The Scientific Supernatural in the *Fin de Siècle* Novel

By

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Dedication

To my grandmothers:

Norma Faye Allee

1934 - 2018

Growing up, your house was home: bikes in the garage, a desk for homework, and the table where we ate family dinners before heading home to bed.

Viola Ramona Garcia Magaña

1925 - 1999

No es más que un susurro de memoria, Abuelita, pero recuerdo que me dijeron una vez que solías jactarse ante tus amigos de que tus nietas iban a ir a la universidad. Aunque desconocidos te quitaron de nuestras vidas antes de que tuviéramos edad suficiente para que vieras en lo que nos hemos convertido, tenías razón. Una abogada, una profesora de ingeniería, yo, una madre y un ama de casa, y una estudiante de secundaria (¡además de todos los muchachos!): sus nietos tienen las oportunidades que soñaste para nosotros.

It's no more than a whisper of a memory, Abuelita, but I remember being told once that you used to brag to your friends that your granddaughters were going to go to university. Though strangers took you from us before we were old enough for you to see what we have become, you were right. A lawyer, an engineering professor, me, a mother and homemaker, and a high school student (plus all the guys!): your grandchildren have the opportunities you dreamed for us. (My translation.)

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Abstract

Nineteenth-century literary criticism has mainly focused on lasting scientific advancements, at the expense of a more comprehensive history, when examining the legacy of science in fiction. Yet there were many sciences that were considered plausible during the nineteenth century which have since been disproven and the ideas relegated to the realms of pseudo-science. This thesis examines novels by Bram Stoker, Marie Corelli, Florence Marryat, and Arthur Machen with attention to the *scientific supernatural*. Throughout this thesis, the term "scientific supernatural" will be used to reference mid- to late nineteenth-century scientific investigations conducted by various types of scientists into the supernatural and the set of phenomena that were the subject of these investigations, regardless of the twenty-first century status of the topics under investigation. Phenomena such as mesmerism, clairvoyance, and Spiritualism, which seem to be supernatural in their interactions with material aspects of the world or the supernatural realm, were studied by scientists with the understanding that they were engaged in scientific pursuits. "Scientific supernatural" is, therefore, intended to represent the scientific inquiries into the supernatural and only the areas of study that were, for a time at least, accepted as scientific by some scientists and often by society at large, evident in scientific periodicals, books, and personal documents, into the fin de siècle. Many supernatural elements in literature at the end of the nineteenth century are representations of phenomena that were being investigated by contemporary scientists and, as such, are represented within fiction as having a claim to scientific validity. This term represents the status of the various phenomena in the historical moment where the supernatural realm seemed to be the next place for science to explore.

This thesis is separated into an introduction and three chapters that discuss different depictions of the scientific supernatural. The Introduction surveys criticism of the scientific supernatural and of science in connection with late nineteenth-century literature to lay a foundation of the historical context for this science and establish a gap in current criticism of science and the *fin de siècle* novel. Chapter 1 explores two different representations of Spiritualism and the way the authors use science to support the worldviews taught through their fiction. The novels discussed in Chapter 2 deal with observed effects of the supernatural in the material world and the problem of explaining these occurrences when science had no certain explanation for them. Chapter 3 examines fictional depictions of scientific experimentation that represent the author's hope that

scientific evidence of the supernatural will be uncovered. In each case, the authors suggest there is something yet to be discovered which will allow science to explain the supernatural as definitely real and capable of interacting with the material world.

Fictional representations of the scientific supernatural such as those discussed throughout this thesis reveal a wider understanding of science at the *fin de siècle* than has previously been addressed in literary criticism. As such, this thesis suggests the need for a broader critical understanding of science, and scientific potential, that mirrors that of *fin de siècle* English conception of science to more fully inform the scientific legacy left in fiction of the time.

Introduction

Scientific History and the Scientific Supernatural in Fiction

In 1875 Alfred Russel Wallace published *On Miracles and Modern Spiritualism*, which defended Spiritualism, mediums, and other "miracles" in three essays that provide extensive support for the various phenomena from Wallace himself and excerpts from others whose opinions he deemed respectable and worthy of consideration. Wallace intended that these essays be read as a part of his wider research, not in conflict with his scientific work, as the title page introduces him as: "Author of 'the Malay Archipelago,' 'Contributions to the Theory of Natural Selection,' Etc., Etc." In the second essay of this volume entitled "The Scientific Aspect of the Supernatural," Wallace proclaims:

It is often asserted by the disbelievers in these phenomena, that no scientific man has fully investigated them. This is not true. No one who has not himself inquired into the facts has a right even to give an opinion on the subject till he knows what has been done by others in the investigation; and to know this it will be necessary for him to read carefully, among other works, "Hare's Experimental Investigation of the Spirit Manifestations," which has passed through five editions. It is a volume of 460 closely-printed 8vo. pages, and contains, besides the details of his experiments, numerous discussions on philosophical, moral, and theological questions, which manifest great acuteness and logical power. The experiments he made were all through private mediums, and his apparatus was so contrived that the medium could not possibly, under the test condition, either produce the motions, or direct the communications that ensued. (Wallace 88-89)

The co-discoverer of natural selection not only understood various aspects of the supernatural as real and testable but also argued for it with the same rigour as his research in biology. Throughout the book, he lists other scientists, engaging with their experiments and publications and providing evidence that his interest in scientifically investigating the supernatural was more than a private guilty pleasure, hidden away from his public life as a ground-breaking scientific researcher. Wallace was a man devoted to scientific investigation, including scientific study of the supernatural or, to use his word, miracles.

Nineteenth-century literary criticism examining the legacy of science in fiction has mainly focused on lasting scientific advancements, at the expense of a more

comprehensive history that would account for the *fin de siècle* scientific interest in the supernatural. Yet there were many sciences that were considered possible during the nineteenth century that have since been disproven and the ideas relegated to the realms of obscurity and pseudo-science. These lost sciences should help to shape the way twenty-first century readers understand the novels in which these sciences are central to the story. The novels discussed in this thesis, *The Dead Man's Message* (1894), *A Romance of Two Worlds* (1886), *The Blood of the Vampire* (1897), *The Lair of the White Worm* (1911), *The Soul of Lilith* (1892), *The Great God Pan* (1894), and *The Jewel of Seven Stars* (1903), each engage with specific expectations that science would provide a way to understand the supernatural at the *fin de siècle*.

In the nineteenth century, ideas regarding who could practise science were slowly changing as new types of scientists were creating spaces for themselves in the field. Bernard Lightman suggests that nineteenth-century scientists can broadly be categorised by historians as: the "clergyman-naturalist and clergyman-academic" (*Popularizers* 40); gentlemen of science generally educated at Oxford or Cambridge (6); middle-class "scientific naturalists" or "evolutionary naturalists" (6); and, as he argues throughout his book on the subject, popularisers who presented scientific discoveries to the general public. Despite being readily accepted as scientists by modern critics studying the state of science in the nineteenth century, members of the growing middle class of scientific naturalists were fighting for their place both in scientific discovery and respectability, not only carving out a place for their work but also arguing that they were the correct people to police the discipline. Lightman explains:

[m]iddle-class Young Turks of science like Thomas Henry Huxley and John Tyndall, who came from outside the Oxbridge environment, began at the middle of the century to vie with the gentlemen of science for the leadership of the British scientific world. At the same time, they engaged in a debate with the Anglican clergy over who would provide the best leadership for modern British society. (*Popularizers* 6)

With the growing influence of middle-class scientists, Lightman notes, "professors and scientific society members were, more and more, practicing men of science rather than wealthy amateurs or aristocrats. The 'young guard' of science in the 1850s, men such as Huxley, and Tyndall, publically championed the professionalization of science" (*Popularizers* 40). Nonetheless, this battle had not yet been won by the end of the nineteenth century and clergyman, gentleman, and professional scientists coexisted in an

uneasy association as no one scientific subfield was the definitive territory of a specific type of scientist.

Building on the legacy of the eighteenth-century Enlightenment, the early Victorian period saw growth in many of the branches of science, especially biology and physics. Charles Darwin's 1859 *On the Origin of Species* provided the basis for the theory of natural selection and evolution that would be further investigated throughout the century. Joseph Lister experimented with theories relating to infection that led to new ideas about germs and the cause of disease. Michael Faraday's studies of chemistry and physics involved the discovery of chlorine and carbon and shaped later experiments relating to electricity and magnetism. Lord Kelvin, known for his laws of thermodynamics and discovery of the temperature of absolute zero, was knighted for his contributions to physics. These early and mid-century discoveries both connected aspects of the world that were previously unexplained and opened up new areas for scientific investigation.

Beginning in the mid-nineteenth century, scientists also experimented with the possibilities of proving the existence of the soul, the supernatural realm, and the supernatural in general. Several well-respected scientists with ground-breaking discoveries to their credit dabbled in experiments concerning the supernatural at one point or another in their lives. Alfred Russel Wallace, Sir William Crookes, and Pierre Curie, for example, believed that spirits, ghosts, and / or Spiritualism could be scientifically proven true. In *The Other World: Spiritualism and Psychical Research in England, 1850-1914* (1985) Janet Oppenheim documents Wallace's interest in Spiritualism. She states:

Wallace's approach to science became imbued with spiritualist assumptions because he rejected the validity of any dividing line between science and spiritualism. [...] Wallace never abandoned his faith in the prevalence of law throughout the universe, and he maintained that the truths of spiritualism, far from violating natural law, provided a more accurate definition and a fuller conception of it. (Oppenheim, *Other World* 320)

The scientists researching Spiritualism saw their research as a next step for science. Christine Ferguson posits a potential reason for some scientists' interest in the supernatural when she suggests, "[o]ne might argue that physical scientists such as Oliver Lodge, William Crookes, Camille Flammarion and Johann Zöllner were more open to the spiritualist hypothesis by virtue of their awareness of the operations of unseen but potent

physical forces" ("Recent" 23). In a biography of the Curies, Denis Brian explains that, "he [Pierre] and his brother, Jacques, were interested in the paranormal and open-minded on the subject. Spiritualism was in its heyday and several reputable and noted scientists were seriously testing mediums and their purported connection with the dead, while conceding that many were frauds" (67). Additionally, respected doctors claimed to successfully practice mesmerism, despite its roots in animal magnetism and the theory of a magnetic fluid in humans that can be manipulated with "passes" (the mesmerist moving his hands just above the surface of the skin of the mesmerised).

These research interests in the supernatural were fated to be relegated to the realm of pseudo-science in the twentieth century, resulting in the fracturing of the legacies of men such as Wallace and Crookes. After all, Crookes did publish articles like "Experimental Investigation of a new Force" (1874) in which he states: "These experiments appear conclusively to establish the evidence of a new force, in some unknown manner connected with the human organisation, which for convenience may be called the Psychic Force" in scientific journals like the *Quarterly Journal of Science* (quoted in Luckhurst, *Invention* 26). The histories of scientists such as these is, therefore, decisively split, with material about lasting scientific discovery (natural selection, discovery of elements, etc.) in science books and a sentence or two about their hope for the supernatural in books tracing the study of the paranormal or occult.

These serious scientists, however, are representative of their culture, their society, and their time. The belief that science could explain the supernatural was not, for many, an attempt to reduce the supernatural through scientific explanation but a desire to discover an additional way of accessing reality that could be quantified and adequately documented. The world was being defined in new ways with each additional discovery and people hoped that one of the next discoveries would prove to explain the existence of the supernatural. Although no longer held as scientific fact, scientific theories relating to things such as mesmerism, clairvoyance, mediumship, and other phenomena now considered fringe, paranormal, pseudo-science, held the same scientific potential as x-rays and radiation during specific periods of the nineteenth century.

Modern scholars have begun to break down the artificial barriers that categorise historic scientific investigations, arguing that the lines are not as definitive as it appears to the twenty-first century critic looking back. In his discussion of the connections between Spiritualism and science, Richard Noakes observes:

[t]he most sophisticated historical analyses of nineteenth-century phrenology and mesmerism embody a further shift away from traditional historiography of 'pseudo-sciences': they regard boundaries between, on the one hand, 'normal', 'orthodox' and 'mainstream' sciences and, on the other, the 'pseudo', 'heterodox' and 'marginal' sciences as boundaries that cannot be taken for granted and whose construction requires historical analysis. ("Sciences of Spiritualism" 26-27)

The latter set of terms in Noakes's list draws attention to the fact that the line between lasting nineteenth-century scientific discoveries and those which have been lost is complicated. Additionally, recent studies of scientific history including *Newton's Apple and Other Myths About Science* (2015) call into question twenty-first century understandings of scientific history. The book includes essays on the comparison between Wallace's and Darwin's explanations of evolution (Michael Ruse), generalisations regarding the relationship between religion and science (Peter Harrison), and the line between science and pseudo-science (Michael D. Gordin) in order to debunk common myths regarding scientific history.

Sciences that attempted to explain the supernatural have been called many things but each term is incapable of fully representing the complexity of the historical hope for scientific proof of the supernatural tied to the Victorian conception of these lost sciences. Although a twenty-first century audience will regard mesmerism as pseudo-science, it is anachronistic to project this assumption onto people who lived in a period before it was established fact that the passing of hands over another's body cannot manipulate the other's will. As this thesis will discuss, Victorian scientists of high calibre investigated Spiritualism and believed that they were on the path to proving the existence of a supernatural realm. That these pursuits did not come to fruition does not mean that the scientists were engaged in pseudo-scientific endeavours. Rather, it means that they were involved in the scientific process (as relevant in their time) and that their experiments have since been disproven. As such, a more useful term for these Victorian sciences that investigated the supernatural is *scientific supernatural*.

Throughout this thesis, the term "scientific supernatural" will be used to reference mid- to late nineteenth-century scientific investigations conducted by various types of scientists into the supernatural and the set of phenomena that were the subject of these investigations, regardless of the twenty-first century status of the topics under investigation. Phenomena such as mesmerism, clairvoyance, and Spiritualism, which

seem to be supernatural in their interactions with material aspects of the world or the supernatural realm, were studied by scientists with the understanding that they were engaged in scientific pursuits. "Scientific supernatural" is, therefore, intended to represent the scientific inquiries into the supernatural and only the areas of study that were, for a time at least, accepted as scientific by some scientists and often by society at large, evident in scientific periodicals, books, and personal documents, into the *fin de siècle*. Many supernatural elements of literature at the end of the nineteenth century are representations of phenomena that were being investigated by contemporary scientists and, as such, are represented within fiction as having a claim to scientific validity. This term represents the status of the various phenomena in the historical moment where the supernatural realm seemed to be the next place for science to explore.

The term "scientific supernatural" would not have been as paradoxical to the late nineteenth-century reader of the novels discussed in this thesis as it sounds to the twenty-first century reader familiar with scientific methods and areas of modern study. The idea that the supernatural could be explored scientifically was held by people of all different walks of life and educational background in the late nineteenth century. What the following chapters will establish is that there were different ways to represent the scientific supernatural, which depicted either science or the supernatural as the preeminent aspect of these phenomena. The issue is then one of ultimate *authority* within the scientific supernatural and whether it rested with science or the supernatural.

Scientific supernatural phenomena were understood by scientists as "supernatural" in the sense of being beyond the laws of the physical world. Whereas radioactivity, for instance, is no longer understood as supernatural and was coming to be fully understood scientifically in the sense that it can be explained according to the physics of the physical world, nineteenth-century scientists investigating the supernatural did not necessarily expect to reduce what *seemed* to be supernatural phenomena to natural phenomena. Rather, as will be discussed, there was a genuine belief by some scientists that science itself would prove the existence of a realm beyond the physical, material world and would be able to investigate the influence of another realm on people and events in this world.

There were many authors at the *fin de siècle* whose fiction relied on their contemporary scientific hope for evidence of the scientific supernatural. When a novel includes phenomena which can be classified as scientific supernatural, the anticipation that science would uncover evidence of the supernatural must be recognised as part of the

historical context despite the twenty-first century classification of these phenomena as pseudo-sciences at best and elaborate trickery at worst. A twenty-first century story featuring a mesmerising monster is drawing from literary traditions of dangerous figures with the ability to manipulate another's will. A nineteenth-century novel with a sinister mesmerist, however, references a real fear of the mesmeric gaze based in a scientific understanding of mesmerism and the dangers associated with it. The continued interest in the scientific supernatural meant that stories shaped by these topics were likely to be popular, something that was hugely important for authors who needed the income from book sales. Borrowing from the authority of science in these novels allows the authors to craft fantastic stories with seemingly fanciful elements that were popularly believed to be possible.

Publishing and Genre at the Fin de Siècle

The combination of the advances in the process of printing and the abundance of printed books allowed for timely novels that relied on current concerns to flourish at the end of the nineteenth century, including those in which the scientific supernatural features. Marie Corelli rose in status to what Annette Federico calls "the Queen of Best-Sellers" (*Idol* 14). H. R. Haggard wrote his "imperial gothic" novels, such as *She* and *King Solomon's Mines*, (Pykett 209) and Stoker tried his hand at different types of novels. Richard Marsh wrote a variety of novels and short stories dealing with the horror of the East (*The Beetle*), mystery (*The Seen and the Unseen*), and scientific progress (*A Spoiler of Men*). Each of these novels was absorbed in a broad "fiction" category (discussed below). It is in this environment that novels of the scientific supernatural thrived: scientists were studying the supernatural with raised expectations and authors experienced new freedoms in how their work was published and set before the reading public.

The *fin de siècle* marked an extensive growth in the publishing industry in both numbers and the types of books that were published, made possible by the advancement of printing technology. The early nineteenth century saw the invention of new papermaking machines and presses; during the middle decades there were developments in moulds and printing processes as well as type casting; and in the 1880s and 1890s, the development of "hot metal type-composing machines" occurred (Eliot 58). These advancements to the physical processes of book-printing made it possible for the growth in the industry in general.

The number of books being published reached increasing record highs towards the end of the nineteenth century. In *Victorian Fiction: Writers, Publishers, Readers* (1995), John Sutherland examines the statistics of Victorian publishing. He estimates that there were approximately 50,000 novels published between 1837 and 1901 by about 3,500 novelists (Sutherland 151-152). Citing the *Publisher's Circular*, Sutherland states that "total book production rose annually from 2,000 to 8,000 new titles over the Victorian period, and that the proportion of fiction concurrently rose from around 12 per cent [sic] to about 25 per cent [sic]" (151). Sutherland's estimate may, however, be low. Simon Eliot states in his work on "The Business of Victorian Publishing" that "[a] list covering all major books published in the UK between 1814 and 1846 indicated that about 16.2 percent of the catalogued titles fell in to [a] broad fiction category. [...] In the last decade of our period, the 1890s, fiction and juvenile books were claiming 31.5 percent of the total titles produced in the UK" (59). In either estimate, the proportion of new books that were published, and can be called fiction, rose significantly as the century drew to a close.

What falls into this category of "fiction" is difficult to further sub-categorise, especially for novels that deal with the scientific supernatural, such as those discussed throughout this thesis. Eliot's discussion of Victorian publishing continues:

Novels, and fiction generally, were only part of the astonishing revolution in print communications that extended throughout the nineteenth century. How important a part? All discussion of particular genres in the past are bedeviled by both inadequate statistical information and problems of definition. What constitutes a novel? What is a work of fiction? How do you distinguish a story written for older children from a story written for a semi-literate adult? The Victorians who compiled subject lists of newly published books finally gave up, and lumped all forms of fiction and juvenile literature into one category, so this is the category that we have to use. (58-59)

Despite twentieth and twenty-first century critical attempts to further classify this fiction, its publishers listed Henry James and Oscar Wilde alongside Ouida, Florence Marryat, and countless others whose names have long been completely forgotten.

The lack of genre-based boundaries can be seen in the publisher's advertisements for other books found in the back pages of novels themselves. For instance, the

announcements included in the 1902 printing of Marie Corelli's *Temporal Power: A Study in Supremacy* include: classics, biographies, Christmas books, poetry anthologies, travel books, and educational books as well as books from other categories. Frank Podmore's *Modern Spiritualism: A History and a Criticism* is, perhaps, the most intriguing advertisement given his skepticism of Spiritualism and many of the phenomena that Corelli relied on throughout her oeuvre. For the publisher, it was a simple matter of advertising rather than a careful matching of similar books.

An early term used to classify some novels is that of "scientific romance," drawn from the use of the term in the late-nineteenth century in a different context. Brian Stableford comments in *Scientific Romance in Britain 1890 – 1950* (1985), "[t]he term 'scientific romance' appears to have been used first in a book title by Charles Howard Hinton, who published a collection of short pieces as *Scientific Romances* in 1886. [...] [I]t must be noted that there is a certain propriety in the juxtaposition of speculative fiction and speculative non-fiction in these collections" (5). Stableford claims that there are three stories and six articles between two volumes (5). The first volume has five texts, only one of which contains a story, "The Persian King," as a parable to be used in the mathematical essay which follows it (Hinton). Regardless of the breakdown of essays to parables, and if lengthy word problems for mathematical and ethical arguments should really be considered "fiction," Hinton is using the term "scientific romance" in a purely speculative sense, with "science" meaning something closer to "knowledge." This is not the discipline of science that his contemporary scientists were seeking to define in laboratories and through lengthy publications as will be discussed throughout this thesis.

Yet Stableford's interest in the representations of science in late nineteenthcentury fiction is significant even if his terminology has not proven to be. He states:

[t]he point of identifying some romances as *scientific* is not to make them into a species of scientific speculation to be judged by scientific standards, but rather to separate them from other kinds of imaginative fiction, variously describable as supernatural fiction or fantasy. The distinguishing characteristic is not that scientific romances *are* scientific, but that they pretend to be, and that they pretend to be in order to serve some rhetorical purpose. (8, emphasis in the original)

This assumption that "scientific romances" pretend to be scientific rather than have a basis in science makes the issue of recognising lost sciences, for example the scientific supernatural, one of genre as well as the use of science in literature. What becomes of the

novel that is imaginative, speculative, and also based on contemporary science? After all, Stableford uses Marie Corelli's *A Romance of Two Worlds* (which will be discussed in Chapter 1 of this thesis) as an example of "imaginative fiction" that combines the occult and science without acknowledging the role of science in the novel (40). Some novels that seem, to the twentieth or twenty-first century reader, to be pretending to be scientific are actually revealing the authors' interest in sciences that have since been disproven.

More recent critics mostly turn to the Gothic when accounting for texts such as the novels that will be discussed throughout this thesis, even though this requires broadening what it means for a text to be Gothic in ways unique to each critic. The effect is that the sense of what Gothic is shifts. For example, Lyn Pykett ultimately subdivides the Gothic in her chapter, "Sensation and the Fantastic in the Victorian Novel," which appears in The Cambridge Companion to the Victorian Novel. She allows, alongside the shared idea of the Gothic as haunted, to do with the past, additional ideas of the Gothic as dealing with anxieties about degeneration and she examines the "mutations, transformations, and modernizations of gothic" (Pykett 193). For Pykett, "fantastic narratives from the fin-de-siècle which do not conform to the tenets of 'classic' 'bourgeois' realism, [...] have tended, hitherto, to be pushed to the margins of literary critical attention, or treated as aberrant" (192). She seeks to account for them in her subcategories. While she allows for more modern-looking scientific concerns to be included in her representation of the Gothic, which fits many novels concerned with the scientific supernatural, she also relies on a contrast between realism and fantasy that would require reading the scientific supernatural to be purely fantastic, thereby failing to account for the real scientific hope represented in these sciences.

Like Pykett, Roger Luckhurst argues the centrality of degeneration as a critical concept for late Victorian Gothic, suggesting that this focus has led to the neglect of many *fin de siècle* Gothic texts, such as those that deal with what he calls psychical research. In *The Invention of Telepathy* (2002) Luckhurst discusses the texts he is concerned with, which include novels by Bram Stoker and Arthur Machen that will be examined in the following chapters of this thesis, as late Victorian Gothic (Luckhurst, *Invention* 181-213). The chapter "Psychical Research and the Late Victorian Gothic," focuses on the way that telepathy complicates the reading of fiction with psychical interests as Gothic in the traditional sense. He continues to explain that "[p]erhaps more importantly, the recourse to degenerationist accounts fails to pick up the currents of psychical research circulating in Gothic texts, because telepathy and other forms of

hyperacuity were markers of evolutionary *advance*, rather than symptoms of reversion" (Luckhurst, *Invention* 184, emphasis in the original). Luckhurst further explains that he aims to "restore some of the multivalences to the fin-de-siècle [sic] Gothic, setting it in parallel with psychical research, as a fictional space for exploring reconfigurations of the self," nuances that have been missed due to the tendency of Gothic studies to focus on degeneration throughout this period (185). He ultimately concludes that "[t]he Gothic in the fin de siècle [sic] never straightforwardly conformed to the accounts of degeneration because it was also traversed by anti-degenerative ideas associated with psychical research" (Luckhurst, *Invention* 213).

If the Gothic can be written about in other terms and broadened by critics such as Pykett and Luckhurst to account for *fin de siècle* texts with a scientific supernatural element, this nevertheless always requires an extension of the critical concept of the Gothic as a genre essentially concerned with a present haunted by the past. In a later piece, Luckhurst refines his definition of Gothic, reinstating the opposition between the past (Gothic) and the future (fantasy) in his chapter in *The Fin-de-Siècle World* (2015), edited by Michael Saler. He asserts in "Scientific romance, fantasy and the supernatural" that:

[t]he Gothic haunts the modern with stubborn past survivals, human agents weighed down with the nightmare of history in anxiety and fear, whilst fantasy is frequently suffused with a melancholia, the genre anchoring itself on a deep mythical past that is nevertheless acknowledged as irretrievably lost in the relentless forward thrust of the modern.

(Luckhurst, "Scientific Romance" 678)

Novels concerned with the scientific supernatural may do either of these things. Mesmerism and diagnosable illness, the scientific uncertainties which will be examined in Chapter 2, are Gothic in the weight of the anxiety caused by the unknown. For example, Corelli's Electric Christianity, which will be discussed in Chapter 1, does anchor itself in the past (Chaldean priests) but it also pulls her system of belief into modernity through the (over)use of electricity. Given the interconnectivity of the different fictional representations of the scientific supernatural, it would seem that these novels should need to share a genre rather than sit uneasily in opposing genres. Luckhurst's chapter title demonstrates the problem of ascribing a genre to novels concerned with the scientific supernatural. Note that the title divides the elements of the scientific supernatural: scientific romance, fantasy, *and* the supernatural. These things are widely

considered to be different in twentieth and twenty-first century literary criticism despite the late nineteenth-century understandings of the potential for a science of the supernatural.

As long as the scientific supernatural is regarded as fantastic science, such *fin de siècle* texts as those discussed in this thesis will continue to elude or trouble the genre classifications that critics have proposed for them. Yet as Luckhurst himself recognises, these texts do have a generic "feel" to them. As he writes in "Scientific Romance, Fantasy and the Supernatural":

Although often artificially separated by critics who want, typically, to try to maintain an opposition between the alleged scientific rationalism of science fiction and the irrationalism or mysticism of fantasy and the supernatural (see Suvin 1979), these genres clearly exist on the same spectrum. They refract the same light, the same generative conditions, only at different wavelengths. (677-678)

Modern genre classifications, including those employed by Luckhurst, divide realist and fantastic texts in a way that highlights the problems of not recognising the scientific supernatural as nineteenth-century science.

The "spectrum" includes books that look at phenomena besides Luckhurst's telepathy, and besides the Spiritualism, mesmerism, and experiments considered in the following chapters, to other concerns which present the supernatural in scientific terms. For example, ghost stories from this period are part of a complex heritage as both a marker of a Gothic story and potentially explainable by *fin de siècle* science. It is, to a certain degree, a matter of the terminology used by the observer or author whether there is a spirit manifestation or a visible ghost in a given scene. Corelli, however, takes it a step farther in *Ziska: The Problem of a Wicked Soul* (1897) to have her learned doctor-character proclaim the existence of a "scientific ghost." Dr. Dean calls Ziska a scientific ghost and explains:

Oh! I don't mean the usual sort of ghost [...]. [...] The ghost that is common to Scotch castles and English manor-houses, and that appears in an orthodox night-gown, sighs, screams, rattles chains and bangs doors *ad libitum*. No, no! That kind of ghost is composed of indigestion, aided by rats and a gust of wind. No; when I say ghosts, I mean ghosts—ghosts that do not need the midnight hour to evolve themselves into being, and that by no means vanish at cock-crow. My ghosts are those that move about

among us in social intercourse for days, months—sometimes years—according to their several missions; ghosts that talk to us, imitate our customs and ways, shake hands with us, laugh and dance with us, and altogether comport themselves like human beings. Those are my kind of ghosts—'scientific' ghosts. (Corelli, *Ziska* 48).

Corelli has both alleged a scientific possibility for ghosts and engaged with the issue of genre by dismissing the common ghost of the Gothic.

The spectrum of these stories is further expanded by authors who use the expectation of the supernatural acting in the material world to build suspense, only to ultimately disallow the power of the supernatural in the world of their novels. Richard Marsh depicts what readers initially assume is the mixing of the supernatural and technology in novels such as The Goddess: A Demon (1900) and A Spoiler of Men (1905) only to reveal entirely material world explanations at the conclusion. In *The Goddess*, the assumed supernatural is revealed to be a mechanical weapon. A Spoiler of Men suggests the possibility of an injection resulting in a mesmeric state akin to reducing a living person to a zombie. These, and others of his novels and short stories, rely on the expectation that the reader is expecting some aspect of the supernatural to be at work to drive the suspense of the story until it is unveiled that there is a material world answer. Marsh accounts for the reader's expectations of something similar to the scientific supernatural and resolves his mysteries in technology, a reversal of novels such as those that will be discussed in Chapter 3. Yet, *The Beetle* (1897) and others of his works actively depict scenes of the scientific supernatural. He was, therefore, not opposed to the scientific supernatural and these examples reveal an additional way that he engaged with the lost sciences. Still others, such as H.G. Wells, were challenging the plots that novels depicting the scientific supernatural were establishing in different ways. The representations of the scientific supernatural with which this thesis is concerned are, therefore, not only of interest in connection with the specific novels addressed here.

Understanding Nineteenth-Century Science in Literature

Nineteenth-century science is an extensive field of critical interest which has been shaped by a few key twentieth-century critics and their examinations of formidable nineteenth-century champions of science. These studies focus on the philosophical science that can be unpacked from realist novels such as those by Thomas Hardy and

George Eliot. In *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction* (1983) Gillian Beer posits:

Fiction in the second half of the nineteenth century was particularly seeking sources of authoritative organisation which could substitute for the god-like omnipotence and omniscience open to the theistic narrator. At the beginning of this period science had escaped for a time its collusion with the magical, the world of occult knowledge, which in the work of Renaissance scientists such as John Dee had ranged it closer to fiction. (149)

As will be discussed throughout this thesis, however, a lack of organisation and all of the potential that undefined science can contain was central to other authors' use of scientific ideas in novels such as those discussed here. If the second half of the nineteenth century saw science cease its "collusion with the magical," it was not always by leaving the supernatural alone but by intentionally testing it in an attempt to uncover its secrets.

Like the gaps in knowledge that authors relied on when writing fiction concerned with the scientific supernatural, their work has, itself, fallen into a gap of literary knowledge caused by the loss of critics' awareness of the scientific supernatural as science. "[B]y and large, the Victorian scientific culture I have identified goes along with a 'realist' approach in literature (the opposite holds true today, when anyone interested in the relationship between science and literature is usually assumed to be referring to the fantasies of science fiction)," declares Tess Cosslett in her book *The "Scientific"* Movement and Victorian Literature (1982) (5). Cosslett continues with a discussion of the highly philosophical use of science in the works of Tennyson, George Eliot, Meredith and Hardy and their references to science of the material world. The literary scientific tradition that she traces is that which can be found in nineteenth-century realist fiction. It is not, however, that nineteenth-century "fantasies" were not interested in science but that both the science with which they are concerned and the fiction itself was lost for the better part of a century. This science was not concerned with the material world; it was attempting to describe the immaterial and the supernatural realm's effects on the physical world. Unlike the papers of Lyell who quoted Ovid or Darwin who drew from John Milton (Beer, Darwin's Plots 5), the scientists who wrote about the experiments on which the novels Cosslett would term "fantasies" warn of rape and foreshadow death by exposure to radiation. The novels discussed throughout this thesis are all fantasies, in this

sense, and all reliant on their contemporary science. The science of the nineteenth-century fantasy is, nevertheless, science of its time.

What emerges from study of this foundational criticism is not that there was a nineteenth-century battle between science and the supernatural, or science and religion, but that there was a war within science which has resulted in a fractured legacy of all that was science throughout the century. Introducing a collection of excerpts on nineteenthcentury science and religion republished in 1984, Tess Cosslett states that "several modern historians have seen the Victorian 'conflict' as not between science and religion, but between 'religious science and irreligious science'; that is, between a science pursued in the interests of natural theology, that relates its findings to moral and religious values, and a new, professional, 'value-free' science" ("Introductory Essay" 2). She later explains that "the main area of conflict was within science, between natural theologians and agnostics who were trying to detach themselves from their natural-theological heritage [...]" ("Introductory Essay" 12). T. H. Huxley and John Tyndall, the agnostics who star in discussions of nineteenth-century science, have shaped later understandings of their contemporary science. The authority that history has given Huxley and Tyndall, however, does not account for the other half of the story. They were vocal and fought for the narrative they wanted for science because there was something to fight against.

This thesis diverges from Beer's and Cosslett's foundational work on nineteenth-century science in that it focuses on sciences that were investigating the supernatural, beyond the realm of the material world, and despite their twenty-first century status. Not every experiment conducted by scientists that are remembered for groundbreaking discoveries yields such an outcome. For every discovery of radium, someone searches but fails to find a new element. For every correct hypothesis that germs exist and cause disease, other causalities are left unexplained. Even legitimate attempts at answering questions related to the physical world do not always prove fruitful. It is said that history is written by the victors. As such, the successes are remembered and the failures slip away, frequently unnoticed by society. Scientists' attempts to prove and explain the supernatural are one such footnote to nineteenth-century scientific and literary history.

The reality is that these scientists hoping to document the supernatural failed.

This is not to say, however, that there were not some who, based on the experimental procedures they designed and followed, thought that they had succeeded. Nor is it a comment on the fields that grew out of these failed sciences. William Crookes, nevertheless, did not walk with a spirit. Alfred Russel Wallace never communicated with

the dead. Yet, it is only with the privilege of time and an understanding of history that these statements can be made. These well-respected men were sure of what they believed they had proven. They published on it. They fought for it. Their reputations are convoluted due to the complexities of legitimate discoveries and trickery that they fell for.

Testing of mediums began shortly after the initial "raps" in the mid-nineteenth century but reached the level of scientific experiment later in the century. Each time a "spirit" was asked to prove its identity, the spirit was being tested. Every time a medium made a prediction and someone was sent to ascertain what was happening at the given time, in a given place, to compare with what the medium saw, the sitters were conducting an informal experiment. When scientists got involved in the process, experimentation was not being introduced for the first time. Rather, the attempt was to raise the standard of the tests to the contemporary understandings of scientific test conditions and the base line of respectability.

An example of the hope for scientific proof of the supernatural was the forming of the Society for Psychical Research (SPR) in 1882. This group of interdisciplinary scholars "established to forge its own 'scientific' approach to spiritualism, telepathy, apparitions and other phenomena strategically grouped under the term 'psychical'" (Noakes, "Sciences of Spiritualism" 38). Although seemingly an ideal place for Spiritualists who wanted to prove their faith, most Spiritualists left the group early on. Richard Noakes explains that some of the leading members of the society such as F.W.H. Myers, Edmund Gurney, and Henry Sidgwick "were too cautious in their approach to constructing evidence for spiritualistic, mesmeric and other psycho-physical phenomena" for believing Spiritualists ("Sciences of Spiritualism" 51). Even once the group stabilised, the question of evidence remained central. In her discussion of the SPR, Leigh Wilson comments that the society:

was founded to investigate inexplicable phenomena in 'a scientific spirit'; what was problematic was not so much what a scientific spirit, or more particularly a scientific method, might be, but what constituted evidence. Late nineteenth-century spiritualism was dominated by physical phenomena. The most important mediums, as well as passing on words from the dead, produced material evidence of their connection with the beyond. The evidence suggested by their messages from the dead was not as crucial, because not as dramatic, as their ability to move furniture,

produce partial or full-body materializations, make musical instruments play by themselves, or flowers fall in showers from the ceiling. (100) Given the number of elaborate tricks uncovered, even scientists struggled with what physical evidence could, or should, constitute the proof they sought. The Society for Psychical Research never fully answered this question before turning its attention to "mental phenomena" in 1896 (L. Wilson 106).

Given the broad boundaries as to what was considered scientific in the period, scholars concerned with the cultural representations of science at the turn of the century have much to choose from. On the one hand, some, like Barry H. Wiley in *The Thought Reader Craze: Victorian Science at the Enchanted Boundary* (2012), explore the fascination with the scientific supernatural with attention to the reality that most of those theories have since been disproven or deemed pseudo-science. He examines science in such a way as to fairly treat the scientists who investigated the supernatural and did not have the information to disprove it. Wiley explains:

The late nineteenth century was a time of scientific discoveries of major importance that were radically changing the human perception of the earth and the cosmos. [...] Fay and other mediums and thought readers played on the hunger of human nature, as Frederic Wickes so aptly described it in 1907, to identify and find that enchanted boundary on the other side of which apparently lay the answers to the deepest mysteries of nature[.] (165)

Contrasting Oppenheim and others who treat the topics as supernatural first, Wiley assesses the theory of thought reading as a misdirection of scientists who were hungry for knowledge outside of the realms of what they could investigate.

On the other hand, others, such as Gillian Beer, address only the lasting science from the Victorian period. While most of Beer's work is the reflection of, and reaction to, early Victorian science in literature, *Open Fields: Science in Cultural Encounter* (1996) traces science in society more broadly. Beer's section entitled "Description and Allusion in Scientific Writing" discusses the ways that writing style influenced who could read and understand various types of scientific writing. In considering the intended audiences of various scientific documents based on stylistic features, Beer examines social distinctions separating scientific understanding that are more nuanced than willingness or desire to believe in the more fantastic scientific investigations of later in the century.

While the important figures who documented the supernatural wrote extensive volumes (for example, Doyle), studies in science were more frequently written for, and published in, periodicals. Much of the research into scientific writing in the nineteenth century, therefore, explores the role of periodicals and where discoveries were first printed or scientists chose to respond to each other. *Culture and Science in the Nineteenth-Century Media* (2004), edited by Louise Henson, Geoffrey Cantor, Gowan Dawson, Richard Noakes, Sally Shuttleworth, and Jonathan R. Topham, studies portrayals of science in the media. The essays included in the collection explain various connections between what was understood of science and how discoveries were shared with both professional scientists and the general population. Likewise, *Science Serialized: Representations of the Sciences in Nineteenth-Century Periodicals* (2004), edited by Geoffrey Cantor and Sally Shuttleworth, deals with scientific periodical literature. These texts reveal what society at large could have known about the discoveries occurring in science (and the scientists' arguments), due to the availability of the studies in common periodicals.

There were, however, popularisers of science who wrote both in book and periodical article forms, as well as giving public lectures. In his 19th Century Science: An Anthology (2000), A. S. Weber positions popularisers of science with scientists, foreshadowing Lightman's later apologetic work. Although he does not expressly state why he does this, the biographies of Mary Fairfax Somerville, Robert Chambers, George Combe, Herbert Spencer, and John Tyndall appear alongside those of Charles Darwin and Lord Kelvin. These popularisers often dabbled in scientific inquiry themselves. Still their most important influence on scientific thought was that of shaping the way the public viewed science and, therefore, the way science was portrayed in contemporary novels. For example, Mary Somerville's On The Connexion of The Physical Sciences (the seventh edition of which was published in London in 1846) has a long section devoted to electricity. Somerville's chapter carefully explains the way electric fluid flows and that, "indeed most of the causes which disturb molecular equilibrium give rise to phosphoric phenomena[,]" ideas which were still portrayed as scientific in fiction (Corelli and Stoker, respectively) in the fin de siècle and at the start of the twentieth century (319).

Twentieth and twenty-first century scholarship relating to the supernatural and science often focuses on technology, associating mediums with the technological advances in communication in the late Victorian period. These texts are frequently readings of novels suggesting that the role of women who succumb to trances is, in effect,

a statement of the new role of women as mediators for communication; this will be discussed in greater detail later in this Introduction in connection with Spiritualism. For authors such as Jill Galvan, in The Sympathetic Medium: Feminine Channeling, the Occult, and Communication Technologies (2010), women's roles as supernatural communicators (such as clairvoyants and mediums) and technological communicators such as typists and telegraph operators are reflections of each other, as both connected the unseen and facilitated communication. Similarly, Hilary Grimes associates the supernatural with the act of writing and ghost writing in *The Late Victorian Gothic*: Mental Science, the Uncanny, and Scenes of Writing (2011). Grimes's primary concern is the ways in which "writers of the 1880s and 1890s were always haunted by and haunting scenes of writing" (11). In contrast to the focus on technology, Roger Luckhurst's *The Invention of Telepathy* (2002) is concerned with the topic of science and the supernatural. In the first part of his book, Luckhurst traces the history of telepathy through scientific and historical studies texts. He later addresses the use of telepathy and trance in selected Victorian works. Luckhurst's interest is in documenting the late Victorian interest in trance and showing this through its inclusion in *fin de siècle* novels. The work of Galvan, Grimes, and Luckhurst draws attention to the role of the scientific supernatural and suggests the need for a study of scientific understanding and literary representations of supernatural sciences.

Additionally, there has been a recent surge in reprinting scientific and Spiritualist texts from the nineteenth century, providing new access to primary materials of particular interest to studies of fiction concerned with the scientific supernatural. *Spiritualism*, 1840-1930 (2014) is a collection of themed volumes that includes excerpts of transcripts from séances and selections from books; selected references to Spiritualism in literature; scientific documents and discussions; as well as material published against Spiritualism. The volumes of *Spiritualism 1840-1930* are filled with excerpts of long documents designed to give an overview of the topics for each collection. Routledge has also reprinted entire noteworthy books in an eight-volume collection entitled *The Rise of Victorian Spiritualism* (2000) and edited by R. A. Gilbert. This collection includes Alfred Russel Wallace's *On Miracles and Modern Spiritualism* (originally published in 1875) arguing for the validity of Spiritualism and Frank Podmore's critique in *Modern Spiritualism: A History and a Criticism* (originally published 1902). Together these collections have made accessible a large amount of material published during the midand late nineteenth-century interest in Spiritualism both in support of the movement and

against it. Although many of these documents are more formal (the published volumes by Podmore, for example), they also include the less official opinions of individuals interested in the various phenomena. These types of reprinted materials reveal the nineteenth-century conversations around scientific supernatural phenomena.

The combination of these resources, both the recent criticism and the reprinted primary texts, provide a foundation that can support new understandings of nineteenth-century literature, specifically related to the *fin de siècle* scientific interest in the supernatural. Although these scientific interests are difficult to categorise, here, they will be broadly divided into instances of mesmerism and different types of Spiritualism. These scientific interests each have unique qualities that have been critically examined by either social historians or literary critics. In turn, mesmerism and Spiritualism (and the body of research conducted on them) can help to inform readings of the scientific supernatural in *fin de siècle* literature.

Mesmerising a Nation

The fear of mesmerism and the potential it could have to allow for the manipulation of another's will, complete or partial, spread in Victorian society until the issue reached a boiling point in the mid-century. Mesmerism itself is an eighteenth-century invention of Franz Anton Mesmer with the original name of "animal magnetism" (Winter 1-2). The (alleged) phenomenon evolved to take on Mesmer's name as the characteristics ascribed to mesmerism were shifted to account both for new scientific discoveries and to allow for further investigation of new areas of inquiry into human interactions with each other and nature.

Both nineteenth- and twentieth-century critics of mesmerism address issues of science and the supernatural in connection with mesmerism. As early as 1896, Ernest Hart wrote *Hypnotism, Mesmerism and the New Witchcraft*, a collection of comments on, and warnings about, the dangers of mesmerism from the perspective of science. Hart was a medical journalist and, due to the intersection of ideas, he wrote extensively on what he considered a possible scientific phenomenon (mesmerism at the point of transition into hypnotism) and the ways it was being abused for entertainment and sometimes crime, "[urging] that the practice of hypnotism be restricted to physicians that it might be saved

from further abuse" (Rieber ii). The Victorians saw great potential in mesmerism, especially in medicine where it held enormous possibilities both for positive use and misuse.² Doctors claimed mesmerism as an ideal anesthetic, performing mesmerism on patients instead of using chloroform before surgeries and during childbirth. In her chapter "The Invention of Anesthesia and the Redefinition of Pain," Alison Winter details mesmerism's potential as a "safe means of suspending sensibility" and the reasons doctors might have been cautious about adopting it as a practice (163-165). Patients claimed to have no pain and no memories of what happened when under the influence of mesmerism (Winter 166). On the one hand, the potential for painless procedures was enticing. Eliminating pain could make medical care more manageable for people who could not afford costly medications and follow-ups. On the other hand, the elimination of pain itself was cause for fear to some. Without pain as a marker of a procedure, some feared the possible abuses of medical personnel. It was not just the physical potential for a lancet to be shoved under a finger nail, an example Winter gives, but more so the psychological effects of losing one's will to the point of having no memories of what happened to oneself (Winter 128). There were, however, less dramatic accounts of mesmerism as a cure in and of itself rather than in tandem with other medical practices that were much harder to prove or disprove because the testimony of the patient was the only possible evidence.

As the supporters and practitioners of mesmerism fought for its place in mainstream medicine, examples of abuse of the phenomena emerged, causing opposition to come from both the believers and the skeptics. A particular issue of central concern was the potential of mesmerism to be a threat to women in particular due to the vulnerability of the patient when in a mesmeric trance. Doctors released statements reporting women who became pregnant while under the "care" of mesmerists, with no knowledge of sexual activity leading to their pregnancies (Hart 137). Whether these women were drugged and raped or were conscious of their affairs and chose to feign ignorance is not the focus in this instance. The fear with which Hart and other doctors engaged was of what *could* happen, what was believed to have happened, not what

¹ Hart conflates mesmerism and hypnotism because of the shifts occurring when he was writing. For the purpose of this thesis, "mesmerism" will be used only to refer to the older practices related to Mesmer's ideas.

² For detailed examples, see *Spiritualism*, 1840-1930, especially volume three. "Spiritualism, Science and Technology" is an extensive collection of excerpts of documents detailing both support of Spiritualism and instances of fraud.

actually happened. Hart argued that "[t]he confirmed and trained hypnotic subject is a maimed individual in mind and body, and is likely at any time to be dangerous to himself and to society," and thus only "skilled physicians" should be allowed to practise mesmerism or hypnotism (68-69).

Recent texts including *Mesmerized: Powers of Mind in Victorian Britain* (1998) by Alison Winter and *Investigating the Supernatural: From Spiritism and Occultism to Psychical Research and Metapsychics in France, 1853-1931* (2011) by Sofie Lachapelle trace mesmerism's beginnings as a scientific theory and the shifts that followed. In doing so, the authors address the changes that occurred to various understandings of the phenomenon, documenting what was considered a scientific idea and what these concepts became once absorbed into supernatural belief structures. These types of texts establish a standard for what was understood to be *real* mesmerism, by explaining terms that have been lost to scientific history but did have specific meaning(s) when the theories were first being explored.

