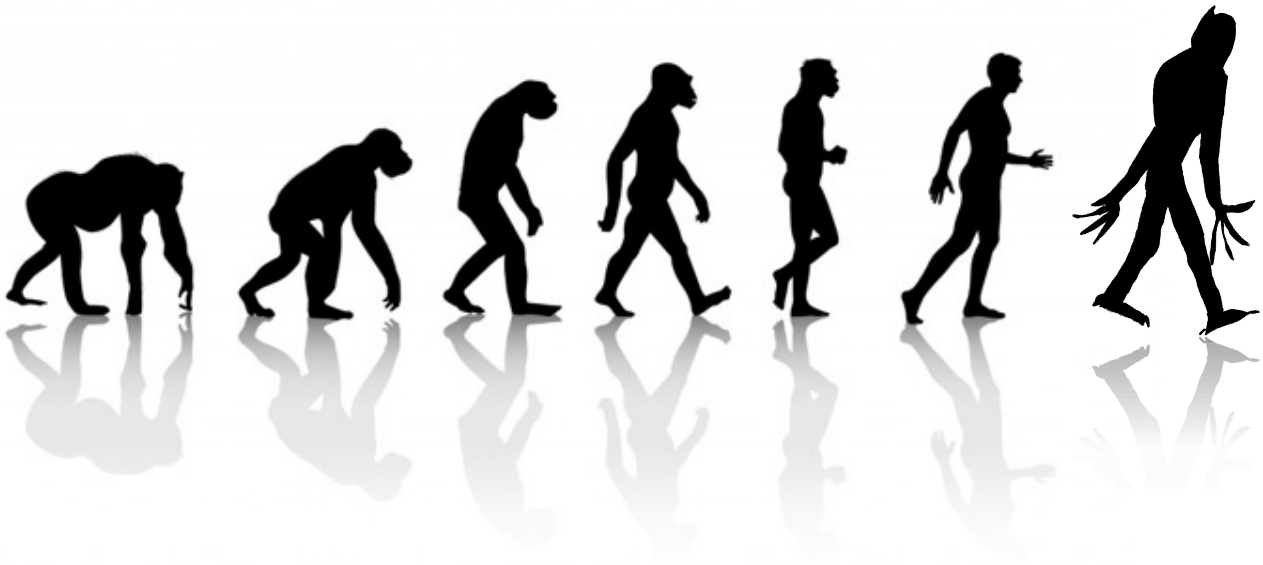


Degeneration in Three *Fin-de-Siècle* Classics of Gothic Fiction:
Lombrosean Monsters, Scientific Turmoil and Gothic London



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I could not persuade myself that the men and women I met were not also another, still passably human, Beast People, animals half-wrought into the outward image of human souls; and that they would presently begin to revert, to show first this bestial mark and then that. (Wells 132)

Introduction

This thesis explores the ways in which works of late nineteenth-century Gothic fiction engage with and reflect upon one of the most controversial scientific developments of the Victorian era, namely the theory of degeneration as developed by scientists such as Max Nordau and Cesare Lombroso. I will explore how the three Gothic classics *Dracula* (1897), *The Strange Case of Dr Jekyll and Mr Hyde* (1886) and *The Island of Dr Moreau* (1896) respond specifically to Lombroso's theory of degeneration and will illustrate that the closely connected themes of monstrosity, science and urban London represent different perspectives of morality in *fin-de-siècle* British culture.

While the Gothic representation of modern science, scientists and the modern city was a specifically late Victorian development in literature, it is not limited to this period. Even today, new scientific developments, such as genetic engineering, evoke critical debate. This controversial scientific development is reflected in post-war literature and film, such as Richard Matheson's *I am Legend* (1954) and the various film adaptations that have appeared, most recently in 2007. These explore the moral role of the scientist and the potential disastrous consequences of scientific experiments against the backdrop of apocalyptic LA and New York (in the 2007 film).

This thesis will focus on the fears and concerns of Victorian Britain during the *fin de siècle*. This thesis explores this particular period because an extensive number of important Gothic fictions were written that were popular at the time and have

remained fascinating to readers and continue to spark scholarly debate about the literary representation of Victorian society up until this day.

The term *fin de siècle* marks “the period between around 1880 and 1914” (Pykett 1). Rather than just a time marker, the term *fin de siècle* also evokes the hectic spirit of a turbulent period. The influential writer Max Nordau, author of *Degeneration* (1895), devoted several pages to capture the mood of the *fin de siècle*, asserting that “[t]he prevalent feeling is that of imminent perdition and extinction” (2). To define “the *fin-de-siècle* mood,” Nordau visualises that “[i]t is the impotent despair of a sick man, who feels himself dying by inches in the midst of an eternally living nature blooming insolently for ever” (3).

During the *fin de siècle*, several new scientific procedures were discovered or further developed. Many of these medical techniques were considered revolutionary but at the same time were criticised for their dangerous and unconventional methods. New branches of science emerged: “[w]hereas phrenology was a dubious pseudoscience [...] the cerebral localization experiments performed after 1860 [...] were firmly grounded in the scientific method and widely regarded as cutting-edge research” (Stiles 12). Even though psychology is significant, as ““mental physiology” or early psychiatry began to emerge during the later nineteenth century” (Punter 23), this thesis focuses primarily on physiology, because it explores the intricately connected themes of science and the repulsive physiognomy of monstrosities.

The city of London expanded significantly from “1.6 million people in 1821” to “6.5 million by 1901” (Marshall 13), so that “[b]y the mid-1840s London had become known as the greatest city on the earth, the capital of empire” (Ackroyd 573). Ackroyd’s extensive biography of London shows that London became overcrowded and riddled with filthiness, disease, and criminality. In literature and art, London

became represented as a dark place. In Joseph Conrad's *Heart of Darkness* (1899), for instance, the narrator refers to London sarcastically as "the biggest, and the greatest, town on earth" (1891). He implies that behind the appearance of a great British capital, the actual city is "the monstrous town" (1892). Urban features, such as the fog and streets, became essential to the Gothic setting, especially in late Victorian Gothic fiction and poetry. A major example, referred to in chapter 4, is James Thomson's "The City of Dreadful Night" (1874). In the poem, the speaker describes how "Although lamps burn along the silent streets, / Even when moonlight silvers empty squares / The dark holds countless lanes and close retreats" (III ll. 1-3).

During this turbulent time, new scientific theories were advanced, particularly concerning human nature and morality. The key issue that fascinated nineteenth-century theorists was degeneration. Degeneration is "the process of degenerating or becoming degenerate; declining to a lower or worse stage of being" (OED 1). Many theorists and philosophers shared the concern that humanity, or certain classes, degenerated into a lower, atavistic form. In response to this discussion, "Gothic texts of the late 1880s and 1890s consequently come to be linked primarily by a focus on the idea of degeneration" (Punter 39).

The first chapter of this thesis provides an overview of nineteenth-century scientific theories of degeneration. First, this chapter will pinpoint the main argument of Darwin's theory of evolution, as his theory triggered the discussion on a reversed evolution into degeneracy. Second, it will briefly discuss the Positivist philosophy and look at key elements of degeneration theory in France and Britain. Lastly, this chapter summarises the famous Italian scientist Cesare Lombroso's theory of the born criminal (1876) in relation to Nordau's arguments outlined in *Degeneration* (1895).

Throughout many ages, literature has been an artistic medium through which writers have expressed and reflected upon various views, hopes and fears of contemporary society. For example, in *Gulliver's Travels* (1726), Jonathan Swift explores what he believed to be the decline of human morality, and expressed scepticism of modern science. During one of his voyages, Gulliver admires the civilised speaking horses, Houyhnhnms, but is repulsed by the vulgarity of the Yahoos, a degenerated human species, "covered with a thick Hair," brown skin colour that "had strong extended Claws before and behind, terminating in sharp points, and hooked" (Swift 207).

In Charles Dickens' *Oliver Twist* (1838), life in London is visualised in detail, and the representation of different social classes, and London's daily setting reflects contemporary viewpoints on urban life in London. Dickens describes the streets smeared "ankle-deep with filth" and "the fog, which seemed to rest upon the chimney-tops" on a market day, where "the hideous and discordant din that resounded from every corner of the market; and the unwashed, unshaven, squalid, and dirty figures constantly running to and fro" (171).

This thesis will critically explore late Victorian fears of urbanisation and scientific development, as well as the concern for a loss of morality as represented in *fin-de-siècle* Gothic fictions. Several scholars, such as David Punter and Glennis Byron, have expressed that it is difficult to define the Gothic genre (xviii). *Fin-de-siècle* Gothic fiction, however, stands out within the Gothic tradition by its focus on the monstrous. The works of *fin-de-siècle* Gothic fiction all share the characteristic of a graphic and grotesque visualisation of the monstrous. On monsters, Punter explains: "Located at the margins of culture, they police the boundaries of the human, pointing to those lines that must not be crossed" (263). These fictions are abundant with

deformed and vile monsters with an immoral nature that leave characters repulsed and nauseous with shock and despair.

A famous example of a late Victorian Gothic monstrosity can be found in Arthur Machen's *The Great God Pan* (1894), in which the immoral and corrupting Helen Vaughan transforms "from sex to sex, dividing itself from itself, and then again reunited...descend to the beasts whence it ascended" (228). In Oscar Wilde's *The Picture of Dorian Gray* (1892), Dorian's beauty and charisma stand in stark contrast to his horrid countenance captured on the portrait, which "records his depravity in terms of physical decay" (Punter *Literature of Terror* 6). In Rudyard Kipling's *The Mark of the Beast* (1891), Fleete is, after vandalising the sculpture of the god Hanuman, bitten by the Silver Man, who "practices a form of eastern magic, inexplicable to western science" (Hurley 191). Fleete transforms into a snarling beast with a green light behind his eyes, howling like a wolf.

This thesis focuses on three Gothic classics belonging to "the 'decadent Gothic'" (Punter *Literature of Terror* 1): Bram Stoker's *Dracula*, Robert Louis Stevenson's *The Strange Case of Dr Jekyll and Mr Hyde* and H.G. Wells's *The Island of Dr Moreau*. The fictions of Stoker, Stevenson and Wells are all key texts that reflect and participate in the controversial Victorian debate about the unsettling phenomenon of degeneration.

Given that science is a key theme discussed in this thesis, it is significant that in the lives of all three authors, science played a crucial role. Stoker was "familiar with Irish folklore and with the early prose vampires," but also fascinated with science and "graduated with a degree in science" (ODNB). Stiles points out that "three of Stoker's four brothers...became physicians," and that he "maintained social ties to well known medical men outside his family (58). His influence by and interest

in nineteenth-century science, such as neurology, is clearly reflected in his masterpiece *Dracula*.

Stevenson “embarked on an engineering degree at Edinburgh University,” and “his early interest in the relations of evolutionary science and ethics endured” (Reid 4). He “rejected the harsh doctrines of the Calvinistic Christianity,” and “was always concerned about the moral principles upon which man should conduct his life” (ODNB). His interest in morality and science is expressed through his memorable double character of Jekyll and Hyde.

H.G. Wells was during his time a famous and influential novelist and public figure, who actively engaged in political debate, and wrote numerous “scientific romances” (ODNB). Wells was highly influenced by the scientist T.H. Huxley, and he “spent a year studying comparative anatomy with Huxley and eventually took a degree in zoology” (Cartwright 202). Wells’ works are known for their vivid, imaginative explorations of modern science, such as vivisection experiments and time travelling, and he is now considered “the founder of modern science fiction” (ODNB).

An overview of nineteenth-century scientific theories of degeneration is provided in Chapter 1. The other three chapters explore degeneration in the three Gothic fictions mentioned above. Chapter 2: Lombrosean Monsters, provides a comparison between the monstrosities described in the Gothic fictions and Lombroso’s characterisation of the born criminal. This comparison shows how the story responds to this theory and reflects the moral perspective. Chapter 3: Heroic, Religious and Mad Scientists, explores the different depictions of scientists as well as science in each work, and examines how the representation of heroic, religious or mad scientists reflects a moral perspective. Chapter 4: Urban Gothic London discusses the

representation of London as an Urban Gothic setting in each work and how the depiction of London correlates with the portrayal of the scientist.

