, and invasion metaphors which induce fear and panic, too. Finally, the last chapter proposes to revisit the definition of alazon which is broad and yet might be better suited for approaching the mad scientist because it is less static compared to some other classifications. Haynes's and Goodrich's approaches that create a genealogy of the mad scientist have many overlapping features which might be simultaneously confusing and binding. Griffin and Moreau are characters who do not significantly develop throughout the novels but the effect they have on mind-reading (which includes the effect of conceptual metaphors) lends them a certain depth and individuality.

Anotace

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Abstrakt:

Tato dizertační práce se zaměřuje na analýzu děl a postav šílených vědců anglického spisovatele H. G. Wellse, a to zejména Neviditelný (1897) a Ostrov doktora Moreaua (1896). Cílem analýzy je prokázat, že navzdory nepřímé charakterizaci, kdy nám informaci o myšlenkách a pocitech vědce nikdy nesdělí on samotný, je možné tuto postavu vnímat jako dynamickou a s jistým osobnostním profilem. Tento profil je budován ostatními postavami přes mind-reading, jak ho definuje Lisa Zunshinová. Metodologie zahrnuje kognitivní přístup k metafoře a metonymii, který byl původně navrhnut Georgem Lakoffem a Markem Johnsonem. Metafory a metonymie považuje tato práce za pevnou součást procesu mindreading, který je občas komplikován takzvanou clonou, kterou definuje Petr Rabinowitz. První část analýzy samotných textů tvoří rekonstrukce dojmů postav přes mind-reading a ukazuje, jak funkční je vzhled při tvoření profilu a identity postavy. Za pomocí metafory je možné laboratoř chápat jako koncept, který je pomyslným centrem dění, protože metonymicky reprezentuje vědce. Román Neviditelný byl kritiky přijat pozitivně, ale Ostrov doktora Moreaua byl považován kvůli tématu a jeho zpracováním za literární ohavnost. Důvodem pro toto pozdvižení bylo téma evoluce, ale také téma samotné vivisekce. Jednou z metafor v tomto románu je ČLOVĚK JE ZVÍŘE, která je v něm zasazena i jako její reálná fyzická variace, když se těla zvířat za pomoci vivisekce míchají s těmi lidskými. Tato metafora je jedním z příkladů sporného metaforického modelu, který pojmenoval Gerard Steen. Kromě ní se však zkoumání z velké části zaměřuje na metafory ŽIVOT JE CESTA, a VÁLKA JE HRA. První metafora je složena z prvků, jakými jsou cesta, čas, a cíl, které hrají v textech důležitou, až ideologickou, roli. Metafora a teorie her od Johana Huizingy či

Hectora Rodrigueze je rovněž použita pro pochopení způsobu, jakým vidí svět samotný šílený vědec. Závěry ze všech kapitol jsou důkazem toho, jak Wellsův styl psaní a konstrukce vyprávění imitují vědeckou metodologii, která je definovaná neustálým tázáním se po tom, jak funguje svět. Předposlední kapitola je věnovaná definici šílenství a jeho vyobrazení v metaforách nádoby, počasí, a invaze, které často doprovází strach a panika. Závěr dizertace se zamýšlí nad tím, zda nejsou některé kategorizace (Roslynn Haynesová, Peter Goodrich) šíleného vědce matoucí nebo statické. Návrat k definici šíleného vědce jako alazona se nabízí jako vhodná alternativa právě díky široké aplikaci této definice napříč literaturou. Griffin a Moreau jsou sice z jistého pohledu postavy neměnné, ale mind-reading a analýza metafory a metonymie jim dávají dostatečnou hloubku a jedinečnost.