A few literary critics have engaged with the role that mesmerism plays in nineteenth-century literature. Kelly Hurley addresses science and Victorian literature in two ways: she applies naturalist readings to late Victorian texts and she suggests a shift in late Victorian science and its role in literature, especially the role of sciences such as mesmerism. In "British Gothic fiction, 1885-1930" (2002), Hurley examines the role of science related to the material world by considering the ways in which stories concerned with the monstrous are drawing from Darwin and evolutionary theory in the gothic texts at the end of the nineteenth century. Of representative pieces from H. G. Wells, Arthur Machen, and Rudyard Kipling she explains: "[a]ll of these texts describe human bodies that have lost their claim to a discrete and integral identity, a fully human existence. They are in contrast liminal bodies: bodies that occupy the threshold between the two terms of an opposition, like human/beast, male/female, or civilized/primitive, by which cultures are able meaningfully to organize experience" (Hurley, "British Gothic" 190). These representatives of transitional bodies are created through "[c]areless or irresponsible science" but can still be reduced to natural or scientific explanations (192). Building on Winter's study of Victorian mesmerism, Hurley surveys the role of what she calls hypnotism throughout a number of texts in the chapter "Science and the Gothic" in *The* Victorian Gothic: An Edinburgh Companion (2012) and concludes of Dick Donovan's "The Woman with the 'Oily Eyes'":

Whatever it is that makes Annette unspeakable – her vampiric sexuality, her hypnotic powers, her very plausibility *within* a scientific framework – the story cannot contain it. It breaks apart in its attempt to conjoin science and supernaturalism. But the story is interesting for precisely that reason. "John Barrington Cowles" and "The Woman with the 'Oily Eyes'" are not artistic failures but narrative experiments, whose struggles help us understand the late Victorian Gothic's struggles to incorporate the new and strange paradigms of human identity provided by experimental psychology and other sciences. (183)

Hurley affirms the late Victorian period's interest in things like mesmerism, and later hypnotism, as science and explores their use within selected stories. She presents these early sciences as evidence of the struggles of science to explain the supernatural. This allows her to establish hypnosis as a scientific precursor to modern psychology, without the complexities of its supernatural connections. To fully contextualise the scientific supernatural, Hurley's reading of mesmerism and its transition to hypnotism needs to be joined with an understanding of these same phenomena as having supernatural elements.

Mesmeric trances carry with them a very contradictory history. A mesmerist can intend to ease pain or be a dangerous villain seeking to take advantage of a person who puts his, but usually her, trust in him. As such, mesmerism was particularly suited for use in the *fin de siècle* novel due to the variety of roles that it could play and the associated uncertainty that is lent to the plots of the books in which it features. Nevertheless, the intended good is half of the story that must not be completely ignored. It was the potential to ease pain and suffering that fascinated, mesmerised, the nation.

Spiritualism(s)

In the mid-nineteenth century, Spiritualism became a major cultural phenomenon in England, encompassing a vast number of differing beliefs related to the human spirit after death and its ability to communicate with the living. There is no single definition of "Spiritualism" by which to evaluate claims of what it is or was, much less the fictional depictions of it. Janet Oppenheim's *The Other World* is the most comprehensive, academic discussion of mediums, Spiritualism, Theosophy, and the experimental attempts to scientifically prove various Spiritualist phenomena. Oppenheim's section entitled "A Surrogate Faith" begins by explaining:

Apart from the belief that the dead can and do communicate with the living, spiritualism, as it emerged during the second half of the nineteenth century, developed no single creed embraced by all species of British spiritualists. Many highly diverse people espoused it for highly different reasons, and most spiritualists thoroughly savored the variety of opinions that were free to take shelter under their capacious umbrella. [...] It was a matter of great pride and satisfaction to its enthusiasts that spiritualism appeared to solve that most agonizing of Victorian problems: how to synthesize modern scientific knowledge and time-honored religious traditions concerning man, God, and the universe. (*Other World* 59)

The relationship between Spiritualism and each distinct set of religious traditions or deeply-held philosophies determined how the different strands of Spiritualism were woven together. The variety itself inspired followers since it was malleable, easy to mould to take into account long-held beliefs and new knowledge alike. Oppenheim states that "[i]ts status among the categories dear to sociologists, such as church, denomination, and sect, is very much open to debate, as the practice of spiritualism in different communities, and among different social groups within the same community, varied substantially" (*Other World* 62). More than a specific religion or faith, Spiritualism emerged as a worldview (a perspective through which the world is viewed and assessed) and was applied concurrently with other approaches to society. For instance, some Spiritualists saw the spirit as the next great frontier for science to investigate, others believed that Spiritualism was the explanation for the miracles of Christianity, and still others used the platform of Spiritualism to mix global religions and proclaim them to be one belief system. Spiritualism's use was limited only by the creativity of its adherents.

Nevertheless, Oppenheim cautions readers not to assume that British Spiritualists were "desperate" and reaching for anything to hold onto (*Other World* 61). Oppenheim urges readers to remember:

[t]hey were not simply embracing *any* source of reassurance about the human condition, nor giving their allegiance to *any* faith in their eagerness to believe something other than the ubiquity of matter. They were turning to the one set of beliefs which, they trusted, could meet the specific demands of their day by satisfying a religious need in language, and through procedures, acceptable to science. (*Other World* 61-62, emphasis in the original)

Spiritualism's appeal, then, was because it was not religion *or* science but because it was understood to be religion *and* science.

Cultural texts that detail supernatural beliefs connected to the scientific supernatural are found beginning in the mid-nineteenth century when Theosophists (adherents to the specific teaching of Theosophy) and Spiritualists, more generally, documented what they understood to be the intersection between science and the supernatural. Leaders of these movements wrote extensively: Helena Blavatsky's *Isis* Unveiled: A Master-Key to the Mysteries of Ancient and Modern Science and Theology (1877) catalogues religions from around the world, supernatural phenomena, and any other ancient source of knowledge, connects them to each other, and uses loose interpretations of contemporary science to explain the immaterial as scientific in her founding book for Theosophy (a specific Spiritualist belief system). When Blavatsky cannot link her assertions to science, she simply makes the claim that scientific discoveries will one day support her explanations. Many of the sciences that she explains as "modern fact" are things such as animal magnetism that have since been disproven but still had supporters when Blavatsky was writing in the mid-nineteenth century (130). Although much later, Sir Arthur Conan Doyle's *The History of Spiritualism* (1926) in two volumes is, likewise, an extensive set of books written from an insider perspective. Doyle addresses not only the abstract possibilities of Spiritualism connecting various religions in harmony but also the tests that he believes have proven the scientific respectability of the worldview. These two collections of books, especially Blavatsky's texts, serve as the primary material for others who contextualise the supernatural both at the fin de siècle³ and into the twenty-first century.⁴ Primary texts such as these help to establish the reaches of these systems of belief and document the early attempts to reconcile ideas of the supernatural with the rapidly changing advancements in science.

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³ Following Blavatsky's publications, her writing was widely used by others to explain the connections between science and the supernatural. Doyle uses the writings of Blavatsky as the basis for some of his own work. Additionally, James Burns wrote about the connections between Blavatsky and Spiritualism in his "Madame Blavatsky as a Spiritualist" (1889).

⁴ Major studies of the supernatural and occult phenomena cite Blavatsky's work and many appeal to Doyle's text as well. A. Campbell Holms's *The Facts of Psychic Science and Philosophy: Collated and Discussed* (1969) presents papers he considers neglected facts and, in doing so, addresses both Blavatsky and Doyle. Studies such as *The Darkened Room* by Alex Owen, Janet Oppenheim's *The Other World, The Ashgate Research Companion to Nineteenth-Century Spiritualism and the Occult* edited by Tatiana Kontou and Sarah Willburn, and *The Late Victorian Gothic: Mental Science, the Uncanny, and Scenes of Writing* by Hilary Grimes directly reference Blavatsky or Doyle. Other articles and books, in turn, reference Owen, Oppenheim, or *Ashgate* for their knowledge of the same material. This thesis relies on recent criticism (such as Owen and Oppenheim) and introduces nineteenth-century scientific texts into this conversation.

In contrast to those who were fully devoted to ideas like Theosophy and Spiritualism and quick to accept new concepts regarding the supernatural, there are others who were less interested or even skeptical. Thomas Huxley and the rest of his X Club are generally the first people considered as skeptics of everything supernatural. These men worked to shape the social understanding of science into what they envisioned, a professional field separate from the clergy with "the desire to ward off attacks on science by conservative theologians" (Jensen 70). Nevertheless, they were not entirely opposed to religion or the supernatural. In their political stance against Irish Home Rule, members of the X Club "feared that religious liberty would suffer a severe setback. They felt that the small minority of Protestants in Ireland would be at the mercy of their historic Catholic foe" (Jensen 71). This group of men was not interested in proving or disproving the supernatural as they considered it unknowable. Instead they desired to police the process of the professionalisation of science. They are best classified not as skeptics, but as scientists who ignored the supernatural because their interest was elsewhere.

Others more interested than the X Club, but more skeptical than Blavatsky and Doyle, queried why science had failed to definitively denounce supernatural beliefs like Spiritualism that were founded on changing sciences like animal magnetism. *Modern* Spiritualism (1902) by Frank Podmore does just that. Podmore traces the development of Spiritualism and concludes with an assessment that, though mediums and clairvoyants had been subjected to extensive testing and few had been found to be frauds, those findings were tied to the social climate which was not particularly ready to accept the phenomena as fraudulent. While Podmore's *The Newer Spiritualism* (1910) compares the Spiritualist's view of possession of mediums with ideas concerning telepathy, he remains skeptical of everything Spiritualism claims. He nevertheless suggests that telepathy may explain the positive test results for some investigations into phenomena such as mind reading. With a different approach to the subject, Edmund Gurney avoided appealing to expectations of future discoveries and sought to make them himself. Andreas Sommer states: "The English music theorist and philosophical writer Edmund Gurney was the first 'full-time' psychical researcher in history. While he was primarily concerned with empirical evidence for telepathy, Gurney significantly contributed to the late nineteenthcentury literature on hallucinations in the sane, and the psychology of hypnotism and dissociation" (383). Examples of skeptical believers, such as those who reject some studies of the supernatural whilst hoping for explanations in others are difficult to find because they do not fit into a simple area of study; while not entirely occult, much of their research is not addressed in modern psychological theory either. Of Gurney, Sommer explains that his "contributions to psychology have subsequently been marginalised because of the discipline's paradigmatic rejection of controversial research questions his findings were entangled with" (383). Men like Podmore and Gurney are hard to classify but their introduction of a middle ground between expectant belief and complete skepticism shows the continued attempts to explain the supernatural into the twentieth century.

Recent scholarship takes this history into account as it interrogates the science of the supernatural, tracing it from its origin and linking it to the shift in modern psychiatry and fringe sciences of the twentieth century. This criticism pertaining to the role of the scientific supernatural in nineteenth-century England mostly focuses on the midnineteenth century obsession with Spiritualism and investigates the fascination within society itself, without a strong interest in the portrayal of the same ideas within literature, then and in the following decades. The most commonly cited texts on the supernatural, Oppenheim's study and *The Ashgate Research Companion to Nineteenth-Century* Spiritualism and the Occult (2012), edited by Tatiana Kontou and Sarah Willburn, are cultural studies. Both of these books document the rise of Spiritualism and dissect the scientific inquiries into it. Through their attention to the testing of animal magnetism, mesmerism, and Spiritualism, these books begin to connect the two different topics (science and the supernatural) by putting them in the context of study in which they originated. Logie Barrow's Independent Spirits: Spiritualism and English Plebeians 1850-1910 (1986) takes these same topics but investigates them specifically in light of class divisions, leading to a study of the ways in which Spiritualism resulted in the lower classes gaining ideas about accessibility of knowledge and ways to make connections within that knowledge; for example, lower class spirit healers who practised natural medicine and saw themselves as capable of healing physical and spiritual ailments. While Barrow's study focuses on a class distinction, The Darkened Room: Women, Power and Spiritualism in Late Victorian England (1989) by Alex Owen splits the population differently to inquire into the history of Spiritualism with attention to gender. As studies of the wider cultural implications of the supernatural, these texts lend valuable insight into the study of the supernatural that can be applied to literature.

Some studies, such as Oppenheim's *The Other World* and Barrow's *Independent Spirits*, are concerned with both contemporary supernatural and contemporary science in the Victorian period and into the twentieth century. As these texts move from discussions

of Spiritualism as a religion, they begin to address the science of the time and the growing desires to investigate any and everything in the name of science. Given the crossover between respected scientists and those interested in supernatural phenomena, it is fitting that the cultural studies of these topics cannot separate the two interests.

Twentieth-century criticism related to the representation of Spiritualism in fiction tends to focus on likening the desire for otherworldly communication to the new communication technologies that were being developed in the nineteenth century, as introduced earlier in this Introduction. Briefly discussed more generally in connection with "Understanding Nineteenth-Century Science in Literature," Jill Galvan posits a connection between the positions that women held as telephone operators and typists to the primarily female role of the medium with its emphasis on channeling, clairvoyance, and other illusions such as automatic writing in connection with the occult. Galvan argues that women essentially performed the role of the medium in their everyday work lives and that enacting the part of the medium after hours was merely an extension of a social space they already occupied, specifically studying "fictional imaginings of some aspect of dialogue exchange or knowledge transmission and the communicative utility of the feminine channel" (Galvan, Sympathetic Medium 18). Likening the desire for communication with the dead to communication with the unseen allows for Galvan to make specific comparisons between the roles women held in offices and the technologies that they employed. In this way, many Victorian women were mediums even if they never took part in a séance, much less claimed to be in personal communication with the spirits of those who had passed on.

Another depiction of woman as channels for others to access is of the foreign Other within British society. Galvan states: "[t]he female channel's [...] role brings out, [...], how much the menace of another culture is interwoven with issues of communication, the conveyance of knowledge and feeling" (*Sympathetic Medium* 61). What neither of these types of criticism account for, however, are the full representations of various types of overt Spiritualism – instances where mediums are not stand ins for technology or vice versa but where a novel is wholly dedicated to depicting some aspect of Spiritualism and connecting it to science, such as this thesis will address in Chapter 1.

Representations of Spiritualism in late nineteenth-century fiction appear primarily in two ways: references to the scientific tests of mediums and complete depictions of Spiritualism as a way of life. Although the purpose of Spiritualism in the novel is different in each case and it overlaps with both experiment and mesmerism in some

instances, the inclusion of the ideas, nonetheless, dictates that the social baggage associated with the Spiritualism movement be considered. The authors would have been aware of what their readers might know of the ebb and flow of the popularity of Spiritualism throughout the century due to the publicity of things such as the testing of mediums. Thus, the type of Spiritualism included in novels concerned with the scientific supernatural necessarily reveals specific social contexts that critics should take into account.

One of Spiritualism's noteworthy effects on society came in the form of scientists trying to prove or disprove the claims of mediums who proclaimed that they channeled the dead in order to provide messages from beyond the grave. Both die-hard believers and dedicated skeptics wanted to test mediums to their own ends. The believer needed proof and the skeptic affirmation. Novels that depict scientific experiments or testing allude to the real tests that occurred and rely on the social common knowledge produced in those laboratories and parlours. Novels such as Marie Corelli's *The Soul of Lilith* (1892) and Bram Stoker's *The Jewel of Seven Stars* (1903), discussed in Chapter 3, explore the ways that these experiments can be represented and what can be suggested without providing material proof. Scientists performing the historical tests wanted to have documented proof of what they believed (or disbelieved) but the fictional reflections document evidence of Spiritualism without necessarily providing physical proof such as actual historical scientists hoped to find.

Other authors, however, were drawn to the potential that Spiritualism espoused and crafted incredibly detailed systems of belief in the pages of their novels; in a world of their own making, exactly what they believed could be the answer to every question. If the tests "proved" Spiritualism, then they were useful but, if not, they were biased and ignored realities of the spirit world. Rather than fictionalising experiments, these novels dictate the *correct* way to believe through the stories they tell. As addressed in Chapter 1 with Corelli's *A Romance of Two Worlds* (1886) and Florence Marryat's *The Dead Man's Message* (1894), the relating of a specific type of Spiritualism through fiction was a way to divulge all of the tenets the author felt were important in an organic (and consumable) unravelling of information as the protagonist learns it, instead of indexing every relevant aspect of belief in a multivolume treatise. The primary example of the latter approach is Blavatsky's *Isis Unveiled* (1877). In merging their beliefs with a fictional story, authors such as Marryat make the didactic texts more approachable.

Thus, Spiritualism is both a historical phenomenon that fascinated people at the end of the nineteenth century and had several manifestations in late nineteenth-century literature as authors created new types of Spiritualism in their fiction. Mediums, séances, scientific tests, and manifestos of English cultural history reveal Spiritualism to be a movement that inspired a loyal following and, simultaneously, a great opposition. Nevertheless, these ideas had great staying power in society and played central roles in the late nineteenth-century novels written for entertainment, and consumed for distraction. The fiction written from a Spiritualist perspective gives details regarding what Spiritualism was believed to be that cannot be discovered from a skeptic's logbook or a believer's recounting of the events of a séance. These novels fill in the gaps in what can be understood about the way Spiritualism was viewed in the late-nineteenth century, in turn allowing for a more complete reading of the novels by contextualising them with the role of Spiritualism in society. Spiritualism was not only the spirits of the dead interacting with the living but also the living creating narratives of what happens after death.

The Scientific Supernatural in Fiction

The authors selected for this study are all authors who showed a prolonged interest in the scientific supernatural throughout their work. This is not intended to be an exhaustive list of all authors who worked with the topic nor all of the relevant novels written by these authors. Rather, Bram Stoker, Arthur Machen, Florence Marryat, and Marie Corelli have been selected because a sample of their combined works demonstrates fictional depictions of scientific attempts to understand the supernatural. The novels discussed in each chapter reveal specific concerns with the scientific supernatural in connection with representations of Spiritualism, scientific uncertainties, and scientific experimentation. Through the reappearance of these ideas in different texts, critical readers can piece together what the authors imagined the scientific supernatural capable of.

In focusing on literature concerned with the scientific supernatural, this thesis is concerned with genre literature and extending the critical discussion of science in late nineteenth-century literature. Realist literature, such as Beer and Cosslett discuss, is most concerned with natural sciences. For example, Beer ends *Darwin's Plots* with a chapter on the plots of Hardy's novels in connection with Darwin's ideas. As will be seen throughout the chapters of this thesis, the scientific supernatural is more central to the plot

of genre novels where the potential of more fantastic scientific ideas can be played out without disrupting the world of the novel for the reader.

Bram Stoker, beloved for *Dracula*, relies much more heavily on the scientific supernatural in some of his other novels. Strange though it is to say, the undead Count preying on English women and children is considerably more mundane than much of his other fiction. Even this relatively canonical novel relies on the scientific supernatural (Van Helsing's hypnotism of Mina) for its happy resolution. The Jewel of Seven Stars (1903) relates the story of a scientist determined to reanimate a mummy, and his acceptance of an undefinable connection between the dead queen and his own daughter. The Lair of the White Worm (1911) is concerned with the folkloric tradition of the White Worm and has an entire concurrent plot related to the evils of mesmerism. Other novels by Stoker rely on different elements of folklore, such as in *The Snake's Pass* (1890), and even a form of clairvoyance (which he calls "Second Sight") in *The Mystery of the Sea* (1902). Thus, Stoker's depictions of the scientific supernatural weave together different facets of the social understanding of science's potential ability to explain the supernatural. Stoker is, therefore, a useful author to consider in connection with the scientific supernatural because he employed it to various ends in different novels and showed not only a prolonged interest in the field but also in the developments that were occurring.

Most of the vast collection of critical material related to Bram Stoker focuses on *Dracula* (1897).⁵ Carol A. Senf remarks in the introduction to *Science and Social Science* in *Bram Stoker's Fiction* (2002):

[e]ven Stoker's biographers, individuals who know more about the man than do most people, have contributed to this oversimplification, all of them including the word Dracula in their titles: Harry Ludlam, *A Biography of Dracula: The Life Story of Bram Stoker* (1962); Daniel

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⁵ Most *Dracula* criticism can be divided into a few categories: gender or gothic studies and social concerns. *Dracula: The Shade and the Shadow* (1998), edited by Elizabeth Miller, is a collection of papers from a conference that was, essentially, Dracula's birthday party and includes chapters like "Dracula and the Epistemology of the Victorian Gothic Novel" that test assumptions about the treatment of Gothic novels (by asserting that readers are not to suspend disbelief when reading the novel but are invited to examine the evidence) and still rely on the presupposition that *Dracula* is best read as a Gothic text. Texts such as David Glover's *Vampires, Mummies, and Liberals: Bram Stoker and the Politics of Popular Fiction* (1996) examine the social politics and gender roles throughout Stoker's novels. Similarly, "*Dracula* and *The Beetle*: Imperial and Sexual Guilt and Fear in Late Victorian Fantasy" (1990) by Rhys Garnett deals with issues of gender expectations and performance. Others, like Nicholas Daly, focus on the social changes mirrored in *Dracula* in chapters such as "Incorporated Bodies: *Dracula* and Professionalism" in his book *Modernism, Romance, and the fin de siècle: Popular Fiction and British Culture* (1999). Even Jennifer Wicke's "Combining Perspectives on *Dracula*" (2002), an essay written to demonstrate the different ways to consider the novel, touches on these foundational topics.

Farson, *The Man Who Wrote Dracula: A Biography of Bram Stoker* (1975); and Barbara Belford, *Bram Stoker: A Biography of the Author of Dracula* (1996). Judging from the titles makes it seem as though the man had been subsumed by his most famous book. (Senf 1)

Although Senf notes this issue within criticism and calls for a growth in attention to the other novels Stoker wrote, she falls into the same pattern. Senf begins with a chapter entitled "Gothic Monster versus Modern Science in Dracula" which, when it does focus on science, addresses medical science. In considering Van Helsing mainly as a doctor, Senf simplifies his scientific interests to what has been passed down as lasting science.⁶ Senf focuses on science as a sign of modernity, stating that Stoker "seems more interested in technology (practical, applied science) than in pure science" (Science and Social Science 30). The other chapters devoted to science make similar simplifications. For instance, she states that Trelawny's "confusion of science, pseudoscience, and magic is evident in the fact that he sometimes characterizes the knowledge that he hopes to acquire as scientific knowledge and sometimes as magic" in The Jewel of Seven Stars (Senf, Science and Social Science 80). Defining science as the twenty-first century defines it, however, removes the scientific supernatural from study and places many areas of scientific inquiry contemporary to Stoker as strictly Other, be that supernatural, primitive, etc. When Senf returns to her opening question of whether Stoker can be considered an early writer of Science Fiction, she determines that, despite the "scholarly emphasis" which tends to connect his work to fin de siècle Gothic (Science and Social Science 128), his "belief that science will eventually reach the point that people can use it and its practical applications qualifies him as a science fiction writer" (138). Examining the scientific supernatural within the texts, therefore, could further a discussion of Stoker as an early Science Fiction writer for those primarily interested in Stoker studies because of his treatment of all contemporary sciences.

There is, however, a small but growing collection of material devoted to some of Stoker's other novels and these articles tend to have a broader spectrum of subject matter. Articles on *The Jewel of Seven Stars* frequently investigate issues of the supernatural as pieces of the past invading the present seen in Robert Edwards's "The Alien and the

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⁶ William Hughes also has a chapter that divides lasting medical science and pseudo-science medicine in connection with *Dracula* in "The Sanguine Economy" in *Beyond Dracula: Bram Stoker's Fiction and its Cultural Context* (2000).

Familiar in *The Jewel of Seven Stars* and *Dracula*" (1998) in *Bram Stoker: History*, Psychoanalysis and the Gothic. He positions the past as uncanny because of the "alien with a sense of the familiar" (107). David Seed's "Eruptions of the Primitive into the Present: The Jewel of Seven Stars and The Lair of the White Worm" of the same collection examines the ways that legend and the use of legends connect the two novels. The Lady of the Shroud, however, suggests political readings including Lisa Hopkins's "Crowning the King, Mourning his Mother: The Jewel of Seven Stars and The Lady of the Shroud," which places great importance on the shift from Queen Victoria to King Edward around the time of the novel's publication and "Exchanging Fantasies: Sex and the Serbian Crisis in *The Lady of the Shroud*" by Victor Sage, which compares the politics of Stoker's created kingdom with those of contemporary British Balkan politics. Rather than looking for outside connections, David Punter's "Echoes in the Animal House: The Lair of the White Worm" (1998) presents a close reading of the novel that compares the various characters to animals of similar characteristics. He does, however, emphasise the role of mesmerism between Caswall and Lilla, and the racial undertones in the text but without discussing the role of mesmerism or its status in society. Thus, there is some pattern to the focus of scholars on individual novels but few overarching themes outside of those applied to Dracula, and still less recognition of the sciences interested in the supernatural.

Despite the intense interest in Stoker's writing (especially *Dracula*), the representation of the scientific supernatural remains a gap to be filled that both builds on the understandings of his novels as Gothic or Horror and suggests readings that merge the gender concerns with other popular social concerns depicted in the novels. Science is often evoked through an interest in his fascination with technology, but pure science is rarely addressed. Even when lasting sciences have been studied within the context of Stoker's novels, the sciences of the supernatural are yet to be discussed. Likewise, if the supernatural is explored it is for the exotic nature of the vampire or Egyptian mummy and not the characteristics that these creatures embody, characteristics that *fin de siècle* science was attempting to explain as scientific. Thus, the combination of science and the supernatural that will be discussed throughout this thesis has not yet been examined.

In contrast to Stoker and his single novel that has made its way to some lists of literature, Arthur Machen's body of work is almost exclusively included in discussions of certain genres of literature: Horror and Occult. Taken for granted as a Horror classic, Machen's *The Great God Pan* (1890) is more than just an early tale of a mad scientist

willing to risk human life for his own experimentation. Machen's novella deals intimately with a scientist's attempt to prove the supernatural and the effects on himself, his test subject, and wider society. Here, the experimentation is completed without regard for human life and the consequences are not considered. As a Horror genre classic, Machen's text is significant for the way that he approaches scientific supernatural experimentation and the potential legacy that it leaves. Machen's work primarily incorporates the dark side of the supernatural.

Machen's interests were complex, making him a challenge for critics attempting to situate his writing. Decadence, as a topic, offers the potential to merge Machen's seemingly tangential works into the dominant literary trends of his day. Christine Ferguson both reads *The Great God Pan* as having a decadent approach to scientific discovery and cites Machen's "denials of affiliation with the style" ("Decadence" 474). Gabriel Lovatt further claims that "Machen's role as an innovator who contributed to the development of Decadence is complicated by the publication history of 'The Great God Pan" since the series in which it was first published "teeter[s] on the seam that divides Decadence between highbrow and lowbrow art" (19-20). In his discussion of *The Great* God Pan, Mark De Cicco suggests that "liminal sciences and fields of knowledge, haunt the edges of literary representation during the fin-de-siècle [sic], and by their very presence force readers to confront the same uncomfortable void between reason and faith, the rational and irrational, that as occult explorers they have attempted to bridge through supernatural means" (8). De Cicco eventually concludes that, in the novella, "the human body itself becomes a pathway and barrier to occult knowledge, and is simultaneously the site of the struggle with madness and death" (21). Although Machen is certainly not attempting to suggest through the novella that the scientific supernatural is a safe place of research, De Cicco's analysis presupposes that Machen's doctor starts from a place of irrationality in his attempt to have Mary see Pan and the human body's inability to withstand the procedure. Positioning the result of Machen's story in the context of scientific testing conducted in the hopes of proving the supernatural, however, will reveal that failure to gain lasting proof of the supernatural did not necessitate monstrous results.

Biographers cannot place Machen in the centre of scholarly debates about science, or religion, but he was nevertheless aware of the concerns of his society. It is certain that he read "widely in every field of the more or less superstitious: in astrology and demonology, about ghosts, magic and dreams, on the Kabbala, and on curious or simply abstruse religious cults" (Reynolds and Charlton 22). Machen also gave advice regarding

what he thought would be published to aspiring authors. Machen's letter to F.C. Owlett reveals a somewhat jaded understanding of what publishers will print in that his suggestions are things such as "How they keep Xmas in Australia" (letter to F.C. Owlett, Arthur Machen Collection, Princeton). He concludes by stating: "I believe this all good advice from the practical point of view. I should hate following it myself: but there you are" (letter to F.C. Owlett, Arthur Machen Collection, Princeton), having told another man only a few months before that he had been "thrown out of Fleet St about a year ago" (letter to Dr. Parker, Arthur Machen Collection, Syracuse). Given his various interests, and his reputation which made him someone from whom others sought advice, Machen would likely have been aware of which of those "superstitious" topics claimed scientific roots as he selected topics for his fiction.

Like Machen, Florence Marryat was deeply interested in the supernatural, an interest evident in much of her fiction. Marryat was herself a fervent believer in Spiritualism and much of her writing is saturated with representations of it and instructions regarding her faith. *The Blood of the Vampire* (1897) is a novel concerned with the unintentional vampiric effects of a young woman who seeks a doctor's diagnosis for the effect her presence has on those she loves. *The Dead Man's Message* (1894) depicts a Spiritualist's perspective of the afterlife. Together, these novels allow readers to explore Marryat's perspective on the relationship between science and the supernatural.

Much of the criticism on Marryat's work begins by noting the lack of attention paid to Marryat or states that she is just coming under academic scrutiny. Nevertheless, there are themes beginning to develop as compelling areas of study in Marryat's extensive body of work. Greta Depledge's numerous articles on Marryat's sensation fiction trace specific topics in Marryat's novels, providing case studies of particular issues. Depledge notes: "[w]ithout doubt some of her novels are best forgotten, but there are many that justify the resurgence of interest in this writer of sensationalism, Gothic pot boilers, and quasi-new woman fiction" ("Conflicting" 42). Marryat's engagement with nineteenth-century medicine emerges as a common theme over several of her novels. Vivisection is a central issue of debate in *An Angel of Pity* and "Marryat uses her fiction as a medium through which she can engage in a contemporary and contentious debate" (Depledge, "Experimental" 232).

Marryat participates in these social discussions through the story of *The Blood of the Vampire*. Sarah Willburn focuses on the possible connections between race and occult in the novels of Florence Marryat, Cora Linn Daniels, and Marie Corelli to argue that

"race essentialism in occult accounts reminds us that even in fictional accounts of special bodies with fantastical attributes, the characters are still subject to the power discrepancies found in so much late-century imperialist fiction" ("Savage Magnet" 450). In a discussion of hybridity and maternal impressions, Brenda Hammack argues that Harriet's inherited psychic vampirism in *The Blood of the Vampire* was not intended to be strange or supernatural but a result of this nineteenth-century scientific theory ("Hybridity" 893-894). What remains to be done is to connect these two strands of attention paid to Marryat as a socially conscious sensation writer and an avid Spiritualist to reveal how her novels are not just interested in her contemporary scientific debates or her own faith, but simultaneously addressing both issues. The discussions of Marryat's novels throughout this thesis seek to make those connections.

Marie Corelli, like Marryat, has not been the focus of much scholarly attention despite her nineteenth-century status as a bestselling author. Many of Corelli's novels blend together science and the supernatural in ways foreign to the twenty-first century reader. Her theory of "Electric Christianity," for example, is a mixing of scientific inquiry into the supernatural and Christian doctrine. What is known of Marie Corelli suggests she believed in the combination of ideas that she represents in her novels. Thus, just as Marryat's depiction of Spiritualism is an illustration of her understanding of the supernatural, so too is Corelli's sect a representation of her belief in the connections between science and the supernatural. Corelli's The Soul of Lilith (1891) tells the story of an ill-fated scientist's attempt to uncover the secrets of the afterlife, specifically as relates to the existence of hell. A Romance of Two Worlds (1886), conversely, deals with life and how a person should live to better his or her station in the afterlife. These two ideas, in one way or another, permeate much of her work and shape the conclusions that readers can form about Corelli's fiction. She did, in fact, understand herself to be spreading valuable knowledge. Thus, despite the status of her science in later centuries, she should be read with attention to the place of those ideas in her contemporary society and the possibilities and potentialities that have since been explained away.

Marie Corelli's lasting legacy is that of being the first modern bestseller. As such, her life and the mysteries surrounding her have drawn interest because of her place as a historical figure. Kent Carr's biography, *Miss Marie Corelli*, first appeared in 1901.

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⁷ Electric Christianity, which will be discussed in detail in Chapter 1, can be considered an unorthodox sect of Christianity that she describes throughout several of her novels.

Seven other biographies of Corelli exist including Teresa Ransom's *The Mysterious Miss Marie Corelli: Queen of Victorian Bestsellers* (1999), George Bullock's *Marie Corelli: The Life and Death of a Best-Seller* (1940), and *Marie Corelli: The Woman and the Legend; A Biography* (1953) by Eileen Bigland. These books detail her life, presenting ideas about who her father was and why she changed her name to Marie Corelli, giving insight into her as the woman behind the pen. For instance, Carr comments that "no biographer may neglect" Czar, Corelli's terrier, "who makes up in spirit for what he lacks in size. He is in the most entire sympathy with his mistress' opinion of the Press, and his greatest pleasure is to give it practical expression by worrying all the press cuttings he can get hold of' (81). Corelli trained her beloved dog to destroy reviews and this makes for both an interesting perspective on her personality and an adorable photograph of Czar hard at work reprinted in Bigland's biography (225). In these biographies, her books are secondary, things she wrote to survive, as the primary interest is her person.

There are, however, two books on Corelli that take a more academic approach to her life and explore the connections between Corelli's time and her works. In Writers, Readers, & Reputations: Literary Life in Britain 1870-1918 (2006), Philip Waller addresses Corelli's role within the wider literary culture. Exploring the interactions between Corelli and both publishers and other authors allows Waller to discuss the influence she had on society and her portrayals of issues of the time such as her insistence that her beliefs were neither Theosophist nor Spiritualist (776) and her ideals of womanhood (809). Parts of Annette R. Federico's Idol of Suburbia: Marie Corelli and Late-Victorian Literary Culture (2000) trace various social phenomena in Corelli's novels. Corelli's attacks on aestheticism in novels such as Sorrows of Satan take up a chapter of the book and less direct topics, such as her portrayal of motherhood in *The* Soul of Lilith and Boy, are also given consideration. Federico's work connects Corelli's novels to outside influences and discusses some recurring themes but does not study any of the novels in great detail in relationship to the representations of science or the supernatural. Federico states that "[f]or Corelli scientific skepticism needed to be reconciled with spiritual longings" (Idol 130) and describes Electric Christianity as Corelli's "creative blend of science, paganism, the Hebrew God, and quasitheosophical mysticism" (131). Her main focus, however, is on gender politics in Electric Christianity. Both of these two texts, the more focused, academic pieces that discuss Corelli do, nonetheless, point to the importance of the supernatural in her novels.

Additionally, there are a small number of books and articles on Corelli that focus mainly on her importance to feminist readings of the late Victorian and Edwardian periods or on what her popularity says about the publishing industry. On the one hand, Anna Vaninskaya's "The Late-Victorian Romance Revival: A Generic Excursus" (2013) discusses the revival of the romance, such as by Corelli, in comparison with the traditional three decker novels that did not sell as well as part of how publishing began to impact writing. On the other hand, Janet Galligani Casey's "Marie Corelli and Fin de Siècle Feminism" (2013) and Federico's "An 'old-fashioned' young woman': Marie Corelli and the New Woman" (1999) juxtapose Corelli's views of womanhood with the growth of feminism in society. Rather than discussing Corelli's politics, Carol Poster addresses the academic lack of attention to Corelli's work as a modern feminist issue in "Canonicity and the Campus Bookstore: Teaching Victorian Women Writers" (2013) and "Oxidization Is a Feminist Issue: Acidity, Canonicity, and Popular Victorian Female Authors" (2013). Silent Voices: Forgotten Novels by Victorian Women Writers (2003), edited by Brenda Ayres, similarly mentions Corelli as a forgotten author of the period in Ayres's chapter discussing her.

Articles that specifically address Corelli's texts are few. For example, Jeffrey J. Franklin examines the influences of Buddhism on society as the newly introduced religion invaded Europe in connection with her A Romance of Two Worlds. He states: "Corelli's hybrid Christianity, like other hybrid religions of the late-Victorian decades, stakes-out its own brand of spirituality by strategically incorporating elements drawn from the very sources that it demonizes: fundamentalist Christianity, market capitalism, science, spiritualism, and Buddhism" (Franklin, "Counter-Invasion" 30). He backs away from the combination of terms, however, to explore the late nineteenth-century understandings of Buddhism, leaving the representations of everything else unexplored. Likewise, Jill Galvan addresses the "combine[d] traits of the spirit medium with those of the technological medium" in her article "Christians, Infidels and Women's Channeling in the Writings of Marie Corelli." Galvan shifts her focus from a possible intersection with science to a feminist reading by noting that Corelli's "works subtly revise the image of inspired femininity, framing women's communications channeling as a vocation marked by active intellectual and social involvement" ("Christians" 84). The supernatural has, therefore, been raised as a topic of concern in Corelli's works. Combining this interest in the supernatural with the role that science plays in the texts will then allow for

new readings of her work throughout this thesis as the discussion explores the way the scientific supernatural is depicted within Corelli's novels.

Bram Stoker, Arthur Machen, Florence Marryat, and Marie Corelli, represent a selection of authors who were intensely interested in the scientific supernatural as science and explored its usefulness for the unique stories it could facilitate. Whether they were more interested in the science or the supernatural, their fictional testing of the boundaries of science left a literary legacy of forgotten sciences in fiction. Focusing on the scientific supernatural can help literary critics to better understand each of these author's work. In combination, however, the depictions of the scientific supernatural in these novels reveals the limitations of modern criticism that only considers lasting science of the material world to be science. Recognising the work of these authors as interested in the authors' contemporary science will expand modern critical discussions of nineteenth-century science in literature.

Each chapter of this thesis examines the way the authors represent the matter of authority within the scientific supernatural. Depictions of Spiritualism, scientific uncertainties, and scientific experiments (the chapters of this thesis) each reveal unique concerns and opportunities for the authors of the representative novels discussed here. Authors who fervently believed in specific sets of Spiritualism (which will be discussed in Chapter 1) can, and do, still critique the supernatural in other novels. Authority was in flux within the scientific supernatural. The interest in depicting authority in the scientific supernatural reveals unique concerns and critiques for each thematic set of novels when the phenomena are read in the historical context of the scientific interest in the supernatural.

The first chapter of this thesis, Chapter 1: Representations of Spiritualism(s), examines Florence Marryat's The Dead Man's Message (1894) and Marie Corelli's A Romance of Two Worlds (1886) as depictions of the supernatural in direct contact with the physical world through Spiritualism and the credibility offered to the systems of belief through appeals to science. These novels rely on an audience willing to read long passages of blatant doctrine and / or lengthy lessons on proper living. Although neither novel engages with the tenets of Theosophy specifically, each suggests the author's own version of Spiritualism, reminiscent of a fictionalisation of Blavatsky's Isis Unveiled. Yet each novel more overtly appeals to science through the inclusion of a doctor or scientist character, whereas Blavatsky relied on her readers trusting her as the author of the doctrine. The resulting novels are spiritual bildungsromans, detailed enough that the

reader can follow the protagonist in his or her journey to faith. Readers can base their new-found system of belief on the scientific support the authors give. There is no single ranking of science and the supernatural for novels of this type despite the scientific supernatural being represented as the scientific backing for the systems of belief presented through the novels.

Chapter 2: Scientific Uncertainties suggests that the authors were engaging with scientific ideas by intentionally basing the stories on the gaps in their contemporary scientific knowledge. In Florence Marryat's The Blood of the Vampire (1897) and Bram Stoker's The Lair of the White Worm (1911), the authors use the gaps in scientific understanding to drive suspense. Scientific uncertainties are dangerous. The stories move quickly, assuming the reader has knowledge of the various issues at play throughout the storylines. When the scientific concerns of the novels (diagnosis in The Blood of the Vampire and mesmerism in The Lair of the White Worm) are contextualised with fin de siècle understandings of the science involved, events of the novels take on greater significance that has been lost to twenty-first century readers because of the growth in scientific knowledge and the filling of those gaps.

The final chapter, Chapter 3: Scientific Experimentation, examines depictions of scientific experiments of the supernatural, which establish the supernatural as real, dangerous, and uncontainable. The three experiments discussed are those of Marie Corelli's The Soul of Lilith (1892), Arthur Machen's The Great God Pan (1894), and Bram Stoker's The Jewel of Seven Stars (1903). In each case, the scientific interest in the supernatural is justified through the action of the supernatural in the material world during the experiment. The authors ultimately deny the reader a full explanation of what happens in the experiments, disallowing any attempted replication of the experiments and preserving the results as depicted. In doing so, the authors reflect the expectation and hope in the potential of science to explain the supernatural that their society held for contemporary scientific experimentation. Scientific experiments, both in this fiction and by real historical scientists, uncovered evidence that apparently revealed that the supernatural was able to act in the material world even as it eluded precise measurement, suggesting that scientific measurement would be possible in the future. The authors are careful to end their novels in this atmosphere of expectation where neither science nor the supernatural is clearly established as superseding the other.

Representations of the scientific supernatural in *fin de siècle* fiction reveal the literary interest in these now-lost sciences that can expand critical discussions of science

in nineteenth-century literature. Recognising the scientific supernatural as late nineteenth-century science changes the way that these novels are understood in that they can receive a place in the wider critical discussions of science in literature. They are more than fantasies uninterested in real contemporary science. The use of scientific interest in the supernatural within novels such as those discussed throughout this thesis suggests the need for a wider understanding of what constituted "science" at the *fin de siècle* and the recovery of late nineteenth-century sciences for twenty-first century readers and literary critics.

Chapter 1

Representations of Spiritualism(s)

Writing novels where the supernatural is clearly represented as beyond the physical world but in direct contact with it, Florence Marryat and Marie Corelli teach specific, science-based, faiths through their fiction. In Marryat's *The Dead Man's* Message (1894) and Corelli's A Romance of Two Worlds (1886), the authors are consciously didactic and their novels detailed enough that the reader can learn, and potentially practise, the faith described within the pages of the novel. The result in both cases is a story which presents a fictional representation of a religion that each author would have the reader consider to be fact. As such, even though they acknowledge the story as fiction, they would each understand their respective stories to be plausible, if not actually occurring somewhere in the world. The lines between fact and fiction are, therefore, blurred for the authors and, perhaps more significantly, for some readers as well. The idea of plausibility is based in the authors' understanding of the scientific supernatural and the social prominence of Spiritualism. Drawing on Spiritualist beliefs, Marryat and Corelli bring together ideas that had some scientific support and intertwine them into systems of belief that cannot be proven scientifically. The result is something new that can only be truly observed in the pages of fiction. This chapter argues that the resulting novels are not only tales of individuals' journeys to faith but also a guide to the shrewd reader who the authors seek to teach through the descriptions of the Spiritualist belief systems of the novels.

These novels that relate new systems of belief, or faiths, that appealed to science for authority and to boost respectability, were ingrained in the Spiritualist movement of the mid- to late Victorian period. Spiritualism has no single set of beliefs, much less texts that document those beliefs, and the depictions of Spiritualism in fiction can be read as what a specific sect, or individual, believed. Based on Oppenheim's definition of Spiritualism discussed in the Introduction of this thesis, these fictional depictions of faiths by Marryat and Corelli can both be considered types of Spiritualism. The mark of a Spiritualist worldview is "proclaiming the existence and activity of spirit agencies throughout the universe" but with "language, and through procedures, acceptable to science" (Oppenheim, *Other World* 61-62). Although Corelli would certainly argue against the classification of her Electric Christianity (also called her Electric Creed) as a form of Spiritualism, she, like Marryat, in fact describes a specific doctrine for a sect of

unorthodox Christianity that falls under the wide umbrella term of Spiritualism because of the use of scientific language and depictions of spirit interactions with the living. Given Marryat's personal belief in Spiritualism, she likely intended her novel to be read in this context. Both of these authors use the novel as a tool to deliver the details of what they would have readers believe to be the correct system of belief that all should follow. Thus, in these novels the authors essentially teach a Spiritualist worldview.

The stories that Marryat and Corelli wrote serve as their introductions to their preferred specific systems of belief, as examples of potential human experiences and avenues for disseminating their (at least professed) faiths through the lessons taught by the guide characters. The message of these novels is wrapped in a story. The plot of the novel is dependent on an exploration of the way that various phenomena are related to, and / or reliant on, each other. These novels bring the protagonist from a starting point of unbelief or ignorance, through a moment of epiphany, and to a genuine desire to grow in his or her understanding (or knowledge) of the system of belief he or she has come to accept as true. In the case of Marryat's scientist, this acceptance requires his willingness to overcome his materialistic biases, whereas Corelli's pianist readily accepts the faith of the man who has helped her find physical healing. Sections of each text are devoted to the guide instructing the protagonist in the necessary changes that need to be made in his or her life (or afterlife). The protagonists must then decide to act on that instruction, choosing to further embrace what they are learning, or ignore their guides in favour of the way they had been living (either depicted at the start of the novel or referenced throughout). Having seen and experienced enough to trust the guide, the protagonist chooses to fully embrace the belief system; to avoid doing so would be to reject his or her own recent experiences. These protagonists not only grow to espouse the beliefs taught to them through the novel but also long for further teaching. As such, the novels are, in effect, spiritual bildungsromans: novels that trace the moral growth of the protagonists through a change in the way they understand the supernatural and man's ability to connect to it from the material world.

As discussed in the Introduction, Marryat and Corelli both enjoyed large reading audiences, making their novels useful for disseminating ideas regardless of their status as fiction. Victorian social knowledge of their depicted belief systems, however, was vastly different. Belief in the ability of spirits to contact those living in the material world was common enough that Marryat's story was easily recognisable as Spiritualist, drawing from accounts of the afterlife passed on through mediums. Corelli's Electric Christianity,

however, was her own unique creation. Nevertheless, both authors write seriously about Spiritualism in their fiction. In both cases the authors would have their faithful readers believe that they were, themselves, adherents to the systems of belief they describe in their respective novels. Marryat was a professing Spiritualist, Corelli's propensity for carefully crafting her public persona makes her own stance on Electric Christianity less clear.

Marryat was actively involved in Spiritualist circles and open about her personal belief in Spiritualism. An undated newspaper clipping in her remaining scrapbook includes in its assessment of her that "[t]he distinguished authoress is a devout Spiritualist. She holds *séances* where denizens of the other world appear, and even the harrowing process of materialisation takes place" with the author's assessment of Marryat's dignity, figure, and speech (Florence Marryat Collection, box 3, folder 41).8 She was convinced of the abilities of mediums and frequented séances. Her own apologetic, non-fiction texts about Spiritualism, There is No Death (1891) and The Spirit World (1894), detail her reasons for believing in the supernatural realm as she understood it and the evidence she thought would convince others. Spiritualism provided her with comfort following the death of a child and, upon the author's own death, her daughter affirmed that Marryat had fervently believed in its truthfulness. As she wrote in a memoriam published December 30, 1899 in St. Paul's, entitled "The Real Florence Marryat. By Her Daughter[,]" "[h]er adherence to the cause of spiritualism is well known, and was, I am convinced, entirely sincere. [...] [I]t was the cause of much happiness to herself' (Florence Marryat Collection, box 3, folder 34). That Marryat's novella The Dead Man's Message tells the story of a scientist's discovery that Spiritualism is true following his death and his family's search for answers in a medium's sitting room is, therefore, not a surprising story arc for her to write.