Chapter 1: An Overview of Nineteenth-Century Scientific Theories of Degeneration: From Evolution to Devolution

During the nineteenth century, a number of highly influential theories were advanced concerning the origin of humanity and nature of man. In particular, these theories discussed moral decay and the fear for human decline into degeneration. This chapter will provide a concise overview of the main nineteenth-century scientific theories of degeneration. First, this chapter focuses on Darwin's theory of evolution, the scientific framework from which theories of degeneration were developed. Second, this chapter will examine the scientific theory of Positivism, which attempted to explain human social and moral behaviour. Lastly, this chapter will discuss the origin and meaning of the concept of degeneration and explore theories on degeneration as developed by the scientists Cesare Lombroso and Max Nordau.

In *On the Origin of Species* (1859), naturalist Charles Darwin proposed a revolutionary theory that explains “that mystery of mysteries” (5), namely how the extensive scale of species variation originated and developed. Rejecting the concept that “each species has been independently created,” a belief shared by many naturalists including Darwin himself, Darwin argued that “species have been modified, during a long course of descent, by the preservation or the natural selection of many successive slight favourable variations” (353).

In “An Historical Sketch” included in the 6th edition (1872), Darwin appraises the naturalist Lamarck, who is known for his theory of “the inheritance of acquired characteristics,” which means that “[a]s individual animals strove toward some goal...so their physical characteristics changed and, crucially, these changes were then inherited by their offspring” (Cartwright 176). Cartwright explains that “Although Darwin retained a role for Lamarckian inheritance, he also noted how

blind chance through the survival of those individuals with favourable but randomly acquired variations could modify, shape, and bring into being whole species” (183). This revolutionary theory of evolution undermined religious beliefs and reshaped views on biology in Victorian England and across the world.

Even though Darwin’s theory of evolution has triggered theological debate, Darwin himself did not perceive a clash between his theory and theological doctrine, arguing that “probably all the organic beings which have ever lived on this earth have descended from some one primordial form, into which life was first breathed by the Creator” (356). However, “Darwin lost the last remnants of his Christian faith around 1851” (Cartwright 185).

In *The Descent of Man* (1879) Darwin theorises on the human species as subject to evolution and part of nature’s process of natural selection. Darwin argued that “man is the co-descendant with other mammals of a common progenitor,” asserting with fervour that “the close similarity between man and the lower animals in embryonic development, as well as in innumerable points of structure and constitution, both of high and of the most trifling importance... are facts which cannot be disputed” (676). Darwin’s theory of human evolution “led to the conclusion that if something could evolve it could also devolve or degenerate, whether it were individual, society or nation” (Punter 42).

By classifying man as an animal species, this theory of evolution clashes with Christianity’s doctrine that humans are created in God’s image: “Humans, those upstart beasts, are no longer the final aim of natural history – not to mention a divine plan – but the contingent products of natural selection” (Richter 3).

Darwin’s evolution theory was adapted into an influential social theory of the society by Herbert Spencer. As a topic of confusion, it is important to point out that

“[i]t was Spencer, not Darwin, who coined the phrase ‘survival of the fittest,’ and in his hands ‘fittest’ became not best adapted, but strongest” (Cartwright 200). Freeman summarises Spencer’s doctrine as follows: “the mental and social evolution of the species *Homo sapiens* was primarily caused by the inheritance of acquired characters, producing a gradual and inevitable modification of human nature and human institutions” (216). Spencer’s theory of a “social evolution” also gave rise to the possibility of social degeneration.

The key nineteenth-century scientific theory that focused on human social and moral behaviour is Victorian Positivism. In *A General View of Positivism* (translated into English in 1865), the French philosopher Auguste Comte explains that this “regenerating doctrine” attempts to “generalize our scientific conceptions, and to systematize the art of social life” (3). Wright explains that “Comte attempted to show how each of the sciences, first mathematics, then astronomy, physics, chemistry and biology, had become positive, that is, based on empirically verifiable laws” (10-11).

Rather than just a theoretical doctrine, Comte entitled Positivism as “the Religion of Humanity” (360). Comte “saw himself as offering a systematic reconstruction of belief on the basis of centuries of scientific and philosophical advance at the expense of theological faith” (Wright 1-2). By “the positivist motto, Love, Order, Progress” (Comte 6), Comte claimed that “finally, ... social physics, the historical study of the collective development of societies, was now sufficiently advanced to join the other sciences” (Wright 11). The main arguments of two positivist theorists, Lombroso and Nordau, will be discussed below.

In *Faces of Degeneration*, Daniel Pick explores the origin and developments in degeneration theories in France, Britain and Italy, explaining that “[e]volutionary anthropology functioned not only to differentiate the colonised overseas from the

imperial race, but also to scrutinise portions of the population at home: the ‘other’ was outside and inside” (39). The French doctor and theorist Morel discussed “the conception of *dégénérescence*” in *Treatise* (1857) (Pick 50), which addressed the “serious and immutable problem of degeneration *within* civilisation” (Pick 40). In short, “[t]he term [*dégénérescence*] was applied to the patterns of heredity in societies and specifically to deviations from the ‘normal type’ of humanity,” and eventually “[c]omplete idiocy, sterility and death were the end points in a slow accumulation of morbidity across generations” (Pick 50-51). In Britain, the discussion about degeneration was prominent throughout the second half of the nineteenth century. The emphasis changed, as “the problem was no longer merely academic or marginal (reports or translations of Morel’s work), but urgently tied to the crises of London society” (Pick 201).

The work of the Italian scientist Cesare Lombroso is key to the nineteenth-century discussion of degeneration. In *Criminal Man* (1876), Lombroso argued that through the observation of a criminal’s physical anomalies he could diagnose a person’s degenerate nature. In this sense, the facial features and criminal behaviour would indicate a man’s deterioration; a person’s criminal tendency from birth. Cartwright asserts that “Lombroso’s main point about ‘criminal man’ is that he represents a type of being further back along the evolutionary chain (like children and ‘savages’), a survivor or ‘throwback’ from a time where civilization had not developed its moral codes against crime” (210). Driven by his concern for Italy’s fragmented population, Lombroso “endeavoured not only to turn ‘peasants into Italians’, but also to separate out those who were incapable of such a conversion” (Pick 119-120).

Lombroso relied heavily on empirical evidence, evident by his numerous photographs, drawings and statistics. Lombroso states: “I can confidently estimate the actual proportion of born criminals to be close to 40 percent of all offenders” (224). Lombroso’s *Criminal Man* contains an elaborate study of criminal types, which ranges from the examination of skulls and facial features to handwriting and tattoos. Chapter 2 will examine the impact of Lombroso’s theory by exploring the different responses of late Victorian Gothic works to this theory of atavism.

Another key work on degeneration is Max Nordau’s *Degeneration* (1895). Dedicated to Lombroso, this work begins by framing the “*fin-de-siècle* state of mind” of “feverish restlessness,” feeling of “imminent perdition and extinction” and “the end of an established order” (1-5). Within this pessimistic context, Nordau theorises on “the decay of the rich inhabitants of great cities and the leading classes” (2). Following Morel’s definition of degeneration, “a morbid deviation from an original type,” Nordau explains that “[w]hen under any kind of noxious influences an organism becomes debilitated, its successors...will form a new sub-species, which... possesses the capacity of transmitting to its offspring, in a continuously increasing degree, its peculiarities...gaps in development, malformations and infirmities” (Nordau 16). The cause of degeneration Nordau attributes to “noxious influences,” as stimulants, such as alcohol and tobacco, tainted foods, and organic poisons, such as syphilis and tuberculosis, as well as “the effect of a large town” (34-35).

Degeneracy is visibly detectable in men by “stigmata,” physical traits ranging from “deformities,” big ears, irregularly formed teeth to “squint-eyes,” (17). Even though both scientists focus on physical traits, Nordau identifies Lombroso’s born criminals as “nothing but a subdivision of degenerates” (17). Another characteristic of degenerates is their lack of “the sense of morality and right and wrong,” which if

“present in a high degree,” is called “moral insanity” (18). Nordau also mentions the disease hysteria, which is caused by “the fatigue of the present generation” (36). This fatigue was, according to Nordau, a logical effect of the century’s pace, as “[h]umanity can point to no century in which the inventions which penetrate so deeply, so tyrannically, into the life of every individual are crowded so thick as in ours” (Nordau 37).

Greenslade explains that “founded on the Darwinian revolution in biology, and harnessed to psychological medicine, the idea of degeneration spread to social science, to literature and art” (16). The following chapters of this thesis will examine how this “idea of degeneration” is explored and responded to in literature, and specifically, how degeneration and the degenerate with its implications of morality is represented in the three selected classics of late Victorian Gothic fiction.

Chapter 2: Lombrosean Monsters in *Fin-de-Siècle* Gothic Fiction

The *fin-de-siècle* Gothic fictions that explore degeneration all integrate the key theme of metamorphosis. The extent of the metamorphosis ranges from a single transformation, such as Jekyll's metamorphosis into Mr Hyde, to several transformations, such as Dracula's shape-shifting from vampire to bat. The literary representations of the degenerate vary from an indefinable hideousness to distinct malformations and bestial characteristics. Furthermore, the degenerate's backwardness is exhibited by his crimes, such as violent assaults and murder. These characteristics point to the reversion in an atavistic creature, which becomes indefinable as a bestial man or human beast. Borrowing the term "abhuman" from the *fin-de-siècle* writer William Hope Hodgson, Hurley claims that "[s]uch a Gothic body – admixed, fluctuating, abominable – can best be called an *abhuman* body" (190). This monstrous or "abhuman" form visualises degeneration: deteriorating, devolving, transforming into a lower form, mentally and physically.

The literary construction of these abhuman representations were directly influenced by contemporary scientific theories about degeneration. In fact, these fictions incorporate in some way Cesare Lombroso's characterisation of the born criminal, popularising the theory for a larger audience. Notably, Lombroso himself stated that "[n]ovelists turn [criminals] into frightening looking men with beards that go right up to their eyes, penetrating ferocious gazes, and hawklike noses" (50-51). Rather than exaggerating criminal features, as Lombroso suggests, the fictional characters in the Gothic fictions studied in this thesis conform to Lombroso's observations about the born criminal. These fictional types are based on descriptions of contemporary scientific works, such as Lombroso's, which are written in response to the contemporary discussion on degeneration. This chapter explores how the

abhuman monsters in *Dracula*, *Jekyll and Hyde* and *The Island of Dr Moreau* reflect and respond to Lombroso's theory of the born criminal, and how their form and behaviour represent degeneration.

2.1 Degenerate Monster and the Born Criminal in *Dracula*

In *Dracula*, the first confrontation with Dracula's bestial nature in his castle emphasises the fear of a degenerate form that can be identified as both human and a lower form of life. Jonathan discovers Dracula's bestial nature as he shockingly watches Dracula's reptilian climb down his castle wall: "But my very feelings changed to repulsion and terror when I saw the whole man slowly emerge from the window and begin to crawl down the castle wall over that dreadful abyss, *face down*, with his cloak spreading out around him like great wings" (41). The visualisation of Dracula's horrific appearance and the encompassing effect of shock are caused by the hybridity of both human and abhuman features. Carroll argues that the "fusion figure" is key to understanding what constitutes a monster, explaining that "this often entails the construction of creatures that transgress categorical distinctions such as inside/outside, living/dead, insect/human" (43-44). Even though Dracula is still recognisable as the Count, "the whole man," his crawling form on his fingers and climbing movement downward makes him an abhuman creature: a monster that transgresses the distinction of human and beast as well as living and dead.

Dracula's degenerate appearance resembles the countenances of born criminals as described in Lombroso's scientific book *Criminal Man*. Lombroso argued that criminals are born as a lower form, and that distinct features show not only that this person is a degenerate but, also specifically, the type of criminal. Dracula's facial features are in accordance with many of Lombroso's features of the

born criminal. Dracula's bushy hair, massive eyebrows, "lofty domed forehead," broad and strong chin (24) are equivalent to the criminal's profile of "thick hair, pronounced sinuses and protruding chins" (Lombroso 53).

In particular, the description of Dracula's countenance closely resembles Lombroso's characteristic description of the habitual murderer. Dracula's cruel and sensual face, "his eyes flamed red" (300) and "high bridge of the thin nose and peculiarly arched nostrils" (24) is similar to the habitual murderer's "softness of skin," bloodshot eyes and hawklike nose (Lombroso 51). The most striking feature, however, is the mouth. Of the habitual murderer, a type of the born criminal, Lombroso observes that "their canine teeth [are] very developed, and their lips thin. Often their faces contract, exposing the teeth" (51). Dracula's mouth is described as "fixed and rather cruel-looking" (24), and his "peculiarly sharp white teeth [...] protruded over the lips" and "were pointed like an animal's" (24, 183). It is significant that the description of Dracula's fangs, one of the vampires' most prominent features, mirrors Lombroso's scientific description of this type of degenerate. Apart from the exaggeration of Dracula's eyebrows that almost meet over the nose, Dracula's description actually minutely resembles Lombroso's profile of the habitual murderer.

The influence of Lombroso's theory on *Dracula* is not only evident by Dracula's resemblance to Lombroso's profile of the born criminal but also by the characters' specific references to Lombroso and his theory. Van Helsing and Mina Harker analyse Dracula according to Lombroso's degeneration theory, classifying him as a born criminal. Van Helsing asserts that "[t]he Count is a criminal and of the criminal type," and that "this criminal of ours is predestinate to crime also" (Stoker 362 - 363). What is more, Mina specifically mentions Lombroso and Nordau, which

shows her familiarity with their scientific theories: “Nordau and Lombroso would so classify him, and *qua* criminal he is of imperfectly formed mind” (Stoker 363). Mina and Van Helsing’s diagnosis of Dracula as “the criminal type” “of imperfectly formed mind” not only emphasises Dracula’s degeneracy but also underlines that the predominant perspective on degeneration in the novel is in line with Lombroso’s degeneration theory.

Dracula’s degenerate appearance is visualised by his shape-shifting transformations into many different forms. The range of transformations from human to animal species to inanimate matter reflects contemporary society’s moral panic and anxiety for degeneration. Specifically, Dracula’s transformation from an old man, into his younger self, to wolf, bat, rats and fog emphasises the loss of control and blurring of any limits. Carroll argues that impurity is vital in defining a horrific being, which is constructed by the structures of fusion or fission (Carroll 47). In contrast to Dracula’s fusion of man and animal, Dracula’s werewolf transformation is fission, as Dracula’s form is alternated between Dracula and wolf. Dracula’s metamorphosis into a ferocious grey wolf is significant, as Lombroso claims that “[t]he most ferocious animals are physiognomically close to the born criminal; tigers and hyenas have bloodshot gray eyes identical to those of assassins” (172-173).

2.2 Impurity and the Duality of Human Nature in *Dr Jekyll and Mr Hyde*

Since late Victorian times, Dr Jekyll’s metamorphosis from a gentleman into the degenerate Mr Hyde has become one of the most popular and memorable fictional representations of degeneration. Driven by his frustration of a dual life, Jekyll experiments with “transcendental” science, which enables him to separate the “polar twins” of the good and evil side of his nature (52, 53). Mr Hyde is the dissociation of

Jekyll's dual nature and the embodiment of Jekyll's degeneration. As Hyde embodies solely Jekyll's degenerate nature, "[e]vil [...] had left on that body an imprint of deformity and decay" (55). Clearly, the alternation between Jekyll's loose lifestyle of vices and his respected lifestyle as the reputable Dr "M.D., D.C.L., LL.D., F.R.S.,&c." – "medical doctor and lawyer" (11, 185) – shows Jekyll's twofold desire, and as such, his twofold identity. This fictional portrayal of Jekyll's dual nature symbolises the concept that every human being consists of both good and evil.

Strikingly, Jekyll's desire to dissociate his evil nature to revel without guilt shows the substantial progress of degeneration in Jekyll, or Hyde's substantial takeover. This is implied by Jekyll's eventual inability to stop his reversion to Hyde, as he "was slowly losing hold of [his] original and better self, and becoming slowly incorporated with [his] second and worse" (59). Indeed, "Jekyll discovers tragically that Hyde's 'ape-like spite' (p. 97) is overpowering," and "[s]leep itself becomes the catalyst of Hyde's liberation" (Pick 166). In this sense, the existence of two conflicting natures in a respected, qualified gentleman shows the extent of potential victims of degeneration, whereas Hyde himself embodies the realisation of man's potential degeneracy.

The physical characteristics of Hyde emphasise his reversion into a degenerated form. In particular, Hyde's shrunken form and malicious countenance is repeatedly alluded to, as Mr Utterson observes that "Mr Hyde was pale and dwarfish" (15) and "[p]articularly small and particularly wicked-looking" (21). The physical deterioration of Hyde's body displays a reversed development into a "particularly small" and "dwarfish" figure. Hyde's atavistic appearance is explicitly referred to, as Mr Utterson exclaims: "God bless me, the man seems hardly human! Something troglodytic, shall we say?" (16) Mr Utterson's explicit reference to a "troglodytic"

being, one “of a degraded type like the cave-dwellers” (OED 3), directly parallels Hyde to a reversed, undeveloped prehistoric creature.

In addition, Hyde’s raw voice and the black hair on his hands display a reversed, uncivilised state that reveals a resurfacing of animal nature. Mighall argues that “Hyde combines a number of atavistic characteristics, comparable to those supposedly found in the ‘lower’ or ‘primitive’ races, prehistoric humans, or the lower animals” (148). Indeed, Hyde’s “dwarfish” and “troglodytic” form is similar to that of the “prehistoric human” and his raw voice and black hair on his hands resemble such features of “the lower animals.”

The key element of Hyde’s degeneracy is not an apparent anomaly, but rather an indescribable hideousness and an indefinable deformity. Enfield explains, “he is not easy to describe. There is something wrong with his appearance [...], something downright detestable. I never saw a man I so disliked, and yet I scarce know why” (9). Considering monsters of the horror genre, Carroll argues that “[h]orrific creatures seem to be regarded not only as inconceivable but also as unclean and disgusting” (21). Dr Lanyon declares that “there was something abnormal and misbegotten in the very essence of the creature that now faced me” (48). He implies that Hyde’s appearance emanates a sense of impurity, which reveals a “misbegotten” essence that is unnatural. As a result, Mr Utterson and Dr Lanyon cringe at the sight of Hyde, sending cold shivers down their spine.

Carroll proposes that “the fantastic biologies of horrific monsters” are represented by the depiction of impurity through the fission and fusion structures (47). Jekyll and Hyde’s sequenced identities constitute “temporal fission,” where Jekyll and Hyde’s dual identity that alternates in one body “link[s] distinct and/or opposed categories” (47). Clearly, the impurity that the physiognomy of a degenerate evokes –

fundamentally the unification of opposed elements such as man and animal – is intricately associated with monstrosity, and therefore, classified as separated from human. The paradox of monstrous, abhuman features and an indescribable impurity is key to Hyde's degenerate nature. Morel's theory of degeneration involved both the exterior characteristics of reversion and the invisible interior decline, capturing "the tension between the image of the degenerate and the unseen essence of degeneration" (Pick 52).

In addition to his degenerate appearance, Hyde's violent behaviour is a key characteristic of his degeneration. Hyde's aggression and lack of empathy are similar to the behaviour of the born criminal as described by Lombroso. Lombroso diagnoses the primitive man and the born criminal as having "complete absence of moral and affective sensibility," "absence of remorse and foresight," and "fleeting, violent passions" (222). Hyde's two main crimes include the brutal assault on a young girl and the horrific murder of Carew, in which "[Hyde] was trampling his victim under his foot, and hailing down a storm of blows, under which the bones were audibly shattered and the body jumped upon the roadway" (20 - 21). Mr Enfield relates that the assault on the girl was "hellish to see" and the servant who witnessed Carew's murder fainted "at the horror of these sights and sounds" (7, 21). These characters are appalled by Hyde's immoral violence as he attacks an innocent girl and a respectable man without any reasonable motive.

Hyde's atavistic behaviour and savagery is explored by the imagery of wild animals. Hyde revelled in egocentric acts of villainy, amongst which his frequent "drinking pleasure with bestial avidity" (57). Hyde's "bestial avidity," jumping movements "like a monkey" (39) and the crushing over his victim "with ape-like fury" underline his departure from the dominant moral framework of his time and

received civilised decorum. This figurative language emphasises Hyde's degeneracy as a regression to an inhuman beast. Particularly, the emphasis on monkeys and apes suggest a reversed process of Darwin's evolution theory. Indeed, Carroll argues that "Hyde is described as having a simian aspect which makes him appear not quite human" (33).

Hyde's immoral behaviour illustrates Lombroso's classification of the mad criminal and the alcoholic criminal. Hyde revels in "drinking pleasure" (57) and he is frequently referred to as mad, such as the clerk's assertion that "[t]he man, of course, was mad" (27). During the murder, too, it is described that "then all of a sudden he broke out in a great flame of anger, stamping his foot [...] like a madman" (20). Lombroso declares "[t]hat insanity occurs frequently among criminals becomes clearer every day" (267). Lombroso's classification of the alcoholic criminal and mad criminal within his theory of the born criminal demonstrates Lombroso's positivist surge to classify the degenerate and his faith in scientific classification. Hyde's indefinable impurity and different characteristics that transgress Lombroso's classifications undermine the validity of his diagnoses; Jekyll's dual nature discards the categorisation as either degenerate or civilised nature, forcing a more subtle perception of good and evil in man, and a more complex concept of degeneration.

The revelation of Hyde's and Jekyll's similar handwriting echoes Lombroso's study of the handwriting of criminals. Based on a collection of 407 signatures, Lombroso believed that certain characteristics of handwriting could diagnose criminals (111). The handwriting of murderers and robbers is distinguished by the elongation of letters and "their extraordinary curlicues and arabesques" (111). Lombroso's examination of handwriting to diagnose a degenerate criminal is echoed in the clerk's examination of the similar handwriting of Dr Jekyll and the degenerate

Hyde. His discovery of their identical handwriting, “only differently sloped” (27), reveals the duality of Jekyll’s nature and the degenerate nature represented by Hyde. This similarity demonstrates that Stevenson’s fiction is influenced by Lombroso’s scientific publications. In fact, *Jekyll and Hyde* transforms Lombroso’s theory into a more general degeneration theory: whereas Lombroso tried to separate the degenerate from others by looking at features such as their handwriting, the similar handwriting of Jekyll and Hyde shows that a degenerate, or immoral, nature can exist in all man, from criminals to respected gentlemen.

2.3 Hybridity and the Nature of Monstrous in *The Island of Dr Moreau*

Dr Moreau’s hybrid humanoid species, with disproportioned limbs, furry ears and luminous eyes is one of the most graphic and grotesque representations of degeneration in modern Gothic horror fiction. Whereas in the former two works *Dracula* and *Hyde* clearly conform to the profile of a Lombrosean degenerate, in *Dr Moreau* clear distinctions between the civilised and the uncivilised become blurred. Moreover, a distinction is made between a monstrous appearance and a monstrous nature. In *The Island of Dr Moreau*, the conception of the degenerate is explored through the creation of a hybrid species of man and animal as well as the abhuman Dr Moreau.

Dr Moreau’s “man-making” (74) of animal species and the reversion of the Beast People to their animal nature visualises a fluctuating and unmanageable process of evolution and devolution. The conception of evolution and devolution become ambiguous and blurred, which is illustrated by Prendick’s misconception of Moreau’s experiments. Initially, Prendick is convinced that Dr Moreau experiments on people to create the species of Beast People. Prendick’s conception that Moreau is

“animalizing these men” (57) involves a deteriorating process of degeneration, or devolution. However, Prendick finds out the experiments achieve the opposite, as Moreau attempts to transform animal species into man. These “humanized animals” (68) are the result of an acceleration of evolution. Clearly, these Beast People are Moreau’s failures, suffering in their hybrid form with inserted human components and the original animal instincts. Rather than degeneration, the regression of the Beast People is actually a natural devolution to their inherent instinct and nature.

Whereas naming the Beast People humanises them, the actual names emphasise their animal nature. In addition to the general name of Beast People, the individual names emphasise the dual nature of man and animal, such as the Ape Man, the Leopard Man, a Swine Woman, and a Saint Bernard Dog Man. Other names highlight the assimilation of animal species, such as a Horse-Rhinoceros creature, a Bear-Bull and an “old woman made of Vixen and Bear” (82). The Ape Man was “a complex trophy of Moreau’s horrible skill, a bear tainted with dog and ox, and one of the most elaborately made of all the creatures” (83). The Ape Man is constructed from four animal species. The paradox of naming them and at the same time highlighting their animal nature by the name given to them emphasises the dual nature and form of the Beast People.