Corelli, however, veiled most of the details of her personal life in a complex web of lies and half-truths, including the matter of her faith. She explained to Mr. Arbuthnot, the vicar in Stratford-on-Avon, that she followed "the teachings of Christ as enunciated by Himself" as a member of an "Order" that was "not [...] allowed to attend public worship" (quoted in Bullock 120-121). Whether or not that was true regarding her personal beliefs, she uses her novels to create something new: Electric Christianity.

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⁸ The article has been cropped too closely to ascertain author, newspaper, or any other publication information.

Corelli's creation is a mixture of Christianity, Spiritualism, occult mysticism, and Corelli's own (mis)understanding of theories of human electricity. The innovativeness of Corelli's fictional scientific sect is evident in three ways: she is the first to write of Electric Christianity; she continues to rework the doctrine in multiple novels; and, in one of her surviving letters, she insists on the novelty of what she writes about. In an undated letter addressed to a Mr. Lawley, Corelli states: "It is hard indeed to be original, - yet I think you will find most people admit who have read the book [A Romance of Two Worlds], that the theory of the 'Creative Ring' – and the 'Central World' within the Ring, are new – as also are the comparisons between the theories of electric force and the leading points of the Christian faith" (Marie Corelli Collection, box 1, folder 28, emphasis in the original). A Romance of Two Worlds, Corelli's first novel, begins her interest in writing stories that convey Electric Christianity as she crafts a new sect of unorthodox Christianity, which she may or may not have believed herself, within the pages of a fictional novel.

Both novelists wrote other types of texts in addition to those that intentionally teach a system of belief. Marryat's works include sensation fiction and her nonfiction Spiritualist texts. Corelli wrote several novels that relate to Electric Christianity, at least in part. She also wrote moral tales and gave lectures on famous authors and a variety of social issues. Bertha Vyver, Corelli's dear friend, writes (with evident pride) in her Memoirs of Marie Corelli of Corelli's invitation to speak at the Philosophical Society of Edinburgh in 1901 and her lecture which "dealt with the decay of civilisation and the loss of the imaginative spirit" (169). Eileen Bigland's chapter "The Cygnet of Avon" details Corelli's potentially unwelcome interest in neighborhood affairs. Janet Galligani Casey's study of feminism and Corelli not only traces her treatment of female characters in fiction but also examines her pamphlet Woman or-Suffragette? and her personal stance against women's suffrage (172-173). In contrast to tracts, pamphlets, and sermons used by traditional religions, novels such as those discussed in this chapter share the system of belief intrinsic to the story without any overt claims of being religious teachings. Fiction provided the authors with a way to share what they would have readers consider true in an unobtrusive manner that appealed to the popular audience, allowing their messages to

⁹ Darko Suvin says of Corelli's Electric Christianity that "the enormous popularity of [it] is echoed right down to C.S. Lewis" in his discussion of the Science Fiction genre (73). He does attribute its existence to Corelli, supporting it as her creation. The claim of its continued popularity is not further expanded upon.

be heard (or, rather, read) widely. As such, the novel was a convenient, and inconspicuous, package for a message they wanted to deliver.

The issues of the authors' professed personal beliefs and the role of the guide in the novels, therefore, cannot be divorced from one another. For Marryat's novel, a case can be made that the novel is a fictional explanatory text for the author's personal faith. The system of belief that Corelli creates is, however, the invention of a woman who fancied herself an expert on subjects she had never studied, such as electrical engineering and medicine. Yet in both cases, the guide characters in the novels convince the protagonists (and potentially readers) that the truth they teach should not be ignored since it will be undeniable after death. Part of the guides' role in the novels is to remind the reader that many people will learn about how and what they should believe about faith and its potential connections to science (by reading the novels) but only some will choose to believe and follow what they read. The cautions that the guides give function both internally, in the plot of the novel, and externally in the way the authors assume that many readers will dismiss the truths found in the novel as pure fiction. Novels that create a system of belief through the narrative, therefore, challenge preconceptions about the location of truth and who can provide it, both internally through who acts as the guide character and externally by suggesting the novel is a potential source of truth.

Both Corelli and Marryat endorsed the worldviews about which they wrote as potential real systems of belief and themselves as potential experts in the respective sects. In her article about channeling (as relates to the passing on of information rather than specifically of spirits by mediums), Jill Galvan briefly notes this authorial claim of knowledge in regards to Corelli's A Romance of Two Worlds. For Galvan, it is the blurring of the lines between authorial voice and narrator that results in the author's acting as a communications channel in the novel ("Christians" 94). As she concludes an article about the channeling of information and the parallels to technological forms of communication, she states that "[b]y framing the story in a voice that cultivates, rather than clears up this identification between narrator and author, Corelli shapes her vocation as female novelist as essentially inseparable from that of her narrator, whose task it is to channel moral messages with as well as through the text" (Galvan, "Christians" 94, emphasis original). This idea is developed to link to Corelli's policing of her public image (95). It is not only Corelli's repeated placement of a character that she felt represented herself into her novels, or the authorial intrusion in the Prologue and at the conclusion of the novel that gives Corelli this dual role, but also that she personally defended the beliefs

portrayed in the novel as her own in her letters and the introductory material to her novels. Although less overt than Corelli, Marryat (who gives no opening or closing message to the reader) similarly advocates for the worldview depicted in her text through the widespread knowledge of her personal belief in Spiritualism. It is the combination of their openness about their professed (or apparent) beliefs and the way that the novels work to teach those beliefs that results in the power to teach a worldview concerned with the scientific supernatural through fiction.

The veiled nature of the didacticism in a fantastic story allowed the authors to create and defend their systems of belief without inciting direct opposition from those who openly opposed Spiritualism in its many forms by the late nineteenth century. If those creating and following hybrid belief systems (both real social movements and fictional depictions of them) provided one half of the social discussion, there were also those who continued to argue against Spiritualism, in general, and invested time in debunking various phenomena or writing against the religious philosophies. Objectors were often forthright in their opposition, even if they did not personally perform any sort of test to discredit Spiritualism. Thus, objection was visible in two ways: tests of mediums to catch frauds through scientific experimentation and writings aimed at the average Englishman with little or no scientific background. J. N. Maskelyne, a stage magician uniquely qualified to uncover trickery because of his profession, was particularly infamous for his views on Spiritualism. In his *The Supernatural?* (1891), Lionel Weatherly defers to Maskelyne as the expected expert for the chapter "Modern Spiritualism." Maskelyne's contribution to Weatherly's book is specifically related to his work debunking Spiritualism and, although only the author of the chapter on Spiritualism, Maskelyne appears as coauthor of the book. Maskelyne begins by stating, somewhat over-weary of the subject, that:

In this year of grace eighteen hundred and ninety-one, to write upon the deceptions which have been practised under the name of Modern Spiritualism is surely akin to thrashing a dead horse; but since this pernicious doctrine has ever been productive of so much evil, and has done so much to fill our lunatic asylums, the author of the present work considers that it would be incomplete without a chapter on the subject, and this I have promised to contribute. (Weatherly and Maskelyne 182-183)

For Maskelyne, Spiritualism is not merely a problem of fraud or of taking advantage of gullible people. He understands Spiritualism to be a great, negative, social force that not only drives individual people mad but also produces evil in society.

Maskelyne's frustration that Spiritualism still needs to be addressed in 1891 is evident and, both his apparent annoyance and the need for it to be challenged as an idea, reveals the staying power Spiritualism had in society regardless of the attempts to oust it from the public consciousness. Maskelyne continues his introduction to the topic at hand with the claim that, "[t]he doctrine of so-called Spiritualism embodies an abstract principle and a concrete fact—the *principle* being that 'those who have plenty of money and no brains were made for those who have plenty of brains and no money;' and the fact is, that the ranks of the Spiritualists have ever been largely recruited from these two classes" (Weatherly and Maskelyne 183, emphasis in the original). Maskelyne writes an inductive argument; beginning with the fraudulent mediums he has encountered, he projects deception as a trait outward to all members of the group. In the pages that follow, Maskelyne catalogues instances of mediums being caught cheating their clients and tricks that he can duplicate himself that have no supernatural element whatsoever. Despite potential problems with logical fallacies in his argument, Maskelyne provides a substantial list of mediums and illusions that can be explained without recourse to the supernatural. Maskelyne's discussion is provided in *The Supernatural?* as all that is needed to reveal Spiritualism as a socially corrosive hoax for the average member of society. Due to Maskelyne's prominence in society as both a performer and anti-Spiritualist, Corelli and Marryat would have been aware of his arguments and those of others like him. Corelli intentionally challenges Maskelyne but nineteenth-century readers would have been familiar with both perspectives of Spiritualism without the direct reference.

Marryat and Corelli confront issues of skepticism through opposing representations of the relationship between the scientist and Spiritualism. Marryat's scientist reaches both the end of his research and his physical life because he is spiritually damaged by his material, scientific pursuits. As a vivisectionist, he has valued only what he can see, touch, and dissect. This science is limited by the physical world and has no way of investigating the supernatural realm in general and, in particular, the Spiritualist afterlife in which he finds himself. Corelli's scientist, however, is superior to medical doctors who treat only the physical and offers physical *and* spiritual healing to his patients through his understanding of human electricity as key to both. His openness to

discarded ideas, and ridicule, enables him to offer better cures and directly challenge skeptics such as Maskelyne. Although both scientists are faced with the reality of the supernatural realm, only Corelli's scientist character is prepared to engage with it and merge it with his understandings of science for the betterment of others. The anti-Spiritualist scientist is revealed to be limited in his understanding of the world and selfish in his materialism, while the spiritual scientist is presented as the hero of the suffering with access to knowledge of great significance.

In this chapter, concerns of whether science or the supernatural has superseding authority in the scientific supernatural are addressed in different ways by the two authors in question. Both Marryat and Corelli rely on connections between science and the supernatural in the systems of belief they depict. Yet the emphasis on where the ultimate authority lies differs in the two novels. Marryat's novel is ultimately critical of science, insisting on the authority of the supernatural in the way that she projects the Spiritualist afterlife onto the materialist scientist. In Corelli's novel, however, she insists on scientific respectability (even in supernatural concerns) in a way that affirms mutual authority for science and the supernatural. Although both novels create systems of belief, the authors envision the source of truth for the faiths differently. There is no formula which dictates authority to science or the supernatural even where it would seem that the supernatural should be of utmost concern.

Learning Spiritualism in the Afterlife: The Dead Man's Message

The Dead Man's Message reflects Florence Marryat's belief that the dead have merely passed on to another, supernatural, realm in which their experiences are a result of their earthly lives. Marryat fervently believed in Spiritualism and her standing in Spiritualist society allowed her to interact with some of the names most prominent in nineteenth-century Spiritualism, and with famous mediums. Yale University's Beinecke Rare Book and Manuscript Library holds the Florence Marryat Collection, which includes various correspondence, notebooks, and a scrapbook kept by Marryat. Of particular interest are the short notes from the famous medium Florence Cook and another from her sister Kate Cook, also a medium. These notes reveal intimacy between Marryat and the Cook sisters, with the sisters welcoming Marryat into the small gatherings where they performed séances. Florence Cook and her spirit control Katie King had undergone numerous tests which were believed to have proven the truthfulness of Cook's abilities. It is Katie King who was the focus of many of chemist and Spiritualist William Crookes's

tests which will be discussed in Chapter 3. Much less is known about Kate Cook than her sister Florence. What is sure from Marryat's remaining letters is that she too was a medium and that she kept a much lower public profile. Florence courted fame in her relationship with Crookes; Kate maintained only a small following outside of the public eye. Marryat was not just allowed to attend séances with both sisters but also actively welcomed, with Kate going so far as to write suggesting multiple options in case Marryat was unable to attend one event (*Florence Marryat Collection*, box1, folder 10). This other world of spirits speaking through mediums and materialisations was a place where Marryat was welcome, even intentionally courted.

Marryat's place in Spiritualist society was secure and this may be due in part to books such as *There is No Death* (1891), her Spiritualist manifesto detailing both her own personal experiences with ghosts, séances, and mediums as well as summarising other important movements in Spiritualism. One of Marryat's chapters is entitled "The Mediumship of Katie Cook" and she discusses Kate as "by no means the least powerful of the three [Cook sisters]" (Marryat, *No Death* 196). Marryat provides examples of Kate's powers including the materialisation of 'Lily' (Marryat, *No Death* 197), a cloak ruined after being *de*-materialised (198), and a piano being moved across the room (202-203). Marryat was a witness to these events; she was providing her word as testimony that these things happened while Kate was under the control of a spirit guide.

In a more general sense, *There is No Death* is Marryat's attempt to tackle issues of skepticism and belief in Spiritualism as a whole. Marryat proclaims:

There are two classes of people who have done more harm to the cause of Spiritualism than the testimony of all the scientists has done good, and those are the enthusiasts and the sceptics [sic]. The first believe everything they see or hear. Without giving themselves the trouble to obtain proofs of the genuineness of the manifestations, they rush impetuously from one acquaintance to the other, detailing their experience with so much exaggeration and such unbounded faith, that they make the absurdity of it patent to all. [...]

The second class to which I alluded—the sceptics [sic]—have not done so much injury to Spiritualism as the enthusiasts, because they are as a rule,

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¹⁰ The letter is undated.

so intensely bigoted and hard-headed, and narrow-minded, that they overdo their protestations, and render them harmless. (No Death 65-66) Marryat seems to be calling for a reasoned, calculating faith in Spiritualism rather than a quick acceptance based on excitement, or entertainment, regarding a single event. Nevertheless, it is interesting that she considers the enthusiasts more dangerous to Spiritualism than the skeptics. She wants people to believe, but to believe in things that can stand up to (at least some) scientific scrutiny. When Marryat shifts her focus to skeptics who refuse to believe anything, she raises a central issue for these discussions: the skeptic refuses to believe anyone else's word but expects his to be accepted without question (No Death 66). Marryat does not claim that every séance will work or that no medium has ever tried to trick people. Instead, she argues that single instances of failure should not be applied to the group as a whole. Thus, Marryat's book is presented as a collection of trustworthy instances of the dead contacting the living such as some scientists were trying to collect. She affirms the possibility of the reader having had bad experiences with fraud and manipulation and seeks to establish faith through the index of real encounters with spirits that she provides. Many of her examples were ones she witnessed personally and considered proof of Spiritualism for herself as well as instances to be catalogued for others. Her readers are to trust her to assess things for them and to teach them what she has learned.

Marryat's *The Dead Man's Message* (1894) does not attempt to explain Spiritualism in terms of science but places an unlovable scientist into the Spiritualist afterlife to show the steps towards spiritual growth possible after entrance into the supernatural realm, and the limitations of a scientific mindset closed to the possibility of the supernatural. Taking into account her faith in Spiritualism, the author's message is simple: your choice not to believe only lasts as long as your final breath and last heartbeat. In making the dead man of the book's title a scientist, if only second-rate, Marryat makes a statement *to* and *about* the scientific community rather than attempting to say something *of* that community. She does not claim to be an insider from within the scientific community. Rather, she manipulates the scientist of her novel so that his hard-heartedness and lack of faith reveal what she thinks about that subset of society while simultaneously disallowing any representative sympathetic voice. The Professor lived his life focused entirely on his physical comfort and what he could learn about the physical world, without considering what his singlemindedness might be doing to his soul. As a result, he is completely unprepared to enter the spirit world; he cannot even recognise

what has happened at first. The story ends when the dead man professes his willingness to devote himself to following God's will. Thus, Marryat's novel suggests that it does not matter what people believe or what their understanding of science says, because they will, nevertheless, be faced with the afterlife they did not accept as a possibility before death and the spiritual consequences of their actions on earth during life.

Spiritualism itself was never a distinctly codified faith, allowing Marryat plenty of room to create her form of the system of belief and still be within the accepted (and practised) boundaries. Janet Oppenheim explains of Spiritualism that, "[a]part from the belief that the dead can and do communicate with the living, spiritualism, as it emerged during the second half of the nineteenth century, developed no single creed embraced by all species of British spiritualists" (Other World 59). It is into this environment, filled with different subtypes of Spiritualism all with their own followings, that Marryat created her own type of Spiritualism and interjected her Spiritualist novel. Marryat's depiction of Spiritualism, in fact her novel as a whole, centres on the Professor's experience after death and his discovery of his new role in relationship to people who are still living. As there were no specific tenets of faith required for every subtype of Spiritualism, Marryat need not detail any precise doctrine. Even had she not specifically referenced Spiritualism as she does in connection with the medium character (Marryat, Message 84), the use of the dead interacting with the living would be enough to signal her interest in the Spiritualist worldview. Marryat's use of the supernatural realm, the interaction between the living and the dead, and a medium through whom the spirits of the dead can speak to the living firmly situates the worldview depicted in her novel as Spiritualist. She not only has both of the necessary ingredients of Spiritualism included in the novella (spirits interacting with the living and some interaction with science) but also most common elements of it as she critiques the materialist scientist.

Issues of science and scientific experimentation, specifically the critique of both, appear in the text in two different ways besides the implied claims of the scientific nature of Spiritualism in Marryat's teaching of the worldview. First, the desire for scientific knowledge, the willingness to experiment, and the attempts to prove his desired theories are implicit in the Professor's profession as a scientist; his life was devoted to scientific inquiry. His job, the most distinguishing thing about him, is to investigate and discover new things about the world, to find truths previously hidden. The Professor was engaged in material biological research and attempts to better understand animals, crediting himself with writing "On Subcutaneous Nervi" and "The Aorta of Tadpoles and Other

Germs" (Marryat, *Message* 104). Secondly, the Professor's experience of the afterlife is itself an immaterial, spiritual, inquiry into the workings of the afterlife. The narrative depicting the events after his earthly body dies attempts to explain what there is besides this physical existence. The Professor's experiences provide answers to questions that others ask, though he was too materialistic to be one of them. Faced with the afterlife, he must make up for lost time. This type of question represents facets of Spiritualist beliefs that could not be tested by Victorian scientists with bells to alert them to a medium's movement or uninterrupted electrical currents during a séance. As such, there was no standard test for an experience after death.

The lack of ability to test for, or materially prove, life after death does not, however, mean that there were no testimonials about the process of dying and the spiritual journey that follows being circulated in Victorian society from which Marryat could draw for her novel. Sophia Elizabeth de Morgan's From Matter to Spirit: The Result of Ten Years' Experience in Spirit Manifestations (1863) includes stories of what happens when a person dies and the entrance into the spirit world from the perspective of the dead, revealed through mediums (see her chapter: "The Spiritual Body").11 One story by an anonymous medium of an individual who died but did not realise it and then saw his or her own corpse is simply called "The Birth into Spirit Life" and is said to have been printed in "Spiritual Magazine" (de Morgan 145-147). 12 "The Process of Death" follows, and is footnoted as being, "A Narrative of the Experience of Horace Abraham Ackley, M.D., late of Cleveland, Ohio, since his entrance into Spirit-life" (de Morgan 148-151). These accounts are brief, only a few pages, but this is to be expected since they were related through mediums. Marryat's own non-fiction, Spiritualist texts (discussed earlier in this chapter) show her engagement with this type of material. What Marryat does in her novel is create a narrative that builds on this type of testimony-by-proxy of Spiritualist non-fiction to craft a fuller story of the Professor's experiences after death. What readers may understand to be fiction or perhaps a Spiritualist morality tale, Marryat (as a faithful Spiritualist) would see as plausible, if not probable, because of the accounts of the afterlife and crossing over to which she would have had access.

The supernatural realm of Spiritualism is unquestionably real within the world of the novel and depicted as being beyond the material world in which people live. Most of

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¹¹ De Morgan does not provide dates for these examples.

¹² De Morgan explains that, although the story is anonymous, she knows the medium and it is, therefore, a trustworthy account (145).

the novel happens within the supernatural realm. The Professor's meetings with those who have died before him, his observations of his family, and his growing understanding of his position in the afterlife are the focus of the novel. Each of these events is based in the supernatural realm and readers observe the Professor's progress towards understanding as the story unfolds. Yet, the living characters are completely unaware of everything going on in the supernatural realm around them unless the spirits of the deceased intentionally seek to interact with them. It is members of the supernatural realm who can reach into the material world, not the other way around as when scientists contemporary to Marryat attempted to prove the supernatural through experimentation.

Marryat's novel takes the traditional moral bildungsroman in which the protagonist experiences personal growth and refines it to focus on spiritual progression in the afterlife. Henry Aldwyn, the Professor, is the perfect example of what not to be; readers should learn from his example rather than follow it. The Dead Man's Message picks up the Professor's life on his last day alive on earth and ends with his recognition that his spirit is subject to God and he must work to counteract the harm he did while alive before he can be at peace in the spirit world; a spiritual bildungsroman which sets up the next stage of the Professor's existence. To illustrate his depravity, Marryat describes his last day on earth as exceptionally devoid of basic human kindness but not atypical for him. In the hours before he dies, the Professor: tells his wife (Ethel) not to allow her cousin to come for dinner (Marryat, Message 4); invites his own friends to dinner to discuss scientific topics; refuses to let his teenage children dine with the adults (9); tells his son he is not even sure he is indeed his father (driving the boy to strike his father and run away) (11); treats his wife's cousin with contempt when he arrives (17); destroys the gifts given to his wife (21-22); and accuses Ethel of lying to him (23). Although only the span of an afternoon and evening, readers are aware of almost all the negative aspects of the Professor's character before he falls asleep lounging in his study after the fight with Ethel. He is easily angered, self-indulgent, has little concern for anyone else, and does his best to thwart any pleasures that his young wife and children may have. The Professor has much to overcome after the harm he has caused to his spirit. Thus, the reader knows what kind of man the Professor was when his spirit guide, John Forest, explains his death to the Professor as being timely, necessary before he had fully extinguished the light of spirituality in himself (Marryat, Message, 38). This is a story relating the afterlife when a person's first interaction with the supernatural realm is after his death.

The introduction to the supernatural realm in Marryat's novel takes into account the potential for skeptical readers (who would believe that science has the ultimate authority) to need assistance recognising the afterlife, and depictions of it, through the Professor's bewilderment at his circumstances. The supernatural realm is not necessarily recognisable to those who are not prepared for it. Unable to leave the proximity of his corpse, the Professor must hear what many others thought of him, family and strangers alike. He initially muses to himself: "What I have always heard and been taught, that people, as soon as they die, are taken away, either to heaven or hell! [...] Why have I not been carried away to another world? Why have I not wings, or—or—the other thing?" (Marryat, *Message* 27). Besides his preoccupation with his inability to fly (also Marryat, *Message* 29), the Professor wants to know why he is bound to "this horrible body" (his own corpse) (Marryat, *Message* 39) and his spirit guide tells him:

You stay because you cannot free yourself. You have lived for that body alone; you have riveted the chain between it and your spirit, until it is so fast that it is impossible to break it all at once. Have patience, and it will be broken. But I do not promise you will that your next experience will be pleasanter. (39)

In actuality, the annoyance of learning that he was not well liked is little in the way of torment and there is nothing he can do now to change the minds of those he listens to. This time essentially makes him aware of the fact that he was not well liked or well respected as he acclimates to his physical death. Through this lesson, he gains insight into how the supernatural realm works, relating truth regardless of any discomfort it may cause. The first step to growth in the supernatural realm, Marryat suggests, is coming to understand what has happened, the transition that has occurred, and that the true state of things in the material world does not necessarily reflect the reality of the supernatural realm.

The second stage of the afterlife that Marryat teaches readers is presented completely in the supernatural realm in a space where the newly deceased learn of the real strength of their earthly relationships in what Marryat calls (using a term designed to sound scientific) the "Sphere of Meeting." The Professor must learn what he is missing because of his spiritual neglect, contrasting with the initial scenes in which he merely learns about other people's perspectives of him. In the Sphere of Meeting the Professor should be met by any friends he has who are "eager to welcome [him] into the Spiritual World, [he] will have an opportunity of seeing and being recognized by them" (Marryat,

Message 45). The Professor sees his father, brother, sister, Susan (his first wife), and their two stillborn children but none of these people come to greet him nor even recognises him when he first approaches them. These people symbolise those who one would expect to have strong bonds with, whether genetically (scientifically) or through marriage (socially). Yet, his father reveals: "The ties of nature are not recognized here, unless they have been accompanied by the ties of the spirit. What sympathy do you expect my spirit to have with yours? I see you now as you are. A man eaten up with love of self, with less spirituality than many a little child [...]" (Marryat, Message 47). Familial connections are bleakly revealed to be ephemeral when the natural bond has not been nurtured.

Compounding the issue of broken connections to family, the supernatural realm is a place of honesty, enforced by scientific concepts which serve supernatural concerns. The Professor's father explains away the apparent harshness of the situation by remarking, "I have not the power, if I had the will, to remain near you. In this world we cannot force ourselves to be outwardly affectionate, when, inwardly, we feel estranged. There is no deception here" (Marryat, *Message* 49). Susan, the Professor's deceased first wife, further comments:

My life was a life of deception. People called me amiable; but I was simply a deceiver. God mercifully delivers us from that here. If our spirits are not in sympathy with another spirit, we cannot stay near him. Something in our magnetism drives us as wide asunder as the two poles of the earth. It is not our doing; it is God's decree. (Marryat, *Message* 51-52)

Both the reader and the Professor are taught that his earthly behavior results in the people he should be closest to wanting nothing to do with him. When confronted by him, they cannot stand his presence and in a supernatural realm without the niceties of social decorum and self-censuring one's feelings, they tell him exactly what they think of him in blunt, honest, truth and are driven away by magnetism. The second stage of the afterlife, according to the version of Spiritualism Marryat teaches, is a place of potential happy reunions or for painful realisations of lost opportunities on earth in which a scientific phenomenon supports supernatural concerns.

Marryat further emphasises the spiritual significance of attention and time dedicated to others to a person's experience in the afterlife and her critique of science through the spirits that are drawn to the Professor. The only spirits that are attracted to the Professor are a "little troop of vivisected animals" (Marryat, *Message* 96), the "dogs, and rabbits, and cats which [he] vivisected for [his] own curiosity, and who died agonizing,

lingering deaths under [his] cruel hands" and now persistently follow him despite his never having liked animals (94). He is connected to the spirits of the animals he tortured, but the people to whom he expected to have familial ties can have nothing to do with him. This Sphere of Meeting in the supernatural realm is entirely about spiritual connections forged through non-material means like kindness and time. As such, Marryat would have her readers internalise the Professor's lesson and evaluate how they spend their time and what relationships they foster.

There is, however, a point in Marryat's Spiritualism when those in the supernatural realm can interact with those in the physical world despite science's inability to fully understand the interaction, if they are trying to assist the living in learning spiritual lessons. In the third and final stage of the Professor's posthumous education regarding Spiritualism, he learns that his mission is twofold as he works towards spiritual growth and peace in the afterlife: he must attempt to undo the harm that he has done to his family and influence others to avoid the mistakes that he made in life. Marryat includes details of the Professor's family members' lives not to strengthen the depiction of their characters but to show the ways through which the Professor caused harm to those he should have lovingly guided. Ethel agrees to an engagement, only a few months after the Professor's death, explaining that she will gladly give up the income she is to have if she remains a widow, as per the Professor's will, for true happiness with Ned (Marryat, Message 61-63). Maddy, his daughter, fosters relationships that will only harm her (Marryat, Message 60) and his son Gilbert is lying ill in a "confined, evil-smelling crib" aboard a ship at sea (117). At this early stage, the Professor finds that he can do little good for any of them. He asks John Forest, "[w]ould it not be possible to influence Ethel or Madeline to do so [repay Bennett for the care he is giving to Gilbert]? Is that not some of the work spirits are sent back to earth for?" (Marryat, Message 120). All John Forest can offer as a response is: "Occasionally, but not spirits such as you. You have never done a good work yourself yet. How then can you hope or expect to be able to influence others to do them?" (Marryat, Message 121). The Professor even attempts to encourage his son by informing Gilbert of his death but he must borrow light from John Forest (Marryat, Message 123) to appear before the boy and the results are far from satisfactory. The ability to interact with the physical world from the supernatural realm is not automatic but something which must be worked towards through spiritual growth.

The point of crossover for the spirit between the supernatural realm and the physical world is vital to the process of self-recognition in the spiritual supremacy

Marryat advocates, facilitating the epiphany that resolves the spiritual bildungsroman. Gilbert proclaims that he must be mad or delirious to see his father appear because there can be "no such luck" as him appearing to say he has died as "[h]e has no heart, no soul" and his son finishes by saying he will kill himself if his father comes again (Marryat, Message 123-124). The reaction of the son finally opens the eyes of the father: the Professor comes to understand all of the negative ways he affected his family. He admits to John Forest, "I see *myself*, and you could show me nothing more hateful to me" (Marryat, Message 126). He then begs his guide: "[t]ell me what I must do to obtain so great salvation?" and declares, "I am willing to do anything which the good God desires me to do. Am I not his slave henceforward?" (Marryat, Message 127). With this first step of "upward progress," the Professor's introduction into Spiritualism after death is complete (Marryat, Message 127). The novel ends here, with the Professor recognising how far he has to grow spiritually and willing to take those steps. Marryat does not conclude the other characters' stories. Ethel is not happily remarried to Ned. Maddy is not safely changed from a rebellious teenager to a respectable wife. Gilbert still lies near death with months to endure before returning home. The story is the Professor's, from enjoying a life of selfish dictatorship of his home on earth, to submission to God's will in the afterlife. In this instance the infringement into the material world by a spirit is for the good of the spirit and his progression, even though it causes stress for the living. The needs of those in the Spiritualist afterlife are more important than those of the living because of the importance of the supernatural.

There are, however, spirits that access the material world for the good of the living and to whom Marryat would have her readers turn for advice on Spiritualism and correct knowledge regarding the authority of the supernatural. Recall that mediums were key figures in the ongoing debate surrounding the scientific supernatural because their abilities were understood to reveal testimonial (and sometimes physical) proof of the supernatural in the material world. Marryat depicts positive encounters between the living and spirits through the medium, Emily, who Maddy and Ethel visit. After an instance of unexpected spirit photography that "half frightens" Maddy because there is a person in the print who did not sit for the photograph (Marryat, Message 72), Ethel and she seek out a medium who "is called a clairvoyant, or one who has the gift of second sight" (78) so that she can explain the photograph. The Professor had forbidden Ethel from visiting the medium. As a widow she is now free to seek supernatural answers for the physical proof of spirits she receives (Marryat, Message 78). Ethel is predisposed to trust Emily

because she is "a straightforward, honest woman" and eager to see her "under control" by a spirit even though Maddy is anxious about the experience (Marryat, *Message* 84). Emily's spirit control, Margaret, tells Ethel and Maddy:

I come back to try and do good to my fellow mortals, as I am attempting to-night with you. You both need spirit guidance very much, especially this young lady. It was no accident that brought her here to-night. A spirit who loves her and watches over her was the means of her coming. She tried to speak to her just now, but could not manage it; so she sent me instead, but she will try again later on. (Marryat, *Message* 86-87)

Margaret is able to reveal that Ethel has accepted Ned's proposal just that morning and predict a happy future for them. When Ethel describes the knowledge as "wonderful" and "magical," Margaret continues,

O, no, [...] don't let any such false conceptions enter your head. There is nothing magical about me. I am only a woman, like yourself. But, when you pass over to the spiritual spheres, and leave the evil influences of earth behind you—the deceit and fraud, the lying and slander, the hypocrisy and ill-nature—you will find all the senses which the Creator intended you, from the beginning, to enjoy in your life, but which have been deadened and over-clouded by sin and disease, wonderfully strengthened and developed, so that you will be able to read each other's minds, and anticipate what is going to happen to you. (Marryat, *Message* 87)

Margaret's abilities to know information and predict the future are described as senses lying dormant in living people because of outside influence rather than as new powers that the dead obtain. Marryat ends the scene with the dead woman, the young widow, and the teenaged girl gossiping about how to determine if a feeling is really love, making it seem like a natural conversation to have on an afternoon visit instead of a séance with the spirit of the dead providing guidance for the living. Ethel and Maddy end up comfortable conversing with Margaret. Spirits, such as Margaret, that have found the selfless senses intended for all people interact with the living to guide and protect them in ways that science cannot yet understand.

For this scene, Marryat draws from the parlour room séances and sittings that historically occurred and in which she was an active participant. Oppenheim explains: "[m]ediums could relay the words of the departed through the laborious process of alphabet rappings or through the more efficient trance utterance. [...] The communicating

spirit might be that of Benjamin Franklin, Plato, the archangel Gabriel, or the sitter's Aunt Nellie. The possibilities were endless" (*Other World* 8). There was no single correct way to communicate with the dead, or rather for the dead to communicate with the living, nor did there seem to be any strict rules about who could return to speak to the living. Thus, it is fitting for Emily's control, Margaret, to speak through the entranced Emily on behalf of Maddy's mother. The methods of communication and messengers depended on the medium in question and a medium gathered a following of "devoted sitters, a fan club composed of men and women who might seek out the medium's powers as often as several times a week and whose faith in the medium's gifts was unshakeable" (Oppenheim, *Other World* 8). Ethel and Maddy trust Emily / Margaret after their first sitting and Maddy returns the next day, quickly becoming a devoted sitter. Marryat's personal belief in the validity of mediums suggests that she would see ready faith as a positive thing when placed in a reliable medium.

Although the focus of the novel is on the workings of the Spiritualist supernatural realm as Marryat describes it, she critiques science through her inclusion of two contemporary issues: skepticism and vivisection. Concerns regarding scientists and their general unwillingness to accept the supernatural as it had been revealed are innate to the text. Marryat's brief references to vivisection through the studies the Professor wrote and the spirit-animals haunting him, however, are an indictment of scientific practices that many found distasteful at best, and morally bankrupt at worst. Through the handling of these topics in the novel, readers are presented with criticisms of real social questions of morality alongside the depiction of the supernatural realm as definitively real, encouraging them to see these issues as Marryat would have them.

Marryat directly addresses scientific skeptics through her protagonist's profession and his ill-informed understanding of the supernatural at the time of his death. Throughout the novel, the general use of "the Professor" to reference Henry Aldwyn allows for the "message" of the novel to be bigger than just one man. The Professor's specific field of inquiry is only addressed in passing, allowing him to represent scientists in general. Greta Depledge explains in her introduction to the novel: "[i]n *The Dead Man's Message* Marryat challenges the scientific establishment's cynical and dismissive attitude to spiritualism by having a dedicated man of science undergo a spiritual awakening" (xiv) and later: "Marryat, however, delivers her most pointed challenge to scientific skepticism through the conversion of one of their own – a confirmed skeptic, a scientist and perhaps most importantly, a man" (xxiii). Marryat makes her protagonist

representative of a group that was likely to be more resistant to the idea of Spiritualism by the time she was writing, that of the self-proclaimed scientist who would have had science be the ultimate authority.

Lionel A. Weatherly, M.D., who compiled *The Supernatural?* (1891) with the understanding that supernatural phenomena can be explained by natural means (subjugating the supernatural to science), was the sort of scientist Marryat was likely targeting. Weatherly asserts:

have we not seen, do we not often see, men of education, men with University training, men who have been taught to thoroughly sift and test evidence by long study and experience at the Bar, unhesitatingly asserting their belief in the possibility of spirit-rapping at tables, and the materialised spirit of some mercenary medium floating in a phosphorescent atmosphere above curtain poles, or maybe passing through ceilings, stone walls, and in and out of closed windows? [...]

My effort in this book will be to lead my readers to look to natural causation as the origin of supernatural seemings. (Weatherly and Maskelyne 8)

Weatherly acknowledges that there are plenty of learned individuals who have asserted belief in the supernatural (in general) and, based on his description, specifically in Spiritualism. Nevertheless, his book is not intended to be highly scientific but simple enough for the common reader to understand. Like Weatherly, who must account for the scientist and lawyer who does believe in Spiritualism, Marryat must, in some way, account for the Weatherlys who do not. Aldwyn's referent of "the Professor" allows him to stand in for anyone who doubts on the basis of being too learned. Marryat's novel is her equivalent to Weatherly's book which places the supernatural in the place of authority.

It should be noted that it is not *all* scientists who must be saved painful experiences and awkward adjustments in the supernatural realm as not every scientist is a dangerous skeptic. Marryat provides two examples of scientists who are (apparently) not actively harming their own souls. She provides little information about the Professor's two friends, Mr. Bunster and Mr. Robson, outside of the context of their being the recipients of dinner invitations to discuss scientific topics, which can hardly be good dinner conversation given the vivisected animals that later follow him. Bunster explains

that he frequented the Professor's house, not out of friendship as they were only associated due to a similarity of scientific pursuits, but because he has always been attracted to his friend's wife (Marryat, *Message* 100). Robson, in turn, visits Ethel (the Professor's widow) to request to be informed if the Professor's library is put up for sale. He is not interested in the Professor's own writings, however, as he calls his deceased friend merely "a dabbler in his profession" (Marryat, *Message* 104). Although information about their faith is not divulged, readers can surmise that they are not actively crushing the light from their souls as Aldwyn was during his life. After all, they continue to live to propose to his widow and try to buy his library after he has died because "[t]he spirituality in [him] has been neglected, until it has burned down like the last flicker of an expiring rush-light. It was time [he] left this sphere [earthly life], for soon it would have been extinguished altogether" (Marryat, *Message* 38). Given Bunster and Robson's motivations for visiting Ethel shortly after the Professor's death, however, it is unlikely that readers are intended to understand them as examples of moral superiority. If anything, their motives suggest that readers should criticise their behaviour.

The second contemporary scientific issue, vivisection, Marryat only addresses in passing, relying on the reader recognising the implications of her inclusion of animals in the afterlife for the critique she provides. The animals trailing after the Professor is a minor detail which reveals her position on the controversial scientific practice: it is inhumane and harmful. Here, Marryat is depicting animals in the afterlife, clearly stating her belief in the existence of animals' souls. In his discussion of pet cemeteries in Victorian Britain, Philip Howell explains that, "[t]words the end of the 19th century, [...], many Victorians were not shy of reviving the old question of the immortality of animals' souls, and devoted considerable emotional and cultural energies towards imagining a spiritual home that was analogous to the middle-class household so prominent in domestic ideology" (10). The concern for the place of pets, both on earth and in the afterlife, reveals an interest in the welfare of animals in direct opposition to the cruel vivisection of animals by scientists. Howell suggests that "the burial of pets resonated especially strongly with those groups most prominent in the anti-vivisection and animal welfare movement" (12). As Howell is primarily concerned not with the link between any one religion and animals but humans and animals, his classifications of religion are that of "orthodoxy" and "unorthodoxy," with unorthodoxy having "a nagging undercurrent of speculation about animal immortality" (14). This connection between unorthodox faiths and the anti-vivisection movement is, however, strong and he cites the belief of one

prominent anti-vivisectionist that no one would be so cruel to an animal if it was believed the animal had an immortal soul (Howell 15). Howell concludes that the belief in the possibility of being reunited with one's pets after death was thus fueled by things such as unorthodox Christianity, anti-vivisectionism, and Spiritualism (19).

Although the animals chasing the Professor through the afterlife were never his pets, Marryat seems to be suggesting a bond between humans and the animals they interact with regardless of the position of privilege or misfortune the animal occupies in life. Greta Depledge's article on the Marryat novel that is most concerned with vivisection, *An Angel of Pity*, details "Marryat's use of antivivisection rhetoric" ("Experimental Medicine" 221) to explain that "Marryat uses her fiction as a medium through which she can engage in a contemporary and contentious debate, while still providing a plot that should satisfy her loyal readership" (232). Rather than actively engage with either debate (the existence of the soul of an animal or the moral consequences of vivisection), in *The Dead Man's Message*, Marryat treats the animals in much the same way she does the human character who has died: the afterlife is described and the reader is led on the journey that occurs from that point. The authority of the supernatural is insisted on through the representation of the afterlife of the animals.

Late nineteenth-century topics of Spiritualist interest and supernatural authority generate Marryat's plot arc for her spiritual bildungsroman. Framed by the Professor's final moments before death and moment of spiritual epiphany, the novel emphasises the journey to the truth of Spiritualism in the afterlife. There are stages of growth and development he must move through in order to come to terms with the realities of his new existence. The reader comes to understand the supernatural realm as real and of greater importance than the material world as the Professor learns how to interact with both the spiritual realm and the earthly world as a spirit. Through this novel, Marryat positions the afterlife as of primary concern for people. Physical existence is sacrificed to redeem the spirit.

The focus on the spiritual is most evident in which plot points Marryat chooses to resolve. On the one hand, the Professor's recognition of his place in the supernatural realm ends the book. His supplication contrasts with his selfishness in the opening pages; he is changed. On the other hand, readers have been presented with asides regarding his family throughout his story but the novel ends before these minor plot points are resolved. As "spirits can only divulge what they are allowed to do[,]" and this is the Professor's story of spiritual progress, what happens to his family is not necessary to depict his

journey to faith (Marryat, *Message* 108). When the Professor is forced to see the negative effects he has had on his family, he bemoans the consequences of his actions because he sees only misery for them in the future. The narrator assures the reader, who is only given hints of the future, that his children will "[overcome] the woeful heritage he had bequeathed to them" but that he could not yet know this lest he become "too well content to trust to the giver of all good to let things right themselves at last" (Marryat, *Message* 125-126). Thus, the lack of narrative resolution for the Professor's widow and children is intentional. It signals what is most important.

The assertive assurance with which Marryat depicts the supernatural allows her to craft a story concerned with an individual's experience within the supernatural realm. What happens within this other world, the experiences and lessons of the deceased, reveals the possibilities for interaction between the supernatural realm and the physical world. In turn, the intense focus on the supernatural realm must lead to a new type of ending because of the differing concerns following death. A story of spiritual growth and development becomes necessary to accommodate the placement of the action within the supernatural realm.

This focus on the supernatural realm suggests that Marryat understands, and would have her readers understand, that the ultimate authority of the scientific supernatural is with the supernatural as related through Spiritualism. These are the lessons she is most concerned with depicting and the realm she is careful to describe. Her criticism of science would have been overt to nineteenth-century readers familiar with the issues she addresses. Yet, despite the criticism of some scientific practices, Marryat *does* base her supernatural realm on scientific ideas of magnetism (in the Sphere of Meeting). Given the Spiritualist understanding of connections between science and the supernatural, Marryat's suggestion of how the afterlife works may insist on the ultimate authority of the supernatural but it is not a dismissal of all science. Here, the tensions at play within Spiritualism as a scientific supernatural system of belief come from Marryat's privileging of the supernatural as being the source of authority, with science as a supporting factor.

Interacting with the Spiritual Realm: A Romance of Two Worlds

Unlike Marryat's novel, Corelli's *A Romance of Two Worlds* does not have the benefit of relying on a social common knowledge of the belief system the author invokes. As a result, Corelli includes much more of the doctrine of Electric Christianity in her novel, creating an advanced follower of the faith in the novel to teach character and

reader simultaneously. She must provide *all* of the information that is required for the reader to accept the premises of her new sect of Christianity. Corelli pieces together Electric Christianity, a scientific-supernatural doctrine that she invented, through the story of a pianist who has a mysterious illness and happily becomes a disciple of the medical priest, Heliobas, when his treatments quickly restore her to health. Since Heliobas's faith is little known, there is much instruction to be communicated about the doctrine of Electric Christianity. In this way, the novel is self-consciously didactic, teaching the system of belief Corelli creates. No character ever has *full* knowledge of the faith and, therefore, readers who come to follow this creed must look to Corelli as the primary prophet of Electric Christianity.

Corelli's works tend to have some element of didacticism even if they do not go so far as to teach an entire belief system. According to Simon J. James, *The Sorrows of* Satan (1895), Corelli's book about Satan walking the streets of London and befriending a poor author, "is a highly self-conscious exploration of the limits of what it is permissible to represent in fiction, of the power of the author in generating what kinds of meanings the reader might see in fiction, and of the duty of the reader to consume and respond to fiction with responsibility and moral seriousness" (138). The author-character in *The* Sorrows of Satan must write what the public should read even though he struggles to find a publisher. Corelli was quite direct in her message that there is shared responsibility for the social and moral outcomes of books: the author for having written it and the reader for responding correctly. James argues that "[t]he didacticism of Corelli's fiction is thus itself a means of re-educating the jaded palate of the *fin-de-siècle*'s over-sated literary consumers" (145-146). This instruction is not, however, accidental: "[t]he reader might indulge their vicarious fantasies in reading the novel, but for Corelli it is part of the writer's educative responsibility towards the reader to make him or her reflect at the same time on the moral consequences of these fantasies" (James 147). Primarily discussing *The* Sorrows of Satan, James establishes Corelli's interest in teaching her readers their moral responsibilities as consumers of books. Secondly, her critique of other authors who might not take their positions as seriously as she would like. Yet, if Corelli's perspective on the responsibilities of authors is clear in a book on writing books, it is most complete in A Romance of Two Worlds, her earlier novel which instructs readers not only in their moral duties as consumers of books but also in how and what they should believe.

Corelli was both publically adamant that she was crafting an entirely new sect of Christianity and confident that Electric Christianity would be proven scientifically true, an affirmation of science and the supernatural that carries throughout the novel. The letter in which Corelli insists on the originality of Electric Christianity, cited earlier in this chapter, continues:

a criticism of the book has just appeared in America in which the above points are noticed as "absolutely and purely original, as not even in Plato do we find so <u>scientific and possible</u> an idea as that of the perpetually Creative Ring." [...]

A Professor, whose name is one of the highest in the land, has written me a long letter, asking me not to mention that he has done so! He is old enough and wise enough for a dozen men – <u>yet he</u> says he shall take the "Ring" theory for an object of "serious research and study" –. (*Marie Corelli Collection*, box 1, folder 28, emphasis in the original)

It is highly likely that Corelli is grandstanding; her claims are carefully devoid of names of the people who find her theories to be true and suggestions of where the study of her theory may be published. The above excerpt from her letter does reveal her interest in asserting the importance of her new sect even if it does not reveal her personal feelings on the faith she created. Corelli insists on both Electric Christianity's novelty and potential, that she is conveying groundbreaking truth within the pages of her novel. As such, readers should expect to see unfamiliar ideas and have those ideas fully explained; after all, there must be enough detail for the unnamed professor to undertake serious scientific scrutiny.

Truth is hard to discern in most aspects of Corelli's life given the care with which she created her own image and the lies she told to do so. Her personal religious beliefs are no different. What is sure, however, is that she wanted the public to think she believed in Electric Christianity and that she was its only prophet. Within *A Romance of Two Worlds*, Corelli insisted that she was not writing about Spiritualism. This argument was only necessary because the assumption would have been that she was, due to the prominence of work by Blavatsky and others directly connected to Spiritualism or Theosophy.

Nonetheless, the passage that Teresa Ransom and others turn to for support for Corelli's belief in Electric Christianity being distinct from Spiritualism comes not from a recovered letter or diary entry, but from a rant against table-turning and slate-writing in *A Romance of Two Worlds* (Ransom 31-32). Given Corelli's policing of her own public image, this section of the novel is unlikely to be the most reliable piece of evidence that Corelli

considered herself the founder of a new creed if she indeed believed this. She was far from shy about speaking out about any topic that interested her.