The merging of human form and animal features establishes the Beast People’s monstrous appearance. In most of the Beast People the original animal species is still visible, as “[t]he human mark distorted but did not hide the leopard, the ox, or the sow, or other animal or animals from which the creature had been moulded” (81). Whereas the Beast People generally appear as human, the specific parts, such as ears or fingers, reveal an abhuman or animal nature. Prendick exclaims that “The man had pointed ears, covered with a fine fur!” (30) The Beast People conform to Carroll’s

classification of “fusion,” as discussed previously, in which the unification of the contradictory elements of animal and man makes them monsters (43). The Beast People’s luminous eyes, number of digits and inability to speak properly emphasises their abhuman nature. Prendick identifies one as “the Thing” (39) and specifically calls them monsters, “monsters manufactured” (69).

The hybrid species of the Beast People induces revulsion to the human beholders. The combination of human and animal characteristics not only makes the Beast People unnatural but also monstrous. According to Carroll, the hybrid assimilation that defines a monster evokes revulsion (22). Prendick states: “I could hardly repress a shuddering recoil as he came” (29), and that it “gave me a spasm of disgust” (23). The contradictory elements of animal and man within this brute are disgusting to Prendick. Prendick states that “he’s unnatural, [...] it gives me a nasty little sensation, a tightening of my muscles, when he comes near me. It’s a touch... of the diabolical, in fact” (33). Prendick’s inability to rationally account for his revulsion for this “ugly brute” (33) turns him to the inexplicable, comparing the attendant to the devil. The Captain, too, attributes to the brute human diabolical features: “That’s just what he is – he’s a devil, an ugly devil” (13), a “mad devil” (13). It is significant that the Captain and Prendick use a different combination of contradictory elements, namely that of human and divine to account for his revulsion.

The name of the ship that brings the animal species to Moreau’s island predicts their repulsive fate. *Ipecacuanha*, the name of the ship, is “a South American small shrubby plant, which possesses emetic, diaphoretic, and purgative properties” (OED 1). Another figurative meaning is “something that produces nausea” (4). Given that the revulsion the Beast People evoke is key to their monstrous nature, it is significant that the name of the ship that transports the animals to the infamous island

is synonymous to nausea and vomiting. In this sense, the name of the ship foreshadows the abominable and sickening experiments of Moreau as well as their foul results. The meaning of the ship's name also reflects the novel's critical attitude towards late nineteenth-century science. Moreau's meddling with species to construct humans resembles to some extent the science of eugenics, which reflects the novel's criticism on this cutting-edge science.

The characteristics of the Beast People mirror Lombroso's profile of the born criminal. Ironically, the Beast People are the product of scientific procedures conducted by a human being. Apart from the obvious animal characteristics, the descriptions of the Beast People conform to Lombroso's diagnosis of the born criminal. The faces of the Beast People "were prognathous, malformed about the ears, with large and protuberant noses, very furry or very bristly hair, and often strangely coloured or strangely placed eyes" (Wells 81). The features that Lombroso believes "nearly all criminals" have, closely resemble these, such as "protruding chins," "jug ears," and "thick hair" (Lombroso 53). The "protuberant noses" and "very furry and bristly hair" of the Beast People mirror the "hawklike and always large nose" and "dark, abundant, and crisply textured" hair respectively of the habitual murderer in Lombroso's work (Lombroso 51). In addition, the Beast People's "faces with protruding lower jaws" echo the born criminal's "overdevelopment of the jaw" (222).

The alcohol abuse and violent behaviour of Montgomery and the Captain indicate their deterioration. Even though these characters do not display physical characteristics of degeneracy, their behaviour and mind-set reveal their moral decay. The captain is an alcoholic "brute" (12), whose aggressive assaults and lack of remorse conform to the diagnosis of a born criminal. Montgomery, too, excessively drinks and has violent outbursts. Prendick describes how "sometimes he

[Montgomery] would ill-treat it, especially after he had been at the whisky, kicking it, beating it, pelting it with stones or lighted fusees” (83). Montgomery’s whiskey addiction stimulates his immoral and violent behaviour, assaulting and torturing the Ape Man. Moreover, Montgomery himself admits that he wished he was an abstainer like Prendick, arguing that “[i]t was that infernal stuff led to my coming here. That and a foggy night” (32). Montgomery blames the alcohol for his decision to join Moreau on the island and his participation in Moreau’s horrific experiments. In this sense, the alcohol stimulated his deterioration and his loss of morals. As in *Jekyll and Hyde*, alcohol is linked to immoral behaviour. Moreover, the deteriorating effect of alcohol echoes Morel and Nordau’s claim that alcohol is a cause of degeneration.

Even though the Beast People have a monstrous appearance, Dr Moreau is the central abhuman character with a monstrous nature. Whereas the Beast People look like monsters, Dr Moreau is the actual monster of the island. Moreau conducts experiments of vivisection, which leaves its victims in excruciating pain. The abominable experiments were so gruesome and horrific that they became infamously known as “The Moreau Horrors” (30). Moreover, Moreau’s lack of sympathy and remorse are key to his monstrous nature. Furthermore, Prendick’s fear of Moreau emphasises Moreau’s monstrous nature. Prendick states that “[i]n those days my fear of the Beast People went the way of my personal fear of Moreau” (96). The following chapter on science will elaborate on Moreau’s monstrous nature as it is closely linked to his atrocious scientific experiments.

In addition to the animal nature of the Beast People, the human inhabitants of the island accuse each other of having a bestial nature. Prendick accuses Montgomery of his bestial behaviour and nature: ““You’ve made a beast of yourself. To the beasts you may go”” (107), and “that he was in truth half akin to these Beast Folk, unfitted

for human kindred” (109). Prendick identifies a parallel between Montgomery and the Beast People. Whereas the regression to animal instincts is natural to the Beast People, the human characters revert to bestial behaviour. Wells aligns animals with a natural instinct but also seems to imply that humans have a natural tendency to be bestial. In fact, the degeneration of men is implied by the sins that are characteristic to humanity. Montgomery argues that M'ling is more human than Prendick because he drinks: “‘Beast!’ said he. ‘You’re the beast. He takes his liquor like a Christian” (107). What is more is that Montgomery presses the Beast People to drink, arguing that drinking makes them like men: “Drink, ye brutes! Drink, and be men” (108).

In addition, Prendick claims that man distinguishes himself from animals by their ability to tell convincing lies: “[a]n animal may be ferocious and cunning enough, but it takes a real man to tell a lie” (121). The conviction that the human sins of drinking and lying differentiate man from animals, emphasises the regression of man and its close relation to animals. Indeed, the concept of an animal nature in man is emphasised throughout the story, as “[b]y creating humans out of beasts, Moreau simply emphasizes the fact that humans are in essence beasts themselves” (Dryden 170).

Not only the Beast People revert to their animal nature. Prendick believes himself to be regressing into a bestial form. Even though the Beast People start reverting to their animal nature, they remain monstrous. Prendick himself, too, changes, and deteriorates, as he describes that “My hair grew long, and became matted together. I am told that even now my eyes have a strange brightness, a swift alertness of movement” (125). Prendick’s hair changes into an uncivilised and wild state. In addition, Prendick’s “swift alertness of movement” mirrors the inherent alertness of animal species. This symbolises degeneration in Prendick. Indeed, Fuller

argues that “Prendick exemplifies Well’s fears of the degeneration of man; the intrepid colonizer of early Pacific fiction has regressively evolved into a cowardly fool who ‘became as one among the Beast People in the Island of Doctor Moreau’” (271).

Conclusion

Carroll’s philosophy of horror explains that “monsters are in a certain sense challenges to the foundations of a culture’s way of thinking” (34). By linking the monstrous to the feared and immoral, the construction of monsters reflects the values and moral framework of a culture. The late Victorian monstrosities represented in the works discussed – *Dracula*, *Hyde*, the Beast People and *Moreau* – reveal late Victorian ideals of morality. The cultural perspective of these books links purity to moral conduct and links the monstrous to immoral conduct. *Dracula* is represented as an abhuman shape-shifting creature as well as an immoral being. The Beast People are represented as abhuman creatures, having been created into a hybrid form by a human being. By paralleling *Moreau* to Lombroso as an abnormal and immoral scientist, the novel implicates that the rational scientist is potentially a monster.

The way each work incorporates and alters Lombroso’s theory of the born criminal suggests the novels’ moral perspective. In *Dracula*, Stoker literally copies the ideas of Lombroso’s work, which implies Stoker’s sympathy to Lombroso’s ideology. The polar forces of good and evil are clear: the respected Van Helsing and his group stand in stark contrast to the immoral degenerate *Dracula*. In *Jekyll and Hyde*, the concept of the immoral degenerate is generalised: good and evil exists in all man. In *Moreau*, Wells shows a strong disagreement with Lombroso’s theory, as his story clashes with Lombroso’s ideology. By depicting Dr *Moreau* as an immoral mad

scientist and the Beast People as victims, Wells portrays a moral perspective which establishes Lombroso himself as a monster.

Chapter 3: Heroic, Religious and Mad Scientists

In the nineteenth century, science becomes increasingly important in society. New revolutionary medical theories were introduced, such as cerebral localisation, and operation methods further developed, such as vivisection and blood transfusion. At the same time, however, science aroused controversy. The technique of blood transfusion, for example, changed repeatedly throughout the Victorian era and “vivisection was illegal after 1876, unless one possessed the proper licences” (Stiles 141). In response to these scientific developments, Victorian Gothic fiction participated in this debate.

Notably, the responses to science ranged from exhilaration and celebration to hostility and fear (Dawson 168). Academics’ fascination for science was reflected by the debate about literature versus science in the educational curriculum and the shift in literature to the genre of realism (Dawson 166, 167). In addition to its importance in the academic world, science also filtered into society by “scientific popularizers,” such as journalists or lecturers, who by new printing methods “conveyed elite scientific knowledge in a self-consciously popular form” (171).

As popular scientific discourse was integrated into the everyday language of both upper and lower classes, as academic debate as well as daily gossip, it “became an integral part of Victorian culture after the mid-century” (Lightman 17). Specifically, the integration of science into Victorian culture is reflected by the prominent exploration of science in literature. As Oscar Wilde wrote, for instance, that “the transformation of Dr. Jekyll reads dangerously like an experiment out of the *Lancet*” (Stiles 27).

Each of the three selected works – *Dracula*, *Jekyll and Hyde* and *The Island of Dr Moreau* – explores a particular representation of science. The order of the works

as discussed in this thesis reflects an increasingly darker representation of science, even though the order is not chronological. This points out that there existed varying perspectives of the role of science and scientists in society at one time. *Dracula* explores medical operations, such as blood transfusion and neurology, as an integral means that, in combination with religious faith, serves a heroic purpose. *Jekyll and Hyde* explores the immoral implications of science: the potentially dangerous consequences of unconventional “transcendental” science and the pretence of doctors. It also explores the scientific concept of dual personality. *Moreau* moralises on the horrific consequences of scientific experiments, exemplified by Moreau’s unethical and horrid experiments of vivisection on species, separated from civilisation.

3.1 Dr Van Helsing’s Quest and Heroic Men of Science in *Dracula*

In Bram Stoker’s *Dracula* (1897), Dr Abraham van Helsing and his devoted companions heavily rely on their scientific instruments and knowledge to chase the degenerate Dracula out of their beloved London. These vampire hunters are represented as brave heroes and their reliance on faith transforms the chase into a quest. In the name of God, Van Helsing and his friends undertake this religious quest, which is emphasised by the numerous references to faith and God throughout the novel. In a sense, *Dracula* is a late Victorian representation of the quest in medieval literature, in which Dracula, the *fin-de-siècle* dragon that must be defeated, symbolises the fear for unethical and unconventional science. In *Dracula*, the scientific procedures are depicted as vital means for their heroic and religious quest, which at the same time reveal the chilling reality of the complex operations in practice.