Twenty-five years after the publication of *Romance*, the Author's Prologue to *The Life Everlasting* (1911) provides her readers with additional material regarding the perspective of the faith Corelli would have her public believe she espouses. Directly addressing her faithful readers of the last few decades, Corelli explains that her first book "was an eager, though crude, attempt to explain and express something of what I myself had studied on some of these subjects [man, God, the universe, nature, etc.], though [...] my mind was unformed and immature, and, therefore, I was not permitted to disclose more than a glimmering of the light I was beginning to perceive" (Corelli, *Everlasting* 13). This discussion of her system of belief, although more straightforward than the passage filtered through one of her characters, still does not provide a definitive assessment of her beliefs since she is known to have fostered a variety of lies and half-truths regarding herself.

Corelli, nevertheless, spends many pages affirming her belief in the sect she created. Working through a brief discussion of her books to date, Corelli states that after *The Master Christian* was published in 1900:

I decided to let it take its own uninterrupted course for a time and to change my own line of work to lighter themes, lest I should be set down as 'spiritualist' or 'theosophist,' both of which terms have been brought into contempt by tricksters. So I played with my pen [...] and that I now allude to the psychological side of my work is merely to explain that these six books, namely: "A Romance of Two Worlds," "Ardath: The Story of a Dead Self," "The Soul of Lilith," "Barabbas," "The Sorrows of Satan" and "The Master Christian" are the result of a deliberately conceived plan and intention, and are all linked together by the one theory. They have not been written solely as pieces of fiction for which I, the author, am paid by the publisher, or you, the reader, are content to be temporarily entertained,—they are the outcome of what I myself have learned, practised and proven in the daily experiences, both small and great, of daily life. (Corelli, Everlasting 25-26, emphasis in the original)

Corelli saw *A Romance of Two Worlds* as the first book in her religious canon, set before, and devoured by, the public as fiction. Although still contained between the covers of a fictional novel, here Corelli states that she believes in the truth of what she has written

and that she practises the faith she teaches through these novels. There is no need to unravel what she intends when a character claims the truth of Electric Christianity or for readers to assign a specific character as her voice within a novel; this is her introduction to the book she has authored. She uses this introduction to claim that her theory in these novels is a faith she practises. This is, therefore, the closest that readers can come to actually knowing what Corelli believed: knowing what she wanted the public to think she believed.

Even if there can be no certainty about her faith on a personal level, what the Prologue does do is offer further explanation as to how she would have her reading public understand Electric Christianity as a scientific supernatural system of belief. She seeks to explain away the scientific inconsistencies in the system of belief as her own growth in understanding of science. In the pages following her confession of earlier confusion, Corelli explains that the knowledge of radium was kept from her by those teaching her, "who possessed all the means of extracting it from substances as yet undreamed of by latter-day scientists;" and she attempts to explain that electricity and radiation are similar enough to each other that she was sufficiently correct in her early theories (Corelli, Everlasting 14). In essence, she argues that she is both not at fault for her earlier inaccuracy and that she was not so much inaccurate as imprecise. Corelli's claim is that her descriptor of "electricity" is no more than "a misnomer, seeing that electric force displays itself in countless millions of forms" (Corelli, Everlasting 13). What she does not explain is whether she thinks readers of her early books, Romance included, are to read her use of "electricity" as "radium" (or "radiation") in light of her later perspective explained in the Prologue to *The Life Everlasting*. In either case, she places great importance on the scientific aspect of the faith she depicts in the novels.

Yet, her conceptions of neither electricity nor radiation are congruent with contemporaneous understandings. Corelli seems to shift to radiation not because she better understands it but because science (and, therefore, society) has less understanding of it at that time. Thus, on both the religious and scientific fronts, readers are presented with a clear message of what Corelli would have them think she believes but nothing definitive about what she actually does believe as she argues for her representation of both subjects.

Corelli did convince her public that she believed herself a prophetess of a faith with scientific backing. Kent Carr's biography *Miss Marie Corelli* (1901), the first to be published on her, asserts that she believed "[t]hat the visions were sent to teach her the

why and the wherefore of created things she never once doubted. And with the confidence born of direct information she set herself to report the same to her generation" (31). He further explains that, "[i]t was by 'a plain history of strange occurrences happening to oneself' that Miss Corelli sought to prove the actual certainty of a future state of being, and to clear up all the knotty points on the subject of the Creation" (Carr 35). Carr's biography suggests that Corelli did just that, described existence with certainty, and he goes so far as to claim that "it is quite inconceivable that anyone except Miss Corelli would have been able to convey them to the public so convincingly" (41). Whether or not Corelli's six books do, in fact, "clear up" the "knotty points" (phrasing Carr borrows from *A Romance of Two Worlds*) of the existence of the world is immaterial because at least some of Corelli's loyal following believed that she did.

Critical and popular assessments of Corelli's books have never been congruent and a major factor in this inconsistency is the overtly didactic nature of her novels. Initial readers of *A Romance of Two Worlds* cautioned against publishing the book but it was eventually printed. Carr notes that "[f]our press notices, short and unfavourable, were all it [Romance] received" (34). George Bullock, a later biographer, states that the "most concise and unfavourable" review read: "Miss Corelli would have been better advised had she embodied her ridiculous ideas in a sixpenny pamphlet. The names of Heliobas and Zara are alone sufficient indications of the dullness of the book" (42). The *Athenaeum*'s review includes an assertion that,

[i]f the author does not believe in the double life and the power of physical transportation which she describes, but simply wishes to throw dust in the eyes of her readers and create a romantic illusion, then she has said a great deal more in her preface than there was any need to say. [...] [I]f she does believe in the nonsense on which her incidents turn, and wishes to produce a belief in the minds of others, she should not have called her narrative a romance. [...] The book will make no converts; but considered as a romance, pure and simple, it may entertain its readers not a little. (quoted in Bullock 42-43)

This reviewer was certainly correct in his assumption that readers were greatly entertained by the novel but he underestimated Corelli's power to create converts.

Despite critics' distaste for *A Romance of Two Worlds*, the public loved it both for the story and the instruction it contains. Beginning with George Bentley (whose readers had told him not to publish the book), Corelli quickly gained fans. In her biography of

Corelli, Teresa Ransom states that Bentley wrote to Corelli: "Though I think it will provoke much adverse criticism, all must allow it to be the work of an accomplished mind, and its style of writing will commend it. I think it will be considered by some as the production of a visionary" (quoted in Ransom 30). The book went on to "set a pattern for all subsequent publications when it was condemned by the critics but devoured by an appreciative public" (Ransom 1). Ransom explains that "[u]nlike earlier 'literary' writers who wrote for a more intellectual public, Marie wrote, as she said, 'directly from her heart to the hearts of the people" (1-2). Though the most favorable reviews only state that she "tells her story in good faith, as being not consciously deceptive or misleading," people loved Corelli's book (quoted in Bigland 77).

The public's obsession with the book was not only with the plot of the story but also with the outlook on life that it teaches. Eileen Bigland explains in her biography of Corelli that the public's love of the book was expressed in letters the author received including one from a man who said that the book had caused him to "turn his back on Agnosticism" and someone else stating "that the reading of it [the book] had halted him on the very brink of suicide" (76). George Bullock claims that Corelli's "didactic way of writing intimidated the majority of the reading public into accepting her as a big moral force, and the serious tone in which she expounded the curative powers of electricity helped to place her among the writers with a message. Those two qualities essential for a best-seller, sincerity and vitality, she possessed in abundance" (44-45). Citing the man saved from suicide, Bullock also quotes a woman who claims: "I felt a better woman for the reading of it twice, [...], and I know others, too, who are higher and better women for such noble thoughts and teaching" (quoted in Bullock 45, see also Bigland 76). As stories about the uplifting nature of Corelli's books circulated, they gained ground to the point where it is difficult to ascertain the number of individual letters Corelli is said to have received about the various wonderful effects of her book. 13 She wanted her readers to believe in the faith about which she wrote – and they did. Although the writing of A Romance of Two Worlds necessarily predates the hype, the reception, and Corelli's response to the book's reception, it reveals her eagerness for the novel to be understood

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¹³ A piece with the opposite viewpoint was published in 1914 by "Another Writer of Less Repute" in *Peril Westminster*. The anonymous author ends his review proclaiming: "I declare emphatically that Miss Marie Corelli is a social menace. I believe that with all my soul, and I would rejoice to see her books banned by the libraries as insidious and harmful to public morality" (692). Ironically, the reviewer claims authority in his conclusions because he has "read them all [her books]—some two or three times: as a youth with some show of enthusiasm, as a man with shuddering and distaste" (692).

as teaching Electric Christianity in the face of (both potential and actual) skepticism. Critics may have hated the book for Corelli's didactic tone and bizarre story but the public clung to it for hope, seeing it as life changing and (in some way) life affirming.

Corelli's relationship with reviewers never got any better, largely because of this stark dichotomy of critics who hated her work and an audience that followed the sect she created. What negative reviews could not account for was the sales of Corelli's books and that, contrary to the *Athenaeum* reviewer's prediction, people did buy in to Corelli's creed. In *Idol of Suburbia: Marie Corelli and Late-Victorian Literary Culture*, Annette Federico discusses Marie Corelli as a celebrity:

Corelli received fan letters from readers interested in theosophy and psychical research, from an "earnest seeker after Truth," from a clergyman who was saved from suicide by reading it, and from an atheist who was converted to Christ. With the zeal of a prophet and the acumen of a publicist, Corelli printed the letters and her explanation of the "Electric Creed" in an appendix to subsequent editions of the novel. (6) ¹⁴

Carr skims over in passing the incongruity of the bad reviews contrasting the adoring fans whose lives are changed by Corelli's novels. *A Romance of Two Worlds* is included in a list of seven novels that he asserts "have a definite lesson to convey, to which, as is inevitable, the exigencies of art must occasionally be sacrificed" (Carr 90-91). In order for her message to change lives, it must be plain enough for the average reader to take in. Thus, from a critical standpoint (the reviewer), a book may fall short of his artistic ideals. From the perspective of a wondering soul (the reader), however, the same book may give hope. *A Romance of Two Worlds* takes the concept of an intrinsic moral a step further than artistically desirable by providing detailed instruction in how to live rightly, sacrificing some art. Readers do not have to learn by the example of the characters in the given circumstances; Heliobas's overt instructions to the pianist regarding Electric Christianity are instructions to the reader as well.

A Romance of Two Worlds details an unnamed pianist's journey to full faith in Electric Christianity through extensive lessons, bringing her both spiritual and physical health. The young woman begins the novel ill and unable to play despite her love of music. After a painter, Raffello Cellini, notices that he has a positive influence on her, he tries a bit of his electric medicine on her by mixing it into the drink he offers her. The

¹⁴ It is unclear if this is the same man as Bigland and / or Bullock mentions or not.

medicine has a strange effect: she is a changed person within hours, she has bizarre dreams, and the flowers she wears do not wilt. Hearing Cellini's story, what he did to her, and that his friend (Heliobas) may be able to fully cure her leads the pianist to abandon friends and relocate to Paris in hopes of a cure. Quickly becoming well under the care of Heliobas, and an intimate friend of his sister Zara after moving into their home, the pianist requests full access to their faith. Zara instructs her new friend to ask Heliobas to "set [her] free" further commenting that her brother will know if she is "strong enough to travel[,]" spiritually, through the cosmos (Corelli, *Romance* 1: 246). The spiritual journey Heliobas sends her on allows her to discover insight into the human condition, God, and the Great Electric Circle (the supernatural realm). After Zara dies (as a result of a lightning strike that frees her to be with her spirit lover), the pianist remains the only living female disciple of Electric Christianity. She will always be connected to Heliobas through their electric sympathies and is free to return to her life as an improvisatrice thanks to the aid of a spirit who promises to send her a song whenever she needs one. The novel does not end with the completion of the pianist's story but challenges the reader to internalise the pianist's lessons. Corelli concludes by directly addressing the reader and questioning whether he or she is really sure that there is no "Hereafter" (Corelli, Romance 2: 300-301).

The closing note to the reader overtly breaks the barrier between fact and fiction by suggesting that readers should take seriously questions of the afterlife and their belief (or lack of belief) in it. Elaine M. Hartnell notes this aspect of the conclusion as in contrast to the novel and the escapism offered by the fantastic story. She further posits: "[i]t is improbable that Corelli would have become a best-seller had her eclectic theology and her taste for preaching been all there was to recommend her. Fortunately, these ostensibly religious novels also yield sensation, drama, and fantasy scenarios in abundance" (Hartnell 291). What this perspective does not account for is the didactic nature of the novel as a whole or the converts that Corelli did gain. Corelli's sensation, drama, and fantasy do not occur except to teach a lesson and ultimately reveal this system of belief as providing the truth about questions of spirituality. The religious teaching of her new sect is so blatantly central to the novel that any reader must negotiate his or her perspective of the novel as fiction and Corelli's statements that it contains truth. If sensation, drama, and fantasy were all Corelli's contemporary reader was looking to experience, then there were plenty of other authors to choose from who did not also create and teach entire systems of belief. It is the combination of sensation and theology,

fact and fiction, scientific terminology put to spiritual use that unites to set Corelli apart from canonical *fin de siècle* authors.

Through the juxtaposition of these seemingly conflicting ideas, Corelli creates Electric Christianity, in which it is the supernatural realm that is the *real* world and life on earth that is a reflection of that. The climax of the novel is not Heliobas's healing of the pianist, which is expected and occurs relatively early on, but his granting of her request to "set [her] free" (Corelli, Romance 1: 252). Throughout the novel there are examples of beings from the supernatural realm acting in the physical world; such as when Zara is protected as she sleeps (Corelli, Romance 2: 89). The pianist's journey through the Great Electric Circle can best be described as an instance of astral projection. Her physical body lies still on Heliobas's sofa while her spirit tours the galaxy. Rather than walk around Paris eavesdropping on her acquaintances' conversations, the pianist rises above earth to learn that the physical world she knows is only one of many, touring other planets as she travels through space. She meets spirits who have no earthly form and still interact with the people living on earth. The most important spirit she encounters is one who will help her with her music (Corelli, Romance 2: 51-52). Elsewhere, she becomes the creator and saviour of her own planet full of people (Corelli, Romance 2: 35-48). Ultimately, knowing her potential in the Great Electric Circle changes how she understands her earthly life. The physical experiences of the earthly world are overshadowed by the implications of those events in the supernatural realm and her spiritual progress. The supernatural realm presented in Corelli's novel is definitively real and encompassing of the earthly world, challenging conceptions of the material world as definitive since there are many worlds within the Great Electric Circle.

Corelli's appeal to the authority of science is found, therefore, not in the centrality of the material world, but in the way she explains Electric Christianity as a scientific system of belief. The Electric Christianity that Corelli creates has very little to do with actual electricity as understood by late nineteenth-century science. Sarah A. Willburn discusses the centrality, overuse, and lack of actual science related to electricity in Corelli's book in *Possessed Victorians: Extra Spheres in Nineteenth-Century Mystical Writings*. Although primarily interested in issues of interiority, Wilburn considers that "[e]lectricity is *styled* as being scientific in this novel while never being discussed in scientific detail. The reader actually learns very little scientific knowledge of electricity from Corelli. What the reader is given is a series of homilies as to the brilliance of electricity" (*Possessed Victorians* 137-138). Corelli's conception of electricity is not just

stylised but also symbolic rather than reflective of nineteenth-century scientific understandings. Besides being present in medicines made of plants and the force holding the supernatural realm together, electricity is given almost human agency in its ability to protect Zara and welcome the pianist into the family due to her spiritual sympathies. For Wilburn, "Corelli's electricity is an aesthetic category and a practice that leads to enlightenment. [...] [N]ot something one would scientifically harness – an internal sensibility, not just an external force" (*Possessed Victorians* 139). The root of this use, however, is Corelli's attempt to claim scientific terminology for supernatural purposes. She would have her readers understand electricity as she describes it. Corelli never intends to teach her reader how electricity works according to someone else; rather, she refashions a scientific concept to her own notions so that she can appropriate scientific jargon for her belief system.

While Corelli's depiction of electricity in the sect she creates is strange at best, there were actual theories that electricity ran through everything (and some of those theories religious in nature) only a half century before Corelli was writing. Iwan Rhys Morus notes in "Galvanic cultures: electricity and life in the early nineteenth century" that:

[b]y the 1820s and 1830s electricity was increasingly being adopted as a universal explanation for natural processes of all kinds, including the processes of life. Popular electricians such as William Sturgeon visualized the universe as a kind of vast electrical machine within which God was a cosmic electrician controlling and manipulating the disposition of the subtle fluid. (9)

Corelli takes this to a new level by claiming that God is, essentially, a spark of electricity. Her theory is, however, in line with this use of electricity as a "universal explanation." In Corelli's depiction, electricity is medicine, the connecting factor between people, and the glue holding the entire universe together. There is no clear superior influence (science or the supernatural) in the way that she depicts the system of belief.

This issue of electricity is the most pronounced appropriation of scientific terminology to Corelli's own ends in the novel, which suggests that she sees this use of science as vitally important for Electric Christianity. As Ransom reminds her reader, "[e]lectricity was a recent discovery, and when *A Romance of Two Worlds* was published in 1886, was still something of a novelty. Electric light was produced by Edison in America in 1879, but in 1886 gas was still the most general form of lighting" (36).

Modern conceptions of electricity were new and Corelli was not likely to be thinking of flipping a switch for light as she wrote of electric medicine and spiritual healing through it. Brenda Ayres asserts in her discussion of Corelli an author forgotten by critics that, while people struggled with reconciling the supernatural with the scientific:

to Corelli there were no conflicts between them unless people believed in one to the exclusion of the other. It is not surprising in an age of telephones, telegrams, and other uses of electricity, plus the knowledge of atoms, that people such as Corelli came to be convinced that the basis of the entire spirit world was electricity, that one could pass one's own electricity into another to bring healing, give knowledge, and transport to another body or time or world. And it is no wonder that Corelli held these ideas were securely grounded in science. (210)

Using scientific terms to describe supernatural things ensured that neither science nor the supernatural was privileged over the other. Moreover, Corelli was happy to adjust her theories as she came across new ideas, be it adding elements of karma (as seen in another of her novels, *Ziska: The Problem of a Wicked Soul*) or changing "electricity" to "radium" in her later novels related to Electric Christianity. Her theory of the supernatural evolved to account for new scientific advancements.

Nevertheless, it is not the late nineteenth-century conception of electricity on which Corelli bases Electric Christianity, but a late eighteenth-century theory. She may, however, have used the term due to its novelty. Heliobas's electric medicine harkens back to Franz Mesmer's day (the late 1700s) and the less common than mesmerism, but closely related, theory of electric medicine. Geoffrey Sutton explains in "Electric Medicine and Mesmerism" that "electricians and mesmerists had the same therapeutic aims. Both wished to correct a deficiency in the quantity or the circulation of the appropriate subtle fluid in the body of the patient" (384). At approximately the same time that Mesmer began treating patients by manipulating animal magnetism there was also a movement of electric medicine. According to Sutton:

a peripatetic lecturer on electricity called Nicolas-Phillipe Le Dru set up a clinic and established himself as an electric healer. His techniques, though not as popular as Mesmer's, attracted a substantial following. A third figure, P. J. C. Mauduyt de la Verenne, was assigned by the Royal Society of Medicine upon its organization in 1776, to investigate electric cures.

Mauduyt also practiced electric therapy, though primarily for investigative purposes. (375)

There are three types of treatments that Mauduyt studied and practised but only the first is of particular interest for its relationship to Corelli's electric medicine. Sutton details:

The first and least dramatic consisted of immersing the patient in electric fluid. To achieve this the patient sat on a wooden platform to prevent the fluid from running off to the ground. The electrician connected the patient to a friction generator, and charged him or (more often) her. Mauduyt called this treatment a "bath," since the generator surrounded the afflicted individual with an "atmosphere" of electricity. (384)

While these theories were short-lived and basically obsolete by the end of the nineteenth century, it is important to note that they had their moment in history, and that they were entertained by respectable medical associations in their day.

It is this earlier theory from which Corelli draws, at least in name, for her Electric Christianity in order to affirm both the authority of science and the supernatural. The process itself is vastly different from what Corelli describes but she takes the image that an "electric bath" would call to mind and makes it part of Heliobas's treatment. On first meeting Heliobas, the pianist is instructed to "have a warm bath, empty the contents of the tube marked No. 1 into it, and then immerse yourself thoroughly for about five minutes" (Corelli, *Romance* 1: 165). The pianist later describes her experience:

I uncorked the glass tube No. 1, and poured the colourless fluid into the water, which immediately bubbled gently as though beginning to boil. After watching it a minute or two, and observing that this seething movement steadily continued, I undressed quickly and stepped in. Never shall I forget the exquisite sensation I experienced! [...] [A]t the end of the prescribed five minutes, I got out of that marvelous bath of healing! As I prepared for bed, I noticed that the bubbling of the water had entirely ceased; but this was easy of comprehension, for if it had contained electricity, as I supposed, my body had absorbed it by contact, which would account for the movement being stilled. (Corelli, *Romance* 1: 175-176)

The description of Corelli's electric bath differs greatly from the actual "bath" that Mauduyt had prescribed for patients but the name suggests that she had heard of the historical treatment. There is no direct evidence that Corelli had extensive knowledge of

Mauduyt or Le Dru and this could account for the differences to some degree. She was aware of mesmerism given her references to animal magnetism and hypnotism, as well as her frequent use of mesmeric trances even if not referred to by that name (for instance, by Ziska in *Ziska: The Problem of a Wicked Soul* and Lucio in *The Sorrows of Satan*). Thus, she had likely come across some reference to electric medicine but not in enough detail that her version of the science resembles theirs in anything but name.

The ideas of human electricity also suggest Corelli's knowledge of Baron Karl Von Reichenbach's *Researches on Magnetism, Electricity, Heat, Light, Crystallization, and Chemical Attraction, in Their Relations to the Vital Force*, originally translated and published in English in 1850, and the fictionalisation of his odyle, or od, concept. Like Mauduyt's electric bath, there is no specific evidence that Corelli knew of Reichenbach's theory. Nevertheless, it is highly likely that she did due to its connection to Spiritualism. Carlos S. Alvarado's article tracing the influence of the od calls it "one of the inspiring factors behind the development of ideas to explain physical manifestations such as those associated with mediums during the beginning of spiritualism" (111), citing researchers in the United States, Germany, England, and France who worked with the concept (112). Richard Noakes discusses links between the od and mesmerism, clairvoyance, and spiritualists ("Cromwell" 9). This connection between an (allegedly) scientific force and the supernatural is evident in Heliobas's manipulation of human electricity in Corelli's Heliobas novels.

Corelli's public claims of a new sect and the scientific basis of something wholly unproven mirror Reichenbach's fervent arguments for his od. Reichenbach thought that he had discovered a new force similar to magnetism or electricity but fundamentally different enough to require that its study be a separate field. In effect, Reichenbach believed the od to be a force running through all things, and things such as electricity to be subtypes of it. In his *Letters on the Od and Magnetism* (1852), Reichenbach explains the need for him to name his discovery given the lack of a term for the force he identifies in physics (Reichenbach, *Letters* 29). Between his *Researches* and his *Letters* he documents extensive experiments and second-hand observations of the od. Although Reichenbach was insistent that the od was distinct from both magnetism and electricity, Corelli applies much the same philosophy to electricity that Reichenbach did to the od. Just as the od could affect humans' behaviour and preferences, as well as lead people to exhaustion, so too could human electricity. Water can be charged with the od; electric medicine made from plants can be drunk by a patient. Understanding the od was

Reichenbach's key to interpreting the world; mastering human electricity is vital to the world Corelli crafts.

Both Reichenbach's definition of the od and Corelli's explanation of human electricity account for skepticism by proclaiming that not all people are able to manipulate the force in question. Reichenbach himself was not a "sensitive" (his term for people who can see and feel the od) and thus he relied on the observations of those he worked with. Nevertheless, he concluded that "this force resides also in all, even the most widely different bodies yet examined, and consequently, without doubt, in all amorphous bodies, even when gaseous, including the stars; and, therefore, takes its place as a general and universally diffused natural force" (Reichenbach, Researches 163, emphasis in the original). As will be discussed, Corelli's scientist explains that, although he is directly connected to the pianist, he can establish a connection with anyone. He is Corelli's answer to the sensitive, able to reveal the powers of (and manipulate) unseen forces to teach others.

Through these references to lost scientific theories, Corelli grounds the beliefs of the sect she creates (and by extension her supernatural realm) in an understanding, albeit confused, of the physical world and contemporary science. The potential curative powers of the electric bath, the od saturating everything, and the mysterious power of electricity are all examples of scientists' attempts to better understand the real physical world. These allusions in Corelli's novel are, therefore, both significant as appropriations of scientific jargon (however dated) and signifiers of the author's attempts to make the supernatural realities in her novel explainable in material, earthly, science.

Electric Christianity is not, however, supposed to be read as providing strictly material scientific explanations for the supernatural (which would privilege science over the supernatural). Corelli is crafting a system of belief that accounts for both the material world and a vastly different and, she would argue, a much more important supernatural realm. Readers are presented with all of the information regarding physical healing through the perspective of the pianist, who believes everything she is learning is scientific. The ability of supernatural forces to interfere with the physical world and the healing potential of non-material connections between people sets up the pianist, and by extension the reader, to expect a supernatural realm which can be experienced via scientific intervention. Yet the case for the supernatural realm and its interaction with the physical world is more complicated than one character's perspective can provide the

reader. Thus, Corelli uses different characters' stories to show various interactions between the earthly world and the supernatural realm.

Through the stories of the characters' interaction with the supernatural, Corelli provides testimonies that describe the Great Electric Circle from the point of view of characters who have already been established as trustworthy because of their reliance on science. Corelli uses three characters with varying levels of access to the supernatural realm: Zara, Heliobas, and the pianist. Each of these characters' experiences provides additional depth to the reader's knowledge of the Great Electric Circle and its connections to the physical world, including details of how it works and the impact of the supernatural on the physical world.

Through Zara, Corelli depicts supernatural events as having concrete, tangible effects in the physical world of the novel. The mysterious things happening around Zara occur with no explanation from the narrator; the reader is expected to understand these events as material evidence of supernatural agents of Electric Christianity acting as her protector. As Heliobas's sister, Zara has many roles: love interest, sister, friend, chaperone, and confidant. These roles, nevertheless, serve to explain her purpose in a particular scene. She is most memorable for the events that happen around her. When a maid sees a spiritual ritual that she should not, the girl is pushed down the hall by an unseen force (Corelli, Romance 1: 230). Prince Ivan is stunned and falls, for all appearances temporarily dead, when he attempts to hold Zara against her will (Corelli, Romance 1: 296). A force keeps the pianist away from her sleeping friend (Corelli, Romance 2: 89). Ultimately, Zara is called to physical death to unite her with her twin spirit because the spirit's relationship with her is stronger than her connection to the material world (Corelli, Romance 2: 203). These things happen without any real explanation, leaving readers to contextualise the strange events into Electric Christianity as tangible outcomes of supernatural events. In the words of the pianist, when she is unable to step closer to her friend, "I felt sure it had something to do with her spiritual life and sympathy, therefore it neither alarmed nor perplexed me. [...] [She was] yet so jealously and invisibly guarded during her slumbers, I softly and reverently withdrew" (Corelli, *Romance* 2: 89-90). Given the lack of explanation, these events are supernatural, beyond nature, and actively occurring in (and impacting) the physical world of the novel as other characters are physically pushed around by unseen forces. Both the reader's and the pianist's understanding of these events is shaped by a growing understanding of Electric Christianity and the ability of spirits to interact with the physical world.

The second character with a unique role connecting the supernatural realm and the physical world is Heliobas, who serves to show the pianist, and readers, the importance of proper knowledge of the Great Electric Circle for both medical and spiritual health. Heliobas, who can be considered a Spiritualist priest, is described by Corelli as a "physical electrician" (Corelli, Romance 1: 136) who both diagnoses and treats the pianist through his manipulation of human electricity. He is the one with knowledge of this electricity, thereby possessing the power to save people, or kill them, and to guide others, instructing them in how to believe. Even before the pianist meets Heliobas, his shadow is cast over the story to direct the events of the novel. His friendship with Cellini is one of many years and great trust. More directly, he appears in the pianist's dreams before she knows anything of him (Corelli, *Romance* 1: 61-62). Heliobas is unquestionably powerful. He is also the only one with the ability to explain the source of his power and the supernatural consequences to both the pianist and the reader. As such, the novel revolves around the pianist's life but the creation of a system of belief regarding the reality of the supernatural realm is related through Heliobas and his teachings. Heliobas's medical knowledge and his ability to provide physical healing through the correct doses of electric medicine suggest that he can be trusted, and that he is likely correct about other matters as well. The pianist's physical healing lays the groundwork for his teachings on the supernatural realm.

Interpersonal relationships take on spiritual and physical forms within the physical world of the novel, making them natural, even scientific connections (reminiscent of sensitives such as Reichenbach's). Heliobas is supernaturally connected to the people he helps and this requires his action in the physical world. He tells the pianist:

I will tell you at once that I never promise to effect a cure unless I see that the person who comes to be cured has a certain connection with myself. If the connection exists I am bound by fixed laws to serve him or her. Of course I am able also to cure those who are not by nature connected with me; but then I have to establish a connection, and this takes time, and is sometimes very difficult to accomplish, almost as tremendous a task as the laying down of the Atlantic cable. But in your case I am actually compelled to do my best for you, so you need be under no sense of obligation. (Corelli, Romance 1: 168)

Here he volleys between supernatural causes (his connection to a given person) and physical effects (his ability to cure that person). In likening Heliobas's supernatural

connections to the Atlantic cable, Corelli references one of the technological advances of the previous generation of scientists. The Atlantic Cable was completed in the late 1850s, approximately three decades before *A Romance of Two Worlds* was published. Thus, the novelty of the feat would not have been as fresh for her readers in the late 1880s, though the work that went into it and the usefulness for communication would be remembered in the public consciousness. The real world example of the Atlantic cable serves to suggest that Heliobas's supernatural connection to specific people is in some way tangible and, therefore, the means by which he transmits healing.

Heliobas's understanding of the supernatural and physical realms as intertwined is problematic, resulting in his teachings being misunderstood by many in his society, and potentially in Corelli's as well. Cellini, the pianist, and Zara understand Heliobas's electric medicine to be curing them physically and opening them to spiritual truths. When the pianist tells her landlady that she will be under Dr. Casimir's (Heliobas's) care, Madame Denise is dismayed and exclaims:

"Oh, mademoiselle, [...] have you not dread of that terrible man? Is it not he that is reported to be a cruel mesmerist who sacrifices everybody—yes, even his own sister, to his medical experiments? Ah, mon Dieu! it makes me to shudder!"

And she shuddered directly, as a proof of her veracity. I was amused. I saw in her an example of the common multitude, who are more ready to believe in vulgar spirit-rapping and mesmerism than to accept an established scientific fact. (Corelli, *Romance* 1: 227-228)

Here the pianist is creating a distinct line between herself and Madame Denise based on their perceptions of Heliobas. Madame Denise is correct in that Heliobas experiments on everyone, including his sister and the pianist, who has only his word that his understanding of electric medicine is anything approaching scientific fact. Regardless of whether what Heliobas practises is actually "established scientific fact," Corelli uses that wording to inspire trust and respectability. Thinking of Heliobas's strange medicine as science (and fact) allows the pianist to put her faith in something ostensibly proven and reliable instead of the esoteric teachings of an ostracised man. The pianist, however, trusts Heliobas because of what she has experienced not because of any facts or a scientific procedure that has proven his teachings are valid, and readers are expected to follow suit.

Corelli is aware that her novel joins the wider social conversation regarding Spiritualism and belief in connection with scientific authority, and she includes specific comments to address potential concerns. She both rejects the most widely acknowledged form of Spiritualism, spirit-rappings and the like, and positions her work, and therefore her understanding of a supernatural realm, outside of the critiques of J.N. Maskelyne and his work against Spiritualism. Nevertheless, she uses the book "to negotiate popular beliefs in a climate of contentious theological orthodoxy, denying spiritualism but confirming both the existence of the supernatural and a variety of worlds beyond the mundane" (Moody 192). She addresses and dismisses Maskelyne in the text of the novel in which she crafts her own system of belief, which Maskelyne had not explicitly criticised. Early in A Romance of Two Worlds Mrs. Everard comes across the book Cellini has given the pianist to read and is very upset by her having "Letters of a Dead Musician" for a plethora of reasons – a book whose title sounds not unlike the stories which were discussed earlier in this chapter of mediums relating the experience of death. She exclaims to her friend: "My dear, I am ashamed of you! You are a believer in spirits, I do declare! Why, I thought Maskelyne and Cook had cured everybody of such notions; and now here's this horrid book going to make you more nervous than ever" (Corelli, Romance 1: 78-79). Maskelyne's name is synonymous with his work in debunking Spiritualism. Thus, Corelli's use of the name is an intentional reference to one of the most popular opponents of Spiritualism when she was writing. Weatherly asserts at the start of The Supernatural?, "this has not been written for the professors of mental philosophy, neither do I expect the student of psychology to gain any information from at least my portion of it" (Weatherly and Maskelyne xi). The book is intended for the Mrs. Everards and pianists who do not need highly scientific explanations for fraud but examples of when fraud has been committed to make them doubt the examples they see. Mrs. Everard certainly agrees with Maskelyne that there is no reason to entertain Spiritualism as a possibility. In having Mrs. Everard reference Maskelyne directly, Corelli acknowledges his importance to the social debates regarding Spiritualism and intentionally disregards him since he has not disproven anything related to her Electric Christianity. When the pianist humours her friend and promises to give the book back, the reader is aware that this is not a sign that Mrs. Everard has won but that the "knowledgeable" woman does not understand the theories that the pianist has begun to explore. Electric Christianity is not synonymous with Spiritualism within the context of the novel, but Spiritualist concerns shape potential attacks on the faith because it is a Spiritualist belief system.

The supernatural, or electric, connections that Heliobas has with characters on earth serve a greater purpose than temporary physical healing: his scientific success makes them trust him with supernatural concerns. In turn, they allow him to send them into the supernatural realm to learn first-hand about other worlds. With a sparkling potion and the invocation of his twin spirit to guide her, Heliobas "frees" the pianist to travel throughout the "glorious Continents of Air" to learn of the supernatural realm through experience in it (Corelli, Romance 2: 18-20). His separation of her spirit from her body reveals that, although there are ways by which beings in the supernatural realm can act in the physical world (be that to overtly protect Zara or Heliobas's understanding of his treatments as partly supernatural), a human physical body cannot enter the supernatural realm. The separation is temporary though and the pianist will be able to return to her physical form after she chases the answers to her questions throughout the supernatural realm, the galaxy. This power to temporarily sever the connection between the physical and the supernatural in people is, however, dependent on the willingness of a supernatural being to take the human spirit away from earth. The residents of the supernatural realm control access, not the scientist on the physical earth.

The supernatural realm of Corelli's Electric Christianity is, exclusively, for spiritual lessons that will shape behaviour upon the subject's return to the material world. The pianist's body stays on earth, seemingly sleeping in Heliobas's office. From the pianist's perspective, she leaves behind a "strange imperfect shape, [...]. It looked like a small cast in clay, very badly executed, of the shape [she] at present wore" as she rises into space (Corelli, *Romance* 2: 21). When she returns to her body approximately two and a half days later, she sits up in the chair where she has apparently been "resting" for that time (Corelli, *Romance* 2: 66). This is the extent to which Corelli describes the pianist's physical form whilst she is off floating throughout the supernatural realm. The physical body of the pianist is inconsequential and, she would argue, an oppressive, cramped, prison (Corelli, *Romance* 2: 64-65). Leaving behind the physical world means the freedom to truly experience the supernatural realm.

Corelli's supernatural realm allows for a variety of real, physical worlds and experiences from which practitioners of the sect are taught. Saturn's inhabitants are protected from pestilence and disease by its rings (Corelli, *Romance* 2: 26-27). Venus and Jupiter are beautiful gardens of peace that the pianist visits (Corelli, *Romance* 2: 28-31). There is, however, an experience that the pianist describes as being dreamlike. The "spirit-drama," she stars in is "a strange scene [that] unfolded before [her]—a sort of

shifting dream that was a reality, yet so wonderfully unreal" (Corelli, *Romance* 2: 34). The "miniature creation" is the only place besides Earth where the pianist sees pain – and it is her creation so that she can come to understand Christ's choice to self-sacrifice for mankind (Corelli, *Romance* 2: 35). The different worlds she visits serve to emphasise the fallen nature of earthly inhabitants and to show that perfection is possible, so that the pianist will always long for better when she returns to her body.

The pianist's experiences are important, not only for the narrative, but also for their potential to enlighten the reader about the way authority works in scientific supernatural concerns. Heliobas tell the pianist:

Yours has been a most wonderful, I must say almost exceptional, experience. It proves to me more than ever the omnipotence of *Will*. Most of those who have been placed by my means in the Up-lifted or Electric state of being, have consented to it simply to gratify a sense of curiosity—few therefore have gone beyond the pure ether, where, as in a sea, the planets swim. Cellini, for instance, never went farther than Venus, because in the atmosphere of that planet he met the Spirit that rules and divides his destiny. Zara—she was daring, and reached the outer rim of the Great Circle; but even she never caught a glimpse from the great Central Sphere. *You*, differing from these, started with a daring aim which you never lost sight of till you had fulfilled it. (Corelli, *Romance* 2: 68-69)

Her time in the "Electric state of being" is the most complete that can be offered to prospective converts (fictional and human). That she then relates the details of the Electric Creed provides the other half of the lessons a person in the real world might need to follow Electric Christianity. The didactic novel results in the most complete depiction of Electric Christianity that any of Heliobas's disciples can give, revealed through the fantastic story.

In the remainder of the novel, Corelli reveals the way that her Electric Christianity changes the way that its adherents live life, not in their actions but in their relationships. Heliobas and his followers are set apart for twin spirits that do not live on earth, and each of them lives with minimal earthly relationships. Zara's life serves to foreshadow the pianist's life. She is governed by one in the supernatural realm and Heliobas no longer has control over her. Preparing for her earthly death, Zara ultimately meets it with literal open arms (Corelli, *Romance* 2: 203) and the doctor called in to examine her can only pronounce it a death by electricity, explaining that the "lightning-flash" went straight

through her heart (211). The mark on her body is beneath the electric gem she wears, a stone she promised to leave to the pianist when she died. It is not death though, but freedom, and Zara appears to the pianist to remind her friend that she is now free and happy (Corelli, *Romance* 2: 218-219). Zara's life can be explained as preparation for the supernatural realm, the welcoming of the transition from earthly life, and the affirmation of a continued existence in the supernatural realm. This is what the reader now expects of the pianist.

In the novel, Electric Christianity offers deeper supernatural connections to its adherents than most people ever enjoy. The constant communion with twin spirits takes the place of earthly love interests for these characters as electric, supernatural connections provide fuller relationships than natural human interactions. The pianist's observations of other followers of the sect prepare the reader to expect that she too will have her most intimate relationship with a spirit. Even before learning anything of electric medicine or Electric Christianity, the pianist is sure that Cellini is engaged and he confirms that his "betrothed is a dream of beauty" (Corelli, Romance 1: 92). This confirmation is intentionally vague as his beloved is a spirit rather than a living, breathing woman. The pianist's own twin spirit is a "Shape" (spirit) named Aeon who promises to sing to the pianist, provide her with songs, and "bring thee comfort," declaring: "As long as thou dost love me, I am thine" (Corelli, Romance 2: 52). The promise of music binds the pianist to Aeon because music and health are intertwined for the pianist, in more ways than her being known only by her profession throughout the novel. The pianist's illness is marked by the amount of time it has been since she touched an instrument and her recovery is charted through her renewed interest in music when she begins to play again. 15 Life and music are, for the pianist, interconnected to the point that to give up the latter is to lose the former. Aeon's promise of devotion secures everything the pianist wants through her promise to remain true to her twin spirit. The result of these supernatural relationships fulfilling the needs of the characters is that they have little interest in traditional earthly relationships.

In this way, Corelli crafts an alternative to a traditional marriage plot for her characters. To settle Zara or the pianist into homes on the outskirts of Paris with the Prince Ivans of their lives would negate the importance of the supernatural connections

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¹⁵ See, for example, the scene following Zara's final dinner party when the pianist is so absorbed in playing that she does not observe the men entering the drawing room (Corelli, *Romance* 2:196).

that are central to her Electric Christianity. Followers of this faith find friends, confidants, and mentors in those with similar human electric compatibility. Their most significant relationships, however, are fully supernatural. The narrative focuses on electric, or supernatural connections, and this must carry through to the most intimate relationships depicted in the novel.

The way that Corelli mixes medical (scientific) authority and religious (supernatural) authority as Heliobas guides his followers to faith in Electric Christianity affirms a mutual need for both science and the supernatural. Electric Christianity relies on the social knowledge of Spiritualism. Regardless of the pointed comments Corelli makes, her system of belief seeks to make the same connections as other, more mainstream, Spiritualist sects. Her interest in setting both aspects of the faith on equal footing, however, may be clearest in the name itself: Electric (scientific) Christianity (supernatural).

Faith through Fiction

Although the two authors work to depict two different subtypes of Spiritualist systems of belief, including their concepts of the supernatural realm, and stress the importance of their specific ideas of correct belief, both authors establish systems of belief that comment generally on the authority of science and the supernatural. Corelli's pianist is much like Marryat's Professor in that both characters are representative of a type of person more than an individual; the generality of the characters allows them to speak to much wider groups than if their characters were more clearly individuals. If the Professor can be any person too learned to consider the possibility of the supernatural, then the pianist is any artist who readily accepts possibilities and wants to believe in bigger ideas. The vagueness allows the authors to make wider statements about belief and the importance of seeking the truth than if the lessons were supposed to be for a single character. All unbelievers will be faced with the afterlife after death. Anyone who is willing to seek the truth can find fulfillment and physical health. Readers can easily apply the morals of the stories to a block of fictional characters – and people in the real world. There are endless possibilities hidden in the characters' (relative) anonymity.

Marryat's and Corelli's attempts to teach their beliefs through fiction may represent a rather intense view of authorial responsibility in their duty to their respective systems of belief but authorial duty itself was not an unprecedented concept in Victorian society. Corelli's *The Sorrows of Satan* provides clear evidence that she understood the

role of author to include duties to the public. Recall Simon J. James's comments related to *The Sorrows of Satan* as an intentional exploration of authorial duty and the reader's responsibility cited earlier in this chapter. More generally, however, he posits: "[n]o late-Victorian producer of fiction can have been unaware of his or her responsibility for the 'influence' novels had upon readers. Whether the reading of fiction was morally beneficial or not to its audience remained a widely contested topic in the decades following the Education Acts" (James 138). What Marryat and Corelli do is take the question of moral responsibility to be their own responsibility to disseminate what they think is morally uplifting. Thus, when Moody remarks that Corelli's novels "address popular concerns, anxieties, and the hope of social change while expressing her own personal feelings," the issue is not actually of this being an effect of her "early success and exclusion from literary social circles" but of her view of her responsibility as author (202). Given the publically adamant faith of both authors, these are novels they would have thought socially important. The importance of these ideas, in turn, means that the authors understood them to be too important to allow the final say to be within the fictional context and so they direct the reader to those who know the systems of belief they teach.

Systems of belief, such as these, are particularly noteworthy for the way that the authors use scientific ideas and appeal to science for faith in the supernatural. As discussed throughout the chapter, Marryat's Spiritualism and Corelli's Electric Christianity intentionally engage with scientific concerns. In both cases, there is a dialogue that occurs between science and the supernatural that must be resolved in an agreement between the two fields. The scientist must believe. The pianist must learn just how reliant her physical health is on her spiritual awareness. The novels are not merely concerned with the supernatural; the ways that science and the supernatural are interconnected are of central concern. The result of this combination of concepts is that the authors emphasise the reliability of their respective faith by appealing to science to justify the supernatural.

Yet the authors approach the issues of authority within the scientific supernatural differently. Marryat would have the supernatural have complete authority, superseding even human life, and is quite critical of some science. Corelli, however, merges her understanding of scientific ideas into her supernatural concerns in such a way that the two mutually affirm each other. Hence, novels that depict Spiritualism are not necessarily concerned with resolving perceived tensions between the authority of science and the

supernatural. Issues of didacticism are more central in novels such as these as the authors use the books to teach correct belief.

Novels such as these reveal that concerns of the scientific supernatural were not one-sided, with representatives of science attempting to peer into the supernatural realm as faithful believers passively observed the scientific process. Due to their personal interest in the various systems of belief, the authors of these novels intentionally serve as spokeswomen for their specific sect of Spiritualism. The characters that teach the respective systems of belief are, in effect, the supernatural equivalents to the scientist characters who will be discussed in the next two chapters of this thesis.

Chapter 2

Scientific Uncertainties

Interaction with the scientific supernatural was not necessarily a positive experience in the fin de siècle. Doctors were powerless to explain patients who seemed to possess scientific supernatural abilities. Where there were scientific supernatural medical treatments, such as mesmerism, the effects of these treatments were not completely predictable, leaving them still holding dangerous potential. The novels discussed in this chapter, Florence Marryat's *The Blood of the Vampire* (1897) and Bram Stoker's *The* Lair of the White Worm (1911), draw on these uncertainties, highlighting the fact that phenomena such as these were considered powerful despite not yet having a complete scientific explanation. Nonetheless, this lack of a clear scientific understanding of these concerns does not mean that the stories rely solely on the supernatural and have no scientific basis. In The Blood of the Vampire, the lack of needed scientific knowledge leads to danger whereas, in The Lair of the White Worm, it is the use of a misunderstood science that is threatening. The scientific uncertainties create the suspense that drives the plot of the stories. The authors based their novels on specific areas of scientific uncertainty in which there was change occurring due to active scientific investigation at the fin de siècle.

Both Marryat and Stoker structure their novels around a single character with a specific scientific supernatural power that results in their being ostracised from others because of their potential to destabilise society. The characters' powers are depicted as causes for fear because their uncontainable abilities cannot be definitively explained with scientific certainty. Harriet, Marryat's tragic heroine, is essentially told this by the doctor from whom she seeks advice. Marryat creates a supernatural condition that both draws from contemporary medicine and confounds the doctor; Harriet's psychic vampirism is real and life-draining to those she meets. In Stoker's novel, he juxtaposes two historical versions of mesmerism, setting them in a battle against each other for supremacy. The central character, Caswall, has a power that is clearly recognisable as a malicious use of nineteenth-century mesmerism and he struggles to retain control of others when confronted with a representative of an earlier form of mesmerism. Stoker complicates the role of mesmerism in the novel through the use of two different plot lines. The characters must first be confined to a specific scene, or at least plot, before critics can analyse them for the way the characters and their respective uses of mesmerism would have been

understood by nineteenth-century readers. In both cases, the plot of the novel follows the character's use of a contested medical science and the effects they have on those around them.