Van Helsing's resolute and professional approach to the operation of blood transfusion is depicted as a heroic attempt to save the life of Lucy Westenra: "then with swiftness, but with absolute method, Van Helsing performed the operation. As the transfusion went on something like life seemed to come back to poor Lucy's cheeks" (133). Van Helsing's "swiftness" and "absolute method" resonate his expertise, and the transfusion immediately improves Lucy's health. Moreover, Arthur's resolution to donate his blood to Lucy and his courageous pledge that he would sacrifice his life for her complements his aristocratic status with honour and heroism. Van Helsing declares to Arthur that "the operation is successful" and that "you saved her life this time" (133). Indeed this time, as eventually all four men have donated their blood during the operation to try and save her life. Their assistance in the blood transfusion is depicted as a noble sacrifice.

Van Helsing's method of blood transfusion is similar to nineteenth-century transfusions, reflecting the development of this medical technique. After the death of a patient during the first animal-to-human transfusions in the late 1660s, "[h]uman transfusions were abandoned," for "over the next 150 years" (Pelis 333-334). After a revival of interest led by Blundell in the early nineteenth century (334), the controversial debate about human blood transfusion continued. The focus changed from the initial focus on blood's vitality to the nutritive capacity in the 1850s, to chemical composition in the 1880s (Pelis 332). In the late nineteenth century, Hunter discarded the nutritive and respiratory function of blood, reminded the effect of clotting and professed "blood's replacement with saline" (Pelis 357). Stoker's novel does not depict contemporary procedures, but rather, "resonated with popular ideas about blood – ones that in fact had guided transfusion's reintroduction in medicine

earlier that century” (Pelis 359). Indeed, Van Helsing’s blood transfusion and the “vitalistic and revitalizing beliefs” evoke Blundell’s ideas of decades earlier (359).

To some extent Van Helsing’s blood transfusion mirrors Dracula’s vampirism. The operation of blood transfusion is portrayed as a complex operation involving a donor and a receiver, which painfully exhausts and drains the donor. Van Helsing and Dracula are polar opposites, given that Van Helsing drains blood to save lives whereas Dracula drains blood to destroy lives. In addition, Dracula destroys his victims’ humanity and their mortality by turning them into immortal monsters. The construction of Van Helsing and Dracula as polar opposites is determined by their particular scientific field of expertise: Van Helsing is “a philosopher and a metaphysician, and one of the most advanced scientists of his day” (122) whereas Dracula practiced the more obscure and unconventional branch of science as an “alchemist” (321).

It is the combination of science and faith that enables Van Helsing to conduct the operations in an ethical and moral manner. This dual approach is emphasised by the dominant religious and scientific discourse in the novel. The chapters not only contain much medical and psychological discourse, they also contain characters’ prayers and many references to God. Before the blood transfusion, Van Helsing crosses himself and Seward: “He touched me on the heart and on the forehead, and then touched himself in the same way” (129). Van Helsing’s reliance on God during their quest drives him to conduct the scientific operations within the moral framework of religion. In fact, Van Helsing’s open mind to science and religion extends to the more unconventional area of folklore and myths, indicated by his knowledge of the “nosferatu” (252) the protective power of garlic. By uniting scientific and religious

discourse, Van Helsing represents the ideal of a religious, and therefore a morally upright (in the eyes of mainstream Victorian culture) scientist.

Van Helsing's destruction of the vampire Lucy unites the elements of science, religion and folklore: "he took out [...] his operating knives, which he placed to hand; and last a round wooden stake, some two and a half or three inches thick and about three feet long" (228). Driven by faith, Van Helsing and his accomplices destroy the degenerate vampire Lucy by uniting the doctor's scientific preparations of autopsy and the wooden stake from folklore legends.

Van Helsing's operation on Renfield primarily highlights the heroism of these men of science but also reflects the impact of brain surgery in practice. After finding the wounded Renfield by "the horrible pool on the floor," Van Helsing returns with his "surgical case" and diagnoses "a depressed fracture of the skull extending right up through the motor area" (294, 295). Van Helsing uses medical discourse, observing further that they must "remove the blood clot" as the "haemorrhage is increasing" (295). Van Helsing concludes that "[t]he suffusion of the brain will increase quickly, so we must trephine at once or it may be too late" (294). These precise diagnoses and medical terminology give the doctor authority and superiority and his resolution to "trephine or it may be too late" presents brain surgery as a heroic and glorious last resort. Even though the operation is futile for Renfield, Van Helsing justifies his decision as the information from Renfield could save other lives: "His words may be worth many lives; [...] It may be there is a soul at stake! We shall operate just above the ear" (296). As with Lucy's operation, the intentions of the men are heroic but the procedure itself is alarming and inadequate to save the patient's life.

Dr Seward's psychiatric case study of the lunatic Renfield is primarily depicted as a professional empirical study. Seward is a "humanitarian and medico-

jurist as well as scientist” (260). He constantly observes and diagnoses his mad patient. Seward’s drive to classify Renfield mirrors Lombroso’s faith in positivist classification of the studied prisoners. Seward states that “I shall have to invent a new classification for him, and call him a zoophagous (life-eating) maniac” (80). In addition, Seward diagnoses Renfield’s degeneracy, stating that “[t]he man is an undeveloped homicidal maniac” (79). The study of Renfield’s fits and his collection of insects provide clues to trace the degenerate Dracula, as Seward exclaims “Goodness knows that we had enough clues from the conduct of the patient Renfield!” (240)

At the same time, the execution of Seward’s psychological study undermines his authority and reveals the moral boundaries of scientific experiments. Seward’s scientific aspirations to test his “own pet lunatic” (249) without an ethical and just cause reveals a darker and immoral motivation. Seward fantasises: “What would have been his later steps? It would almost be worth while to complete the experiment. It might be done if there were only a sufficient cause” (80). Seward considers the moral need for a cause to conduct experiments and the significance of experiments for the sake of scientific discovery. Moreover, Seward even admits that he could possibly be persuaded to continue the experiment for his own sake: “I must not think too much of this, or I may be tempted” (80).

In addition, Seward’s addiction to drugs that are destined for patients undermines his authority: “If I don’t sleep at once, chloral, the modern Morpheus – C₂ HCl₃O-H₂O!” (112) Chloral is a “sedative-hypnotic drug, commonly used in the late 19th century to treat insomnia” (Encyclopaedia Britannica). Seward refers to his sleeping pills by the name of the Greek God of dreams, by which he parallels modern drugs to ancient deities, sanctifying science.

Van Helsing represents authority in the field of neurology whereas Seward is a darker representation of the neurologist. Through Renfield's speech it becomes clear that Van Helsing "has revolutionized therapeutics by his discovery of the continuous evolution of brain-matter" (260). Seward expresses his desire to explore and engage in the scientific field of neurology:

Men sneered at vivisection, and yet look at its results today! Why not advance science in its most difficult and vital aspect – the knowledge of the brain? [...] I might advance my own branch of science to a pitch compared with which Burdon-Sanderson's physiology or Ferrier's brain-knowledge would be as nothing. (80)

Seward appraises the work of the neurologist Ferrier "and the work of fellow vivisectioner (and sometime brain researcher) Burdon-Sanderson" (Stiles 64). Seward's appraisal of vivisection parallels that of the scientist Dr Moreau, which will be discussed in the next chapter. In fact, Well's fiction imagines the horrific experiments of vivisection when such fantasies as Seward cherishes are given opportunity to be realised.

The reliance of Van Helsing and his accomplices on empirical evidence and reason is in accordance with a positivist viewpoint on science. In order to fight the degenerate vampire, Mina collects all the printed, written and recorded data on Dracula, including diary entries, newspaper articles, telegrams, and phonograph entries, "knitting together in chronological order every scrap of evidence they have" (240). By collecting these accounts, the vampire hunters try to deduct a rational explanation from the assembled facts and observations. Seward ponders: "Surely there must be *some* rational explanation" (217) and Van Helsing states that "in this record of ours we have proof by inference" (255). What is more, the novel's chapters

are comprised of these diary entries, letters and other accounts. In this way, the reader is forced to adapt the positivist viewpoint along with the characters. Stiles claims that “[l]ike a work of psychical research, the novel is an accumulation of evidence that might serve as ‘scientific’ proof of the existence of phenomena such as immortal souls, free will, and even vampires” (79).

3.2 Pretentious Scientist and Fatal Experiments in *Jekyll and Hyde*

The portrayal of the scientist as a brave hero in *Dracula* is changed into the depiction of an egocentric and mad doctor and his secretive experiments in *Jekyll and Hyde*. Dr Jekyll’s immoral and unorthodox experiments show the potentially destructive results of science, which undermines the positivist philosophy of scientific truth.

Dr Lanyon represents the conventional doctor of orthodox medicine whereas Jekyll represents the mad doctor of the darker branch of “mystic” and “transcendental” (52) science. Lanyon refutes Jekyll’s experiments as “[s]uch unscientific balderdash” (12) and even “scientific heresies” (18). The argument between Lanyon and Jekyll captures the friction between the desire to enhance scientific knowledge and the fear for its unethical potential results. In line with Christopher Marlowe’s *Faustus* and Mary Shelley’s *Frankenstein*¹, Jekyll embodies the mad scientist whose thirst for knowledge of human nature brings about his own destruction.

The location of Lanyon’s house emphasises his medical authority whereas Jekyll’s hidden laboratory highlights his immoral practices. Lanyon’s residence is located in Cavendish Square, entitled “that citadel of medicine” (11). The imagery of

¹ This thesis only briefly discusses Shelley’s *Frankenstein* (1818) as a text that explores the mad scientist figure, because Victor Frankenstein is an alchemist and a magician, as much as a scientist. Therefore, this novel is not so relevant to the discussion of the modern scientists in this thesis.

a strong fortress reinforces Lanyon's scientific authority. Even though Jekyll's laboratory used to belong to a "celebrated surgeon," the former authority of the surgeon's "dissecting rooms" disappears with Jekyll's deviation to obscene "chemical" experiments (24). This redefinition of the setting from conventional medical practice to a hidden laboratory symbolises Jekyll's internal discrepancy: the path he could have chosen to continue as a conventional doctor and the fatal divergence he took by pursuing the darker branch of "transcendental" science.

Lanyon analyses Hyde's degeneracy by using medical discourse, which leaves him unable to define Hyde's immoral and corrupt soul. Lanyon explains that "[t]his bore some resemblance to incipient rigor, and was accompanied by a marked sinking of the pulse" (48). Lanyon explicitly diagnoses the response to Hyde as "incipient rigor," the scientific term for "goose pimples" (Luckhurst 188). Using the terminology of Raymond Williams, "the dominant" is scientific discourse whereas "the residual" is religious discourse (121-122). Even though literal religious discourse is absent, the significance of moral codes essential to religion is implicit throughout. Lanyon concludes that "I have since had reason to believe the cause to lie much deeper in the nature of man" (48). Lanyon's inability to formulate Hyde's disease demonstrates that the scientific discourse restricts him to speak of the soul, the essential part "deeper in the nature of man."

Lanyon's diagnosis of brain disease to explain Hyde's degeneracy mirrors Lombroso's positivist classification of criminals' craniums. Dr Lanyon observes that "[t]he more I reflected, the more convinced I grew that I was dealing with a case of cerebral disease" (47). Dr Lanyon's diagnosis of "cerebral disease" is key in that it echoes the fascination of degeneration theorists with phrenology. Phrenology, or "craniometry," is "the study of the external conformation of the cranium as an index

to the position and degree of development” (OED), which Lombroso applied to “those ‘dangerously diseased’ and ‘degenerate’ groups of the population” (Pick 113). Based on a collection of sixty-six skulls of criminals, Lombroso examined the “cranial abnormalities” of criminals to prove the degenerate’s regressed development (Lombroso 48). Lombroso concluded that many skulls displayed anomalies, such as an “abnormally small” skull or “a median occipital fossetta or indentation at the base of the skull,” which “recall [...], above all, prehistoric man much more than the white races” (Lombroso 45, 47, 49). In line with Lombroso’s study, Lanyon attempts to explain Hyde’s atavistic appearance by diagnosing a cerebral abnormality.

The story of Jekyll’s dual nature is not only influenced by contemporary scientific theories on dual personality but *Jekyll and Hyde*, in turn, influenced contemporary scientific publications. Even though Stevenson “denied using any medical theories or case studies as models,” he “likely drew inspiration from case studies written in the mid 1870s, when dual personalities were widely discussed” (Stiles 27, 33). Stevenson himself was not only influenced by scientists through correspondence with “important researchers,” but also his short story, in return, seems to have affected other scientists’ work (Stiles 29, 30). In this sense, Stevenson’s fictional story is part of the nineteenth-century scientific debate on “cerebral localization” (Stiles 34) and its controversial theories.

The interaction between the story and scientific publications shows how Stevenson participated in the debate about brain duality. In fact, Jekyll’s characterisation of his dual nature evokes the 1870s and 1880s debate on left and right hemispheres, as “Jekyll exhibits left hemisphere attributes (masculinity, whiteness, logic, intelligence, humanness), while Hyde embodies right-hemisphere traits (femininity, racial indeterminacy, madness, emotion, and animality)” (Stiles 37).

Stiles claims that “Stevenson transformed the polarities of the double brain into a tale of terror that shows the potentially disastrous consequences of hemispheric imbalance” (48-49).

The scientific theory of dual personality explored in *Jekyll and Hyde* undermines religion. Phrenologist Gall’s theory that the two brain hemispheres are identical and independent brains (Stiles 34) implicates “that man might have two souls (one per brain hemisphere)” (Stiles 33). The heretical complication of multiple souls not only clashes with Christianity’s doctrine of the human soul, but it also provides a glimpse into the extent of unorthodox conclusions of scientific research.

3.3 Mad Scientist and Bestial Operations in *The Island of Dr Moreau*

Dr Moreau’s scientific experiments involve bloody experimental operations on animals that are left in tormenting pain, as they become the victims of horrific experiments of vivisection. In contrast to the heroic scientific operations in *Dracula*, in *Moreau* science is depicted as immoral, even evil. The scientist Moreau becomes a monstrous version of Lombroso and scientific experiments are horror elements. In *The Island of Dr Moreau*, Moreau’s manufactured humanised animal species show the potential horrifying and unethical results of unlimited and uncontrolled scientific operations.

Dr Moreau is a *fin-de-siècle* representation of the mad scientist. Dr Moreau’s deep desire to discover more about human nature and enhance new scientific techniques makes him indifferent to any moral law. Moreau contemplates: “Was this possible, or that possible? (73) “I wanted – it was the only thing I wanted – to find out the extreme limit of plasticity in a living shape” (73). Similar to Frankenstein’s “wretch,” the Beast People are constructed from multiple parts in order create human

life. Whereas Frankenstein lingers in his guilt and regret, Moreau continues his experiments even after ten failures without any sense of remorse, which shows his loss of conscience. By using Dr Moreau as a representation of the mad scientist, *Dr Moreau* imagines and moralises on the dangerous consequences of science without a moral purpose. In this way, Wells warns for the future of London when science is not controlled by morality but escalates.

Dr Moreau is depicted as a monstrous character. Moreau is not considered monstrous because of any deformity but because of his immoral behaviour. Stiles argues that “Wells’s depiction... of Moreau... focus[es] on moral and psychological abnormalities attendant on genius” and “[t]hese psychological abnormalities must be inferred from behaviour” (139). In London, the paper headlines formulated Moreau’s atrocious experiments of vivisection as “The Moreau Horrors.” Dr Moreau’s radical experiments of vivisection were unaccepted and condemned by London society. Stiles notes that “while both Moreau and Wilde have broken the law – vivisection was illegal after 1876, unless one possessed the proper licences – they are reviled mainly because they have violated social taboos of one sort or other” (141). Moreau’s vivisection was considered immoral and taboo in Victorian England, and this unethical behaviour is what constructs his monstrosity.

Dr Moreau’s experiments of vivisection are visualised as horror elements within the book’s general gothic representation of science. Whereas in *Dracula* Van Helsing and the other gentleman professionally and heroically perform operations to save lives, in *Moreau* the scientific operations become a horror theme fused with the elements of pain, blood and death. Prendick beholds the nightmarish operation room:

A startled deerhound yelped and snarled. There was blood, I saw, in the sink, brown and some scarlet, and I smelled the peculiar smell of carbolic acid.

Then through an open doorway beyond in the dim light of the shadow, I saw something bound painfully upon a framework, scarred, red, and bandaged.

And then blotting this out appeared the face of old Moreau, white and terrible.

(47)

Prendick witnesses in shock the impressions of the operation room of blood, bound victims and torture. The operation room presents a horror scene which is not only visually frightening by the “blood, [...], in the sink, brown and scarlet” but is also appalling by its “smell of carbolic acid.” In addition to the classic Gothic trope of shadow, Moreau himself frightens Prendick, “white and terrible.” Moreau himself is monstrous as he embodies the Victorian fear of unconventional vivisection.

Moreau’s trivialising of the pain caused by his vivisection not only shows his monstrous nature but also specifically highlights his degeneracy. Fittingly titled “the House of Pain,” (57) the “stone enclosure” is the dreaded place where Moreau and Montgomery perform their agonising and excruciating operations of vivisection. Moreau argues that “a mind truly opened to what science has to teach must see that it [pain] is a little thing” (72). Stiles argues that “Moreau’s appalling indifference suggests ‘the complete absence of moral sense and of sympathy’ that Lombroso associated with moral insanity” (139). In this sense, Moreau’s lack of guilt or empathy reveals his immoral and degenerate nature. The concepts of guilt and empathy are key to Protestant doctrine, two moral values Moreau does not possess. Stiles argues that “seen from the grim perspective of evolutionary neurology, then, Doctor Moreau’s overdeveloped rationality is the monstrous presence on the island, not the grafted hybrids he creates” (139).

The immorality of Moreau’s experiments is emphasised by the references to religion. In *Dracula*, Van Helsing relies on both science and religion to defeat the

monster during his quest. In *Moreau*, by contrast, Moreau is obsessed with science and holds no faith. Prendick calls the Beast Men “these horrible caricatures of my Maker’s image” (97). Moreau asserts that “pleasure and pain have nothing to do with heaven and hell. Pleasure and pain – Bah! What is your theologian’s ecstasy but Mahomet’s *houri* in the dark? This store men and women set on pleasure and pain, Prendick, is the mark of the beast upon them, the mark of the beast from which they came” (73). In this excerpt, science and religion clash. Moreau implies that he takes away “the mark of the beast” from men and women, by transforming animal species into man. As Moreau is obsessed with science, Moreau takes these religious concepts literally, and consequently, misunderstands its metaphorical meaning. The emptiness of religious references reinforces the pointlessness of Moreau’s experiments. What is more, Prendick loses his faith as he cannot find solace in religion back in London. Prendick declares that “into some chapel, and even there, such was my disturbance, it seemed that the preacher gibbered Big Thinks even as the Ape Man had done” (133). Even revered men like preachers resemble, in Prendick’s eyes, the grotesque and monstrous species of the Beast People.

Moreau’s use of Latin to explain his scientific experiments not only emphasises the abhuman nature of the Beast People but also highlights the immoral and uncivilised behaviour of Moreau himself. Moreau explains to Prendick in Latin that “*Hi non sunt homines, sunt animalia qui nos habemus... vivisected*” (65).² Even though the use of Latin, a language closely associated with scientific discovery, taxonomy and anatomy, emphasises Moreau’s education and scientific ambition, the fact that he uses “Bad Latin! Schoolboy Latin!” undermines his authority. In this way, Moreau explains the nature of the Beast People to Prendick without the Beast People

² “These are not men, they are animals which we have vivisected.”

understanding it. It is significant that Moreau uses the language of a great ancient civilisation to express his modern scientific experiments of vivisection. Moreover, the use of Latin to keep the Beast People ignorant symbolises the distance between the Beast people and civilisation, emphasising their abhuman nature.

Conclusion

In each Gothic work, the exploration of science and the portrayal of scientists as heroic, religious, pretentious or mad presents a particular moral perspective on scientific progress. *Dracula* confirms to the dominant positivist ideology of Victorian culture. *Dracula* reflects Lombroso's panic by portraying the polarisation of good as white, male and Western, and evil as all that is foreign and deviating from the Western norm. Science and religion are united through Van Helsing: a religious scientist who heroically defeats Dracula. In *Jekyll and Hyde*, Jekyll complicates the positivist ideology by showing a different ideology of the time. Jekyll is represented as a pretentious scientist whose secretive dual life and immoral experiments undermine the image of the authoritative scientist.

In *Moreau*, Moreau is a mad scientist who is monstrous because of his immoral scientific experiments. As scientific discourse is predominant and Moreau does not possess moral values, Moreau misinterprets religious references. Moreau mirrors Lombroso: Lombroso creates monsters by categorising deviant criminals, whereas Moreau literally creates and manufactures monsters of different animal species. Considering that man is an animal species, *Moreau* offers a moral message that scientists should leave species the way nature intended: they should not meddle with animals any more than they should with man.

Chapter 4: London and the Urban Gothic

In the Gothic tradition, the city has attained connotations of corruption and darkness. In traditional Gothic novels, such as Ann Radcliffe's *Mysteries of Udolpho* (1794), the city is presented as a place of corruption and temptation, a blight on the sublime landscapes that dominate the novel. In early nineteenth-century Gothic fictions, such as Mary Shelley's *Frankenstein* (1818), or James Hogg's *Confessions of a Justified Sinner* (1824), the city becomes a more prominent setting. On the one hand, it is a place of possibilities, scientific inventions and individual freedom. On the other hand, it is a place that facilitates over-ambition and moral corruption. In addition, the city itself becomes a dark presence, an – Urban Gothic – setting. This dark depiction of the city in literature reaches a peak in the *fin de siècle*. A major early example is James Thomson's poem "The City of Dreadful Night" (1874), which gloomily describes the city as a dark and eerie place: "The street-lamps burn amid the baleful glooms, / Amidst the soundless solitudes immense / Of ranged mansions dark and still as tombs" (I ll. 43-45). The *fin-de-siècle* Gothic fictions primarily explore the setting and dark enterprises in Britain's capital city of London.

The abundant exploration of the dark side of London by *fin-de-siècle* Gothic fictions is clearly influenced by the impact of urbanisation on Victorians. At the time, "London's expansion during the 1800s was unequalled, even in an era when urban growth was escalating exponentially around the globe (Ridenhour 16). The innumerable streets became labyrinths and neighbours strangers. London was riddled with disease and criminality and "the fog, pollution, overcrowding, and cramped topography made London a dark city" (Ridenhour 21). In the late nineteenth century, Charles Booth went to London to investigate the scale of poverty in this urban setting, finding that "some thirty per cent of London's population lived below the poverty line

which he devised – more than was claimed by the report he had originally set out to disprove as an exaggeration (Smith 107).

The contemporary anxiety for urbanisation becomes most elaborate and graphic in the *fin-de-siècle* Gothic fictions. In these selected works, London is an Urban Gothic labyrinth where its half-lit streets, shadowy houses and corners facilitate residence for malicious demonic intruders, fatal experiments and social corruption which emphasise the confrontation with degeneration. The first section analyses the representation of London and the theme of intrusion in Stoker's *Dracula*. The following section discusses London as an Urban Gothic labyrinth in *Jekyll and Hyde*. The last section examines the significance of the absence of London in *Dr Moreau*.

4.1 Foreign Intrusion of the Degenerate Aristocrat in *Dracula*

In Stoker's *Dracula*, the two polar settings of Transylvania and the British capital of London highlight the quintessential fear of foreign intrusion. This intrusion distinguishes three subsequent phases: Harker's confrontation with the Count's demonic nature in Transylvania, the Count's invasion of – their – London, and the hunt that ends in Transylvania. As explained in Chapter 2, not only Dracula's movements and bestial appearance but also his cruel actions evoke sheer terror and utter panic. However, what is most disturbing is that this degenerating force relocated from a distant, foreign land and schemed his way into the familiar setting of their everyday city.

The clash between the familiar and feared foreign is clearly illustrated by the climactic confrontation of Jonathan Harker with Count Dracula amidst the bustling city-centre of Piccadilly. Mina describes in her diary entry an ordinary day-out, as she

relates that “[w]e came back to town quietly, taking a bus to Hyde Park Corner,” and later “[...] we got up and walked down Piccadilly” (183). Amidst London’s city centre Jonathan becomes paralysed with fear as he witnesses this degenerate creature, transformed to his younger self, standing in the middle of the street. Rather than a nightmarish encounter in a far-distant country, this confrontation takes place in his city, where this foreign creature preys on women among unaware Londoners. As “Dracula’s primitive savagery occurs in the very center of the modern city” (Ridenhour 71), Dracula’s degeneracy clashes with the civilised decorum that is linked to the Victorian metropolis.