The plots of The Blood of the Vampire and The Lair of the White Worm are directed by issues of scientific understanding and uncertainty. Marryat's novel is a straightforward depiction of the medical doctor's attempt to diagnose and, more importantly, marginalise the strong and uncontrollable woman. Issues complicating diagnosis in the late nineteenth century appear not only in the doctor's failed attempt to diagnose her but also in the failure of medical terminology to provide a term for her. Doctors attempted to understand disease and classify things that affected people in ways that could be conclusively stated and discussed. In her introduction to twenty-first century issues of diagnosis, Annemarie Goldstein Jutel quotes a writer for the British Medical Journal in 1886 who explains: "The imperfection of our medical vocabulary is not a matter for surprise. It is the measure and gauge of the imperfection of our medical knowledge, and only perfect knowledge admits of a perfect nomenclature" (quoted in Jutel 12). The attempt to diagnose the psychic vampire in Marryat's novel demonstrates the problems of definitive diagnosis in the late nineteenth century. The doctor recognises the problem but cannot name what is wrong or propose a cure. Marryat creates a charming villain out of a young woman a doctor cannot definitively classify because medicine cannot fully explain people like her. The lack of explanation for Harriet is not a failure on the part of this specific doctor but of doctors in general to be able to explain her condition. She is outside of medical nomenclature; even though her condition can be discussed obtusely in the context of incomplete sciences attempting to explain the seemingly supernatural power she has over other people.

Shifts in medicine and the understanding of disease throughout the nineteenth century can help to explain the reason that, while Harriet is identified as dangerous by the doctor figure, he is powerless to cure her and uninterested in dealing with her sensitively. The doctor represents one half of a sharp dichotomy that Roy Porter discusses in his chapter "What is Disease?" Porter claims that "[s]ufferers experience the personal side of being sick; doctors, especially those with scientific pretensions, are more likely to emphasize its objective aspects, the facts underpinning diagnoses and prognoses" (R. Porter, "Disease" 82). He later returns to this idea stating: "doctors directed their gaze not on the individual sick person but on the disease of which his or her body was the bearer" (R. Porter, "Disease" 96). It is facts, details, and identification that surround the process

of diagnosis and shape the perspective of the doctor, not the patient's experience. Marryat draws from the aloof and disinterested medical doctor to craft her diagnosing character. The doctor in the novel is harsh to the afflicted woman, uninterested in her plight, and concerned only in protecting others. Marryat is careful to include the emotions and the motivations of her psychic vampire. Readers know, for instance, that she longs for love and friendship. Yet, she is offered no cure and readers are left to follow her journey hoping that she can fit into a society driven by scientific investigation without a specific diagnosis for herself.

Scholarly interest in nineteenth-century medical diagnosis often focuses solely on lasting medical concerns such as those found in realist novels. Medical history has been traced through realist novels by Lilian R. Furst, who suggests that the depictions of medicine in literature reveal the perception of medical care in the nineteenth century. Medical Progress and Social Reality: A Reader in Nineteenth-Century Medicine and Literature catalogues difficult-to-access texts by medical topic with the perspective that "[l]iterature reveals more fully than history the social realities in the dilemmas that physicians and patients alike faced in the wake of new discoveries and technologies" (xi). Between Doctors and Patients: The Changing Balance of Power examines depictions of doctors and their relationships with their patients in literature of the nineteenth century. Both of Furst's books deal specifically with what a late twentieth-century reader would consider medical encounters. As such, scenes of psychic vampires and mesmerism fall outside of her purview due to Furst's emphasis on physical illness. Yet, given Marryat's personal belief in Spiritualism (discussed in depth in Chapter 1), she would have considered Harriet's discussion with the doctor conceivable and her negative effects on others as possible, opening up this type of novel for consideration regarding the representations of the doctor and diagnosis.

Although many illnesses were lumped together under umbrella terms such as "fever," in the nineteenth century there was a push to distinguish diseases from one another and give specific names to the differing illnesses. Charles Rosenberg notes in "The Tyranny of Diagnosis: Specific Entities and Individual Experience" that, as early as 1804, the British physician Thomas Trotter explained: "[t]he name and definition of a disease [...] are perhaps of more importance than is generally thought. They are like a central point to which converging rays tend: they direct future inquirers how to compare facts, and become, as it were, the base on which accumulating knowledge is to be heaped" (241). Identifying a specific disease, the act of diagnosis, reveals the next steps,

the way by which to respond to a threat to the body. Additionally, early diagnosis included attempts to classify anything that was different from what a person was expected to be. Rosenberg suggests that, in this way, "disease entities have been called on to do a variety of cultural tasks, most conspicuously to naturalize and legitimate conceptions of difference and deviance. I am referring, of course, to an assortment of problematic ailments ranging from attention deficit disorder to homosexuality and alcoholism" (251). Thus, these attempts to name a diagnosis include not only actual diseases caused by germs or genetic conditions but also preferences and personal decisions.

Mesmerism and its role, real or alleged, is innate to the nineteenth-century topics of science, medicine, diagnosis, and medical treatment. Victorian England held both high hopes for and intense fears about the powers associated with mesmerism because of the potential that it seemed to possess. Although it became so much more than initially posited, mesmerism began as Franz Anton Mesmer's theory of a "superfine fluid existing in and around all objects of the universe [...] [that] connected earth to sky, human to celestial bodies, and its proper or improper distribution within any individual explained that person's state of health or disease" (Oppenheim, Other World 210). Mesmerists attempted to cure illnesses by correcting imbalances and blocks of the magnetic fluid (Oppenheim, Other World 210-211). Although strange to twenty-first century readers, mesmerism was central to many Victorian debates. Alison Winter states: "[f]ar from being assigned a position on the sidelines of intellectual life [...] mesmerism became a means — or 'medium' — for Victorians to explore and even to forge definitions of authority wherever they were open to question" (6). Victorian society had already seen mesmerism "refashioned as hypnotism by James Braid (Neurhypnology, 1843) and William Carpenter, setting the ground for the late nineteenth-century development of psychology and psychoanalysis" (Ascari 67). Hence, mesmerism was already greatly changed from Mesmer's ideas, and had become something more important than one man's concept, by the fin de siècle.

Instances of mesmerism that appear in novels like Stoker's *The Lair of the White Worm*, therefore, represent more than the author's interest in a mistaken science. Stoker's inclusion of mesmerism in the novel allowed him to interrogate scientific authority through the use of a phenomenon already apparent in both scientific and social debate. Winter warns:

When modern readers consider the nature of such states [as unconsciousness caused by mesmerism], some of the experiments will

look like patent frauds, while others will seem to have displayed some real effect. The divergence between Victorian notions of plausibility and ours is one of the most interesting features of these practices. [...] [W]hat is relevant to this history is not whether they happened but whether they *could* happen in Victorian eyes. (11, emphasis in the original)

It is this possibility of mesmerism and the unanswered questions associated with the phenomenon that allows Stoker to suggest social power inversions without making them explicit. He did not have to personally believe in mesmerism to know the potential many in society ascribed to the phenomenon. Stoker's conception of mesmerism was introduced into a cultural atmosphere full of explanations for, and fears about, mesmerism and relies on this dichotomy of hope and fear.

There is evidence of early attempts to classify mesmerists based on their motivations. A mesmerist could be a performer looking for income or a scientist / doctor experimenting with using mesmerism for medical issues such as pain management. Even this distinction, however, does not provide a full range of the nineteenth-century reception of mesmerism. Janet Oppenheim relays that "Sir Edward Bulwer-Lytton [...] distinguished 'mediums of probity and honor supported by people of like character,' from 'paid professionals' in the business of providing séances. His distinction would appear to be between amateur mediums who used their powers without thought of material reward, and those who sought to support themselves with their talent" (*Other World* 10). Given Bulwer-Lytton's death in 1873, his division of mediums as people who use their powers for specific purposes falls within the period when the discussions of scientific supernatural phenomena were at their height in English society.

Earlier, in 1842, mesmerism as a form of anesthesia caught the attention of the public when W. Squire Ward amputated the leg of the mesmerised J. Wombell who claimed to feel no pain (Winter 165). This incident became central in a debate regarding mesmerism as "some claimed that he [Wombell] had colluded with the mesmerist and surgeon" (Winter 166) and those who believed the statements regarding the surgery wondered if mesmerism should be used in connection with medical procedures if it were possible to eliminate pain. The issue of mesmerism and medicine has already been briefly discussed in the Introduction to this thesis. In addition to the potential benefits and abuses raised earlier, some doctors were "horrified" at the idea of mesmeric anesthesia as "the idea of one person producing insensibility in another was too terrible even to admit into consideration. If pain could really be suspended, [one doctor] threatened, 'the teeth could

be pulled from one's head' without one's even realizing it" (Winter 167). ¹⁶ The idea of a person losing control of himself or herself for any purpose was a line some were not willing to cross. The mid-century debate surrounding mesmerism and its potential continued into the following decades. Anti-Spiritualists such as Henry Maudsley published papers such as "'Hallucinations and Illusions' and 'Hallucinations and Illusions Continued'" in 1886 in response to continued claims of mesmeric successes, and as late as 1924 Harry Houdini was still explaining away related phenomena. ¹⁷ Mesmerism was, therefore, a highly charged concept for its combination of alleged beneficial uses and manipulative possibilities by the time Stoker was writing at the end of the century.

Stoker's use of mesmerism in *The Lair of the White Worm* changes the expectation for a scientific practitioner to be a positive figure, driving suspense in the story as readers hope for a limit to his power. Caswall *is* the danger posed to his neighborhood in one of the concurrent plot lines. For whatever positive associations science (in general) and medicine in particular may have potentially held, Stoker's mesmerist is a cautionary figure. He is not easing pain; he is the instigator of the problems in the peaceful neighborhood. In effect, Caswall is the opposite of Marryat's doctor, who, as this chapter will go on to explore, is seeking to protect society. Caswall possesses a selfish desire to exercise his power over others simply because he can. Mesmerism represents, at best, a temptation to try to control others that Caswall cannot overcome. Caswall's mesmeric power helps him to identify the weakest possible victim, serving as a scientific aid to the devastation. The abuse of mesmerism becomes a perversion of diagnosis as opposed to an aid to healing the individual or society.

In each of the novels discussed in this chapter, the author capitalises on the reader's expectation that the character in question can be contained to hint at the importance of protecting society and, specifically, late nineteenth-century England's status-quo. On the one hand, Harriet's short-lived experience of European society exposes her to little more than heart-break in *The Blood of the Vampire*. She is eager for acceptance and hungry for love but shunned for her lack of social awareness. With the doctor's declaration, her associates (and readers) understand her as a threat with the potential to disrupt healthy relationships and, of potentially greater concern, control men

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¹⁶ The Psychic Research Company includes a subsection explaining that dentists do not advertise that they use hypnotism because it is poorly looked upon by society, not because it does not work (51).

¹⁷ Both Maudsley's and Houdini's papers are included in Volume IV, *Anti-Spiritualism*, edited by Tatiana Kontou, of the *Spiritualism*, 1840-1930 series.

who seek her affection. On the other hand, Stoker's Caswall enjoys high social status and it is through him that his neighborhood is threatened by his unexplained malice. The young woman looking for love and the land owner returning home are familiar plots in which there is an expected conclusion to the stories: a courtship and marriage for Harriet and a happy life of neighborly dictatorship for Caswall while the young women of the area vie for his attention. The scientific supernatural power that these two have, however, leads to new and different endings to their stories. Unable to be healed, both characters must die in order for their communities to move on.

Although both characters are associated with a number of deaths, a combined body count any villain could be proud of, it is ultimately stability that is stressed when the authors stop short of ruining society to reinstate order before the final page. Both Harriet and Caswall have the potential to devastate the communities of their respective novels and yet neither author allows the full effect to be felt. Harriet's victims are accidental and she chooses to die rather than continue to kill. Only minor characters die; the more central ones recover when she is no longer in close proximity. The complexity of the two plot lines in Stoker's novel make those characters' deaths more important in the society of the novel due to the multiple roles of each character. Nevertheless, he falls short of allowing a truly carnivalesque upending of society, though he does play with the possibilities through Caswall's use of mesmerism. This policing of potential by the authors reveals the extent of the concern with the medical attempts to explain the scientific supernatural in their actual society, in that they reinstate order by removing the character with scientific supernatural power to resolve the narrative.

The authors deal with questions of the authority of uncertain science in connection with the supernatural quite differently in these novels. Marryat overtly enforces the authority of science through the doctor character who identifies and ostracises the psychic vampire. The appeal to science is formal in that a potential patient asks for a diagnosis from a doctor. The supernatural is both affirmed (there is something strange wrong with Harriet) and condemned. The plot of the novel follows the search for an explanation so that Harriet's condition bolsters the events of the novel. In contrast, Stoker avoids direct appeals to scientific authority by not including a doctor or scientist character in his novel. The two characters with mesmeric abilities are merely practitioners of differing abilities. As a result, there is no direct attempt to explain the way science and the supernatural are both involved in either version of mesmerism. Stoker ignores any perceived tension in the concept. Without a clear authority figure, the results of the mesmeric encounters vary.

Readers are forced to acknowledge that the science of mesmerism is amoral, open to abuse. Thus, the uncertainty of the scientific supernatural is both in the missing scientific terminology and in the ways that it can be used. The real effects in the (fictional) worlds are signs that something is causing them. The unanswered questions reveal uncertainty regarding authority within the power dynamics of the scientific supernatural since the concern exists both when there is an overt authority figure and when there is not.

Diagnostic Uncertainty: The Blood of the Vampire

Marryat's novel provides a simple story in which the protagonist's search for answers regarding her situation is ill-fated because there is no definitive medical diagnosis for what she is or cure to sanitise the threat she poses. Harriet embodies the danger of scientific uncertainty in her undiagnosable condition which dooms her to harm others. Marryat's choice to end the novel with Harriet's death to erase the uncertainty she embodies from the world suggests that there is no way to scientifically resolve all questions posed by the supernatural. Built on a combination of historic scientific and seemingly supernatural ideas, Harriet's power to drain the life of others can be described in nineteenth-century scientific terms. There are specific events that led to her unfortunate power. Yet, there is no name for the result of those events and, more importantly, nothing that can be done to fix the symptoms she has. Marryat's combination of these contested sciences relies on the scientific uncertainties of her contemporary society for both the hope of a scientific explanation and the fear of the unknown that drives the novel, demanding areas of scientific uncertainty be rendered sure through explanation or elimination.

The Blood of the Vampire slipped into literary obscurity in a way that mirrors the silent death of its tragic heroine, as the science on which the novel relies became scientific history. Greta Depledge asserts in her introduction to The Dead Man's Message that, "appreciation of [Marryat's] work is certainly due for a revival and is very relevant to the current academic trend for revisiting forgotten and neglected Victorian popular novelists" (viii). The Blood of the Vampire (1897), a primary focus of rediscovery of Marryat's work, provides another glimpse into the late Victorian fascination with creatures capable of draining the life force from others made popular by Bram Stoker's Dracula and drawing increasing scholarly attention in Richard Marsh's The Beetle and Marie Corelli's Ziska: The Problem of a Wicked Soul, all also published in 1897. Brenda Hammack suggests that Harriet's lesser fame may be because "Marryat's portrait of a

female vampire reads like a medical case study" ("Hybridity" 886), but this suggestion about the relevance of medical science to the novel has not received significant scholarly attention. While the diagnosing of Harriet's condition is central to the plot, readers are still given the full arc of her life without medical jargon to describe her. Harriet has no sinister intention, secret plot for revenge, or conscious need driving her to harm others. She is merely a victim of her inherited characteristics and doomed to victimise others in her pursuit of interpersonal relationships. The doctor of the novel explains, "Harriet draw[s] upon the health and strength of all with whom she may be intimately associated—that may render her love fatal to such as she may cling to!" (Marryat, *Blood* 95). Marryat's novel, therefore, provides a unique depiction amongst the selected scientific supernatural novels of a woman's view of women's potential to be innocently dangerous to those they most love and medicine's inability to diagnose and cure the condition.

The medical doctor in Marryat's *The Blood of the Vampire* has almost enough knowledge of Harriet and her heritage to diagnose her; however, it is ultimately up to the reader to complete the diagnostic process. He attempts to describe her social transgressions in medical terms but fails to do so because there is no specific diagnosis available to him. Brenda Hammack's Introduction to The Blood of the Vampire can usefully inform twenty-first century readers of the context in which contemporary readers would have interpreted Harriet's symptoms. Likening Harriet to "human corruptors like Oscar Wilde's Dorian Gray or Arthur Machen's Helen Vaughn more than she [resembles] Lucy Westenra or any of that trio of vampettes who threaten Jonathon Harker in Bram Stoker's Dracula," Hammack explains that "like Wilde's and Machen's characters, Harriet is a dangerous influence. Her intimates don't thrive, and usually don't survive long in her presence. [...] Marryat's Harriet unknowingly drains the energies and lives of those she likes or desires. She is, in other words, a psychic vampire" ("Introduction" v). Harriet is not alone as a dangerous woman identified by a learned man who attempts to limit her deadly power. Marie Corelli's Ziska of Ziska: The Problem of a Wicked Soul (1897) drains life from others, in her case seemingly out of revenge, while a scholar character carefully watches her progress. For fin de siècle readers, this ability to drain away another's life or energy would have built on the belief in a magnetic fluid running through all living things as described by Mesmer in his depictions of mesmerism. The precise nature of such a fluid was never defined and, as such, the draining of life was as

likely as the curative potential of mesmeric passes when the novel was originally published.

Marryat's novel tells the story of Harriet Brandt's brief experiences in European society after growing up in a convent in Jamaica. Readers are introduced to Harriet at a Heyst hotel where she has arrived as an unknown young woman who turns out to be a rich heiress with no knowledge of the world and a child-like naivety. Harriet longs for the love she did not have as a child and heaps affection, as well as costly gifts, on those who show her even the slightest interest. Mrs. Margaret Pullen attempts to ease Harriet's entrance into society as she feels that the young girl needs a trustworthy friend. As a result, Margaret is the first person in Europe to feel the effects of Harriet's vampiric nature. The novel then traces Harriet's relationships as her friendship causes Margaret and others to feel ill, results in the death of Margaret's baby and Bobby (a young man who falls deeply in love with her), and strains the friendships and familial ties of most of her acquaintances. When Bobby's mother drives Harriet to flee into London with few friends and no introduction, she agrees to marry Anthony Pennell despite having learned the curse of her birth and knowing that she will suck the life out of those she loves. After only a few months of marriage, Anthony dies in his sleep and Harriet chooses to follow him into death, leaving her fortune to Margaret Pullen, a relative of Anthony and a friend when she most needed one.

The character controlling Harriet's understanding of herself is a medical doctor backed by scientific authority who fits the reader's expectations of a scientific expert in his diagnostic and curative abilities. Although Harriet is the main protagonist of the novel, Marryat places the real influence in the hands of Doctor Phillips, a minor character whose only purpose is to address medical concerns within the story. The doctor's work in the novel is to offer physical diagnosis where possible, and medical-sounding explanations and scientific authority to the supernatural where not. Readers meet Phillips when he joins the group in Heyst and Margaret sets her "dear old godfather" (Marryat, *Blood* 54) immediately to work examining her child (77). He notices the physical symptoms of the child's uncle on the way to the baby and physically examines the child: "[t]he doctor raised her eyelids and examined her eyeballs—felt her pulse and listened to her heart—but he did not seem to be satisfied" (Marryat, *Blood* 77). Phillips assumes a physical cause for a physical illness. He queries the infant's diet and double-checks that the mother had not relented and given her opium, soothing syrup, or "quackeries of any kind" (Marryat, *Blood* 78). His question regarding any people who had interacted with the

baby is not initially intended to blame a specific person or supernatural being. It is an attempt to ensure that no one could be poisoning the baby's food without the mother's knowledge. Although the name Brandt (Harriet's last name) causes concern because Phillips associates it with the horrible scientist who is later revealed to be Harriet's father, he goes to the chemist for a prescription to treat the "state of exhaustion and collapse" from which the child suffers (Marryat, *Blood* 78). The baby's lethargy is a physical illness and should have a physical, medical, cure. It is only *after* Phillips meets Harriet and he is assured of her relationship to Henry Brandt that he changes his diagnosis of the baby to be the result of time spent with the dangerous woman. Marryat's doctor is primarily one of physical medicine who aims at medical healing through correct diagnosis but he also reflects *fin de siècle* scientific practices in his willingness to accept the scientific supernatural as part of his diagnosis.

Both scientific and supernatural causes for Harriet's condition are posed as medical possibilities, with scientific authority: genetic inheritance and a supernatural curse. Initially, Marryat's doctor's diagnoses are grounded in observations linked to knowledge rather than a desire to see something strange in the illnesses he confronts. The focus of the doctor, nonetheless, shifts from the moment that he observes Harriet and is cemented following his conversation with her. Just as he questions Ralph's health on sight and examines the baby, he seems to read Harriet's condition on her body before they speak. Physical markers denote genetic heritage that he can identify. The conversation with her about her parentage serves to solidify the diagnosis he already has in mind which combines her physical traits with a curse carried down to her in her parents' genes. The curse is a part of her genetic heritage not a break from the scientific to entertain the supernatural. After telling Margaret what he knows of Harriet's parents, he implores:

My dear Margaret, are you so ignorant as not to see that a child born under such conditions cannot turn out well? The bastard of a man like Henry Brandt, cruel, dastardly, godless, and a woman like her terrible mother, a sensual, self-loving, crafty and bloodthirsty half-caste—what do you expect their daughter to become? She may seem harmless enough at present, so does the tiger cub as it suckles its dam, but that which is bred in her will come out sooner or later, and curse those with whom she may be associated. I beg you and pray of you, Margaret, not to let that girl come

near you, or your child, any more. There is a curse upon her, and it will affect all within her influence! (Marryat, *Blood* 83-83).

Here, Marryat gives Phillips an amalgam of concerns. On the one hand he seems to be insinuating that Harriet has no chance but to have inherited bad genes which will result in her personality being like that of her parents. There was no good in them to pass on to their daughter. The issue is firmly genetic, scientific. On the other hand, this loosely identified genetic condition is a curse, something supernatural which will eventually encompass the person of Harriet and spread to infect those in her circle of influence. At this stage, Phillips already fears that Harriet is negatively affecting those around her but he is unwilling to assert that she is, in fact, the cause of the baby's mysterious illness. There is no clear signifier to denote where Phillips shifts from discussing science to fearing curses; the two classifications are fused into a single declaration of Harriet as simply inevitably dangerous.

The specific concern regarding Harriet's inherited traits is reflective of the nineteenth-century interest in eugenics, which Marryat extends to encompass the scientific supernatural by envisioning a supernatural element to the social danger posed by low-bred individuals. Angelique Richardson begins her discussion of eugenics at the fin de siècle by stating that, as a way to intentionally control human evolution, eugenics was first publicised in 1865 by Francis Galton (275). In the approximately thirty years between the publication of the idea of eugenics and the publication of Marryat's novel, the idea was developed in a variety of ways. Concerns related to the topic of eugenics include nationalism (the need for England to have healthy children, especially healthy white children, in order for imperialism to prosper), the place of women in society, and feminism more generally. The poor were of obvious concern but so too were those whose morals or life choices were considered transgressive. According to at least one "physician and a married man of fifteen years' experience," it was each person's responsibility to "choose a partner [without] any transparent defect of either person, character, or morals, nor if possible to ascertain, with any strong hereditary proclivity to the same" (quoted in Richardson 281). Neither of Harriet's parents followed advice of this sort and their daughter could, arguably, be the physician's proof of the importance of heeding his caution. Phillips's preoccupation with ascribing Harriet's parents' failures to her is a

reflection of this idea that moral failure was a heritage that cannot be helped but will be passed on to later generations.¹⁸

The reference to eugenics foreshadows the ending of the novel and the ultimate resolution of the uncertainty Harriet poses. For society to be safe, Harriet must die childless and it is the responsibility of every honourable man to avoid a woman like her whose children could not help but inherit her defective nature. Writing about disease in the late nineteenth century, James Mussell expresses this idea specifically through issues of the material:

Existence through time is always predicated on the material. Our inheritance is always embodied, whether this is in terms of genetics or property, [...]. What this material inheritance demonstrates, in diverse contexts ranging from spiritualism to science and aesthetics, is that the Victorians, [...], were not only concerned with the immaterial, but also its relation to the material world. (164)

The discussion of Harriet's parents serves not only to explain who she is but also why she is as she is, and why her fate must be what it is, due to the effect of her potential legacy on society. Given Harriet's mother's nature, however, she could also be solely to blame for her daughter's condition despite the father's own shortcomings. Dr. George Napheys, a late nineteenth-century doctor, wrote of "the 'disposition' of the woman at the time of conception [having] an effect on the physical and emotional formation of the fetus" (Jutel 102). In either case, any intangible problems within Harriet (whether they were caused by a curse or genetics) are of utmost concern because of the possibility for them to play out in the material world in the present and future generations. The scientific uncertainty making Harriet impossible to classify combines what has since been solidified into scientific fact and that which has since been relegated to superstition.

The medical potential of the scientific supernatural described by Marryat is a unique combination of scientific ideas and medical concerns. Marryat merges ideas from the burgeoning field of genetics with older traditions of maternal imprinting to create Harriet's strange condition. On the surface, the description seems merely to be a combination of nature and nurture. Her parents passed on bad genes and she spends her

¹⁸ Sarah Willburn attributes Harriet's ability to draw energy from others to her race arguing that "it is not just that some people draw energy from their colleagues, but rather that some dark creatures like a panther or Harriet, do" (*Savage* 442). This would allow for a more obvious genetic component to Harriet's condition but does not account for Phillips's focus on the moral failure of her parents.

formative years being raised by those horrible parents: she is ill-fated regardless of whether nature or nurture has the upper hand in shaping a person.¹⁹ This does not, however, account for the vampire tendency being passed on to her as a second-generation victim of the bat attack. Phillips tells Margaret,

[Harriet's mother's] servants had some story amongst themselves to account for this lust [of blood]. They declared that when her slave mother was pregnant with her, she was bitten by a Vampire bat, which are formidable creatures in the West Indies, and are said to fan their victims to sleep with their enormous wings, whilst they suck their blood. Anyway the slave woman did not survive her delivery, and her fellows prophecied [sic] that the child would grow up to be a murderess. (Marryat, *Blood* 83)

Marryat links Harriet's behaviors to the negative genetic traits her mother possessed as a result of the vampire bat. Rather than the traditional birthmarks associated with maternal impressions from the "mother's trauma or desire [which] is converted into a bodily sign on the fetus" (Mazzoni 24), Harriet receives vampiric traits handed down through the generations. Harriet's mother's cruelty is the direct result of maternal impression. The legacy is passed down to Harriet, not in physical appearance or overt blood lust but as an invisible change to her nature that makes her dangerous to others, and medicine cannot quite explain it.²⁰ She is a complicated specimen that blends together various medical uncertainties and fears that operated within the scientific community during the nineteenth century.

Although easily relegated to scientific folklore, theories of maternal impressions lasted well into the late twentieth century. Ian Stevenson begins his 1992 study of maternal impressions: "[t]he belief that a shock or other strong impression in a pregnant woman can produce a mark or other defect in her baby has been held for centuries; although it is less common now in Western countries, it is still widely accepted in other parts of the world" (353). He ultimately answers in the affirmative his question: "Does a frightening experience in a pregnant woman *sometimes* have an effect on the form of her baby?" (370). Stevenson's discussion of maternal impressions reveals that modern readers would be remiss to write off Marryat's interest in the possibility of them a century

¹⁹ Through the doctor's diatribe, readers have learned her father's history of vivisection and murder, her mother's blood lust, and of the vampire bat that bit her grandmother.

²⁰ In *The Gothic Body: Sexuality, Materialism, and Degeneration at the Fin de Siècle*, Kelly Hurley notes that "the smallest possible lapse on the part of the parents was enough to doom the offspring" (67).

before. Noting that as early as the 1830s Johannes Muller argued against the theory of maternal impressions, denouncing them as "derisive allusions to 'animal magnetism," Stevenson surveys historical cases and new examples (354), summarising Dabney's 1890 study of the phenomena and his finding that "defects related to errors of embryological development tended to be associated with maternal impressions received early in pregnancy; in contrast, birthmarks and other abnormalities of the skin and hair tended to be associated with maternal impressions occurring later in pregnancy" (355-356). The cases Stevenson cites vary from distinctive birthmarks to malformed limbs.

Throughout the nineteenth century, The British Medical Journal published a similar variety of potential horrors that mothers accidentally impress on their unborn children. These published examples include a child who was severely malformed as the result of a mother being frightened by two men "who kept hugging each other closely and posturing" in 1875 (C. Thompson 412), a baby born with "a double fifth toe upon each foot" (Jones 559), and a child with multicolored eyes in 1876 (Wood 270). A more bizarre case of a child who had his father's name and year of birth evident in his eyes after the mother suffered anxiety about the father denying the child was his appeared in Manual of Antenatal Pathology and Hygiene in 1904 (T. E. C., Jr. quoted in Ballantyne 901). The theory of maternal impressions overshadowed ideas of genetic heritage for some. In the same short article in which Wood documents the multi-colored eyes, he tells the story of a man with a "double thumb" who had several children born the same way and cut off his thumb in hopes of having a child without the deformity but "this made no difference to his offspring, who continued to be affected with the same abnormality" as he did not recognise the genetic component to his condition (270). The man assumed his children were being born with his physical deformity because of their mother seeing it rather than it being a genetic trait he passed on. Any fear or disturbance could accidentally maim an unborn child but protecting the child seemed impossible. As Brenda Hammack states in connection with hybridity and Harriet as a vampire, Marryat "seems to expect her readers to accept maternal impressions as readily as she does" ("Hybridity" 893). With maternal impressions as a given based on scientific support, Marryat can develop the idea further for her own purposes and include supernatural traits as well as physical ones.

Maternal impressions such as birthmarks do appear in fiction but Marryat's version of the poisonous personality threatening society shapes a different type of novel because there is no obvious mark signalling her danger. Although medical reports of

maternal impressions focus on physical evidence, Philip K. Wilson's article, "Eighteenth-Century 'Monsters' and Nineteenth-Century 'Freaks': Reading the Maternally Marked Child" includes a discussion of an 1861 book by Oliver Wendell Holmes, "well known among both medical and popular audiences," in which he, "[c]reated a serpentine child / woman protagonist whose mother, Catalina, had been bitten by a rattlesnake while pregnant with Elise. According to Holmes, 'an antenatal impression ... had mingled an alien element in her nature.' The venom poisons Elise from her childhood, both morally and physically" (12). Elise's description is much more similar to Harriet than the historical children with extra fingers or no feet. Nevertheless, Harriet differs from Elise in a fundamental way: she is not the one born after the animal bite. Thus, Marryat takes the idea of the child corrupted by a dangerous animal whilst still in the womb and makes the condition hereditary, synthesising a blood line tainted by impression.²¹ In doing so, Marryat emphasises the fear of the unknown since any danger can reach far into the future and yet remain outside of medical terminology.

Medical authority did not require precise scientific certainty because the scientist (doctor in the case of medicine) was considered the filter for refining knowledge through investigation and, therefore, his informed opinion could stand in for definitive proof. John Pickstone states in his discussion of medicine and society, "[f]rom about 1870, doctors had presented themselves as experts on physical constitutions and inheritance" (325). Dr. Phillips's ideas about traits passed to Harriet from her parents should be reliable within the world of the novel. As Margaret trusts her family friend and doctor, she would have no cause to question his assessment. Even more damning for Harriet than the catalogue of negative traits of her parents, Hurley explains that, in nineteenth-century Britain, degeneracy was considered to be "progressive in its effects, as the original contamination (be it 'ever so slight') intensified itself in the offspring, and was manifested in the increasing mental and physical deformity of each successive generation" (Gothic Body 68). There is no term given for what Harriet is or how she will impact those around her but if she were to continue to live into mature adulthood, Dr. Phillips expects that she cannot help but be worse than her parents and so he warns others to avoid her. As far as Margaret is concerned, Harriet is cursed or similarly inexplicably dangerous. It is not the

²¹ It should be noted that no animal likeness or connection was a positive thing. Lombroso's likening of visible physical traits denoting criminality to various animals is perhaps the epitome of this. Hurley suggests that gothic literature portrays "[a]tavism [as revealing] that the human body is too compendious, too full of incompatible histories, too full of strange narrative lines waiting to be developed" (*Gothic Body* 94).

effect of Harriet's powers on Margaret that causes the break between the two but the doctor's insistence that it is the correct thing for the mother to do. As such, the issue at hand is Margaret's blind acceptance of the doctor's authority, given to him by his apparent understanding of scientific things she cannot understand.

The lack of named diagnosis allows for the effects on others to be emphasised throughout the novel over the experience of the "sick" individual as scientific authority is depicted as more important than explaining any uncertainties. Readers hope for containment of, rather than care for, Harriet. Given the combination of concepts that feed into Harriet's character, it is not surprising that Marryat avoided naming the condition. The doctor attempts to diagnose what is wrong with Harriet by describing the effect she will have on others because it is her corrupting influence that is more important than her personal experience. Harriet seeks the truth from Doctor Phillips and decides to trust what he has told her regarding both her family and her own personality. Although Phillips refuses to directly answer Harriet's excited demands that he tell her if she "[possesses] the fatal power of injuring those [she] come[s] in contact with" or if she has "inherited the vampire's blood?" and who is responsible for this legacy, he does provide her with enough information that she believes her cursed heritage to be true (Marryat, *Blood* 194-195). Phillips lectures:

Miss Brandt, you have now touched upon a subject that is little thought of or discussed amongst medical men, but that is undoubtedly true. The natures of persons differ very widely. There are some born into this world who nourish those with whom they are associated; they *give out* their magnetic power, and their families, their husbands or wives, children and friends, feel the better for it. There are those, on the other hand, who *draw* from their neighbours, sometimes making large demands upon their vitality—sapping their physical strength, and feeding upon them, as it were, until they are perfectly exhausted and unable to resist disease. This proclivity has been likened to that of the vampire bat who is said to suck the breath of its victims. [...]

[...]

I should certainly say that your temperament was more of the *drawing* than the *yielding* order, Miss Brandt, but that is not your fault you know.

[...] But I think it is my duty to warn you that you are not likely to make those with whom you intimately associate, stronger either in mind or body.

You will always exert a weakening and debilitating effect upon them, so that after a while, having sapped their brains, and lowered the tone of their bodies, you will find their affection, or friendship for you visibly decrease. You will have, in fact, *sucked them dry*. So, if I may venture to advise you I would say, if there is any one person in the world whom you most desire to benefit and retain the affection of, let that be the very person from whom you separate, as often as possible. You must never hope to keep anyone near you for long, without injuring them. (Marryat, *Blood* 195-196, emphasis in the original)

Phillips describes in great detail what Harriet will do to others without the benefit of a formal naming of her ailment through which she (and readers) can then identify her. Harriet's company is to be feared as part of a horror of the unknown of which science is uncertain. The doctor, however, is to be trusts as an authority even in this uncertain matter.

Marryat's description of Harriet's condition was intensely personal to the author despite her evasiveness about any potential medical terminology for the disorder. It closely resembles a diagnosis that "Winona" had given to Marryat while controlling the medium William Fletcher in 1879. "Winona" had warned Marryat:

You are one of the world's magnets. You have nothing really in common with the rest. You draw people to you, and live upon their life; and when they have no more to give, nor you to demand, the liking fades on both sides. It must be so, because the spirit requires food the same as the body; and when the store is exhausted, the affection is starved out, and the persons pass out of your life. [...] You may not like it, but those you value most you should oftenest part with. Separation will not decrease your influence over them; it will increase it. Constant intercourse may be fatal to your dearest affections. You draw so much on others, you *empty* them, and they have nothing more to give you. (Marryat, *No Death* 233-234, emphasis in the original)²²

Marryat might be said to work through the most devastating consequences of this description of her own personality through Harriet. Phillips's consulting room is the site

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²² Marryat does not reveal "Winona's" occupation when alive or any other details that would give her the authority to say this.

of a turning point that leads quickly to Harriet's marriage, her husband's death, and her suicide. Marryat's own life was a chain of successive husbands, constant travel, and interaction in society. They are the two possible outcomes of such a prognosis: one understanding it as license to flit quickly between people and places (for their own good, of course) and the other fearful of her dangerous power, determined to the point of suicide not to harm another person whom she loves.

The conversation with the doctor shows both the girl's hope for an authority figure to counter the claims of others and the desperation she feels when inadequate science cannot provide a cure. In the consulting room, Marryat shows that even without definitive identification, the doctor has the power to change Harriet's understanding of herself. Until this conversation with Phillips, Harriet had not heard the details of her personality explained to her by anyone she could consider emotionally uninvolved. She trusts the doctor to have told her the truth, removed from personal attachment, as an aloof medical man. Yet Phillips does feel it his duty to protect Captain Pullen and his family's interests. His approach is not strictly clinical but he is still, as Alex Owen describes the scientific investigator, the "man of science who would destroy retrogressive myths and illusions, thereby contributing to the establishment of a more rational and enlightened society" (140). Here, however, Phillips is unable to negate the bizarre allegations of the baroness that Harriet has "poisonous breath" and "vampire's blood" (Marryat, *Blood* 187) and Harriet is forced to accept the descriptive diagnosis she is given. It may be harsh to tell her what he does, but Phillips's opinion of her upon arriving in Heyst and her leaving his London consulting room is the same. The scientist understands the uncertainties posed by the supernatural aspect of Harriet's condition as dangerous in their uncertainty.

Phillips's revelation to Harriet is, therefore, the point in the novel that marks a change from innocence for her, as ignorance is no longer an excuse and subsequent decisions should include consideration of her effect on those she loves. In the words of Marie Hendry, "Phillips's prescription is loneliness" (88) but Harriet initially rejects this. In discussing the historical medical concern with Spiritualism, Owen remarks that the concerns were more complicated than simple power dynamics as "physicians were models of enlightened practice and the problem went further than the misogyny of some individual doctors" (139). The doctor's revealing of Harriet's condition should be viewed in this light: not as the individual overstepping into her personal life but of the more knowledgeable sharing this information first with the primary villain / victim (Harriet) and then with the reader. The doctor's description of her condition shifts culpability as

Harriet is now aware of the harm she causes, and her power to draw others' love is replaced by guilt (with a measure of horror) at the unintended pain she causes. The reader, however, is still left with effects but no named cause due to scientific uncertainty and the narrative suspense building regarding whether Harriet will choose loneliness or to always harm others.

Diagnosis is not necessarily an issue of a scientific authority figure reading the symptoms on the afflicted one. Phillips's attempt at a diagnosis is based on the effect Harriet has on others rather than an examination of her, which mimics Michel Foucault's observation that "[m]edical certainty is based not on the *completely observed* individuality but on the completely scanned multiplicity of individual facts" (101, emphasis in the original). Phillips does not need to know everything about her as an individual but as many facts as he can gather about the situation. Many of the facts her deems pertinent to the situation are things he already knows about her parents before even meeting Harriet. Despite coming to his office, Harriet is described as appearing healthy throughout the novel, albeit upset in this scene. She exhibits no physical symptoms for Phillips to diagnose and it would not have been uncommon for a doctor to not examine a patient physically. Sir James Reid, Queen Victoria's physician, only saw the queen in her bed as she was dying and did not discover the hernia that led to her death until after she died because he had not given her a physical examination (R. Porter, "Disease" 97). Nineteenth-century readers would not have necessarily expected the doctor to do anything other than talk with a patient before forming his conclusions.

Recognition that a doctor may not be able to see or be told of the source of an illness was, however, becoming more common as scientific knowledge of diseases grew. James Mussell explains:

[w]hen influenza appeared in 1889 it was expected that it too would be attributed a body. Robert Koch's announcement of the *Tubercle bacillus* in 1882 not only demonstrated that germs were the causative agents for disease but that it was also possible to isolate and identify them. [...] Without a demonstrable causative agent for influenza, it was difficult to cohere the diverse symptoms with which it was associated to a single named condition and impossible to delimit its modes of transmission and contagion. (162)

Historical medical doctors needed a specific cause to name and blame for influenza and they anticipated that this would have a physical form. Mussell's reading of influenza

further identifies it as "signal rather than thing, its effects signified its presence but could not bring the microbe itself into being. Its edges, in other words, eluded the various technologies that attempted to make it an object of discourse" (173). Something harmful can be present but not visible. Harriet has no physical symptoms to signal her condition. The cause of her psychic vampirism is invisible and hereditary, be it genetic or supernatural in nature. Yet Phillips needs to blame all the suffering and death that follows Harriet on something and, as she is the common denominator, so *she* becomes the contagion within society. Invisible on her person, Harriet's power (the signal) is evident when it is harming others and Phillips is unable to concisely describe it; he only describes the effect she will have on those she loves. Harriet herself is unmarked by her psychic vampirism but she marks society by leaving illness in her wake.

Marryat does not create a referent to make discussing this affliction easy: once Harriet is gone so too is the issue. Her disease better serves as a source of horror if unnamed. The diagnostic work that Phillips performs, therefore, may seem inexact to the twenty-first century reader who would have a medical doctor perform tests or scans or at the very least physically examine his patient but it follows medical practices contemporary to Marryat when cause, disease, symptom, germ, and contagion were undergoing shifts in social understanding to account for new medical knowledge. The gaps in this knowledge were things to fear because they could not yet be categorised.

It is in the dynamics of the above conversation between Phillips and Harriet that Marryat reveals the catalyst of the plot within the novel to be the search for scientific certainty in the form of a specific diagnosis. Jutel comments that "diagnosis is both rudder and anchor: its pursuit guides the individual to the doctor's consulting rooms, while its assignment positions identity and behavior" (4). A diagnosis has the potential to assign identity and prescribe behavioural changes. As such, readers await Harriet's diagnosis so that it can reveal the information that necessitates the reforming of her identity. For most of the book, readers follow Harriet from friendship to flirtation to relationship and are, therefore, passive observers of her powers over other people. Even before Harriet inventories her life to list the illnesses and deaths she has caused, a list of characters whose lives she has destroyed is evident. Harriet exerts a life-draining influence over others despite her wish for friendship. Harriet seems powerful in her ambiguity despite her lack of agency. On the fringes of Harriet's social group (safely out of life-sucking reach) Phillips ultimately controls what others think of Harriet, as well as what she thinks of herself, because he holds scientific authority. He should be the one to

replace the ambiguity of her condition with a specific scientific diagnosis. He knows her lineage. He orchestrates Margaret and her family cutting ties with the girl. He ultimately warns her to isolate herself from anyone that she loves. Phillips's attempts to contain Harriet determine the narrative suspense as readers await both a name for what she is and the details of how others respond to her.

The prescribed treatment, isolation, is of central concern once Phillips speaks with her because it pushes Harriet outside of the nineteenth-century woman's normal place. In his examination of gender and suicide in nineteenth-century medical and social thought, Howard Kushner posits that nineteenth-century attitudes towards suicide included the immunity of women from such acts because of their safe place in the home protected by "traditional values, especially the patriarchal family" (461). Kushner states:

[a]dherence to familiar roles was depicted as the primary defense against the forces of social disintegration. Because middle-class ideology, as opposed to social reality, emphasized the role of women as mothers and as guardians of the family, theorists assumed that women were better positioned than men to resist the chaos ascribed to modernity [on which suicides were blamed]. (461)

Phillips's prescribed treatment of Harriet makes her unnaturally susceptible to self-harm because she cannot be a part of a traditional family without slowly killing those she loves. Without even the potential for a safe and loving home, the possible endings to Harriet's story are dark with condemnation because of her power to drain others' life force and the lack of a cure for it. With no hope for a scientific or social cure, she must choose to kill herself or others.

Here, both the attempt to give a diagnosis and the prescribed treatment are social rather than scientific. Pickstone remarks of Western medicine that, "organized medicine benefited considerably both from the extension of welfare and from the increasing acceptance of science as a source of social authority" (323). It is this social authority from which Marryat borrows to condemn her psychic vampire. Through a "doctor" of some variety, she tries to classify, to describe, and to respond to the psychic vampire: an attempt at a diagnosis for the socially transgressive woman. Of sociologists' attempts to describe the "medicalization of deviance," Rosenberg cautions that reductionist methods must be used but that doing so fails to emphasise that "the consistent use of determinist, mechanism-oriented explanatory strategies to define, to stigmatize, and to de-stigmatize"

is a paradox of attempting to classify cultural behaviors (252).²³ The identification of Harriet within this novel, as a specific sort of scientific supernatural being or with certain traits that link her to one, is an attempt to explain her social transgressions as genetic so that there can be a scientific cause. She defies social expectations and, therefore, must be accounted for in some way so that society knows how to interact with her. Marryat uses her contemporary scientific uncertainties to create a woman whose life-draining power is definitively real and still misunderstood.

Further, Marryat's depiction of science serves to legitimatise and give clear reasons for concerns that society already has. The importance of a scientific assessment of Harriet is first signalled when upstanding members of society find her inappropriate. Marryat suggests that the psychic vampire's traits are transgressions of English social norms; others could understand her as improper even though they could not discern anything specifically dangerous about her by performing informal assessments of her. Elinor Leyton, Margaret's soon-to-be sister-in-law and travelling companion, serves as a constant and consistent reminder of proper feminine English behaviour. Elinor is reserved in manner (though certainly not in opinion), guarded in behaviour (including an unwillingness to flirt with her fiancé, much less allow their engagement to be known), her father is titled (even though he has no wealth), and she has just the right balance of judgmental attitude and xenophobia to note every social transgression that the new Jamaican girl makes upon arriving in Europe. She *knows* something is wrong but does not have the scientific knowledge base to identify the real problem.

Behaviours are key symptoms observed by lay members of society to identify transgressive individuals. Everything that Elinor finds fault with in Harriet can be related to her appetite, more specifically, her eager indulgence in her appetites without attention to any amount of socially dictated reserve. As soon as Harriet sits down at the hotel dinner table, Elinor watches the way the newcomer eats. The narrator first remarks that, "Miss Leyton thought she had never seen any young person devour her food with so much avidity and enjoyment" (Marryat, *Blood* 4). This thought, however, is quickly followed by a description that depicts Harriet's enjoyment of food as a negative trait:

The Baroness Gobelli, who was a very coarse feeder, scattering her food over her plate and not infrequently over the table cloth as well, was

²³ Rosenberg cites Lyme disease and chronic fatigue syndrome as modern examples in which the diagnosis may help the patient to feel social equality through the naming of the disease or stigmatisation because of the social perception of the diagnosis (252).

nothing compared to the young stranger. It was not so much that she ate rapidly and with evident appetite, but that she kept her eyes fixed upon her food, as if she feared some one [sic] might deprive her of it. As soon as her plate was empty, she called sharply to the waiter in French, and ordered him to get her some more. (Marryat, *Blood* 4-5)

Leaving the table before the meal is over, Elinor exclaims to Margaret: "I never saw anyone in society, gobble her food in such a manner! She made me positively sick!" (Marryat, *Blood* 7). Here it is Harriet's actual appetite that condemns her in the eyes of the stiff Englishwoman. Whether a case of a poor first impression or extremely bad table manners, the way Harriet eats is only the start of Elinor's list of reasons to dislike her. Without medical knowledge, Elinor relies on socially acceptable manners as an indicator of the type of person Harriet is.