The degenerate nature of the aristocrat Dracula is reflected by his two dark and Gothic mansions in London. The Count’s purchases consist of a church ruin called Carfax Abbey, and a decrepit mansion at Piccadilly. These decrepit, deteriorating houses symbolise the Count’s deteriorating nature. In particular, these Urban Gothic settings enable the invading degenerate to adapt to the city. This relationship is twofold: the Urban Gothic houses facilitate the creature’s living conditions and provide freedom, and the Urban Gothic setting emphasises the presence of this dark creature in the city. Jonathan highlights the intricate and mutual connection between the house and Dracula as he reflects that “[e]very breath exhaled by that monster seemed to have clung to the place and intensified its loathsomeness” (267).

Carfax Abbey represents the darkness and foulness of its degenerate owner. The ruin is Gothic: the lamps throw great shadows across the place, “thick with dust,” “masses of spiders’ webs” and a desolate chapel with a foul odour of blood (266-267). Mighall argues that “[t]he new Gothic landscape of the slum [...] employs the familiar Gothic trope of the unspeakable” (68). However, in the Urban Gothic the

unspeakable horror is associated with “the sanitary sphere,” as “its principal horror is stench” (Mighall 68). The stench of blood in Carfax symbolises Dracula’s repulsive thirst for blood. Furthermore, the vampire hunters’ response to the house is a – slightly weakened – version of their response to Dracula. Indeed, their first response was “that there was someone else amongst us” (266). Moreover, Jonathan hallucinates Dracula’s presence as he “seemed to see the high lights of the Count’s evil face,” and Lord Godalming, too, mistook the shadows for the Counts face (268).

In addition, the rats in both houses symbolise Dracula’s presence and emphasise his bestial nature. The group witnesses “the rats [...] multiplying in thousands” and “[w]ith their going it seemed as if some evil presence had departed” (269). These rats evoke Dracula’s bestial and evil presence. In addition, in the asylum Renfield witnesses Dracula turn into rats, giving Dracula a material connection with the bestial. Phillips notes that “[t]he image of the rat has always featured in anti-urban discourse” (106). Rats are also historically associated with disease in an urban setting. In particular, the rats, unhygienic and festered through the city, were agents that spread the highly contagious Black Death to European cities. In this sense, Dracula’s metamorphosis into rats represents his contagious influence in the metropolis as an agent of the Victorian disease of degeneration, degenerating victims by his infectious bite.

The rats present in Dracula’s houses not only represent urban decay but also signify moral decay. Even in modern horror, rats are associated with urban decay and the moral decay that is linked to modern urban life, such as James Herbert’s *The Rats* (1974). Apart from the rats’ connection to Dracula, Sullivan “talks of the rat as ‘mirror species’ to ourselves” (qtd. in Philips 107). This highlights the fear of a degenerate aristocrat from a distant land as well as the possibility of degeneration

within modern civilisation. Indeed, “as Burt also suggests, the human / rat crossover often occurs in moments and places of crisis and horror, war, urbanization, slum living, torture” (qtd. in Philips 107).

Dracula’s house in Piccadilly and the two other houses that contain his coffins emphasise the fear for urbanisation and inhabitants’ degeneration. Dracula is able to settle himself in several houses among unknowing Londoners. In the immense city of London, Dracula becomes, in a figurative sense, invisible. The city’s immense proportions provide a hidden refuge and countless inhabitants provide him with anonymity.

In particular, this connection between the city and the anonymity of its inhabitants is apparent in the significance of the specific location of Dracula’s houses in London. In Stoker’s London of the 1880s, the infamous serial killer Jack the Ripper brutally murdered women and terrorized the East End streets. Ridenhour points out that the specific address of one of the houses, “Mile End New Town at 197 Chicksand Street” is reminiscent of the Ripper’s killings as “the Count’s house [...] is roughly at the center of a circle formed by the Ripper murder sites” (69-70). The similar location in London parallels Dracula’s degenerate and monstrous nature to Jack the Ripper’s. In addition, it highlights that London facilitates the anonymity of criminals, as Jack the Ripper remained anonymous and was never convicted. The Ripper’s mysterious identity parallels with Dracula, who in its transformed shapes, escapes to Transylvania and after being stabbed literally disappeared into thin air.

The asylum of Dr Seward represents a key Urban Gothic setting, which emphasises the corrupting influence of the city as catalyst of mental disease. The desolate and dark prison-like walls of Seward’s lunatic asylum and its screaming patients illustrate a dark and sinister aspect of urban life. Seward and his patient

Renfield become Gothic characters, as “[t]he romantic Gothic villain is transformed as monks, bandits and threatening aristocratic foreigners give way to criminals, madman and scientists” (Punter 26). Seward laments his loneliness and the depressing interior of his asylum:

It was a shock to me to turn from the wonderful smoky beauty of a sunset over London, with its lurid lights and inky shadows and all the marvellous tints that come on foul clouds even as on foul water, and to realize all the grim sternness of my own cold stone building, with its wealth of breathing misery, and my own desolate heart to endure it all. (126)

Seward is attached to the city, as he regards the smoke as “wonderful” and the dark shadows among London’s street lights as “marvellous.” The “smoky” sunset, “inky shadows” and “foul clouds” are reminiscent of the fog in 1880s London. This fog was caused by pollution and smoke, and “often turned mid-day into twilight,” varying “from yellow to brown to black” (Ridenhour 21). Within this – to him – mesmerising cityscape, Seward seems trapped in his asylum, which, with its cold stone walls, “breathing misery” and loneliness appears as an urban dungeon.

4.2 London’s Gothic Streets and Urban Degeneration in *Dr Jekyll and Mr Hyde*

Stevenson’s fictional London is one of the darkest representations of the Urban Gothic in *fin-de-siècle* Gothic fiction. Whereas in *Dracula* modern London becomes occupied with Dracula’s Gothic lairs, in *Jekyll and Hyde* the entire metropolis of London, from its street corners to its districts, is fused with Gothic elements of darkness, decay and horror. In *Dr Jekyll and Mr Hyde*, London’s depiction as an Urban Gothic labyrinth explores London as the centre which facilitates the downward spiral of degeneration.

A key Urban Gothic theme that visualises decay is the London fog. Mr Utterson describes the filthiness and thickness of the brown London fog, observing how “the next moment the fog settled down again upon that part, as brown as umber, and cut him off from his blackguardly surroundings” (22). The thick fog that covers the city makes London an Urban Gothic setting, attributing to the innumerable houses and infinite streets an eerie atmosphere. The fog facilitates degeneration, as “the swirling mists...obscure and envelop vice and crime” (Dryden 93). In Victorian London, the fogs that primarily resulted from “the smoke from coal-burning factories and chimneys combined with London’s natural propensity for mist [...] turned mid-day into twilight” and “caused chronic health problems” (Ridenhour 21). Morel argued that *dégénérescence* was caused, apart from intoxications and certain habits, by certain diseases (Pick 61). The filthy, brown fog that obscures Mr Utterson’s view symbolises the city’s noxious and corrupting influence on city dwellers as a catalyst of degeneration.

London’s filthy streets and its dark cityscape emphasise decay, which mirrors the moral decay of Londoners. Mr Utterson describes London’s dim and shadowy neighbourhood:

The dismal quarter of Soho seen under these changing glimpses, with its muddy ways, and slatternly passengers, and its lamps, which had never been extinguished or had been kindled afresh to combat this mournful reinvasion of darkness, seemed, in the lawyer’s eyes, like a district of some city in a nightmare. (22)

The polluted urban streets mirror the dishevelled appearance of its passengers. The most significant feature that constructs nightmarish London, however, is the “reinvansion of the darkness.” The dark atmosphere is a classic Gothic setting, adapted

from the crumbling ruins and mysterious woods in classic Gothic novels, such as Ann Radcliffe's *The Romance of the Forest* (1791), to suit the late nineteenth-century urban metropolis. The dark cityscape embodies the sinister process of degeneration that it generates and the impending doom that all victims face. Even the lamps "which had never been kindled afresh" cannot defeat the darkness. Moreover, "[I]n plights here only compounds the nightmarish quality and danger of the place" (Dryden 92).

Walvin describes the negative image of the Victorian city, asserting that "[f]or much of the nineteenth century, the city was synonymous with dirt, disease, overcrowding, smells and noise" (8). In late Victorian Gothic fiction, these urban features became intricately linked to the Urban Gothic setting. Mighall states that "the horrors and fears of the Urban Gothic mode [...] perform the familiar elision between dirt, disease, and vice (76). In fact, in *Jekyll and Hyde* the mutual influence between Urban Gothic London and degeneration is reinforced by the themes of dirt, disease and vice. Degeneration was considered a disease: "degeneration was technically a medical term, and denoted a particular sub-category of organic disease" (Hurley *Gothic Body* 71). These three intricately linked themes visualise the vicious circle of degeneration. The city's pollution, the spread of disease and inhabitants' immoral habits facilitate degeneration, a disease that pollutes man's nature and induces victims to immoral vices.

The decayed buildings in the city mirror the decaying nature of the inhabitants: "Round the corner from the by-street, there was a square of ancient, handsome houses, now for the most part decayed from their high estate and let in flats and chambers to all sorts and conditions of men: map-engravers, architects, shady lawyers and the agents of obscure enterprises" (Stevenson 16). The former "ancient, handsome" houses that have fallen into a decrepit state symbolise the middleclass and

aristocracy that now regress into degeneracy. In particular, “all sorts and conditions of men,” implies how the respected profession of a lawyer is meaningless in the city, an empty title hiding criminal intentions. This parallel between the setting and man’s nature extends to Jekyll’s dual nature and his residence, as “[s]urrounded by the higher districts of May Fair and Pall Mall, Soho’s relation to respectable London is therefore a topographical replication of the Hyde within the Jekyll” (Mighall 151).

The depiction of London as a catalyst for degeneration is highlighted by the frequent references to London and its sounds. The numerous references to London present the city as an omnipotent presence that surrounds its inhabitants. London is explicitly mentioned in the key scene when “the yellow light of a mid-London morning” on Jekyll’s hairy hand reveals his reversion into Hyde (58). London’s presence is emphasised by the references to background noises, such as the city’s bell tolls, and distinct sounds made by London, such as “the low growl of London” (14). Dryden points out that “[t]hese sounds, as much as the sights, locate the novel as metropolitan, as set within a humming, teeming city” (107). In addition to the emphasis on London, “[i]t’s noise became an aspect of its mightiness, and horror; it became numinous” (Ackroyd 75). Rather than a divine presence, however, London is portrayed as diabolical presence whose horrific influence demoralises and deteriorates its victims. This depiction echoes society’s fascination with the occult in the late nineteenth century.

London’s labyrinthine streets and hidden compartments are paramount to the Urban Gothic setting, which facilitate Jekyll’s dual life and the dissociation of his dual nature. The opening chapter in which Mr Utterson and Mr Enfield discuss the mystery of a hidden door emphasises the prominence of London’s depiction as a labyrinth, as they observe, “for the buildings are so packed together about that court,

that it's hard to say where one ends and another begins" (9). This labyrinthine depiction reflects London in Stevenson's time, as "Bacon's 1888 Ordnance Map of London shows the city encompassing an area roughly 12 by 16 miles" (Ridenhour 17). The official front door on one side of the house and the hidden door of the laboratory illustrate the disordered labyrinth of urban houses and demonstrate how these buildings facilitate the invisibility of criminals and their dark enterprises. Pick argues that "[p]erceived as visibly different, anomalous and racially 'alien', the problem was simultaneously their apparent invisibility in the flux of the great city" (52). Indeed, regardless of Hyde's atavistic appearance, he is able to disappear through the laboratory door and dissolve in the crowd of the city.

The extent of the downward spiral of degeneration that is facilitated by London is demonstrated by the dual nature of the respected and civilised gentleman Dr Jekyll. In the 1860s, *The Lancet*, a journal discussing French anthropological debate about degeneration, discussed arguments "about the capital as a literal breeding ground of decay" (Pick 190). Indeed, one writer argues that perhaps not only "the lower orders" but "aristocracy" are afflicted too (Pick 190). Whereas degeneration was primarily linked to the lower classes of society, in *Jekyll and Hyde*, "[t]he horror unfolds within a self-consciously civilized and modern milieu: that of a comfortable middle-class, professional, and male London" (Reid 94). Indeed, "[t]he susceptibility of the upper class to moral decay was the theme of [Nordau's] *Degeneration*" (Dryden 78).