Another place of tension which denotes breaches of social code to signal danger to the non-scientist observer is Harriet's use of affection to draw people to her. There is a shift that marks the passive observer's (Elinor's) reaction to the dangerous woman and the direct impact she has on her closer acquaintances. Harriet's other notorious appetites are connected to the way that she gives and receives affection: the traits Phillips later explains as symptoms of her hereditary condition that can be ascribed to her psychic vampirism. Harriet latches on to Margaret (figuratively and then literally) after she is shown only a small amount of sympathy by the other woman. In the space of a single evening, Harriet attempts to hold Margaret's baby against the mother's wishes (Marryat, Blood 16) and then, reminiscent of Geraldine in Samuel Taylor Coleridge's "Christabel," "crept closer and closer to Mrs. Pullen as she spoke, and now encircled her waist with her arm, and leaned her head upon her shoulder. It was not a position that Margaret liked, nor one she would have expected from a woman on so short an acquaintance" (19-20). Harriet has no restraint when it comes to expressing affection with physical touch. She likes babies, so she wants to hold the child; she considers Margaret a potential friend, so she physically clings to her. Unwilling to be cruel to the "poor girl [who] was evidently quite unused to the ways and customs of Society, [who] seemed moreover very friendless and dependant [sic]," Margaret allows Harriet to lean against her but determines it will never happen again (Marryat, Blood 20). Margaret pays for her kindness as she begins to feel ill in Harriet's embrace. As they sit waiting for Elinor to join them, "[s]he [Margaret] felt as if something or some one [sic], were drawing all her life away. She tried to disengage herself from the girl's clasp, but Harriet Brandt seemed to come after her, like

a coiling snake, till she could stand it no longer" (Marryat, *Blood* 21). On this particular evening, the baby is saved from illness and the mother escapes back to the safe company of her aloof friend and the hotel. Harriet's affection for the mother and daughter is both inappropriate and a symptom of her lack of worldliness: she does not know that she should have, not to mention show, more reserve with her feelings. Margaret recognises that social customs are being breached but is unable to label (diagnose) what is wrong other than by ascribing naïveté to Harriet. The unknown nature of the problem allows narrative suspense to build as seemingly caring acts have a harmful impact on her acquaintances.

The standards of behaviour for women in nineteenth-century English society were much debated in connection with Spiritualism, where notions of what constituted normal behaviour were narrowly defined in order to condemn the movement. Alex Owen remarks in her discussion of medicine and mediumship that "[t]he struggle that ultimately ensued between physicians and spiritualists circulated implicitly around the key issue of the construction of normalcy and, by extension normative womanhood" (139). The medical classification of Spiritualists' behaviour set a precedent for transgressions of "normative womanhood" to be considered dangerous subversions of social norms.²⁴ Because a medical professional was "both the arbiter of what constituted a healthy mind and the instigator of a cure when he diagnosed a disease, medicine became a powerful weapon in the armoury of Truth" (Owen 140). Building on the idea that doctors could identify dangerous people by their transgression of social norms, Marryat suggests that, through careful observation of an individual's behaviour, other members of society can too. Far removed from Phillips's individual medical knowledge, Elinor and Margaret (and others to varying degrees) note Harriet's unintentional breaches of normalcy and this serves to designate her as dangerous to them, given the contempt for female social transgression. What Marryat does here builds on these two ideas, the medicalisation of normative womanhood and the doctor as guardian of truth. The doctor has his role in the attempted diagnosis of Harriet but society can also detect something is wrong with her through her transgressions of social norms even if they cannot state definitively why she is unacceptable. Her behaviours serve as unofficial markers of danger.

²⁴ See Owen's chapter on "Medicine, Mediumship and Mania" for a full discussion of the medical management of Spiritualism and the tendency of medical professionals to label female practitioners as insane (139-167).

The lack of scientific certainty regarding what Harriet is and how to cure her causes her behaviours to be important symptoms of her condition. A secondary authority assists the representative of science to identify and ostracise a misunderstood, (seemingly) supernaturally afflicted person. Harriet may be innocent of harming others despite the danger she poses, at least until she marries Anthony, but her disregard for propriety and eager indulgence in her passions mark her as potentially hazardous within society and serve to caution the careful observer looking for a diagnosis. That she actively seeks the attention she desires should serve to warn those she knows that her love is not without cost. Her assertiveness signifies her as a potential social hazard. The inability, or unwillingness, to control her desires and appetites causes breaches in social decorum that could (and do) have lasting consequences for those in her sphere of influence. Had Dr. Phillips been able to offer a complete scientific diagnosis of Harriet, there would be no need for social indicators of her condition. She would carry the stigma of a specific named disease. There would be a way to easily warn others of the danger she poses. Without a certain diagnosis, Marryat uses the medical ambiguity to shift some diagnostic authority to upstanding members of society and their judgement of the woman in question to ease some of the danger released into society because of scientific uncertainty.

Marryat offers readers the safety that science fails to provide in Harriet's suicide at the end of the novel. Rather than resolve the question of diagnosis and offer a cure for Harriet, Marryat takes away the danger posed by Harriet, suggesting that her life would require answers the doctor could not provide. Harriet's psychic vampirism is real in the effects felt by others, scientific in the factors that combine to create her condition, and, nevertheless, scientifically incomplete in the absence of a diagnosis. The lack of a clear scientific diagnosis shapes the plot of the novel as Harriet's life in Europe is a discovery of her life-draining power, her struggle against it, and her ultimate surrender to it. When Harriet takes her own life, she eliminates the need for others to define her – any search for a specific label is no longer necessary because there is no longer someone to label. The scientific attempts to explain Harriet are not only incomplete but also destined to remain so.

In *The Blood of the Vampire*, Marryat insists of the authority of science and uses the potential supernatural causes for Harriet's condition to drive the plot. The uncertainty of the scientist marks the incompleteness of scientific knowledge. Dr. Phillips is nevertheless correct in his opinions. Given the way that Marryat describes Harriet's condition within the novel, Harriet's psychic vampirism *is* scientific; it only *seems* wholly

supernatural to readers who may not know the science on which she bases the condition. The assumption that the supernatural outside of scientific control is bad drives the suspense of the novel, even though the condition is based in nineteenth-century science. Here, Marryat uses the uncertainties of science to explore the consequences of something that seems supernatural evading scientific explanation. She ultimately resolves the suspense in the novel by privileging scientific authority, which dooms anything (or anyone) outside of its understanding for the good of society.

Versions of Mesmerism: The Lair of the White Worm

Bram Stoker's *The Lair of the White Worm* examines the threat posed by the contested and changing understanding, and practice, of mesmerism during the nineteenth century. In contrast to the lack of scientific knowledge driving the plot of Marryat's novel, in Stoker's The Lair of the White Worm there is an excess of medical and scientific information, with two quite different understandings of mesmerism playing a role in the story. The Lair of the White Worm has been criticised for the difficulty readers have navigating the story. Daniel Farson, for instance, states that the "plot is so bizarre, almost ludicrous, that it is hard to imagine anyone taking it seriously" (218). Although a relatively short novel, events unfold rapidly and not everything is explained or connected to a single narrative. Some events are chapters long but lead nowhere and vital information is sometimes given in a brief sentence or withheld altogether. An abridged version of the text released in 1925 attempted to streamline the novel by leaving out episodes that seem unnecessary and adding in details that Stoker omitted. Paul Murray joins other biographers in suggesting that The Lair of the White Worm proves that Stoker was ill for years before his death.²⁵ Murray states: "Nothing [...] illustrates the precipitate decline in Stoker's health in the final year or two of his life better than his last book, *The* Lair of the White Worm, written between March and June 1911. A bizarre and confusing novel, the story is full of incredible and fantastic subplots, with little overall coherence or consistency" (262). The Lair of the White Worm does elude a neat summary, and this may be because Stoker's health was declining as his biographers posit, but it may also be partially due to Stoker's use of variant versions of the same science.

²⁵ Murray references Harry Ludlam and Daniel Farson (262). Barbara Belford also discusses the possible connection between *The Lair of the White Worm* and Stoker's health (319-320).

Stoker had a prolonged fascination with the scientific supernatural and the potential subplots it allowed his novels. Although he himself did not go into medicine, he had three brothers who were doctors (Murray 25). As such, he would have had easy access to any information he required about the potential medical uses of, and problems with, the phenomena that interested him. Additionally, Barbara Belford explains in her biography of Stoker that, "Stoker himself was easily drawn to the controversial occult ideas of Egyptology, Babylonian lore, astral projections, and alchemy. He had always been intrigued by phrenology, and his eclectic library held books on Egyptology, a history of the Ku Klux Klan, and five volumes of J. C. Lavater's *Essays on Physiognomy*, published in 1789" (211).²⁶ Stoker's varied interests meant that he could draw from a collection of scientific and supernatural topics from different periods of history and connect ideas in the different fields as he saw fit. He was as interested in ancient ideas as he was in current trends.

Stoker's *Famous Impostors* (1910) is the most definitive evidence of his interest in the scientific supernatural. *Famous Impostors* reveals that he, personally, believed the phenomena to be fraudulent (or at least commonly practiced by charlatans). In his Preface, Stoker states that he:

has aimed at dealing with his material as with the material for a novel, except that all the facts given are real and authentic. He has made no attempt to treat the subject ethically; yet from a study of these impostors, the objects they had in view, the means they adopted, the risks they ran, and the punishments which attended exposure, any reader can draw his own conclusions. (Stoker, *Impostors* v)

The book is thus intended to provide information with which the reader can judge what to make of the individuals scrutinised in its pages.

The inclusion of mesmerism's founder in *Famous Imposters* reveals Stoker's awareness that the science was contested (or undermined) and yet he treats it as a real contemporary science within the context of his novels. German doctor Franz Anton Mesmer, after whom mesmerism is named, has his own entry in the text under "Practitioners of Magic." Stoker begins Mesmer's entry: "[a]lthough Frederic-Antoine Mesmer made an astonishing discovery which, having been tested and employed in

²⁶ Stoker's interest in Egyptology will be discussed in depth in Chapter 3.

²⁷ There is also a section of the text dedicated to "Witchcraft and Clairvoyance." Stoker uses variations of clairvoyance in several of his novels. See *The Mystery of the Sea* and *Dracula*.

therapeutics for a century, is accepted as a contribution to science, he is included in the list of impostors because, however sound his theory was, he used it in the manner or surrounded with the atmosphere of imposture" (Stoker, *Impostors* 95). In the following description, Stoker discusses Mesmer's dedication to his theories of mesmerism (*Impostors* 99) and that the Royal Commission stated "that similar effects to those attending his passes could be produced by other means, and that such passes had no effect unless through the patient's knowledge; in fact it was all the work of imagination" (100). Stoker seems to be undecided as to how much to judge the practitioners of the phenomena, and the tone reveals a struggle to remain detached from the material he is presenting. He cannot ignore the evidence that Mesmer was not correct in all of his claims, yet he attempts to respect the loyalty the scientist felt to the theories involved. In the case of each "impostor," including Mesmer, Stoker details the individual being confronted with the fact of their fraud. It is, therefore, important to note that it is the person and not the phenomena that Stoker attempts to judge in *Famous Impostors*.

Although criticism has relegated mesmerism to a strictly supernatural issue in *The Lair of the White Worm*, this does not align with Stoker's own perspective. Carol Senf places the setting of the novel in the early or mid-nineteenth century, an accurate time for the height of mesmerism as a science, but reads only the technological aspects as science. Of the ending of the novel, she explains: "[c]ertainly the fiery conflation at the conclusion occurs because Lady Arabella and Edgar Caswall are ignorant of science [the dangers of lightning and electricity]" ("Commentary" 221). Her mid-century timing for the novel to explain the lack of electrical knowledge disregards the changes in the science of mesmerism, one version of which would not yet have existed until later in the century. In reading only lasting science as *science* Senf misses the role that mesmerism plays in the novel as a science and its usefulness for not only determining the setting of the story but also unraveling the different plots. Stoker calls mesmerism "accepted as a contribution to science" in his *Famous Imposters* and this should inform readings of his use of mesmerism as a science in his novels.

The Lair of the White Worm has two distinct plots that are loosely woven together throughout the novel: the story of the White Worm that possesses Lady Arabella and a story of mesmerism. The White Worm, a legendary monster, surfaces when Australian-born Adam Salton gets to England and is adopted by his grand-uncle at the same time that mesmerist Edgar Caswall returns to his neighbouring ancestral home from Africa. Later, out of unexplained fear and possibly jealousy, the White Worm targets Adam's neighbour

and love interest, Mimi. Adam and his uncle's friend, Sir Nathaniel, work to keep Mimi safe. Using dynamite, Adam destroys the White Worm in her lair at the end of the novel. The Worm's threat and the quest to eliminate it follows a simple plot arc reminiscent of knights slaying a dragon and, in this storyline, Adam and Sir Nathaniel play the gallant knights protecting Mimi, the helpless damsel, from the hideous monster. Between the homecomings and the destruction of the lair, a second storyline in the form of a cautionary tale of mesmerism supplements the investigation into the White Worm. Caswall, whose family has connections to Mesmer, targets Mimi's cousin Lilla with a sinister mesmeric stare. Lady Arabella and Caswall's African servant Oolanga support him. Lilla is powerless to stand up to Caswall but Mimi's strength helps to delay his victory; Adam can only watch helplessly. Ultimately, Caswall gains his sinister victory over Lilla and her family mourns her death.

The interaction between the characters is complicated by the relationships they have to the mesmerism plot and their understanding of the science of mesmerism. Stoker situates the key characters in opposing positions of power in each of the two plots: the hero of one is impotent in the other and the passive damsel is a force to be reckoned with when a loved one is in danger. Adam is simultaneously heroic and helpless; Mimi is both helpless and assertive; Caswall is absent and central. These opposing characteristics are made possible through the two stories Stoker intertwines within the novel. As a result, the characters elude simple classification; they can only fit within standard classifications when their role is confined to a single episode of the novel, or at least plot line. Within the Worm plot, the characters fit into customary romance roles: Adam saves, and weds, Mimi. If the mesmerism plot is of central concern, however, Adam is useless and Mimi does her best to protect her cousin. Thus, when *The Lair of the White Worm* is taken as Stoker's story of mesmerism, the expected power dynamics of the relationships between the characters are reversed.

There are two vital factors to consider when reading nineteenth-century novels that deal with mesmerism to determine the role mesmerism plays: the context in which mesmerism takes place and the identity of the mesmerist. These two factors influence both character development and the narrative offered through the novel. In *The Lair of the White Worm*, Stoker's primary mesmerist is Caswall and the others react to his powers. Stoker's representation of mesmerism dictates character relationships that influence possible readings of the novel as a whole, as well as individual characters in specific instances. The way that the characters interact with each other is dependent on the

presence or absence of mesmerism in any given episode of the novel. Additionally, although mesmeric interactions in the novel occasionally subscribe to social norms, they generally subvert late nineteenth-century expectations of both social class and gender roles governing society. The different versions of mesmerism are Stoker's tool for the thematic development of the danger associated with redefining or stepping outside of prescribed social roles in ways that lead to social subversion.

Stoker's choice of mesmerism as a scientific supernatural trope likely drew from real debates in nineteenth-century England concerning the potential for social inversion in connection with the shifting science. In her chapter "Carnival, Chapel, and Pantomime," Alison Winter explores the ways that mesmerism allowed a safe outlet for carnivalesque social critiques. She explains:

The notion of the carnivalesque — of the world turned upside down — is a useful starting point for studying the experiments at University College Hospital (UCH) [the site of numerous famous experiments with mesmerism], because carnivals traditionally disrupted or even temporarily inverted the social order. They could release tensions between different ranks and provide opportunities to air grievances, though they could also become truly insurrectionist. [...] But the notion of "carnival" is most useful in a looser, less literal sense. It provides a framework for understanding one part of the significance of what was going on during these experiments, and how the relationships among experimenter, experimental subject, and audience were changing over time. (Winter 81-82)

Winter's case study, Dr. Elliotson's experiments with mesmerism on Elizabeth O'Key, demonstrates how a practitioner of mesmerism risked inverting the social order. Dr. John Elliotson founded the London Mesmeric Infirmary in 1849 where there were "ongoing experiments to test the efficacy of mesmeric medicine" (Franklin, "Evolution of Occult" 124). When Elliotson entranced O'Key, she "was at liberty to speak crassly and to mock the man who was ostensibly manipulating her every state of mind and sensation, as a madman, a baby, and a fool. No one stepped in to stop her from caricaturing the aristocracy, the clergy, and the law" (Winter 88). Mesmerism, therefore, freed the subjects who were allegedly mesmerised to step outside of their social positions and comment on or insult their social betters without fear of repercussions.

The new and incomplete science of genetics was also useful to Stoker for justifying innate knowledge of the changing science of mesmerism in his characters. Like Marryat, who turned to genetics as a convenient means of passing down a curse through the generations, Stoker moulds it to create a family heritage for his mesmerist to justify Caswall's knowledge of the science, as both a genetic predisposition and a learned skill. Caswall's family is said to be connected with Mesmer, the discoverer or creator of mesmerism, in that Caswall's eponymous ancestor was a "pupil and the fellow worker of Mesmer" who came into the possession of many of Mesmer's instruments (Stoker, Lair 383).²⁸ The direct association between Caswall's family and Mesmer is not, however, the only indicator of mesmeric power. Passed down through the Caswall family is "some mysterious quality, partly hypnotic, partly mesmeric, which seems to take away from eyes that meet them all power of resistance, nay deeper, all power of wishing to resist" (Stoker, Lair 345). According to Sir Nathaniel, "[t]here have been circumstances in the Caswall family which lead one to believe that they have had from the earliest times some extraordinary mesmeric or hypnotic faculty. Indeed, a skilled eye could read so much in their physiognomy" (Stoker, Lair 382). Thus, Sir Nathaniel implies that mesmeric abilities are passed down through the Caswall family and, through this, Stoker makes the claim that mesmerism is an inherited ability.

Physiognomy was, itself, a debated science of the nineteenth-century that led to phrenology. Physiognomy, such as Sir Nathaniel practices here, involves the reading of a person's character on their face. This ability to see character traits is also evident in *The Blood of the Vampire* where Phillips reads something in Harriet's physiognomy before he has put together the full story. In these novels, strange powers are explained as genetic traits that leave physical marks denoting their presence. Franz Joseph Gall began the transition from physiognomy to phrenology (of which he is considered the founder) by attempting to quantify the physical markers of different aspects of personality. Although both physiognomy and phrenology have been discounted, these sciences show a progression in the attempt to explain behavioural characteristics based on physical markers on a person's body. Gall's *On the Origin of the Moral Qualities and Intellectual Faculties of Man, and the Conditions of Their Manifestations* is volume one of the Phrenological Library's collection on the science of the mind. This text includes a section entitled "On Physiognomy" in which Gall states: "I shall show here that I am nothing less

²⁸ All citations throughout this thesis are from the 1986 Foulsham republication of the 1911 text.

than a physiognomist" (17-18). Hence, any lines twentieth and twenty-first century critics draw between these sciences should account for the blurred beginnings of phrenology in which its creator understood himself to be participating in the earlier field of study.

The intertwined nature of physiognomy and phrenology reveal the difficulties of separating various individual sciences when the same scientists tended to support and use various related ideas, mixing parts of one thing with another. Mesmerism is also one of these sciences. Oppenheim explains the connection between mesmerism and phrenology in that, "[d]uring the years of its development and transformation, mesmerism crossed phrenology's path and shared many of the same supporters" (Other World 215). Given the close association between physiognomy and phrenology, similar could be said for mesmerism and physiognomy. Although Stoker's depiction of mesmerism as an inherited trait was not a common belief, the overlap in supporters between the two ideas did result in theories of mesmeric ability or susceptibility being visible in a person's physiognomy. This crossover between the two sciences allows Stoker's concept of mesmerism to become natural, human, and those who possess the ability to control others simply genetic people of power. Sepharial's 1912 discussion of Second Sight demonstrates the idea that scientific supernatural traits could be genetically inherited in his presentation of clairvoyance as hereditary. Although not specifically referring to mesmerism, this is evidence that there were notions of scientific supernatural powers being genetic. Sepharial states: "[t]hat there are some persons in whom the psychic faculties are more prone to activity than in others is certain, and it would appear also that these faculties are native in some by spiritual or hereditary succession, which fact is evident from their genitures as interpreted by astrology" (ch. 2). Uncertain sciences thus drew from one another to build a support, with those that have been developed further and kept as modern science (genetics) initially being mixed with contested sciences long since discarded (physiognomy and clairvoyance).

In addition to the heritage of mesmerism, Stoker draws from documented cases of contemporary nineteenth-century uses of mesmerism to create Caswall's dangerous use of his mesmeric abilities. The repeated attacks on Lilla are reminiscent of the training a hypnotic performer might have willingly undergone. Ernest Hart explains in the Preface of *Hypnotism, Mesmerism and the New Witchcraft* (1896)²⁹ that the papers making up the book originally appeared in the "Nineteenth Century" and the "British Medical Journal"

²⁹ The 1896 edition of Hart's book is the second edition and includes the Preface to the first edition.

(vii), respected scientific journals. One of the case studies Hart includes is the story of a man who performed with mesmerists. The man, "L.," relates of one doctor: "[h]e made an appointment with me at his house and tried to mesmerise me. The first time I did not let him succeed entirely, next time the same, but the third time he succeeded to get me under his entire control. [...] He used to put me to sleep and make an impression on my mind that as soon as he rapped on the table I have to wake" (Hart 182). Unlike Hart's source, L, Lilla is a reluctant victim rather than a willing participant. Caswall's fictional process, however, follows stories with which late nineteenth-century readers would likely have been familiar. He is trying to gain his desired outcome and it takes him multiple attempts to overcome her will and get Lilla completely under his control. Here, the mesmerist is strong and able to shape the wills of others with his understanding of the changing science.

The fear Lilla's family and friends exhibit at the possibility of her being mesmerised mirrors a contemporary social fear of mesmerism as granting not only psychological control of women, but also physical control, which circulated in stories during Stoker's lifetime. Quoting Dr. Luys, Hart explains the additional fears concerned with the mesmerism of women over that of men: "Where a woman is concerned she may be violated and even infected with syphilis, of which I have recently observed a painful example in my practice. She may become a mother without any trace existing of a criminal assault, and without the patient having the smallest recollection of what had passed after she has awakened" (137). The potential effects of mesmerism in real fin de siècle society could be physical, had been documented in medical journals, and were life changing through infection with disease or sexual assault. Given accounts such as Dr. Luys's being published in medical journals in the 1890s, Stoker crafts Adam's concern for Lilla with an awareness of the contemporary fears surrounding mesmerism. Shortly after the first mesmeric encounter between Lilla and Caswall, Adam explains of the mesmerist: "he kept his eyes fixed on Lilla in a way which was quite intolerable to any man who might hold her dear" (Stoker, Lair 368). Adam feels protective of Lilla even though he must admit that nothing completely unacceptable occurs. He fears even the possibility of Lilla being mesmerised by Caswall, considering a look as improper and threatening as any attempt at physical harm. A contested science that had begun as a way to cure people, if only through convincing them it could help, had changed into something physically threatening.

The final battle between Caswall and Lilla reflects the late nineteenth-century societal concerns regarding women's susceptibility to danger when mesmerised in that it is presented as a psychic rape:

Without warning or any cogent cause, the psychic battle between the two individualities began afresh. This time both the positive and negative causes were all in favour of the man. The woman was alone and in bad spirits, unsupported; and nothing at all was in her favour except the memory of the two victorious contests; whereas the man, though unaided, as before, by either Lady Arabella or Oolanga, was in full strength, well rested, and in flourishing circumstances. [...] He began his preliminary stare with a conscious sense of power, and, as it appeared to have immediate effect on the girl, he felt an ever-growing conviction of ultimate victory.

[...] Lilla seemed at last overcome by his dominance. Her face became red and pale—violently red and ghastly pale by rapid turns. Her strength seemed gone. Her knees collapsed, and she was actually sinking on the floor, when to her surprise and joy Mimi came into the room, running and breathing heavily. (Stoker, *Lair* 483)

Although Mimi rushes to Lilla's rescue, she is too late. Lady Arabella joins Caswall in the middle of the attack and Lilla has been defeated before her cousin can assist her. Mimi is left to attempt to revive her cousin and come to terms with her death. Through Caswall's mesmeric dominance over Lilla, Stoker depicts mesmerism as a disturbingly strange force with real physical results.

Mesmerism is not the only medical science from which Stoker draws as the novel builds to Lilla's death. In this scene of Caswall's attack on Lilla, Stoker seemingly also draws from contemporary ideas of "nerves" as the agent by which Caswall's mesmerism kills, but without building or relying on any real evidence for a connection between these two concepts. Stoker's description of Lilla as in "bad spirits" would suggest some level of intentionality on the part of the author to link nerves, spirits, and mesmerism. If, however, Stoker intended to introduce this concern, then it remains one of the (many) details he could have done much more with but lead nowhere in the novel as originally published. According to Athena Vrettos in *Somatic Fictions: Imagining Illness in Victorian Culture*, early Victorian "medical theories generally focused on the physical basis of the nerves, arguing that emotional excesses literally stretched nervous tissues beyond their normal

capacities, thereby producing physical symptoms, later theories tended to view physical symptoms as the direct (and subjective) product of mental or emotional causes" (Vrettos 51). As Oppenheim discusses in *Shattered Nerves: Doctors, Patients, and Depression in Victorian England*, much of the medical discussion relating to female nerves and medical diagnosis involved connections to a woman's reproductive system (187-189). Lilla is never described as having any physical symptoms, excluding her death. While she does seem to react strongly to Caswall's stare, Stoker describes this as the causal effect of the actual glare rather than the result of any emotional reaction. Through his description of her as in bad spirits it seems likely that he was merely trying to describe Lilla as lonely and depressed, as weak in comparison to the times when Mimi was present to support her. Nevertheless, Stoker's wording does allow for the compounding of medical problems that have shifted in meaning throughout history onto Lilla.

Stoker sets different versions of the changing science of mesmerism against each other in a battle for supremacy through the way he depicts mesmerism in The Lair of the White Worm. Although Mimi and Caswall fight each other in the psychic battles, the powers that they command are products of different periods in the evolution from Mesmer's initial idea of mesmerism to the late-nineteenth century conception of mesmerism, which was morphing into hypnotism as a kind of psychological tool. Mimi, whose power Stoker never really explains, performs a form of early mesmerism. The waving of her hands as she banishes Caswall from the house alludes to the "passes" of Mesmer's mesmerism to manipulate magnetic fluid. This version of mesmerism was created to help and to heal. Something about her physical movement influences the other mesmerist and he is driven away from her whether he wants to respond to her shooing motion or not. In one of the middle mesmeric battles, Mimi refocuses on the situation at hand with a "deep religious conviction that the struggle round her was of the powers of Good and Evil, and that Good was triumphing. [...] Once again her vigorous passes drove him [Caswall] to the door" (Stoker, Lair 407). Caswall is unable to combat Mimi without the power of Lady Arabella (who was rendered helpless by the falling of the kite and resulting noise like that of a "snake-charmer" because of her connection to the White Worm [Stoker, Lair 407]). Mimi's conviction that the battle is one of Good and Evil may be appropriate for the context of the story but it has no grounds in mesmerism as a

science.³⁰ Nevertheless, Caswall succumbs to the mesmeric passes and does what she wants: he leaves and takes Lady Arabella with him. What Stoker does not provide is a reason why Mimi should win over Caswall outside of her conviction that she represents Good and, as such, should prevail for morality to win. What this battle does do, however, is allow the reader to hope that she will continue to prevail despite the antiquated version of the science that she practices.

Looming over the narrative is Caswall's form of mesmerism (closer to the late nineteenth-century mesmeric stare), his strange hereditary connection to Mesmer to account for his knowledge of the science, and the assumption that the newer version of a changing science should be stronger than the older version. Sir Nathaniel tells Adam that there is a belief that "the Caswall family [has] some strange power of making the wills of other persons subservient to their own" and that Mesmer's chest of instruments allegedly "bequeathed" to Caswall's ancestor has never been uncovered (Stoker, Lair 383). Caswall soon discovers the chest and manages to open it in a strange dream-like state despite the lack of a lock or other obvious method of access. Although Sir Nathaniel and Adam are unaware of this development in Caswall's obsession with his family's heritage, the reader can understand the appearance of the chest to be support for the claim Caswall's family has a connection with Mesmer. Yet this is another instance where Stoker does not build upon the association he creates. Caswall practices a later, late nineteenth-century, form of mesmerism removed from Mesmer's initial ideas. Caswall merely stares at the young woman with such intensity that he kills her in the chapter "The Last Battle" when he finally achieves his victory over Lilla. Despite the carefully built backstory, Caswall's ultimate success does not rely on any of the framework Stoker constructed that justifies Caswall as a person of scientific supernatural heritage. Staring at Lilla as a method of gaining control of her is not Mesmer's mesmerism even if it is the dangerous, later version of his legacy. What the association between Caswall and Mesmer does accomplish is vilifying the science from discovery (Mesmer) to present day (Caswall), leaving little hope that precisely defining it would have positive results. Stoker reveals mesmerism to be real and full of potential in its various forms but also dangerous or damaging due to the potential for practitioners to misuse it.

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³⁰ The scene discussed here is one of the few in which the two story lines seem to impact each other and, even so, only indirectly. Lady Arabella is distracted by the noise, presumably due to her connection with, or possession by, the White Worm. The "evil" side (Caswall and his minions) is connected to the snake in tangential Biblical symbolism. These connections (or explanations) are fleeting though and require that the reader project them onto the text rather than unpack them from Stoker's writing.

Stoker explores the potential of mesmerism through one of the plots of the novel, which is a narrative dedicated to the events that happen at the mesmeric battles and as a result of them. Caswall's role as a mesmerist is not only that of the primary practitioner within the story but also that of a catalyst which causes others to resort to mesmerism, drawing them into involvement with it. His command of mesmerism demands the attention of the others whether to assist him (Lady Arabella and Oolanga) or combat him (Mimi and Adam on behalf of Lilla). No one in either group questions either the reality of mesmerism or the power of it; they assume power and potential danger.

The power Caswall embodies mirrors Stoker's contemporaries' social fears that interaction with mesmerism or a mesmerist could draw a person in, whether or not the person was physically present. For example, Elizabeth Barrett (Browning) was once asked to send a lock of her hair to a "French clairvoyant [...] in order to obtain diagnosis of her condition, [but] she was terrified" (Winter 238). In Winter's analysis of mesmerism, clairvoyance is included in the range of "mesmeric phenomena" which to Barrett felt like "forms of possession" (Winter 238). Winter explains in a discussion of Barrett's concern about the place of mesmerism in the sickroom:

She [Barrett] imagined lying on her sickbed 'at the mercy of my imagination,' mentally following the lock of hair into the clairvoyant's consulting room hundreds of miles away. [...] Mesmerism was the incarnation of her worst fears regarding Victorian society, and she agonized over the question of how one could possibly retain one's identity in the presence of such a power. (238)

Barrett's fear that the mesmerist would, in effect, gain control of her imagination before he even had her hair in his possession demonstrates the extreme power ascribed to successful mesmerists. Stoker's depiction of Caswall as capable of compelling the others to behavioural changes in his presence is comparatively minor. Caswall's command of mesmerism results in a change in the dynamics between the characters in each of the plots. This complicates the novel because character roles are defined by the relationship they have to each of the two plots of the novel, rather than just to each other.

The version of the science with which characters are aligned serves to mark them as positive or negative characters, and designates whether they are destined to succeed or fail in relation to mesmerism. On the one hand, Lady Arabella and Oolanga serve as Caswall's expendable assistants. Despite Lady Arabella's unexplained connection to the

White Worm in Stoker's original edition of the novel³¹ and Oolanga being a "user of Voodoo, which seems to be a service of the utmost baseness and cruelty," Caswall is the leader of the mesmeric encounters (Stoker, *Lair* 372). Additionally, neither Lady Arabella in her human form nor Oolanga play much of a role outside of their respective connections to Caswall in either of the two plots. Lady Arabella recognises her position, telling Caswall before one of the battles:

This time you should win. She is, after all, only a woman. Show her no mercy. That is weakness. Fight her, beat her, trample on her, kill her if need be. She stands in your way, and I hate her. Never take your eyes off her. Never mind Lilla—she is afraid of you. You are already her master. [...] If [Mimi] is overcoming you, take my hand and hold it hard whilst you are looking into her eyes. If she is too strong for you, I shall interfere. I shall make a diversion, and under the shade of it you must retire unbeaten, even if not victorious. Hush! silence! they are coming. Be resolute, and still. (Stoker, *Lair* 406)

Lady Arabella's primary motive is to support Caswall, and a general, if unexplained, hatred of Mimi. She makes no claims of mesmeric power. What she does do is offer to distract the girls if Caswall is failing, which would allow him to leave without surrender and maintain control of the situation. Sir Nathaniel tells Adam that "[a]ll the country knows" that Lady Arabella is determined to marry Caswall because "her only hope is in a rich marriage" (Stoker, *Lair* 353-354). Thus, her support in the mesmeric battles flows from her desire to show herself loyal and worthy to be Caswall's wife. Both Oolanga and Lady Arabella seek to serve Caswall in their own ways and neither practises mesmerism without him. The former is actually his servant but the latter willingly puts herself into a submissive relationship. The grouping of dangerous individuals is the same in both plots; those characters are destined to succeed in one and doomed to fail in the other storyline.

The mesmeric battles serve as the primary episodes of suspense in one of the storylines and yet Stoker chooses to offer the possibility of an early resolution – if only through a misunderstanding. Lady Arabella assumes that Caswall wants a difficult victory over the more powerful of the cousins; "[t]he other, Mimi, will try to make you look at

³¹ The frequently referenced explanation for Lady Arabella's connection to the White Worm, a snakebite when she was a girl, first appears in the 1925 abridgement. As this edition was published without a notation divulging the heavy editing the novel had undergone and is the most frequently reprinted, it has caused some misrepresentations of Stoker's work and the story as he wrote it.

her cousin. Do not. There lies defeat. Let nothing—no, not death itself, no matter of whom—take your attention from Mimi, and you will win," she advises (Stoker, *Lair* 406). The final battle, however, is between Caswall and Lilla, not Mimi. Caswall is attempting to assert his power wherever he can rather than dominate the stronger girl. Stoker gives no specific reason for Caswall to focus on Lilla unless it is simply that she is described as fair and books teaching mesmerism claimed: "[b]londes are more easily influenced than brunettes" (Psychic Research Company 24). Lilla, who Stoker gives no mesmeric power, is the obvious easier target. The late nineteenth-century, malicious version of mesmerism is only successful when there is no worthy opponent. The potential healing properties and strength of the science had already been lost in the changes over time.

On the other hand, contrasting Caswall and his assistants' simplistic understanding of mesmerism, Stoker creates Lilla's, Adam's, and Mimi's reactions to Caswall's growing mesmeric strength in different ways dictated by their personal command of mesmerism and the danger that they are in. Lilla is victimised by Caswall but her plight inspires the others to action. Adam has little interaction with mesmerism; he fears the possibilities but does not possess the power to mesmerise. Mimi, however, is both inspired to action and capable of using mesmerism to attempt to protect her cousin. Stoker does not provide a back-story that explains Mimi's knowledge of mesmerism as he does with Caswall. That she is a worthy opponent for him, however, is never doubted. Stoker's depiction of Mimi's altruistic intentions and the respectability of the version of mesmerism she practices requires that the reader admire her intentions even though there is so much mystery surrounding her.

It is the dynamics of the characters' relationships that Stoker disrupts by multiple versions of a scientific catalyst. None of them are in the same position of power or submission in both the Worm and mesmerism stories. Caswall is a powerful mesmerist but dies in the lightning strike that destroys the Worm. Lady Arabella willingly serves Caswall as she seeks his favour but is also the Worm that everyone fears. People fear Oolanga for his reputation in Africa but he is easily killed by Lady Arabella. Adam defends his wife against the White Worm but is emasculated by mesmerism. The most significant change is that Mimi can control Caswall with a wave of her hand but is helpless to protect herself against the Worm. Power dynamics are inverted in connection with the plot where the scientific supernatural is embodied in an individual seeking to assert himself. What develops within the novel is a differentiation of behaviour

determined by a character's relationship to a person with mesmeric power in a specific plot. Roles that are static and stereotypical in the adventure (Worm) narrative become reversed in the presence of mesmerism. The power of the uncertain scientific supernatural is not only to change those who have the ability to control the phenomenon but also all those who come in close contact with a practitioner of mesmerism.

Stoker uses the scientific uncertainty in the form of different versions of the same developing science as a catalyst to justify the distinct plot arcs in the novel. The possibility of inversion due to mesmerism is hinted at, the danger depicted, and culprits punished but the remaining neighbourhood left to recover because the power inversion is never made complete. The finality of the deaths associated with mesmerism is contained within that specific storyline. In the other plot, the reader is led to imagine a new era led by the other returned heir, Adam, and his bride, Mimi, whose actions have led to the destruction of the transgressive individuals of both plots, ensuring physical safety and social stability free of the evils of mesmerism. As in *The Blood of the Vampire*, the status quo is maintained. The combination of the two different versions of mesmerism, the practices of which were separated by time in history, complicates the plot of the novel because there are different expectations for what can, or should happen due to the distinct mesmerisms. Stoker's use of two plots in his novel allows him to compare the variant versions of mesmerism and ultimately suggest that the later version may be more dangerous than useful to society. This specific contested science no longer represents a hope for understanding the supernatural, rather it has become a dangerous tool used by some to take advantage of others.

Potentially more significant, however, is the missing attempt to codify the scientific supernatural in the novel. Any concern of authority between the scientific and the supernatural is ignored in both versions of mesmerism that Stoker depicts. Without a scientist figure, it is less important to determine authority as predominately scientific or supernatural than it is to explore the possible outcomes. The greater concern is the impact of mesmerism on the material world of the novel. There is no attempt to understand or explain mesmerism; it is a tool for driving one of the plots and eliciting emotion from the reader. Hence, it is the uncertainties associated with mesmerism and its uses that Stoker employs to drive the events of the novel.

Resolving the Danger of Uncertain Science

The sciences that Marryat and Stoker use to shape their novels were useful precisely because of the gaps in scientific knowledge around them in the *fin de siècle* that allowed the authors to choose which ambiguities to leave and which to explain as they told their stories. The interest the original readers had in these sciences is not diminished by the fact the potential to prove the supernatural that they represent has since been relegated to scientific history. In both cases, the author reveals the potential for the uncertainties of science to be dangerous and places responsibility for the outcome in the hands of a human character to dispose of the unexplained threat that drives the story, be it the destruction of the individual who science cannot explain or by erasing the variant uses of a single, easily abused, science.

These novels end as the reader of a fantasy may expect with the victory over the monster, the destruction of the dangerous individual, and no possibility of redemption for the villain. The inability of late nineteenth-century science to complete the scientific process that was underway leaves the misunderstood, powerful and transgressive individual vulnerable to judgement and unable to have a place in society. Ultimately, it is the good of society that must be of primary concern and the threat is neutralised. The ending of the novels comes quickly following the death of the threat as there is no longer an object of curiosity.

Yet, in both cases, the scientific uncertainty is embodied in a person who must be sacrificed because he or she cannot be understood, which complicates the otherwise black and white morality of the novel. Given that Harriet and Caswall are human characters, the flat depiction of their deaths as necessary is itself unsettling. They are both ostacised for the potential that they have to endanger society: Harriet for the effect she has on others' health and Caswall for his abuse of scientific knowledge. Despite the *fin de siècle* interest and active investigation into these sciences, the authors remove the hope for a new way of understanding the respective sciences by destroying the object of study. In doing so, the uncertainty and shifting definitions of the science, and its relationship to the supernatural, are not resolved even though the plots of the stories are.

The uncertainty of diagnosis central to Harriet's experience in Marryat's novel specifically references a certain personality trait whilst also engaging in the wider conversation about diagnosis of disease in general. The symptoms she had required a medical authority, with knowledge of her family background, to inform her of her condition. Without a name for that concern given within the pages of the novel, Harriet

can stand in for any number of women with real illnesses or perceived transgressive behaviours that were seen as threatening in *fin de siècle* England. Marryat's decision to use an undefined scientific concern allows for a wider reading of her heroine that can connect to many real medical concerns of the time.

Conversely, Stoker's use of different versions of mesmerism situate his interest as the uncertainties associated with changing understandings of a specific science. He ends the threatening (more modern) version of mesmerism through Caswall's death and allows the older, helpful and benign version to find a place in society through Mimi's marriage and her settling down to life with Adam. Newer is not necessarily better: here, the passing of time has not refined the understanding of the science into something useful.

The authors both turn to imprecise sciences, not to mask the supernatural in scientific terminology but because of the narrative possibilities available to them since the scientific investigation into these issues was ongoing. In doing so, Marrayat and Stoker draw attention to the need for further study into these sciences even as they use the uncertainty to drive the plots of their novels. When certain diagnosis can replace a collected descriptive diagnosis and developing sciences can be appropriately labelled, then there could be a different plot, one which leads to answers and understandings of the powers in a way which solves the concern of danger through scientific knowledge rather than through the elimination of the uncertain threat.

Ascribing scientific or supernatural authority within the scientific supernatural is not necessarily a primary concern for authors using uncertainties to drive their novels. Yet scientific authority does seem to supersede the supernatural, be it embodied as a character or as the latest version of a specific science. The reader is expected to know the background of the scientific supernatural prior to engaging with the text. The novels do not need to explain in detail the connections between science and the supernatural. Therefore, the plots of these novels can be focused on action in novels, which provide alternative endings to traditional narrative arcs.

Chapter 3

Scientific Experimentation

Fictional representations of late-nineteenth century experiments with supernatural phenomena suggest that this research was dangerous due to the material world impacts of experimentation which resulted in unpredictable and, sometimes, uncontainable results. The authors discussed in this chapter emphasise the reality of a supernatural realm through the outcome of the experiments they depict while simultaneously disallowing any attempt at replication of the experiment through the destruction of the unique object of study at the center of the test. Consequently, readers are left with an experimental outcome that can never be disproven; there can be no "next time" with a different result. In erasing the possibility for the science to be disproven, the authors affirm both the authority of science and the reality of the supernatural. At the same time, the endings of these novels suggest that scientific knowledge has not progressed enough for transparency in experiments with the supernatural or for them to result in permanent evidence of the supernatural in the material world. Scientific authority does not mean science is complete.

These fictional representations of scientific experiments to test or prove the supernatural appeared in the *fin de siècle* and into the early twentieth century, demonstrating a continued popular interest in the possibility of scientists being able to document the supernatural and the stories that could result from it. Marie Corelli, Arthur Machen, and Bram Stoker all wrote novels that explore the possible outcomes of scientific investigation into the supernatural from different types of experiments. Corelli's *The Soul of Lilith* (1892) records the undoing of a scientist following his attempts to prove what happens after death. The scientist longs for physical proof that he cannot have. In contrast, Machen's *The Great God Pan* (1894) is a story in which the scientist is faced with physical proof of a supernatural event, proof that he does not want. Stoker's *The Jewel of Seven Stars* (1903) offers yet a third outcome of experimentation. In this novel, a disaster leaves the scientist dead and the outcome of the experiment is ambiguous. There is, however, a common theme that emerges in each of the different plots: scientific meddling in the supernatural reveals its potential, including permanent consequences in the physical world.

Nineteenth-century investigation of the supernatural was not always as ostentatious as the grand plans each of these fictional scientists has for his experiment.

There were scientists of high calibre creating elaborate tests. As discussed in the previous chapters, William Crookes did develop complicated experiments for mediums and devices designed to "measure elusive spectroscopic effects of the promontories of the eclipsed sun, anomalous pathways across the rarefied space of evacuated tubes, and the psychical effects of the mediums Daniel Home and Florence Cook" (Luckhurst, Invention 36). E. E. Fournier d'Albe's The Life of Sir William Crookes details other experiments Crookes designed to test mediums and the arguments he had with fellow scientists over his investigations, such as the "accordion experiment" with Home (201-205). More pervasive than the highly respected scientist conducting complex experiments, informal testing should not be ignored by historians or critics. After all, most experimentation was informal and took place around card tables in lowly lit drawing rooms with groups of close friends in the form of séances. Recall Florence Marryat's detailed descriptions of many encounters, by herself and others, with spirits through séances in her *There is No* Death (1891), discussed earlier in this thesis. People creating test conditions for their conversations with spirits during séances were countless whereas history has only recorded a small number of experiments by famous scientists, regardless of their stance on spirits. From Matter to Spirit: The Result of Ten Years' Experience in Spirit Manifestations (1863) includes as Chapter 1 "Introductory – Method of Experimenting" in which the author, only identified as "C.D." upon initial publication,³² explains how to witness a spirit manifestation because she assumes that some of her readers "may like, while mentally following the course described, to experiment for themselves, and thus, if successful, verify my statements as they go" (De Morgan 3). Experimentation went hand in hand with curiosity.

What constituted *science* was evolving throughout the nineteenth century into what twenty-first century readers would recognise as discipline. Many topics now categorised in various social sciences, such as anthropology, were included in the early divisions of science. In her discussion of the changing meaning of *science* in the nineteenth century, Diana Postlethwaite states: "On the one hand, Victorian 'science' was still a discipline-in-progress, not yet a subject to be studied at Oxford or Cambridge, often an enthusiasm pursued by the independent amateur. On the other, it was during the Victorian era that 'science' began both to professionalize and to narrow itself to the study

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³² Sophia Elizabeth De Morgan has since been identified as the author. Her name has been added to reprinted editions of the text.

of the physical world" (99). That science had not, in fact, narrowed itself to the study of the physical world has been discussed throughout this thesis. What is of concern here is that science was in the process of being formed, that disciplinary boundaries were still in the making.

Herbert Spencer's essays on science establish one process for the progression of science and new knowledge in general. The three volumes of Essays: Scientific Political and Speculative (1868, 1868, and 1874) approach the issue of science from different perspectives, most notably by addressing discussing measurement and the forming of scientific laws. In his "The Genesis of Science," originally published in the British Quarterly Review in 1854 and reprinted in volume one, Spencer emphasises the importance of measurement to scientific knowledge. He establishes an "earlier phase" of science that "attains only to certainty of foreknowledge" and "later phases" in which there is "completeness" ("Genesis," 120, emphasis in the original). He continues: "We begin by discovering a relation: we end by discovering the relation. Our first achievement is to foretell the kind of phenomenon which will occur under specific conditions: our last achievement it to foretell not only the kind but the amount" ("Genesis," 120, emphasis in the original). In this introduction to his argument, he establishes an argument for the importance of measurement as a marker of advanced science. Spencer does not define what may or may not be classifiable under science. Rather, he states that "undeveloped science is qualitative prevision: developed science is quantitative prevision" (Spencer, "Genesis," 120, emphasis in the original). In this way, history, literature, anthropology, religion, and other fields were open to scientific study as defined by Spencer's earlier "phases" through qualitative methods.

Spencer's concern with measurement as the delineation between earlier and later phases of science is of interest here specifically because none of the scientists in the novels discussed in this chapter are trying to measure the supernatural with a set standard for their studies. They are dabbling in Spencer's earlier phases of qualitative investigation without attempting to shift deeper into quantitative study. Spencer's real-world examples of sciences that have proved measurable include specific phenomena for which the finding of a standard measurement led to the establishment of the sciences of geometry, dynamics, aerostatics, and others ("Genesis" 121).³³ Yet, he also notes the paradox that

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³³ Spencer comments that there is no science of the "loudness" of sounds because of a lack of a way to measure loudness ("Genesis" 121). The early twentieth century definition of the decibel and resulting studies in sound support the reasoning of his argument.

"on the one hand, we can discover the laws of the greater proportion of phenomena only by investigating them quantitatively; on the other hand we can extend the range of our quantitative previsions only as fast as we detect the laws of the results we predict" (Spencer, "Genesis" 122). The fictional scientists (and to a degree the historical scientists who studied the supernatural) are stuck at this point. They cannot measure what there is no measurement for. Thus, the representation of the supernatural as evasive and elusive, slippery, just beyond reach, in the *fin de siècle* fictional experiments, situates those studies as early phase science because of the missing marker for measurement.

The issue of establishing the laws of science, which the fictional scientists may be attempting to skip ahead to, Spencer considers a concern for after phenomena have been established. The essay "Of Laws in General, and the Order of their Discovery" is reprinted in the 1874 volume three of the collection.³⁴ Spencer begins with the assertion:

[t]he recognition of Law being the recognition of uniformity of relations among phenomena, it follows that the order in which different groups of phenomena are reduced to law, must depend on the frequency with which the uniform relations they severally display are distinctly experienced. At any given stage of progress, those will be best known with which men's minds have been oftenest and most strongly impressed. In proportion partly to the number of times a relation has been presented to consciousness (not merely to the senses), and in proportion partly to the vividness with which the terms of the relation have been cognized, will be the degree in which the constancy of connexion [sic] is perceived. ("Laws" 80-81)

Essentially, scientific laws are based on repeated observations of the same phenomena, acting in the same manner. Spencer goes on to explain that the most basic or common phenomena were first reduced into law because they were "experienced oftenest and most distinctly" and that "there must remain phenomena which, from their rareness, or unobtrusiveness, or seeming unimportance, or complexity, or abstractness, are still ungeneralized" ("Laws" 97). Although Spencer's examples of sciences in which there are things yet to be established into law are Biology and Sociology, this understanding of rare phenomena being harder to reduce to scientific law is the concept with which scientists of

³⁴ There is note stating that the chapter originally appeared in the first edition of *First Principles* (1862) but was moved to this collection of essays following a revision to that book for the "re-organized second edition because it did not form an essential part of the new structure" (Spencer, "Laws" 80).

the supernatural were engaging. Their object of study was less common and harder to observe than even the lizards and birds Charles Darwin observed in the Galapagos Islands and documents in his journals (Darwin 608). Spencer's concluding sentence, "[a]nd unless we make the absurd assumption that the process of generalization, now going on with unexampled rapidity, has reached its limit, and will suddenly cease, we must infer that ultimately mankind will discover a constant order of manifestation even in the most involved and obscure phenomena," could just as easily have been the rallying cry of scientists investigating the supernatural ("Laws" 98).

While the definitions of science were being worked out, the language used in scientific discourse did not aid in distinguishing science from the unscientific. Language use in scientific contexts is an additional indicator that disciplinary lines were not yet firm. In connection with a discussion of George Eliot's interest in scientific theories, Sally Shuttleworth remarks that, "[t]he Victorians' tendency to refer to science as if it were a defined and coherent entity reflects their desire to treat it as an unproblematic source of authority. Such an assumption obscures, however, the social origins and diversity of practice of nineteenth-century science" (Shuttleworth, *George Eliot* 6). The social theorists Shuttleworth focuses on are not the only representatives of other fields to influence nineteenth-century science. Gillian Beer addresses the more general interaction between disciplines when she states:

In the mid-nineteenth century, however, it was possible for a reader to turn to the primary works of scientists as they appeared, and to respond directly to the arguments advanced. Moreover, scientists themselves in their texts drew openly upon literary, historical and philosophical material as part of their arguments: Lyell, for example, uses extensively the fifteenth book of Ovid's *Metamorphoses* in his account of proto-geology, Bernard cites Goethe repeatedly, and – as has often been remarked – Darwin's crucial insight into the mechanism of evolutionary change derived directly from his reading of Malthus's essay *On Population*. [...] The traffic, then, was two-way. Because of the shared discourse not only ideas but metaphors, myths, and narrative patterns could move rapidly and freely to and fro between scientists and non-scientists: though not without frequent creative misprision. (*Darwin's Plots* 5)

Science was not yet buried in the technical jargon that veils many twenty-first century breakthroughs from the average, and even educated, reader. The nineteenth-century

scientist had the expectation that a learned man could follow the argument that he made. For the authors discussed in this chapter, this is of vital importance in two ways: the inclusion of the non-scientist witness and the destruction of the things needed for the experiment so that it could not be replicated.

Just as what constitutes science and who a scientist is has shifted since the nineteenth century, so too has the perception of the method by which scientists conduct their research. Theodore M. Porter, who specialises in the history of science, suggests that the twenty-first century notion of a precise scientific method of experimentation is itself a fantasy: "the 'scientific method' has been notoriously elusive, and the history of attempts to capture it for the study of society is mainly a history of a search for prestige, for the authority and certainty of 'scientific law' in the slippery domain of human studies" (1041). Others, such as William Dampier, make less definitive statements and note that there was a disconnect between science and philosophy in the nineteenth century. Dampier explains, "science and philosophy for a time lost touch with each other," and further suggests that the "process was doubtless hastened by the simultaneous segregation of science into sciences. The growth of knowledge went on so fast that no man could keep track of it all" (290). What is perceived as the scientific method of a certain time is, actually the method which emerges most prominently rather than that which was the most commonly followed. In other words, the scientific method is constantly evolving based on new discoveries and the nineteenth-century division of science into different sciences was part of a major period of methodological change. The expectation that a hypothesis should govern an experiment is one such example. Stephen G. Brush states in his history of science that "one of the most publicized philosophies of science in the nineteenth and early twentieth centuries, 'positivism,' urged that hypotheses were of little epistemological value, regardless of their methodological effectiveness" (390). Yet, the importance of the hypothesis in later research causes readers to project this expectation onto nineteenth-century representations of experimentation. This is evident, for instance, in Christine Ferguson's discussion of Machen's The Great God Pan, which will be discussed later in this chapter.

Corelli, Machen, and Stoker are all concerned with the potential of science to eventually explain the supernatural. The novels discussed in this chapter all highlight this concern which, paradoxically accounts for the lack of the expected results at the end of each of the fictional experiments. The issue of *potential* is complicated in that providing lasting evidence of any sort would negate the possibility of yet-to-be-determined

potential. Lasting evidence would be limiting. Thus, the stories hint at what scientific evidence of the supernatural could look like, providing temporary evidence that suggests permanent evidence may one day be uncovered without leaving anything that can later be disproven.

By the late nineteenth century, scientists knew of many scientific phenomena that are not themselves visible, yet could still be consistently observed by the effect they had on the physical world – such as magnetism and gravity. Forces such as these that can be replicated and whose behaviour can be predicted in given circumstances are no less scientific for their lack of physical embodiment. The allusive evidence of the supernatural could have been a similar force, evident by the impact on the physical as opposed to lasting in the physical world itself. In effect, proof of the supernatural could be the consistent response of the supernatural to scientific attempts to explain or document it. In order to consider the experiments depicted in these novels, the modern critical reader must be aware of not only the scientific theories that have lasted in the growing field of science but also the science that has been relegated to the realm of pseudo-science. The potential captured in these pages, that one day science would explain the supernatural, must be recovered to the reader to explain why the authors end the novels the way they do.

The scientists in these novels ultimately engage with scientific potential rather than scientific fact. Marie Corelli's scientist in *The Soul of Lilith* is too obsessed with the material to be able to accept the evidence Lilith brings him from the afterlife. The scientist in Arthur Machen's *The Great God Pan* anticipates an immaterial result for his experiment and is faced with an immensely inconvenient material outcome. Both of these scientists are following a procedure they have invented, and are therefore claiming to be in control of, throughout the narrative. They are attempting to direct their experiments to uncover their desired information. In contrast, Bram Stoker presents an experiment in *The Jewel of Seven Stars* in which the scientist would no longer be considered a scientist by twenty-first century classifications and he professes no knowledge of the forces at play in the crux of the experiment. All of these experiments result in changes to the material world, demonstrating the power of the supernatural to act in the realm of the physical even as it remains inexplicable through the laws of the material world.

All of the experiments described are fantastic in nature and yet some of the alleged science reflects historical belief. Corelli's experiment echoes the exploration into Spiritualism but her magic, life-sustaining potions are wishful thinking. Although

Machen's demigoddess seems the most bizarre, his indirect referencing of concerns regarding the use of living subjects engages most closely with lasting scientific concerns. Stoker's attempt to reanimate Queen Tera situates Trelawny as a Frankenstein character. The focus on Egyptology is an appropriate retelling of the story for Stoker's time.³⁵ None of these novels is designed to be taken literally. All of them, however, interact with real scientific questions with which their authors and original readers would have been familiar. Each of the novels suggests the danger posed by the study of science reaching beyond the material. In each case, however, the experiment reveals that the supernatural does have the power to affect the physical world. Corelli, Machen, and Stoker address questions about the proper place of science and the societal consequences of man attempting to explain things outside of the natural world through the depictions of these experiments.

As the authors draw from their contemporary science, they borrow from the authority of science for their narratives. The scientific concerns were real. The possibilities were numerous. Yet, the scientific narrative was not yet complete.

Nineteenth-century science suggested that there was *something* to the supernatural. These novels have in common emphases on misplaced focus and the danger of overreach by science in investigating the supernatural. They also all draw attention to the unfinished nature of science through the lack of explanations for what happens during the experiments. Removing the necessary tools for scientific experimentation, whilst leaving the scientific potential unexplained and intact, suggests the possibility for later explanation of the supernatural forces at work in the experiments. It leaves science a gap to fill in. These novels, consequently, point to the hope that science will one day explain the workings of the supernatural realm.

The authors discussed in this chapter use the experiments they depict to critique scientific investigations into the supernatural. In each case, the supernatural realm is depicted as a possible next frontier for scientific inquiry and outside of contemporary scientific methods of codifying facts. Corelli's novel insists on the supremacy of the supernatural. The scientist gets information about the supernatural realm but cannot understand it. He is closed-minded and unable to adjust his expectations about what he

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³⁵ The nineteenth-century obsession with Egypt and the fascination with the prospect of mummies' curses is detailed by critics such as Roger Luckhust in *The Mummy's Curse: The True History of a Dark Fantasy*, Jasmine Day's *The Mummy's Curse: Mummymania in the English-Speaking World*, and David Huckvale's *Ancient Egypt in the Popular Imagination: Building a Fantasy in Film, Literature, Music and Art* as they trace the legacy of ancient Egypt throughout history.

can learn. Machen's novel also critiques science's limitations. He suggests, however, that even inadequate science can forcefully provoke the supernatural. In contrast to both the Corelli and Machen novels, Stoker's novel critiques both the agents of science and of the supernatural. The ending of the novel is so ambiguous that little is sure. Each novel offers a different critique of some aspect of the scientific supernatural. What is revealed in each case is that potential is upheld over any consistent, specific ranking of authority for either science or the supernatural.

The Scientist's Misplaced Focus: The Soul of Lilith

As discussed in Chapter 1, exactly what Corelli, herself, believed about the scientific supernatural is impossible to ascertain despite her novels and extant personal papers. Jill Galvan, Annette Federico, and others read Corelli's novels as affirmations of her personal beliefs, with Galvan claiming that "Corelli herself made clear [her books] reflect her personal philosophies" (Galvan, "Christians" 85). Yet, Corelli "made clear" many things that she could not possibly have thought to be true, such as the oft-discussed retouched photo she allowed to be printed. In an extant letter, Corelli claims a scientist is investigating her "Electric Christianity" as scientifically viable (Marie Corelli Collection box 1, folder 28). Her contention that her novel might have scientific value exposes Corelli's intention to join the *fin de siècle* conversation regarding science, experimentation, and the potential for proof of the supernatural.

The Soul of Lilith (1892) is Corelli's story of El-Râmi-Zarânos, his search for proof for or against the existence of "death," and his descent into insanity when faced with the supernatural he is unable to process. El-Râmi is an eccentric man who can predict the future, whose advice is sought out by powerful people, and who is very private about his own affairs. His biggest secret is that he is a scientist and that he believes his research will prove to the world a definitive understanding of the nature of death. Within the novel, it is *death* itself that is in question due to El-Rami's understanding of science and the emphasis on the soul and the supernatural as what is real. Since the soul is of primary importance, physical death is merely a transition because he considers *real* death the death of the soul. In a conversation with a clergyman, El-Râmi states: "I am simply trying to prove the existence of a 'something after death' – but I am certain of nothing, and I believe in nothing unless proved" (Corelli, *Lilith* 32). Without ever explaining the secrecy in which he cloaks his experiment, the rebellion of his assistant and the reaction of his brother to his test subject Lilith suggest that El-Râmi has guarded his experiment

because he (rightly) assumes that others will not understand his methods, deeming them cruel and inhumane. This lofty experiment involves keeping a girl alive with injections and sending her spirit out into the cosmos to search out death, even as he claims she is already physically dead. Lilith is actually the one doing the research in her astral journeys. El-Râmi carefully guards Lilith and jealousy sparked by his brother seeing Lilith ultimately causes the scientist's downfall. Faced with seeing her spirit appear before him as her body decays behind him, El-Râmi cannot focus on the spiritual at the expense of the physical. He loses everything when he turns away from her materialising spirit: her body, the possibility of knowing the truth about death, and his mind. The once brilliant scientist whose advice was sought by nobles and royalty from across the world is left a simple man under the care of his brother in an obscure monastery.

Experiments in which a representative of the supernatural reveals knowledge of the supernatural realm to eager listeners in the physical world were not uncommon in fin de siècle England. Corelli's crafting of El-Râmi's quest for proof of the supernatural is reminiscent of William Crookes's mid- to late nineteenth-century interest in proving the validity of mediums despite the difference in the specific expectations placed on the individual interacting with the supernatural realm. When Crookes became involved with mediums and Spiritualism, he was already "[a] designer of scientific equipment and a gifted chemist, [who] had recently discovered a new element, which he named thallium. A soft, malleable metal, thallium was also a neurotoxin so potent that later generations of scientists would speculate that Crookes became involved in spirit research only because of work-related brain damage" (Blum 45). Crookes was quick to publish his results when he became involved in Spiritualism. According to Roger Luckhurst in *The Invention of* Telepathy, Crookes's research diary of sittings with the famed medium Home (known for levitations, spirit-messages, and playing musical instruments at a distance), reveals that "his published accounts erased any verbal messages from spirits, focusing purely on the record of a physical force" (26-27). He wanted to divide his experiences as a participant at the seances and the scientific observations before publishing his results. In order to prove that Home's capabilities were supernatural, Crookes focused on controlling every physical aspect of the experiments. He used devices that would detect movement and secured the medium to "guard against cheating" and, "[a]s a result of those and other experiments, Crookes reached a conclusion shocking to his fellow scientists: that some kind of as yet unexplained 'psychic force' existed" (Blum 47-48). Leigh Wilson suggests that these devices were important because "hope of positivist knowledge was now located in recording machines, as faith in empirical knowledge via the senses was undermined, or at least complicated, by various developments in experimental psychology" (101). Although many argued against Crookes's conclusions, others (such as Sir Francis Galton) were inspired by Crookes's study of Spiritualism and "persuaded" that séances could result in scientific findings (Oppenheim, *Other World* 296).

Corelli builds on this idea that there can be scientific findings for supernatural research, though fictional scientists can have much grander research goals. In Corelli's story, El-Râmi is already at the point where he trusts his test subject is interacting with the supernatural realm: he believes in the existence of the supernatural and is attempting to discover the answer to a specific question. He does not necessarily need anyone else to support his work. In contrast, Crookes had a public goal: he wanted his experiments to be taken seriously by the wider scientific community. Whereas the historical figure, Crookes, had to attempt to protect his reputation as he argued for his research into the supernatural, Corelli's fictional scientist need not have any career aspirations and can be consumed by his obsession.³⁶ Crookes eventually retreated, for a time, into "the safer-and definitely saner—world of mainstream science" (Blum 63). El-Râmi's goal is grander than Crookes's aim but no retreat into respectability is needed. He wants to uncover proof of suffering, specifically something that would materially prove the existence of death through the spiritual excursions on which he sends Lilith. Yet the scientist is unwilling to take Lilith at her word as testimonial evidence of what she has found when he recalls her to him. El-Râmi seems to be attempting to uncover physical proof of death in the supernatural realm. The supernatural search for a material result is the incompatible centre of the experiment on which the novel focuses as Corelli critiques scientific expectations.

The discordant focus on the material at the expense of the supernatural is first evident in the descriptions of the scientist's lab. Corelli depicts El-Râmi as taking a great deal of care with the physical details of his experiment. The most prominent aspects of El-Râmi's experiment are not a scientific procedure or a careful attention to the details Lilith reports but the pride he takes in keeping her body functioning and the lavish apartment that stands in for a sterile scientific lab (such as a twenty-first century reader may expect). This room in which El-Râmi enshrines Lilith's body serves as a cross

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³⁶ Fournier d'Albe discusses Crookes's battle for respectability associated with his belief in Spiritualism in the chapter "Mysterious Forces and Apparitions, 1871-4" of his biography.

between a laboratory and a quasi-religious shrine. This is fitting because he claims to be doing a scientific experiment but idolises Lilith; the awkward combination escapes his attention but is emphasised by the extended narration of the physical setting and her body. Before the reader meets Lilith or has learned the nature of El-Râmi's experiment, the secret rooms beyond the velvet curtain are described in detail:

a wonderful interior of luxury and loveliness as seemed for the moment almost unreal. The apartment opened to view was lofty and perfectly circular in shape, and was hung from top to bottom with silken hangings of royal purple embroidered all over with curious arabesque pattern in gold. The same rich material was caught up from the edges of the ceiling to the centre, like the drapery of a pavilion or tent, and was there festooned with golden fringes and tassels. From out the midst of this warm mass of glistening color swung a gold lamp, which shed its light through amberhued crystal, while the floor below was carpeted with the thickest velvet pile, the design being pale purple pansies on a darker ground of the same almost neutral tint. A specimen of everything beautiful, rare, and costly seemed to have found its way into this one room, from the exquisitely wrought ivory figure of a Psyche on her pedestal to the tall vase of Venetian crystal which held lightly up to view dozens of magnificent roses that seemed born of full midsummer, though as yet, in the capricious English climate, it was scarcely spring. And all the beauty, all the grace, all the evidences of perfect taste, art, care, and forethought were gathered together round one centre-one unseeing, unresponsive centre-the figure of a sleeping girl. (Corelli, *Lilith* 22)

The narrator lingers on insignificant details of the room like the type of flower on the carpet and the rose blooms. Readers know beyond any doubt that this room is costly and beautiful, in direct contrast to the simplicity of El-Râmi's own rooms described only pages before. That the first introduction of these chambers stresses the beauty of the surroundings establishes the primary importance of the room as a receptacle of beautiful things. Luxurious carpets and crystal vases are, however, at odds with the purpose of this space if he is indeed interested in proving something about the supernatural. This lab is primarily concerned not only with the physical but specifically with a costly aesthetic.

The chamber and its occupant are El-Râmi's closely guarded secret and yet the first glimpse Corelli gives readers into his research is not his interest in the supernatural

but an extended description of the physical objects he has gathered. In the place where El-Râmi's scientific pretensions should be the most obvious, Corelli emphasises beauty rather than functionality and physicality rather than spirituality. Readers are introduced to El-Râmi's materialistic obsession rather than his theories of the supernatural, foreshadowing his downfall because of his misplaced focus.

The introduction of Lilith into the story extends and exaggerates the focus on the material aspects of the experiment by treating her as an object rather than a living being capable of supernatural exploration. The young woman is physically assessed long before her importance is explained. The account of the room continues, without so much as a paragraph break, to describe Lilith, laying in the center of the room, with painstaking attention to detail:

Pillowed on a raised couch, such as might have served a queen for costliness, she lay fast bound in slumber[,] a matchless piece of loveliness, stirless as marble, wondrous as the ideal of a poet's dream. Her delicate form was draped loosely in a robe of purest white, arranged so as to suggest rather than conceal its exquisite outline, a silk coverlet was thrown lightly across her feet, and her head rested on cushions of the softest, snowiest satin. Her exceedingly small white hands were crossed upon her breast over a curious jewel-a sort of giant ruby cut in the shape of a star [...]. To say merely that she was lovely would scarcely describe her for the loveliness that is generally understood as such was here so entirely surpassed and intensified that it would be difficult if not impossible to express its charm. Her face has the usual attributes of what might be deemed perfection [...]. [...] [I]t seemed more than certain that she would never rise, never tread earthly soil in common with earth's creatures, never be more than what she seemed—a human flower, gathered and set apart—for whom? For God's love? or man's pleasure? Either, neither, or both? (Corelli, *Lilith* 22-23)

Here Lilith is described as an object in two ways. First, she is merely another item in the room. In moving from the description of the things to the description of the person who resides in the room with no demarcation or noticeable change in the way in which the details are listed, Lilith becomes like the Venetian crystal vase and the raised couch she

lies on. She is a part of the room's furnishings to be examined and deemed beautiful, not an active participant in her environment. Secondly, the description of this young woman leads to a sexualised objectification of her as a woman for a male gaze (regardless of the gender of the reader). Although El-Râmi is blind to her humanity and the possibility of her as an object of love or desire at this point in the novel, the reader is made aware of and becomes a participant in the objectification of the sleeping young woman on the couch. Her clothing accentuates her "maiden shape," her features are described to the reader "dewy red" lip and "delicately upcurled" eyelash, and her breathing is "scarcely perceptible" but nonetheless noted (Corelli, Lilith 23). In case the thorough account of Lilith has somehow been too subtle, the narrator questions if this "human flower" is for "man's pleasure," even though there has not yet been a male character introduced into the novel, much less these specific chambers, who sees her as a living human being (Corelli, Lilith 23). The lengths to which Corelli intends to objectify Lilith are best expressed by her caregiver in conversation with El-Râmi. Rather than query if the beautiful young woman is an object for "man's pleasure," Zaroba, the old woman charged with monitoring Lilith, asks the more pressing question: "Does one love a statue?" (Corelli, Lilith 22). In having her caregiver give this retort, Corelli establishes that Lilith's position is less than human to all who know her, not just to the scientist.

This narrative emphasis on the beauty of the room and the objectification of Lilith in which the reader is complicit serves to establish a focus on the physical in El-Râmi's experiment, something which Corelli implicitly criticises when it is revealed just what research is being done. The reader, like the scientist, has been wrongly focused on the material trappings of the experiment. El-Râmi's experiment is reliant on the physical, for example his miraculous preservation of Lilith's life, even if the lavish lab is actually unnecessary.³⁷ Nevertheless, all these details of the physicality of the experiment are extraneous to his actual research. The extended descriptions ultimately serve as early signs that the scientist's focus is incorrect by distracting the reader from a focus on the supernatural.

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³⁷ El-Râmi has kept Lilith alive for years despite her alleged death in the desert years before. El-Râmi muses, "Six years she has lived thus, but who can say whether indeed Death has no power over her? In those six years she has changed—she has grown from childhood to womanhood—does not change imply age, and age suggest death, in spite of all science?" (Corelli, *Lilith* 30). He claims that his injections of a "strange sparkling fluid" allow for "tissues [to be] renewed, the blood reorganized, the whole system completely nourished with absolute purity" and she exhales any impurities from her body (Corelli, *Lilith* 30). The image Corelli gives of Lilith is not one of a sickly girl fighting to stay alive but of a beautiful young woman who seems to be resting. Something in El-Râmi's injection must be working; he does practise at least some form of medical science.

This focus on the physical aspects of the experiment reveals El-Râmi's desire for control in an experiment in which he can do little to facilitate the outcome since the answers he seeks are far outside the physical world. Lilith is both the woman lying in the lab and the spirit off exploring unknown galaxies. When El-Râmi summons her spirit back to her body, Lilith explains that she has traveled much since they last spoke. She has been, "Away, away, far, far away!" beyond Sirus where she has found "a bright new world" (Corelli, *Lilith* 26). Although her spirit is tethered to her body and (as she grudgingly admits) is subject to El-Râmi's will, Lilith is free to explore far beyond the earth and outside of the galaxies known to man, even a knowledgeable scientist. She is both dead and alive, prisoner and free. In this way, her body is in fact an object under El-Râmi's control even though her human spirit lives on in search of new adventures, or at least experiences, and the implication is that Corelli intends that her scientist not have full control over his subject despite his attention to the physical details. These physical details that El-Râmi is so adept at controlling do not account for the supernatural aspect of his experiment, of Lilith.

The experiment Corelli creates to drive the plot of the novel demonstrates the impossibility of explaining the human condition with a physical answer. The desire for physical proof that is so central to El-Râmi's experiment does not actually answer the question he claims to be trying to answer. El-Râmi wants to solve the mystery of suffering. He commands Lilith to "[u]nderstand and seek out sorrow–pierce to the root of suffering—explain the cause of unavailing agony! [...] Take my command and go hence; find out God's Hell, so shall we afterward know the worth of Heaven!" (Corelli, Lilith 29). Lilith has already reported to him that there is no such thing as death, only change. She complains: "I have told you this so often, yet you will not believe. Always you bid me seek death; I have looked, but cannot find it" (Corelli, Lilith 27). When El-Râmi sends her in search of Hell, he does so thinking that she will surely find the death he seeks there. The scientist and his subject are at an impasse. El-Râmi wants a report of where death can be found and Lilith claims there is no death. The scientist refuses to be satisfied with his subject's word but she cannot provide physical proof that something does not exist. El-Râmi has designed an experiment in which he will never accept the results because there can be no material answer, no physical proof. The question he has is, however, one that many would wish answered.

Corelli places El-Râmi in the position to choose between the two scientific desires evident in the scientific study of the supernatural: a fleeting glimpse of a magnificent

supernatural reality or a fairly firm grasp on potential physical evidence. In posing these two possibilities against each other and having the scientist choose, Corelli suggests that the two cannot coexist. After El-Râmi begs to see Lilith in her true form, he is still unable to focus on the appearance of her spirit when she shows herself. As he begins to discern her true shape before him, the narrator notes that:

his strength was rapidly failing him; unsupported by faith his mere unassisted flesh and blood could endure no more of this supernatural sight, and, . . . all suddenly, . . . the tension of his nerves gave way, and morbid terrors shook his frame. [...] [H]ardly knowing what he did, he turned desperately to the couch where Lilith, the Lilith he knew best, lay. (Corelli, *Lilith* 299)

He is unable to watch the supernatural manifestation of Lilith and instead turns to see that, "Lilith—his Lilith [her physical body] was withering before his very eyes!" (Corelli, Lilith 299). Even proclaiming his love cannot keep her in the earth any longer: "The Soul of Lilith had departed forever, . . . even as the Cyprian monk had said, it had outgrown its earthly tenement; . . . its cord of communication with the body had been mysteriously severed, and the body itself was crumbling into ashes before his very eyes" (Corelli, Lilith 303). This loss of both the opportunity to briefly see the manifestation of Lilith's spirit and her physical body is facilitated by an accidental witness to the experiment. In contrast to the other novels discussed in this chapter, here, a witness is unwelcome and the catalyst for loss. Zaroba, the only witness El-Râmi intends to see his experiment, shows Lilith to El-Râmi's brother Féraz. Seeing with Féraz's eyes, El-Râmi becomes aware of the physical beauty of his captive and begins to love her. El-Râmi ultimately chooses to try to hold on to the physical, assuming its permanence, only to lose it.

For this scene, Corelli draws from the experiments of scientists in her society and their expectations of proof. Lilith is best described as a young woman exploring the supernatural realm through astral projection with El-Râmi caring for her body while her spirit explores. There are, however, parallels to Corelli's contemporary scientists who attempted to document the materialisation of a medium's spirit guide. A spirit guide was the spirit of a deceased individual who addressed the living by controlling (or guiding) a medium. Although different from the historical examples in her relationship to the physical world, Lilith appearing before El-Râmi in a lit room would satisfy the requirements of a materialisation of a spirit. Home had written: "Light should be the demand of every spiritualist. [...] Where there is darkness there is the possibility of

imposture—and the certainty of suspicion" (quoted in Blum 61). Lilith's materialisation is depicted in a way that would allow it to be considered real and, potentially, reliable as evidence of the supernatural. As such, when El-Râmi turns his back on her soul to look at her body, he is denying the evidence with which he is presented, and which historical scientists documented.

The one-sided romance of the scientist for the subject may, itself, be evidence of Corelli borrowing from the life of late nineteenth-century scientists to connect her fictional scientist to the actual people he is a fictional representation of. Crookes had been enamored by Florence Cook's "fully materialized [form] as a graceful young girl named Katie King, a creature of flowing white robes and charming manners" that appeared while Cook was tied up in a cabinet during séances (Blum 62). That Katie had agreed "to submit to his embraces but begged him to take no advantage of her" (quoted in Owen 229) as he "paid her close court during her séances" brought his physical interest in the (alleged) spirit into sharp moralistic focus for some (Owen 229). Crookes publically proclaimed that Katie had repeatedly materialised before him and, as Oppenheim notes, he:

may well have been the ideal scientist for Florence Cook – a man of substantial reputation whose vanity enabled him to endorse her mediumship without equivocation. Although a scientist is no better equipped than any other equally intelligent person to perceive conjuring tricks or similar deceptive practices, Crookes's support of Cook in 1874 nevertheless proved a tremendous boost to her career. It was generally assumed at the time that men of science *did* have special investigative talents that enabled them to identify fraud in the séance chamber as readily as they might isolate rare gases. (*Other World* 342-343)

Respected scientists like Crookes had claimed to see materialised spirits, touch them, and walk with them. He developed feelings for one. The stories and articles (and whispers of scandal) were public knowledge with which Corelli would probably have been familiar given her interest in Spiritualism. Crookes's literary descendant, El-Râmi, has the opportunity to see the spirit he loves appear before him, but the vision is ruined and ruins him when he fails to leave the figurative cabinet door closed and he peeks back. Although El-Râmi may represent scientists such as Crookes, he also serves as a warning to them to avoid trying to hold on to both the materialisation and the spirit control.

Corelli's twenty-first century readers need to contextualise her sensational fiction with scientific history (such as potential allusions to Crookes's experiments) in order to accurately deal with the events of the novel. In one of the only academic discussions of the novel, Janet Galligani Casey's study of Corelli's views on feminism, she states that:

Corelli's faithfulness to the Victorian conception of gender roles is perhaps presented most extremely—and, from a twentieth-century point of view, comically—in *The Soul of Lilith*. The 'heroine,' Lilith is a dead girl on whose body the male character El-Rami [sic], conducts experiments. Although Lilith achieves mystical powers through El-Rami [sic], she is nevertheless a passive receptor of his intellectual activity. (166)

Casey's analysis is correct in as far as it goes. Her conclusion that Lilith is actually dead, despite all El-Râmi says that would lead away from this conclusion, allows for this simplified view of gender power dynamics to be the central relationship between the two characters. If Lilith is really dead, then she is merely an object of his experiment, the material tool he uses to delve into the supernatural realm. In this case, however, the experiment would be unnecessary because communicating with her spirit at all would be evidence of a continued existence after physical death. Yet she is simultaneously dead in that he is keeping her alive in some strange fashion and very much alive in the supernatural realm. This in-between state allows her to be both acted upon and act to her own advantage since she is neither fully physical nor fully supernatural (until his unwitting freeing of her spirit).

Corelli uses the scientist's obsession with material proof to critique scientific overreach and attempts to secure material proof of the supernatural. Regardless of whether love and power over another can (or should) be equated, at the crux of El-Râmi's experiment, he chooses not to follow through and document the outcome because he wants to hold on to what he has. He then also loses the physical miracle he had (Lilith's body) and the potential for scientific documentation of what she describes. Corelli uses Lilith to connect the supernatural world with the physical world for El-Râmi and he is not able to deal with these two aspects of humanity once she is gone. His new obsession with beauty, love, emotion, and other non-material aspects of humanity takes the place of his search for suffering with a renewed fervour. El-Râmi never trusts in the supernatural and the physical in equal measures but he does have some connection to both as long as Lilith is physically under his control. After Lilith's body reduces to ash, El-Râmi's grasp on the physical world disintegrates as well. He gazes around in "inquiring wonderment"

recognising neither where he is nor anyone else present the next morning (Corelli, *Lilith* 311). All he seems to know is that "[t]he gods have taken her!" (Corelli, *Lilith* 311). Corelli uses the destruction of Lilith's body and the loss of El-Râmi's respectability to reveal that El-Râmi's focus on the material was misplaced and suggest that it could not be fixed. His level of obsession with the material left him deaf to the evidence delivered to him.

Although *The Soul of Lilith* shares with the other novels in this chapter a focus on experimentation, Corelli does what these other novels do not: questions the outcome of the experiment on the scientist himself rather than question the outcome of the experiment. El-Râmi is looking in the correct place (the supernatural realm) for answers to his questions but without a willingness to accept that the answer may not manifest physically in the material world. After El-Râmi's change, Irene Vassilius, a friend of the brothers, receives a letter stating, "El-Râmi, through prolonged over-study had lost the balance of his mind" (Corelli, Lilith 336). Irene is Corelli's counterpart in the novel. As Jill Galvan notes, Corelli ascribes to Irene all of the traits that she preferred to think that she, herself, embodied: a brilliant author misunderstood by the world, a messenger of true faith, and a strong woman persecuted by the male dominated press ("Christians" 91-93). Through Corelli's representative in the novel, Irene, the secret consequence of scientific obsession is imparted by Corelli to those who she chooses to share her knowledge with: her readers. On a short visit to the monastery by Irene and those traveling with her, a former acquaintance of the scientist queries Féraz about his brother's mental state and is answered: "El-Râmi's intellectual faculties were too brilliant, too keen, too dominant; his great force and supremacy of will too absolute. With such powers as he had he would have ruled this world and lost the next. That is, he would have gained the shadow and missed the substance" (Corelli, Lilith 356). It is noteworthy that Féraz calls the physical world the shadow for the substance of the next. Irene seems to respect El-Râmi's change in focus to the immaterial aspects of life. This shift in attention from the material to the immaterial is the outcome Corelli suggests should be respected in a scientist attempting to answer supernatural questions.

Corelli's ultimate critique of scientific expectations is evident in the novel ending with the scientist's shifted focus to immaterial things. The supernatural cannot be pinned down in a laboratory. Nevertheless, it is definitively real and results in changes in the material world. The scientist's downfall is not the attempt to study the supernatural – he has been doing this for years. The problem is his behaviour and the decision that the

physical body of his test subject is more important than what she wants to show him. As the turning point in the novel, that scene reveals Corelli's understanding of the supernatural as being of greater importance. Hence, she suggests experiments with the supernatural should be open-minded attempts to document whatever the supernatural reveals because scientists may not be expecting the supernatural to manifest as it does.

The Unprepared Scientist: The Great God Pan

Arthur Machen is best known for occult or horror novels at the turn of the twentieth century. Yet what he thought of the topics on which he wrote is unclear. Aiden Reynolds and William Charlton begin their biography of Machen by declaring on the first page: "ignorance of his life, fairly general then [directly following his death], time has done nothing to dispel" (1). As they remove the layers of myth surrounding Machen, it is revealed that he "was a man who possessed, in a very high degree, the older and more traditional values. He was a devout Christian, chaste in his personal life, chivalrous, truthful, honourable in matters of business" (Reynolds and Charlton 2). Although his father "likely made the decision for him," Machen did attempt a medical career by heading to London in 1880 "to be entered as a candidate for the preliminary examinations of the Royal College of Surgeons" (Reynolds and Charlton 10). His interest in the "odd and unaccountable" seems to stem from his early experiences as a journalist and the access he had to read widely on various occult fields (Reynolds and Charlton 21-22). The medical and supernatural elements of the experiment in *The Great God Pan* can be traced to these specific influences in Machen's life. Given biographers' claims of his having traditional values, it is not likely he personally believed in a syncretistic religion. The scientific-supernatural experiment he composes in his novella, therefore, is most likely intended to be read as a cautionary tale of horror warning others not to dabble in the unknown.

The Great God Pan (1894) relates the horrible events that follow a doctor's attempt to lift the veil between the physical world and the supernatural realm, allowing a young woman to see Pan, without thought of the danger of such an experiment. The first episode of the story retells the experiment itself. Dr. Raymond has selected his friend, Mr. Clarke, to witness the procedure in which he will cut into Mary's brain; it is only "a slight lesion in the grey matter [...] a trifling rearrangement of certain cells," he claims (Machen 12). Despite Raymond's assertion that there is "absolutely no physical danger whatever," Clarke learns from Raymond that Mary never regains her senses after the operation

(Machen 10). The doctor explains without emotion, "it is a great pity; she is a hopeless idiot. However, it could not be helped; and, after all, she has seen the Great God Pan" (Machen 23). Following this opening chapter, the main events of the novella occur years later when Clarke is collecting stories of strange happenings and investigating a bizarre chain of suicides. These horrible events seem to be connected to a woman named Helen Vaughan who looks just like Raymond's servant Mary, the subject of the earlier experiment. When faced with the choice to be held accountable for what she has caused or to commit suicide, Helen dies a strange, shape-shifting death before Clarke and his friend Villiers. The final chapter, a collection of fragments that can be pieced together to explain what transpired, explains that Helen is Mary's daughter. Mary remained insensible after the experiment and died only days after giving birth to Helen, a child apparently the result of her having seen Pan. Helen was never a normal girl and this information explains some of the stories Clarke has collected. Although she looks like her mother, Helen was the product of an unholy union and has her father's supernatural nature. The men who commit suicide are each discovered the morning after they spent the night with the demi-goddess. Helen's suicide acts to restore order as it results in the removal of the child of Pan from the human world and ends the senseless destruction caused by Raymond's ill-fated experiment.

Machen establishes Helen as a supernatural child of Pan through the narrative and details that point to her as a physical outcome of Raymond's supernatural experiment. The witness to the experiment on Mary, Clarke, serves not only as a representative of respectable society present for the procedure but also to limit what happens in the room. Clarke notes that he does not watch the entire process, but he *is* still present. If the scene were intended to be read as a rape of Mary, then the intentional witness would be undesirable. Thus, the presence of the witness addresses the fear nineteenth-century readers would have (justifiably) had that Raymond followed in the footsteps of historical scientists who took advantage of mesmerised or unconscious women.³⁸ Clarke's presence should do the same for twenty-first century readers. Additionally, Machen distorts the Biblical story of Mary's conception of Jesus in the Christian tradition to further direct readers to a supernatural explanation for Helen. Machen's parallels are heavy-handed: a young woman named Mary submits to the will of another, a religious vision, a baby born with no earthly father, and a child with both human and supernatural natures. Likewise,

³⁸ See the discussion of female susceptibility and opportunistic scientists in Chapter 2.

the distortion of the narrative is overt: Raymond's Mary is sexualised and her daughter dooms the men she spends the night with. Without the purity and innocence of the Biblical Mary, and with the human motivations of Raymond, Helen is not a saviour but a destroyer of men. Machen suggests scientific experimentation such as Raymond is engaged in is akin to playing God with potential creative power, even if this power is undesired.

The scientific backing Machen provides for Raymond is, itself, an early clue that this specific scientist and his experiment should not be duplicated. Machen is careful to create for Raymond connections to real and fictional scientists' legacies to lend credibility to his experiment within the novella, strengthening his critique of the experiment. Raymond claims that his experiment is scientifically groundbreaking. He name-drops those he has surpassed. After telling Clarke what he plans to attempt, Raymond states: "I saw a paragraph the other day about Digby's theory and Browne Faber's discoveries. Theories and discoveries! Where they are standing now, I stood fifteen years ago, and I need not tell you that I have not been standing still for the last fifteen years" (Machen 12). The choice of the name Digby is not coincidental. Kenelm Digby was a seventeenth-century writer on alchemy and religion (Hall 95). Machen's interest in the occult means that he would have been familiar with Digby's theories long discounted by science, making it likely that even if Digby is represented here as a fictional contemporary to Raymond, Machen does intend to allude to the historical scientist.

Machen's references to the uncharted areas of the brain highlight his interest in the unpredictable and the dangerous aspects of experimental science. The physicality and danger of the proposed experiment is suggested in the reference to Browne Faber and the neurobiology he allegedly studies. Faber seems to be a fictional scientist with a résumé and list of publications that Machen creates for Raymond to reference. As the discussion continues, Raymond explains to Clarke:

You may look in Browne Faber's book, if you like and you will find that to the present day men of science are unable to account for the presence, or to specify the functions, of a certain group of nerve-cells in the brain. That group is, as it were, land to let, a mere waste place for fanciful theories. I am not in the position of Browne Faber and the specialists, I am perfectly instructed as to the possible functions of those nerve-centers in the scheme of things. With a touch I can bring them into play, with a touch, I say, I

can set free the current, with a touch I can complete the communication between this world of sense and – we shall be able to finish the sentence later on. Yes, the knife is necessary; but think what that knife will effect. (Machen 14-15)

The fictional Faber provides the perfect excuse for Raymond to believe that his experiment will work. Faber, despite being a specialist, does not have the information that Raymond does. The former has offered a question and the latter will provide the answer, an answer that Machen's contemporary science had yet to uncover.

In this novella, Raymond's lack of a desire for a particular lasting outcome of the experiment is a narrative problem for some readers because of the expectation that experimentation should stem from a desire for a specific documentable result. Christine Ferguson asserts that a reason for the problems with the experiment is that Raymond is imprecise in why he is conducting the experiment: "The purpose of Raymond's project is unclear: certainly he wants Mary to see Pan – that is, the chaotic life force that lies beneath the surface of civilization – but he seems remarkably unconcerned with the effect or purpose or function of such an unveiling" (Ferguson, "Decadence" 475). Readers such as Ferguson want there to be a reason, an outcome beyond simply seeing the ancient god that would allow for an assessment of the procedure or results and be measurable in some specific way. He may not tell Clarke why he wants her to see Pan, but Raymond does give this as his purpose in the experiment. Whereas El-Râmi has specific questions he wants answers to, Raymond is experimenting just because he can. Whatever happens during the experiment is his desired outcome as he has no stated purpose beyond wanting Mary to see Pan. Since Raymond wants nothing more than (at most) her testimony that she has seen Pan during his experiment, he is not prepared for any other result and takes no real responsibility for either Mary's death or Helen. Following Raymond's heartless disregard for Mary, the byproduct of his experiment is likewise unconcerned with moral or social responsibility. Ferguson argues: "decadent science, by its nature, seeks knowledge that is not recuperable, that has no use and is in fact pure waste. Such a knowledge cannot exist in the world of everyday, symbolic reality" ("Decadence" 476). For Ferguson, Raymond's experiment is a decadent waste of resources that is doomed to result in useless knowledge, knowledge that Machen may suggest is harmful as well as of no practical use. Yet, if the experiment is the end in and of itself, then (decadent waste or not) it has served its purpose. Raymond's attitude and the uselessness of the knowledge

he gains *is* useful for critiquing science. It has pointed to the potential for scientific proof of the supernatural and the possibility of danger.

Machen intentionally creates tension between the desire for scientific respectability and the emphasis on scientific potential. The lack of explanation about what will happen when Raymond cuts into Mary's brain highlights the danger of the experiment and foreshadows his inability to deal with the physical results. Raymond does not know what will happen. Nonetheless, he is careful to have a witness present during the procedure. There is irony in that the unbiased witness cannot reliably tell the story because of his own squeamishness during the surgical procedure. Still, a witness was present. The narration of Raymond's experiment intentionally leaves out most of the details of the process. Mary, the test subject, is never able to relate her story of what she did or did not experience of the supernatural; she cannot confirm that she saw Pan. No one else truly knows what happens the night of the experiment and what can be known of the story is only found after the fact, and in fragments of narrative. The reader is left to piece together information and take many different people at their word without knowing the background or reliability of most of them. The nineteenth-century reader, hopeful for scientific proof of the supernatural, is not granted the details. In turn, the twenty-first century reader must recall this hope for the mystery to inspire suspense.

The story is not written conventionally with events revealed in the order they happened or in flash backs, but in fragments of narratives, that add to the reader's distrust of the experimental procedure. The manner through which the story is told causes difficulties in unravelling what happened and delays knowledge of the outcome of the experiment, and of the resulting fallout. Information about the events is withheld, revealed out of order, or presented as hearsay after the fact. Although Raymond seems to be the primary storyteller at the start of the novella as it is his experiment, the majority of the narration follows Clarke and his interest in strange stories. The reader is, therefore, investigating the stories with Clarke and not privy to the details that would contextualise what happens. Clarke collects "documents on the most morbid subjects" (Machen 26). The story of Helen V. as a young girl, Mrs. Herbert, and Mrs. Beaumont (Helen's aliases) need not be necessarily connected for him to remain interested. His "Japanese bureau" (Machen 25) of "pigeon-holes and drawers" could have a specific place for each (26). Nonetheless, these stories are connected and Raymond holds the key to unlocking the mystery. Clarke must unite the stories and work his way to the conclusion that all three women are, in fact, the same Helen Vaughan, taking readers with him on this

investigation. As the connection is uncovered, so too is the physical outcome of Raymond's experiment. This broken narrative adds to the importance of the observer for the reader. It is no longer just the witness to the experiment who is telling the story but also the witnesses to the events that follow. As the stories are told and collected, there are new witnesses with an interest in the later events but no vested interest in the initial experiment.

Machen's critique of supernatural science is offered through the scientist who threatens society by proving the potential danger of scientific meddling with the supernatural by creating a supernatural being he is not prepared to contain. "The Fragments," the final chapter, fills in parts of what has transpired over time but leaves the reader to make connections and draw conclusions rather than providing a clear narrative. The portions of a manuscript found after the death of "the well-known physician, Dr. Robert Matheson," are written by different people who observed different episodes of Helen's life and death (Machen 107). These pieces of letters and other documents begin abruptly or leave an idea hanging when they end without resolution. With no definitive resolution and most of the details needed to fill in the story revealed, the reader is left to do a certain amount of interpretation of the events left out of the narrative. Thus, the details of the outcome of the experiment are themselves permanently fragmented, leading to problems determining exactly what happened both during Raymond's experiment and as a result of it. The broken nature of this unveiling serves a useful purpose: no one can attempt to duplicate Raymond's process. In not relating meticulous procedures and lengthy descriptions of every aspect of the experiment, Machen notably marks Raymond's procedure as taboo, something which should not be replicated.

The conflation of ideas involved in Raymond's understanding of the world and the supernatural realm make it difficult to determine what possible outcomes readers are supposed to think he has considered for his experiment. Raymond claims that the world is "but dreams and shadows: the shadows that hide the real world from our eyes. There *is* a real world, but it is beyond this glamour and this vision, [...] beyond them all as beyond a veil" (Machen 11, emphasis in the original). He further states: "You may think all this strange nonsense; it may be strange, but it is true, and the ancients knew what lifting the veil means. They called it seeing the god Pan" (Machen 11). What Raymond's experiment is designed to do, therefore, is provide testimonial evidence about what is he calling the "real" world (the supernatural realm). He unfortunately cannot gather this testimony because Mary becomes insensible. She can never provide the descriptions that

Raymond appears to want and he sees this as inconsequential since he had no specific reasons for wanting the information. "Clarke, Mary will see the god Pan!" exclaims Raymond (Machen 15). This declaration that the goal is for Mary to see Pan, however, is problematic because it proves to be unmeasurable. Firstly, it is Mary and not Raymond seeing Pan; he will have to take her at her word for anything that she may see. Secondly, Raymond thinks that Mary owes him for saving her life and, as his servant, Mary would likely perceive it as her place to do what he wants. As such, Mary's testimony could not necessarily be trusted even if she had been able to provide it as planned. She knows the outcome Raymond desires and there would be no evidence to support any claims she makes about seeing Pan. Raymond's experiment, as intended, could never be considered scientifically creditable. In providing different results so that there is a physical outcome of the procedure, Machen suggests the sinister potential of even inadequate experimentation into the supernatural because so much is unknown.

The authority of science is tested in two ways in the narrative: Raymond's initial belief in his success without evidence and the unexpected physical outcomes of the experiment. Raymond takes Mary's insanity as the unavoidable outcome of her seeing Pan, a sign that his experiment worked even though she is incapable of saying anything about what she experienced or saw that night. This scene, with Mary laying helpless in her bed and Raymond coolly relating that he has turned her into an idiot, occurs only three days after the experiment (Machen 22-23). Raymond assumes that Mary's insanity is proof of her seeing Pan, rather than the result of his cutting into her brain. Her condition means Raymond can tell the story as he wishes and he chooses to understand it to be evidence of success that the subject of his experiment cannot relate what happened during the procedure. There is, in fact, nothing at this stage to support his idea that a loss of sense or any other form of insanity comes from seeing Pan. The doctor's hasty assumptions serve only to highlight his lack of regard for life and the danger of his scientific investigation into the supernatural since Machen neither finds nor creates a case for believing Raymond. In this way, Raymond's early claims of success challenge the reader's expectation that the scientist is reliable and to be trusted.

Machen interrogates questions of scientific ethics through the use of Mary as a human test subject within the story. Disregarding twenty-first century notions of informed consent, the effects of the experiment on Mary's body are what Raymond does not account for in his search for testimonial evidence of Pan. By the late nineteenth century, there was much debate about how to map the brains of animals and humans. Given

Machen's early (father-directed) destiny to become a surgeon not a journalist, he would have known this. That Raymond cuts into Mary's brain without accounting for unpredictability and danger, and while explaining himself to be far exceeding all others in knowledge, casts him as an irresponsible man with a God complex. In an article about Bram Stoker's brain-surgeon brother, Anne Stiles surveys Thornley Stoker's failures before reminding readers: "[b]ecause of the many risks involved, brain surgeries during the nineteenth century were still a last resort for a dying patient" ("Bram" 205). Raymond's experiment on a healthy young woman is needlessly dangerous to her. Even in those early pages of the text, readers should be able to discern that Raymond's behaviour is being critiqued.

Machen gives his reader a scientist recklessly experimenting on a human character when society had been condemning research on animals. In 1881, David Ferrier had been subjected to a well-publicised trial for allegedly violating the 1876 Anti-Vivisection Act as he "had been performing experiments in which he applied electrical currents to the brains of live monkeys, cats, and dogs. He then studied changes in the animals' behavior once they awoke from anesthesia" (Stiles, *Popular Fiction* 12). As Stiles notes, the cortical maps Ferrier created "proved to be lifesaving medical breakthroughs" but the public still deemed the experiments to be unreasonably cruel (*Popular Fiction* 12).³⁹ Raymond is, essentially, conducting his own localisation experiment on Mary in his zeal to document the purpose of the part of her brain into which he cuts. Furthermore, Raymond is not seeking to map the brain for future diagnostic use: he cuts into Mary's brain merely to prove his point. Mary is, regrettably, expendable not just to Raymond but also to Machen. The reader's attention is drawn to Raymond, his cruelty, and his results versus what he hoped to achieve (and his consequences) through the lack of attention paid to Mary in the story.

In this novella, Machen not only suggests the potential for science to one day uncover the supernatural but also the possibility that it already has. This experiment *does* provide concerning short-term, tangible, physical proof of the supernatural in the form of Helen that is a threat to the physical world. While the doctor's claim that Mary's insensibility is proof that she has seen Pan seems to be special pleading, her daughter is definitive proof that something happened that night. Mary does become pregnant and give

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³⁹ Stiles's chapter "Bram Stoker's Brother, the Brain Surgeon" details Thornley Stoker's knowledge and use of Ferrier's brain maps before connecting these ideas to Bram Stoker's *Dracula*.

birth to a daughter and, years later, men who spend the night with this daughter commit suicide. Looking back on the events, it becomes apparent that Raymond's experiment set in motion a series of incidents that eventually leads to the string of suicides. Although Raymond's proclamation that Mary has seen Pan three days after the experiment while she lay "wide-awake, rolling her head from side to side, and grinning vacantly" is premature (Machen 23), when she gives birth to a child "nine months after that night" (116), Raymond is faced with physical evidence that something supernatural occurred during the brain surgery he performed. The young servant girl was impregnated, somehow, presumably by Pan given the child's (and later woman's) unnatural characteristics. This physical proof of supernatural events is, to say the least, inconvenient for Raymond who must raise the child and attempt to dodge questions regarding her. Machen skips over this aspect of Helen's life to focus on the damage she causes. Inconvenient as physical proof of the supernatural may be, it is the danger of it which is greater cause for alarm.

Machen's novella raises questions about the dangers of not anticipating potential physical results for experiments designed to test the supernatural specifically and about scientific ethics more generally. In being unprepared for any physical outcome, Raymond releases a monster into society. The narrative does not linger on the effects of spending time with Helen as she herself is the mystery. That she is the cause of pain in both the quiet country family and the hustle of the city is accepted as fact and the only question is why. Helen's life is encased in insanity and death. Beginning with the night on which she is conceived, and her mother goes insane, to the night of her own suicide when Helen chooses death, she leaves a string of broken (and dead) people behind her. Raymond only wanted Mary to see Pan but the results of his attempt reach far beyond what he imagined. The idle curiosity that drives the scientist to experiment with the supernatural is not enough of a reason to justify what he produces in the physical world and the effects she has on society. Machen skips quickly over the actual experiment to focus on the outcome of the procedure. Like Corelli, he warns of the unpredictability of experimental outcomes and situates physical proof as undesirable and impermanent at this stage of scientific experimentation. Unlike Corelli, Machen suggests not only that science may one day interact with the supernatural but also that the effects may reach farther into society and negatively affect more than just the scientist.

The gaps in knowledge and hasty assumptions that characterise Raymond's scientific study are intended to draw critique from the reader. In case the scientist's hubris

and unpreparedness are too subtle to evoke critique, Machen further emphasises the unfinished nature of scientific discovery through the way the narrative is written. It is, therefore, noteworthy that even *this* experiment is capable of provoking the supernatural to action in the material world. The science and / or scientist does not have to be perfect to access the supernatural because the supernatural is not bound by scientific limitations. After all, Helen chooses to die.

Limited Knowledge: The Jewel of Seven Stars

The Jewel of Seven Stars tells the story of Abel Trelawny and his attempt to reanimate an ancient Egyptian queen's mummy through what he calls the "Great Experiment." Malcolm Ross, a friend and later fiancé of Trelawny's daughter Margaret, becomes involved when Margaret asks for his help due to her father's mysterious illness. As the novel unfolds, Ross learns the story of Trelawny's collection of Egyptian artifacts and, specifically, his fascination with Queen Tera which led to his having had his fellow Egyptologist Corbeck collect every item from her cave burial place. Although Ross and Margaret are unable to determine how, Trelawny's illness is connected to his Egyptian obsession. Trelawny awakens and explains his plans to Ross: to duplicate the conditions of Queen Tera's cave in an effort to allow her reanimation to be enacted through his Great Experiment. During the experiment, Queen Tera's mummy does move before it disintegrates, proving that there is some physical outcome of the experiment, but the experiment also costs Trelawny, Corbeck, Margaret, and Doctor Winchester their lives. Stoker leaves Ross as the sole surviving witness to the preparations and experiment but he is unable to explain anything. Both what happens and how the supernatural engages with the physical world are shrouded in (literal) smoke.

The experiment in Stoker's novel is grounded in the physical through the ancient Egyptian mummy, reflecting the nineteenth-century interest in Egyptology. Queen Tera is likely based on Queen Hatshepsut, whose tomb was discovered in 1902 and who Victorian Egyptologists were working to give a place in history (Luckhurst, *Mummy's Curse* 173). In her Introduction to *The Jewel of Seven Stars*, Kate Hebblethwaite details Stoker's personal interest in Egyptology both through his education at Trinity College Dublin and his collection of related texts, suggesting that the novel is "a showcase of Stoker's knowledge of Egyptian civilization and the literature subsequently inspired by it" (xix-xx). The study, and unwrapping, of mummies provided a way for the investigation of Egypt to be performed in the heart of London. Stoker's novel takes this

ability to study the ancient supernatural at *home* in England further by situating the action of the story in an individual's home.

Egyptology was uniquely situated as a discipline which was both physical and abstract, making it an ideal field for Stoker to use when suggesting caution in experimentation into the supernatural. If collecting Egypt's national treasures seems to be a straightforward task, though unethical by twenty-first century standards, the early inquiries into Egyptology are a much more confusing proposition given the mixed subject matter involved in the study. Stoker's crafting of Trelawny as a mad scientist using any and all means necessary to further his study, and thus overreaching strictly physical scientific investigation into the supernatural, is reminiscent of what twenty-first century scholars would consider the mixing of disciplines: science, religion, anthropology, and history. Yet these distinctions were less formal, more easily crossed, with less-defined boundaries in nineteenth-century England, particularly within sciences such as Egyptology. Histories of science from the 1960s onwards take into account various research problems. One such issue of misunderstanding earlier scientists is that of "anachronism of regarding scientists of previous centuries as men whose mental topography, canons of rationality and criteria for proof were identical to our own" (R. Porter, *History* 39). Porter further states that: "[c]areful reconstruction of scientists' thoughtworlds [...] showed their absorption in metaphysical and philosophical systems, in the occult arts and magic and in alchemy and astrology, all of which disciplines are clearly alien to today's sciences of which they have been called the founding fathers" (R. Porter, *History* 39). Science of the past is necessarily different from science of the present due to discoveries and the addition of new knowledge, both general and specialised. Nineteenth-century researchers were only just uncovering information that has since been classified in many different ways, including information regarding ancient Egypt. Thus, Stoker's contemporaries would have considered the interest in Egyptology to be scientific inquiry in its own right. It is not only Trelawny's experiment that makes him a scientist even though that is the most obvious marker of scientific interest to the twenty-first century reader.

In addition to hoarding amateur Egyptologists like Trelawny, the late nineteenth century also saw a substantial growth in more systematic approaches to studying ancient Egypt. Men such as W. M. Flinders Petrie and Percy Newberry began work that led to an understanding of scientific methods of archeology in the twentieth and twenty-first centuries. Documented on the pages of *Archaeological Report (Egypt Exploration Fund)*,

which was published from the 1890s through about 1911, men such as these sought methods of scientifically dating artifacts and determining their purposes.⁴⁰ Nevertheless, both sorts of Egyptologists coexisted, under the same name and without definitive distinction, at the close of the nineteenth century.

Egyptology, as a science, brought the subject of anthropological study into England and the private collector's home. Roger Luckhurst's *The Mummy's Curse: the True History of a Dark Fantasy* traces the history of Western interest in mummies and the development of mummy curse stories. It should be noted that many private collections of Egyptian artifacts were sold or given to the British Museum eventually. Luckhurst notes:

[i]n the 1830s, partly in rivalry with the collections of Paris and Berlin, the British Museum went through an intensive phase of acquisition, picking up the collection of Joseph Sams (1833), James Burton (1836), and Giovanni d'Anastasi (1839). When Egypt became part of the extended Grand Tour in the 1830s, amateur collectors also began gifting their finds to the museum. (*Mummy's Curse* 136)

Stoker's amateur collector is not strange for collecting the things he does; he represents a real trend of men of means buying Egyptian historical items. Museums gained many of their acquisitions from real life enthusiasts. Thus, Trelawny's interest is not, itself, unique as an obsessed private collector. Recall Postlethwaite's explanation of science as an undefined discipline often practised by amateurs in their own homes discussed in the introductory section to this chapter. Stoker depicts his scientist as one such individual.

Stoker's novel relies on a narrative tradition in which the physical remains of ancient peoples and the associated artifacts are the birthplace of fantastic narratives about the past invading the future. For those who did not travel to Egypt, the British Museum was the primary source of information. Luckhurst describes the museum,

A centre of sober scholarship and enlightened modernity, the Egyptian Rooms also gradually entered the cultural imagination as a very spooky place indeed, full of unruly or dangerous things, one of London's most haunted houses. This contradiction needs teasing out, to find at the root the uncanny mummy-thing, the sacred remains that could never be quite

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⁴⁰ See, for instance, Percy Newberry's "The Archæological Survey of Egypt. Mr. Newberry's Work, 1892-93" in the 1892-1893 report and W. M. Flinders Petrie's "Excavations at Deshâsheh" in the 1896-1897 report. Each of the reports addresses the development of the study of the tombs and the methodology used in some way.

contained as museum artefacts, biologically or anthropologically reduced to exemplifications of pre-modern beliefs. Instead, the mummy remains a curio, which, precisely because of its location in the Museum, begins to leak strange and vengeful stories. (Luckhurst, *Mummy's Curse* 134)

Source of knowledge but haunted house, the museum is historically both an epicenter of mystery and of information. In other words, the Egyptian Rooms were essentially the archeological equivalent of the scientific supernatural.

Stoker sets up Trelawny's story to be one that is simultaneously in pursuit of knowledge and an ideal backdrop for the unexpected because of the way the mysterious museum environment he calls home mirrors the dual purpose of a museum. Trelawny is the master of his household and collection, and simultaneously unaware of what the consequences of his Great Experiment will be. As Jasmine Day notes in *The Mummy's* Curse: Mummymania in the English-Speaking World, "[n]ineteenth-century museums displayed exotic objects from foreign cultures but interpreted them in Western terms, not from the viewpoints of their makers and users" (12). Trelawny has assigned purpose to all of Queen Tera's things based on his assessment of her intentions, but it remains his opinion. There are too many unknown factors intertwined in the fabric of the experiment, something that Stoker highlights in Trelawny's rambling guesses about causality, and specifically radiation, throughout the preparations. The broadness of the possible methods highlights the potential of science. Stoker is suggesting that it is not important that the scientist know the specific means by which something will happen in his experiment but that he be open to whatever does happen. Accordingly, Stoker foreshadows the ending of the novel and the importance of the haunting of these locations in Trelawny's early, unexplained, illness. Experimentation with the ancient supernatural cannot be strictly focused on the physical since there is supernatural potential to act during the experiment.

While recognising Trelawny as a scientist requires attention to the history of Egyptology, the references to contemporary theoretical science that was not yet understood act as markers that there is something more than the study of an ancient culture going on. Trelawny's interest in late-nineteenth century theoretical science suggests Stoker intentionally situates him as forward-thinking. The most interesting of these references is to radiation, given the period during which the book was written. Due to how little was known about radioactive elements, which were first discovered in the late 1890s, people were still imagining endless possible uses for radium. Building on their interest in uranium, Pierre and Marie Curie discovered polonium and radium during

research for a paper they published in 1898 (Ogilvie 69). As Marie continued her research, "in 1900, the Curies collected all of the research on radioactivity that they could find and published it in a long paper. Although they described the properties of these rays, the source of this curious energy remained unknown" (Ogilvie 72). It was not, however, until 1902 that Marie was able to isolate radium and 1903 when her thesis was published (Ogilvie 72). As *The Jewel of Seven Stars* was first published in 1903, Stoker's use of radium as a possible means of Queen Tera's reanimation situates him, at least narratively, on the same trajectory as the Curies. His fictional scientist is interested in both the ancient sciences and the most recent discoveries.

Here, however, there is irony that the twenty-first century reader can understand but which was hidden to the original, early twentieth-century reader: Trelawny proposes as life-giving what is, in fact, life-taking. It is evident that the Curies were proud of their glowing discovery. The Nobel Prize website entry on the discovery of Radium and Polonium notes that, at the party following Marie's thesis defense, Pierre produced a "little tube, partly coated with zinc sulfide, which contained a quantity of radium salt in solution. Suddenly the tube became luminous, lighting up the darkness, and the group stared at the display in wonder, quietly and solemnly" (Frōman). Radium's glow was thus a party trick to its discoverers by 1903. It would still be three decades before Marie Curie would die of complications due to radiation poisoning from her research. By the 1920s it "was becoming more and more difficult to ignore the harmful effects of radium" (Ogilvie 153). Although Marie and the others in her family suffering from radiation poisoning were hesitant to blame radium, people who worked in labs and factory workers who dealt with radioactive substances were making public claims about the dangers of radioactivity (Ogilvie 153-154). Marie Curie died on July 4, 1934 from complications of what her doctor called "long accumulation of radiations" (Ogilvie 164-165). The potential of radiation has been explained since the publication of the book but this does not erase the hope that predated the discovery of the danger. In that historical moment, Radium was a "radiantly beautiful," glowing, blue element full of potential (Ogilvie 72). Stoker's scientist's hope of success is built on the framework of real scientists' discoveries, taken in a direction that the discovery did not ultimately lead. This does not, however, negate the scientific potential of the time before the latter discoveries were made.

In the midst of narrative foreshadowing of the importance and danger of the supernatural, Stoker emphasises the scientist's single-minded focus on the physical through the discussion of the artifacts at the expense of any due attention to the

supernatural. It is through the hoard of items that Stoker can establish the museum-like aspect of Trelawny's collection, connect him to Egyptology, and emphasise the physical aspect of the experiment. When the group moves to the location Trelawny has selected for the Great Experiment, each item from the cave is treated like an exhibit of her burial chambers in that it is all carefully packed, moved, unpacked, and positioned to be an exact replication of Queen Tera's tomb. Ross recalls of packing the artifacts: "For my own part I had had a vague idea that there were a large number of Egyptian objects in Mr Trelawny's house; but until I came to deal with them seriatim I had little idea of either their importance, the size of some of them, or of their endless number" (Stoker, Jewel 1903, 192). The Great Experiment requires more than just the mummy and some scientific tools, contrasting with Corelli's experiment in which things are important and costly but not actually central to what El-Râmi hopes to accomplish. Trelawny believes that the things are going to be key to the success of it all and this obsession with material objects allows him to justify his years of study and grave robbing. Trelawny has sent Corbeck after every last item and documented where everything should be. Here, Queen Tera's possessions are as important as she is as a possession. Queen Tera, after all, is a mummy that is of central concern in the experiment. The group may come to see Margaret as speaking for the queen and attempt to do what they think she wants but the mummy remains an object to be acted upon. The experiment itself is an attempt to allow her to return to her body: to become physical again. In writing Trelawny as obsessed with the objects he has collected to this degree, Stoker critiques a scientist's focus on physical things and suggests that they will not, and perhaps cannot, be the key to an experiment with supernatural intentions.

Stoker's critique of both science and the supernatural becomes evident in the detailed focus on the artifacts because the physical aspects of the experiment cannot control what Trelawny hopes to accomplish. Trelawny creates a lab environment with artifacts in the place of scientific equipment to scientifically test the preparations Queen Tera made for her resurrection before her death. He takes precautions to have reliable observers and controls every possible physical detail. In Trelawny's care, however, is not an objective scientific experiment but the supernatural intentions of an ancient queen who had been "learned in the lore of the very priests themselves" (Stoker, *Jewel* 1903, 128). Queen Tera's father had:

gone to further lengths [to protect her], and had had his daughter taught magic, by which she had power over Sleep and Will. This was real magic

- "black" magic; not the magic of the temples, which [...] was of the harmless or "white" order, and was intended to impress rather than to effect. [...] She had won secrets from nature in strange ways; and had even gone to the length of going down into the tomb herself, having been swathed and coffined and left as dead for a whole month. (Stoker, *Jewel* 1903, 128-129)

On the one hand, Trelawny is conducting an experiment of his own design. He has recreated everything about the tomb according to his own understanding. He determines the time of the event based on his calculations. The experiment is firmly in Trelawny's hands because he has possession of the contents of Queen Tera's tomb which were supposed to allow her return.

On the other hand, however, Queen Tera is controlling what happens in the cavern under Trelawny's house through the narrative emphasis on her plans which highlights gaps in the scientist's understanding. To the extent that they understand her wishes, the group is doing what they think the queen intends. The question throughout the preparations is never "how can we revive the mummy?" but "what has she planned to allow for her resurrection?" Stoker reminds readers of Trelawny's misplaced focus in the physical through the things the Egyptologist takes for granted. Trelawny is testing the procedure but is accepting Queen Tera's beliefs as true for the basis of his test. Thus, the experiment is guided, not by empirical scientific procedure, but by the ancient Egyptian queen's understanding of magic and her attempts to manipulate Sleep in order to be resurrected from the dead. Stoker juxtaposes these emphases so that the incongruity of the experiment is evident to the reader. The focus on the physical in the experiment is inadequate to explain the experiment and still leaves the supernatural wholly unaccounted for. In turn, this means that the supernatural remians open to later scientific investigation regardless of the outcome in this instance because any results of this experiment are specific to this mummy and the assumptions they make about her wishes.

The role of Queen Tera, the potential supernatural power in the novel, implies that the supernatural may circumvent physical restrictions that a scientist may attempt to put in effect. At first consideration, she is nothing more than a mummy in the possession of Trelawny with no ability to speak for herself directly or to enact any aspect of the experiment. Some critics, such as Andrew Smith, allow for some agency on her part but posit that she is "a Gothic monster, one who is simply using the group to stage her resurrection" (83-84). Yet this does not fully account for her strange relationship with

Margaret (discussed below). Regardless of what she is, her wishes and desires saturate the fabric of the experiment. She is a central object of study and the one dictating the rules of the experiment; she is not present but always consulted; she is being tested but her actions determine the outcome of the test. Queen Tera is both the measure of success and the one who determines if the experiment gets to be successful. For an inanimate mummy, Queen Tera exerts an impressive amount of power over Trelawny's plans from the (relative) safety of her sarcophagus. Whether or not she is speaking through Margaret is actually unimportant because they *believe* that she is. Trelawny wants Queen Tera to be a mummy he controls, and in a physical sense she is. Still, she is also more than an artifact of ancient Egypt because he treats her as such. Queen Tera is understood to be the spirit speaking through Margaret that dictates the details of the experiment because they give her this power. As such, it is the supernatural which is governing the experiment in spite of the scientist's consuming focus on the physical.

Margaret's connection to Queen Tera is the most complicated aspect of the supernatural depicted in the novel, as it is unexplained and yet taken for granted as true that the dead queen is able to speak through the living young woman. In this way, the experiment itself is unnecessary, since they already believe that Queen Tera is acting in their contemporary world. This connection is observed by everyone long before the experiment actually takes place. Margaret's changing behaviour is the only possible proof for the supernatural that Stoker allows Ross to observe closely enough to record. Ross asserts that the hold Queen Tera has on Margaret seems to grow as time for the Great Experiment draws near (Stoker, Jewel 1903, 201 and 204). Potentially because he does not understand the scientific or the supernatural sides of the experiment, Ross misses the support for the existence of a lasting soul that he does have. Trelawny implies that astral projection could lead to the possession of another living person but he, like Ross, neglects to recognise the value of the observational evidence in hand. Margaret's resemblance to Queen Tera is repeatedly noted, as are the references to her being "unlike her mother; but in both feature and colour she is a marvelous resemblance to the pictures of Queen Tera" (Stoker, Jewel 1903, 136). Furthermore, Margaret has a birthmark on her wrist, "a thin red jagged line, from which seemed to hang red stains like drops of blood!" that matches the stain on the mummy from where its hand was broken off (Stoker, Jewel 1903, 160). The most noteworthy association between Margaret and the ancient Egyptian queen, however, are the circumstances of Margaret's birth. When Corbeck relates the story, he says: "the child was born after the mother's death – [and Margaret's birth] took place

during the time that we stood in that trance in the Mummy Pit of Queen Tera. It seemed to have become in some way associated with his Egyptian studies, and more especially with the mysteries connected with the Queen" (Stoker, *Jewel* 1903, 136). Margaret is physically marked by her father's obsession with Queen Tera and she is the queen's voice in the story. As such, Margaret is the proof of a supernatural power, stronger than nature, and able to act in the physical world.

That Stoker provides so much of this type of evidence to the reader that the characters overlook suggests that he wants readers to note the characters' folly as they needlessly press on towards the dangerous experiment in search of a specific type of material evidence. For instance, when musing on Margaret's connection to Queen Tera, Ross observes: "whatever power of necromancy the Sorceress had might have been exercised over the dead mother, and possibly the dead child. The dead child! Was it possible that the child was dead and was made alive again? Whence then came the animating spirit – the soul?" (Stoker, Jewel 1903, 206). Ross is obviously contemplating the similarities between Queen Tera and Margaret in connection with the strange circumstances of her birth. He begins to question what they are taking for granted about Margaret. Trelawny and Corbeck, however, do not see the potential for physical evidence in the relationship between Queen Tera and Margaret. As such, they are not interested in exploring this aspect of the supernatural and Stoker leaves this connection as something that can be observed but is not explained. It is evidence of his critique of the scientist. The Egyptologists want evidence of the supernatural on their terms and in a way that would validate their obsession with the artifacts they have collected.

Accepting evidence of the supernatural outside of the experiment Trelawny devises would position the supernatural as outside of scientific authority and able to act in the material world of its own volition. The assumption that Margaret is linked to Queen Tera is the greatest example of this. For example, Ross muses to himself as he considers his fiancé's physical likeness to the dead sorceress:

The dual existence! This was indeed the conclusion which overcame all difficulties and reconciled opposites. If indeed Margaret were not in all ways a free agent, but could be compelled to speak or act as she might be instructed; or if her whole being could be changed for another without the possibility of any one noticing the doing of it, then all things were possible. (Stoker, *Jewel* 1903, 208)

The ready acceptance of this dual existence without testing it means that the men feel confident of the queen's wishes due to Margaret's approval of the plans for the experiment. Margaret's understanding of Queen Tera as asleep rather than dead means that she empathises with the queen and wishes to protect her. The only approval she temporarily withholds is of the men unwrapping the mummy on the basis of modesty. She only relinquishes the point when her father posits that not removing her wrappings would result in the queen's immediate death when she wakes up still encased in her burial shroud (Stoker, Jewel 1903, 230-232). In this scene it is unclear whether Margaret's concern is as an agent of Queen Tera or merely that of a woman who would not have a vulnerable woman undressed by a group of men. Either reading, however, is equally telling since Trelawny does not proceed until Margaret assents and leaves unable to watch the "horrible indignity" (Stoker, Jewel 1903, 232). Her father goes so far in assuming Margaret's connection to Queen Tera as to ask Margaret on behalf of the queen to prove her dedication to the resurrection by agreeing to the "abandonment of your Familiar to death – to annihilation?" (Stoker, Jewel 1903, 225). The permission he seeks is from Queen Tera ("your Familiar") but he asks his daughter for her assent. In these instances, the supernatural is assumed to be acting in the material without the escort of science.

Stoker's use of a mummy's curse aligns with contemporary stories of the consequences of disturbing a mummy's tomb and the supernatural revenge doing so would inspire in the physical world. These stories document the danger of disrupting supernatural forces that are not understood and cannot be scientifically explained or, perhaps more importantly, contained. Luckhurst notes that, although the curse of Tutankhamun in the 1920s is the most famous,

the Tutankhamun story followed a script that had already been prepared for it by at least two prior instances that were widely known in the late Victorian and Edwardian periods. Precisely because they circulated as rumors, these stories are poorly remembered, often returning in incoherent or fantastically elaborate fragments to bolster up the Tutankhamun case. (*Mummy's Curse* 23)

These late Victorian and Edwardian curse stories vary due to the nature of the storytelling. Luckhurst has traced a legacy of misfortune to the coffin lid of a Priestess of Amen-Ra that was brought back to England in the 1860s and is said to have caused a number of deaths and lost fortunes, even eliciting a warning about its evilness from Madame Blavatsky, until it was gifted to the British Museum in 1889 (*Mummy's Curse*

31-32). The mythology surrounding mummy curses has "tended not to differentiate between archaeologists and thieves" in general and Corbeck and Trelawny have been both (Day 4).

Where the chain of events begins marks the difference between an occult myth (such as curse stories) and a scientific investigation. The curse stories discussed above are centered on alleged supernatural activity without scientific prodding from someone in the material world. If a scientist sparks the supernatural into action (and within the accepted limitations of his study), then the result is respectable and even desirable. Should the supernatural act in the material world without invitation, it is to be feared and, if at all possible, vanquished. Blavatsky's participation in the perpetuation of curse mythology is, perhaps, the most intriguing support of this desired power dynamic between the supernatural and the material. As the woman at the very centre of the Theosophy movement, she would seem to have a vested interest in the supernatural acting freely in the material world. Yet she issues a warning about an object that is said to be cursed. It is one thing for her to unite all seemingly supernatural events into one theory that can be explained to the world in extensive volumes she wrote. It is something else, and entirely unacceptable to her, for there to be a power at work that cannot be contained and is instigated by something supernatural. Whether in Stoker's novel or in history, the starting point for interaction between the physical and supernatural realms must be in the material world for the balance of power to remain in favour of the physical world and the understood laws of nature. Free agents of the supernatural threaten this dynamic by suggesting the supremacy of the supernatural over science.

Stoker creates his own curse narrative within the novel to show that this is not the type of supernatural concern with which a material-obsessed scientist would be interested because of the missing potential for it to yield physical proof. Chiseled into the rock surrounding Queen Tera's cave burial place are the words: "Hither the Gods come not at any summons. The 'Nameless One' has insulted them and is for ever alone. Go not nigh, lest their vengeance wither you away!" (Stoker, *Jewel* 1903, 124). The threat of the curse is both specific and vague simultaneously. The occupant of the tomb is unnamed. What she did to result in spiritual exile is not recorded. Which gods were insulted is left to the imagination. The only thing that is clear is that entering the tomb will result in death. Since the manner or timing of death from the curse is not related, however, those invoking the curse will be found to have accurately predicted any invader's fate, eventually. Corbeck suggests that a "hostile priesthood" must have carved the

hieroglyphics into the cliff but even that is not certain (Stoker, *Jewel* 1903, 124). Given Queen Tera's preparations for her resurrection, the curse could be part of her plans: an effort to keep grave robbers from looting the cave and taking the things she has prepared for herself. The deaths of those actively engaged in the Great Experiment can be read as the fulfillment of the curse with Stoker providing an ironic, long-awaited resolution for this detail. The imprecise nature of this initial ending to the novel provides a fertile ground for any of these possible outcomes which would allow supernatural supremacy. The curse is, nevertheless, mostly ignored by the characters in the novel because it puts control in the hands of a supernatural agent rather than the scientist.

In Trelawny and Corbeck's deaths at the end of the novel, Stoker erases the possibility of any of those involved in the experiment understanding what happened whether the supernatural or science caused it. The ambiguity that shrouds the novel's end and the lack of trained witnesses provide options as to whether or not the Great Experiment does, in fact, do what Trelawny hoped. Regardless of how, the mummy does move out of the sarcophagus because Ross relates that he moves someone he thinks is Margaret into the hall but returns to find that "[h]er body was not there. But on the spot where [he] had laid her was Queen Tera's Bridal robe, and surrounding it the girdle of wondrous gems. Where the heart has been, lay the Jewel of Seven Stars" (Stoker, Jewel 1903, 244). Thus, although Queen Tera does not come back in a physical resurrection, for long if at all, something does happen that animates her body for at least a brief time. The other possibilities hinted at throughout the novel remain. The physical body Ross picks up off the floor is evidence of supernatural activity, despite that it disappears. Ross knows something did happen: the experiment has resulted in supernatural activity in the physical world. The missing details caution that scientific study may not be able to explain the supernatural, even when it is evident in the unfolding of events.

The later revision to Stoker's text, published in 1912, rewrites his ending to be less morbid but at the expense of changing the outcome of the experiment on the material world. In the revised ending, the Great Experiment amounts to nothing. Black smoke fills the room and the mummy disappears; ash covers the room. Everyone lives. Margaret and Ross marry, the bride wearing Queen Tera's robe and jewel for the ceremony. Editors explain that the authorship of the revised ending is uncertain "as, by 1912, [Stoker] was very ill. A number of inconsistencies between the first half of the chapter (unchanged from the 1903 version) and the final part have also been cited as evidence for Stoker's non-involvement" (Hebblethwaite, "Appendix" 245). These inconsistencies are mainly

plot points, such as the location of the mummy cat. Although fitting in that no marriage penned by Stoker avoids being uncanny in some way, this ending is at odds with the story the rest of the novel has set up. The later ending results in a plot climax that amounts to nothing more than actual smoke and removes the experimental potential in favour of a less deadly Great Experiment. Throughout the text, Stoker has warned that not everything about the supernatural can be understood and pointed to potential, both scientific and supernatural. Both an emphasis on potential *and* critique are woven into the novel. The text is filled with what *may* happen and even what *might* have happened in the past. The revised ending of the novel, therefore, deviates from Stoker's preoccupation with scientific possibilities and his careful balance of critiquing science and the supernatural in similar measure. Whether or not Stoker was involved in composing the revised ending, the changes made to the conclusion of the novel suggest that there had been a shift in the expectations for a science of the supernatural that resulted in a reading public to whom the open-ended potential of the scientific supernatural was less satisfying.

Ultimately, Stoker's novel insists on the existence of the supernatural and affirms that it evades material trappings in this instance. Trelawny's experiment does not do what he sets out to do even though he does cause the supernatural to act in the physical world. The detailed plans for the physicality of the experiment failed to account for the Egyptologist's inability to predict and recognise the supernatural in such a way that would allow him to obtain the proof he desires. Stoker's cautionary message, therefore, is not of the apocalyptic possibilities of dabbling in the ancient Egyptian supernatural but in thinking that everything can be explained in physical terms and accounted for in material objects. In Stoker's novel, the scientist only seems to maintain authority over the supernatural because the scientist pays no attention to the ways that the supernatural is already acting in the material world. The experiment, nevertheless, proves the dangerous nature of the supernatural and its ability to act within the physical world.

The novel's mysterious ending epitomises Stoker's critique of scientific experiments in the supernatural in that both science and the supernatural are called into question. The reader is given no help deciding whether the experiment works or Queen Tera's magic accomplishes whatever it is that happens in nineteenth-century England. The unanswered questions blur the lines between the possible causes of the events. The blurriness is intentional though as Stoker has carefully critiqued both the scientific and the supernatural aspects of the experiment. Hence it is filling that Ross (and readers) cannot ascribe supremacy to one factor over the other.

Dangerous Potential and Necessary Lack of Detail

In these novels, science is granted the authority to investigate the supernatural and, hopefully, prove its existence in some way recognisable in the material world. Corelli, Machen, and Stoker each write novels in which the scientist is successful in proving the existence of the supernatural – just not in the way that he hoped to be. The proof is not precise and measurable; it is suggestive and incomplete, full of potential. There is a result in the physical world for a cause in the supernatural realm. Yet each author chooses not to relate the respective scientific experiment in the level of detail throughout the novel which would make duplication of the experiment possible and position science as having definitive authority over the supernatural. What results is a tension between the scientific exploration within the novel and the reader's expectations of how the supernatural should manifest as a result of the experiment.

The scientists' focus is misplaced: rather than document the supernatural, they attempt to confine it within pre-existing standards which account for the physical world. As the theme develops across texts, it becomes apparent that the authors are suggesting a role for the supernatural that supersedes their contemporary scientists' current scientific knowledge, while still allowing for future scientific developments that will provide safe, manageable, or appropriate proof of the supernatural. Without the ability to predict how the supernatural will manifest, the scientific experiments are dangerous. The danger itself is necessary not only as a warning of overreach but also as a reason for the lack of narrative explanation at the conclusion of the novels. A silenced scientist cannot reveal his method, thereby allowing others to follow in his footsteps to the same unfortunate end. It is not the nature of a specific warning or the hypothesis of any single novel that is important but the way that specific features occur in each of these novels.

Readers are consistently given the evidence of the supernatural acting in the physical world and the means to accept the story as reliable within the world of the novel. In each case, the author carefully establishes observers to the experiments who have no vested interest in the outcome. Corelli gives her readers two witnesses to El-Râmi's experiment: Zaroba and Féraz. Neither of these characters is invested in El-Râmi's search for death in the supernatural realm nor are they specifically invited as witnesses into the room. Zaroba is a necessity in her role as caretaker and Féraz's introduction to Lilith was strictly forbidden. Still, they respond to Lilith's condition in ways that affirm her as real and ultimately make El-Râmi reconsider how he views his test subject. Machen's Raymond specifically recruits a respectable witness into his lab to be present during the

procedure. Much of what Raymond says is suspect but this does not greatly influence the experiment because it is Clarke, the reliable witness, who pieces together the narrative and confirms the validity of the supernatural. Stoker's Ross does not have the same distance as Clarke given his speedy engagement to Margaret, but he does have every reason to watch the progression of the Great Experiment and hope for a favourable outcome. The witnesses do not have to understand what is happening, merely know that something does happen. Through these characters, the authors remove the problem of a scientist telling his own story for his own gain. They are skeptical of the scientists' methods and, therefore, trustworthy in what they observe.

That the witnesses are free to question the scientists' methods is important and so too are the gaps in their knowledge base which result in unrepeatable experiments. These representations of experiments into the supernatural provide evidence of the supernatural acting in the material world. In order for this evidence to remain valid, the outcome of the experiment must never be rechecked. Thus, it is vital not only that the scientist not be the one telling the story but also that he not have fully taught the witness what he does. Zaroba, Féraz, Clarke, and Ross miss important details. Whether because they cannot understand them (as may be the case with El-Râmi's choice of witnesses) or that they cannot see the main event (Clarke and Ross), the resulting stories are missing important parts. The process of the experiment is lost with each respective scientist.

Despite this intentional omission of scientific detail, these experiments do rely on different aspects of nineteenth-century science (to differing degrees) in the attempt to prove the supernatural. Corelli, the only one of the three authors to focus entirely on scientific studies of the supernatural, exposes the soul of Lilith under test conditions which would have stood up to contemporary scrutiny. Machen criticises localisation experiments and vivisection. Stoker reveals interests in various sciences, most notably Egyptology and radiobiology (though the field had not yet been defined). Each of these fields were experiencing great change in the *fin de siècle*. As such, each had great potential for discovery.

It is this potential for discovery that ultimately governs these novels which depict scientific experiments into the supernatural. As the authors set up their experiments, they rely on the nineteenth-century reader's expectation that physical proof of the supernatural could, and would, be found. That each scientist is successful in causing the supernatural to act in the physical world answers this desire. The danger inherent to these specific experiments makes the loss of the ability to repeat them acceptable. No one wants to

reconduct the experiment that costs everyone their lives and still only proves that the supernatural exists and is uncontainable. The actual results of the experiments are, therefore, more suggestive than informative. The scientists have done *something*. They have shown the supernatural can be active in the physical world. It can have material effects. In establishing this possibility, these experiments affirm the potential for science to, one day, provide a way for the supernatural to be fully understood. Since it can be observed, accessed, and provoked, there is hope that it will also be explained.

The potential of science to experiment with the supernatural suggests that there will be an eventual answer to supremacy in the scientific supernatural. Either science will explain the supernatural, thereby subjugating it to scientific laws and definitions, or the supernatural will definitively elude that kind of definition. The fictional critiques of both factors offered by the authors discussed here ultimately avoid predicting which result will win out. The various scientists' focus gets the most direct (and sustained) critiques. In this way, the authors use these experiments to engage with other scientific concerns of their day. The experiment is simultaneously useful for depicting a popular concern and for commenting on other scientific movements.

Conclusion

Investigating the Scientific Supernatural in Fiction

The novels discussed in this thesis were all published in a 25-year period, a relatively short span of time bridging two centuries. The earliest of these novels, *A Romance of Two Worlds* (1886), deals with the joining of faith and science in a system of belief. The latest publication date for the novels discussed in this thesis is 1911, that of Stoker's *The Lair of the White Worm*, which engages with observed phenomenon in the late nineteenth and early twentieth centuries. Both authors and scientists were exploring the various sciences discussed throughout these chapters in an overlapping period of interest in the scientific supernatural. The authors' representations of these sciences in fiction have been largely lost to twentieth and twenty-first century literary criticism.

Attempts to bolster systems of belief through science, such as those examined in Chapter 1, are perhaps the most foreign to the twenty-first century reader in that the appeal to science would now be considered an appropriation of science by religion. Yet in these texts it is evident that the presentation of the supernatural is intended to be read as scientific in nature. Novels such as these by Corelli and Marryat are not merely the fictional depictions of fantastic systems of belief nor personal apologetic texts (though they may be these things also). These novels reflect an interest in the potential connections between science and the supernatural at this specific point in history from the perspective of the ready believer. In these stories, the authors show the possibility for science to support a belief in the supernatural whilst faith in the supernatural likewise supports scientific interest. Credibility, therefore, flows in either direction in these novels. The authors would have a believer come to understand his or her faith as scientific in the same way that they hope that a scientist would come to faith through reading their books. In either case, the system of belief and science converge in a way that does not require a specific designation of authority. Through these novels, the authors demonstrate an approach to understanding potential connections between science and the supernatural: combining religious understanding (to account for the role of the supernatural) with scientific interests (represented through a scientist figure). Given both authors' claims of personal belief, the heavily didactic novels serve to teach the scientific supernatural as reconcilable through their respective systems of belief without the need for additional scientific proof.

The observed phenomena discussed in Chapter 2 present a different problem to the twenty-first century reader in that the authors wrote with the expectation of readers' familiarity with specific contexts which have since been forgotten. The scientific expectation that grounds Marryat's doctor and the genuine fear that Stoker expected mesmerism to trigger require knowledge of late nineteenth-century scientific uncertainties. To return to Alison Winter's warning regarding perceptions of nineteenth-century mesmerism, "[W]hat is relevant to this history is not whether they happened but whether they *could* happen in Victorian eyes" (11, emphasis in the original). Although Stoker's mesmerism is intertwined in a novel with multiple plots, at least one of which would always have been read as fantastic, the potential effects of mesmerism were real to his contemporary readers. Marryat, meanwhile, considered herself the recipient of a diagnosis similar to her character's unhappy condition. The unexplained effects of the supernatural realm on the physical world reveal the uncertainty and the perceived likelihood of supernatural explanations for what science could not yet name. The issue was not a matter of authority but of potential for later certainty.

Given the reception of phenomena such as mesmerism in the real world, as described throughout Chapter 2, the authors of these novels did not need to convince their original late nineteenth-century readers of the horrible side effects of a mesmeric glare or spending too much time with an indeterminately toxic person. As such, these novels are not, themselves, explanatory. Marryat's pretty young villain's story unfolds without recourse to heavily didactic prose. Stoker's narrative progresses so rapidly that it fails to even account for various events in the novel. Yet, in both cases, the depicted phenomena draw from late nineteenth-century science and various understandings of potential connections between science and the supernatural.

In these novels in which the authors depict the supernatural as observable in the material world, and with the potential to provide answers to questions where science was only leaving uncertainty, the plot of the novel depends on the role of the supernatural in the physical world. Authors who wrote of the scientific supernatural in this way assumed the reader's awareness of the various possible interactions between the supernatural realm and the material world. In contrast to novels such as those discussed in the first chapter, which are mostly hopeful in outlook, these depictions of the supernatural realm reaching into the physical world are cause for caution and fear. The observations reveal that there is some sort of connection between the supernatural and science that cannot be fully explained.

The experiments of Chapter 3 reveal fictional attempts to answer *fin de siècle* concerns regarding scientific investigations through experimentation and critique. The novels discussed throughout the chapter have differing degrees of identifiable scientific procedure to the twenty-first century reader. While Machen's experimental set up seems the most straightforward and *scientific*, human testing *vis-à-vis* a lobotomy to enable her to see a Pagan god invalidates this assumption early in the text. Yet the experiments represented in the novels follow scientist-driven processes in the attempt to investigate the supernatural as relevant to the concepts of the scientific method that were still evolving.

Each of the authors discussed in the chapter create scientists who delve into the possibility of scientific experimentation and documenting the supernatural with different aims and through different means of investigation. Corelli's scientist assumes the supernatural and seeks scientific evidence of one aspect of the afterlife. The scientist in Machen's novel is uninterested in the physical proof he obtains. Stoker's scientistcharacter is, essentially, the opposite of Corelli's in that he assumes science will eventually fully explain the way that the supernatural realm works, the potential it holds, and everything he does not currently understand as due to properties of the various elements of the experiment. Despite the very different goals ascribed to the fictional scientists, each of the authors concludes with the impossibility of the experiments they depict providing proof of the supernatural at that time. There is a tension between the experiments not working out as the scientists want and the potential to which the outcomes point. In the historical moment when these authors are writing, it is the experiment itself that is important as evidence of the desire to systematically unveil something about the way the supernatural realm works or the way that it interacts with the physical, material world.

That these novels suggest experiments as a way to gather information to describe the scientific supernatural while still refraining from providing definitive proof (even in fiction) highlights the authors' emphases on the critiques they provide. Real experimentation had not yielded a repeatable experimental process for testing the supernatural, though there had been tests suggesting something unknown was occurring under the test conditions. Each of these authors chooses to do the same as he or she depicts scientific supernatural experiments that engage with subjects of their contemporary scientific debate. Evident in the gaps in information they give the reader,

they are unconcerned with ascribing authority for what happens in the experiments. The detail given is to provide the critique of the experiment.

The various depictions of the scientific supernatural discussed throughout this thesis demonstrate the breadth of the field for these sciences. Rather than empty belief based in a desire to have a science of the supernatural, there is depth to the *fin de siècle* understanding of these things as scientific. Nineteenth-century experts and laypeople alike prodded the topic from different angles in the hopes of synthesising a scientific approach to the supernatural. Concepts evolved and hypotheses were revisited as scientific study progressed (for example, the shift from mesmerism to hypnotism or the burgeoning understanding of radiation). The lack of a specific methodology for defining the scientific supernatural in fiction reveals that these authors were engaging with the simultaneous trends as opposed to attempting to create a pattern.

Within the scientific supernatural, there is no clear authority. In each chapter of this thesis, the authors vary in claiming authority for science or the supernatural to fit the story and the other issues raised in the narrative. It is important to note that even individual authors depict authority differently for different types of novels. Consider Marryat's depiction of the supernatural as the primary authority in Chapter 1 in juxtaposition with her focus on a doctor of scientific authority discussed in Chapter 2. The scientific supernatural allows for this type of flux.

Recovering a broader understanding of science closer to that which was recognised at the *fin de siècle* is also important because it brings these novels to light and they, in turn, reveal variations on expected plot arcs. The scientific supernatural was a catalyst for a bildungsroman becoming a spiritual bildungsroman and for a marriage-plot novel to portray the marriage through the bride being struck dead by lightning (or, in a different example, committing suicide). Alternatively, the concurrent plots of Stoker's *The Lair of the White Worm* juxtapose folklore and his contemporary science in a complex way that seriously impacts the way the novel flows. Something about the way the authors integrate the contemporary scientific interest in the supernatural seems to lead to revision to the expected narratives. Whether posing alternatives or simply strange complications, the authors experiment with different plots and variations on expected endings in fiction such as has been addressed throughout this thesis. Essentially, scientific experimentation seems to lead to authors experimenting in the way that they depict the associated stories.

These fictional representations of the scientific supernatural reveal a literary interest in a more broadly defined definition of science than has previously been recognised by literary critics. In contextualising bizarre scientific trends and sciences lost to history, this thesis suggests that a field of study which has, until recently, seemed to have precise boundaries is actually quite porous, with many sciences in the periphery waiting to be given their due consideration and used to shape literary critical understandings of fiction. Just as Gillian Beer and Tess Cosslett have established the general field of study for nineteenth-century science in realist novels, there needs to be research into the other sciences that appear in various other types of fiction. Depictions of science in the late nineteenth-century, and specifically at the *fin de siècle*, are made up of both lasting scientific theories in realist novels and fantastic sciences, such as the scientific supernatural, in other types of novels.

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