The habit of alcohol abuse is key to urban degeneration. Mr Utterson sees "a dingy street, a gin palace, a low French eating house, [...] and many women of many different nationalities passing out, key in hand, to have a morning glass" (22). Not only the "gin palace" indicates the urban demand for alcohol but also the "morning

glass” of many clearly signifies widespread alcohol addiction. As this thesis discusses degeneration, it will not cover the imperial Gothic theme evoked by “many nationalities” and focus on alcohol as a stimulus for regression. Lombroso argues that “[a]lcohol and drugs irritate the nervous centers, causing acute arachnitis and congestive hyperaemia, or at least degeneration of brain tissue” (277). Jekyll’s fragmentation into his degenerate nature is facilitated by “a largely implied catalog of vices which Hyde is guilty: alcohol, opium, illicit sex” (Ridenhour 34).

The implied practice of prostitution that is mentioned above is a significant aspect in degeneration theory. The independent woman, “key in hand,” and ready for her “morning glass” probably refers to an alcoholic prostitute. This modern woman is by herself a *fin-de-siècle* theme, a New Woman, who “was vilified for her unwomanly sexual appetites and her insistence on behaving ‘like a man’” (Hurley 201). In Victorian London, “the plague of prostitution [was] seen by many as a symbol of all that was wrong with society,” which might be explained by the fact that around 1850 “there were an estimated 80,000 prostitutes in London” (Ridenhour 23). Lombroso incorporated prostitution into his degeneration theory, arguing that “[t]he ‘natural form of retrogression in women’ is prostitution rather than crime (*The Female Offender* p.152)” (Hurley *Gothic Body* 98).

After the publication of *Jekyll and Hyde*, in the reality of 1888 London, the Ripper murders materialised Hyde’s atavistic crimes. The notorious murderer Jack the Ripper and the so-called Whitechapel murders became infamously linked to and an intricate part of London’s Gothic image. The enigmatic Jack the Ripper terrorised the streets of East End, where he gruesomely mutilated and murdered several women. Curtis pinpoints the contemporary newspapers’ parallel between the Ripper and Hyde: “Life – or rather death – was imitating art, because the ‘obscene Hyde’ took no

more ‘intense delight in murder for murder’s sake’ than did the Whitechapel assassin” (Curtis 127). Ridenhour remarks that “[t]he overlapping of fiction reached its apex in the events surrounding the London production of a stage adaptation of Stevenson’s *The Strange Case of Dr Jekyll and Mr Hyde*, playing in the West End during the first of the Ripper murders” (37).

As with Hyde’s criminal outbreaks, Jack the Ripper’s killing spree in the middle of London’s city centre underlines the city’s image as a catalyst for degeneration. Notably, not only Jack the Ripper himself conforms to the profile of an urban degenerate, or Lombrosean monster, but also his victims who were all alcoholic prostitutes, display key characteristics of degeneracy. Moreover, the enigmatic mystery of Jack the Ripper’s identity proves the invisibility of criminals in London’s urban labyrinths, as with Hyde’s escape through the back laboratory door. Indeed, “[t]he vastness and anonymity of the city helped to mask the Ripper’s identity, a cover that Jekyll relishes” (Dryden 87).

4.3 Alienation from London in *The Island of Dr Moreau*

The urban setting of London in *Dracula* and *Jekyll and Hyde* is depicted as the centre of knowledge where the scientists, such as Van Helsing and Jekyll, are attracted to, or live. In *Moreau*, the equation of the metropolis with scientific authority is reversed. Whereas the scientist Dr Van Helsing drives Dracula out of London to a foreign land, in *Moreau* the scientist Dr Moreau himself is driven out of London and exiled to an exotic island. In *The Island of Dr Moreau*, the extent of Moreau’s horrifying experiments force a relocation from modern London to an uninhabited island without the laws of civilisation.

As Dr Moreau's radical scientific theories are unacceptable to London society, he is forced to conduct his horrifying experiments of vivisection on a lawless and uninhabited island. Moreau's radical ideas on vivisection originated in London but these were rejected there as abominable scandals entitled "The Moreau Horrors." As Moreau crossed the moral and ethical boundaries of scientific operations and urban morality, he is forced to isolate himself on a deserted island as an outcast of civilisation in order to continue his radical experiments. The extent of Moreau's horrifying experiments symbolises the potential of uncontrolled and unethical science in London or else in the world. Wells imagines what happens if science is out of control and moralises on its unethical and dangerous consequences.

It is significant that the Beast People attempt to live in a community based on laws, whereas Moreau and Montgomery dominate the island without regulations. Laws are generally based on society's moral perspectives: that which is forbidden by law is generally considered immoral. Moreau and Montgomery are unrestricted by laws, and can dominate the island without moral values. The Beast People's strive to become human and Moreau's bestial behaviour obscure precise definitions of man and animal. In fact, it demonstrates a reversion of the morality expected of Western men and animals' lack of morality. Moreover, this implicates the concept of civilisation, as civilised animals are victims of the uncivilised Moreau. The Beast People live in a communal setting: they live in their dens and are obsessed by an imprinted set of restrictions called the Law. The Beast People chime repeatedly: "Not to go on all-Fours; *that* is the Law. Are we not Men?" (57) Their constant confirmation of their humanity illustrates their struggle to maintain these moral rules against their animal nature. The only rule Montgomery follows to keep order is the need to prove it was the Leopard Man who killed the rabbit.

The wild, primitive jungle of the uninhabited island mirrors the inhabitants' lack of morality. Not only is Prendick hunted by the Leopard Man, he is also chased by Moreau and Montgomery. Eventually, the Leopard Man is hunted down by all until Prendick kills him with a pistol shot to release his suffering. An animal nature, immoral and wild, resurfaces in both men and the hybrid Beast People.

Prendick's fear and suspicion that Londoners resemble the Beast People reflects the fear for degeneration in urban London. After his return from Dr Moreau's island, Prendick becomes paranoid with fear that Londoners are similar to the Beast People, and might revert:

I could not persuade myself that the men and women were I met were not also another, still passably human, Beast People, animals half wrought into the outward image of human souls; and that they would presently begin to revert, to show first this bestial mark and then that. (132)

Prendick asserts that "I feel as though the animal was surging up through them; that presently the degradation of the Islanders will be played over again on a larger scale" (132). Prendick states "I have withdrawn myself from the confusion of cities and multitudes" (133). Prendick isolates himself from the dense population of the city, as he feels that the people he meets are subject to degeneration.

Conclusion

The three different representations of London in each Gothic work present a particular moral perspective on the role of the city and the scientist. The representation of London as infiltrated in *Dracula*, as an Urban Gothic labyrinth in *Jekyll and Hyde* and as absent in Moreau show a correlation between London and the scientist. In *Dracula*, London is represented as the characters' familiar home, which is invaded by the

immoral and degenerate Dracula. Van Helsing and his group roam freely through London to chase and drive out Dracula.

In *Jekyll and Hyde*, the immoral practices originate from the city itself. Even though London is still a city inhabited by scientists such as Dr Lanyon and Dr Jekyll, it is also a corrupt place. The neighbourhoods, backstreets and houses have become a Gothic and sinister labyrinth that hides obscure experiments. In *Moreau*, the forced relocation from London to an uninhabited island symbolises Moreau's absolute lack of any morality. Victorian London becomes a paradox of ascent and decline: London is not only depicted as the centre of knowledge where scientists gather and live, but London is also explored as a catalyst of degeneration. In fact, *Jekyll and Hyde* and *Dr Moreau* suggest that behind the appearance of a great city of knowledge, the scientists and the scientific experiments contribute to the process of degeneration.

Conclusion

The monstrosities presented in the three Gothic works all resemble Lombroso's profile of the born criminal to some extent. The construction of these Lombrosean monsters show how the novel agrees, undermines or clashes with Lombroso's theory. Dracula is depicted as a degenerate monster whose description is an exact copy of Lombroso's description of the habitual murderer. Given that Van Helsing's diagnosis of Dracula as a born criminal minutely resembles Lombroso's profile of the born criminal, it shows that Stoker's novel affirms the dominant Victorian ideology.

Hyde's degeneracy is characterised by an unspeakable impurity rather than specific anomalies. Hyde's violent crimes and lack of empathy mirror Lombroso's profile of the born criminal and the imagery of wild animals emphasises his bestial reversion. However, Jekyll's dual nature undermines Lombroso's fixed categorisations, as it implies the existence of good and evil within all man.

In *The Island of Dr Moreau*, Wells transforms the theory of Lombroso by blurring clear conceptions of animal and man. Wells criticises Lombroso's theory by constructing the Beast People that mirror Lombroso's profile of the criminal man as victims and paralleling Dr Moreau, as a mad scientist, to Lombroso. By paralleling Moreau to Lombroso, the novel suggests that the rational scientist is potentially a monster.

Reading *Dracula* from the perspective of Carroll's philosophy of horror reveals that Dracula's impurity is caused by the assimilation of human and bestial traits and his alternation between man and wolf, the structures of fusion and fission respectively. Jekyll's transformation between himself and the degenerate state personified by Hyde is the structure of fission that makes him impure and evokes repulsion. The hybrid assimilation of human traits and features of different animal

species make the Beast People repulsive and even diabolical. However, the Beast People are actually victims to the immoral behaviour of Dr Moreau, which makes him the central monstrous character in the story.

The three Gothic works offer three different representations of science as well as scientists. In *Dracula*, Dr Van Helsing and his group are presented as brave heroes, who fight the monster in the name of God, even though they rely on scientific operations to drive away the degenerate Dracula. Van Helsing represents the ideal of the religious scientist who unites the discourses of religion and science into a powerful master discourse. Van Helsing and Dracula are polar opposites: Van Helsing is a religious scientist who saves lives, whereas Dracula is a devilish magician who destroys lives. In addition, Dracula threatens the Christian foundations prevalent in the novel. By turning his victims into physically immortal beings, Dracula denies the characters their immortal afterlife in Heaven.

In *Jekyll and Hyde*, the doctors Dr Lanyon and Dr Jekyll display an appearance of respectability but in reality do not live according to the moral values they maintain on the surface. Jekyll is represented as a Faustian scientist, whose immoral experiments to dissociate his polar nature show the destructive and dangerous consequences of unethical science. The scientific discourse is dominant. It is significant that religious discourse is mainly absent but Christian norms and values are still implicit. Dr Lanyon is unable to formulate Hyde's corrupt soul with scientific discourse, which is insufficient to tackle moral matters. Whereas Jekyll's dual nature undermines the positivist philosophy, in *Dracula* this Victorian philosophy is prevalent. Moreover, Stevenson not only responded to current scientific theories; his novel actually participated in the scientific debate on dual personality and influenced the way scientists thought about their work. By involving in this debate on dual

personality, Stevenson also undermined religion, as the concept of multiple souls in one being clashes with the Christian doctrine of the human soul.

In *The Island of Dr Moreau*, Wells portrays and moralises on the potential catastrophe that could occur when scientific experiments run amok. The representation of painful and bloody operations of vivisection and the victims that scream in tormenting pain are horror elements within the gothic portrayal of scientific operations. Moreau is a *fin-de-siècle* mad scientist, whose unlimited drive to discover scientific possibilities becomes his own doom. Moreau's immoral behaviour makes him monstrous, and indicates his degenerate nature. Moreau's frantic surge to classify and to distinguish degenerates makes him a monstrous version of Lombroso. In *Moreau*, scientific discourse is the dominant discourse, on the island. Moreau's misinterpretation of religious references by taking them literally shows his complete lack of morality and repudiation of any moral code.

In all three works, London is depicted as a city of knowledge that scientists are drawn towards. At the same time, a darker side of London is explored, an Urban Gothic representation which presents London as a catalyst of degeneration. In *Dracula*, Dracula invades London and inhabits several Gothic lairs across the city. The shadows, rats and foul smell of Dracula's Gothic lairs reflect his degenerate nature.

In *Jekyll and Hyde*, the entire cityscape of London becomes a Gothic labyrinth, which facilitates the downward spiral of degeneration. The fog, the darkness, the filthy streets and the decayed buildings emphasise the corrupting influence of the city and reflect the degeneracy of its inhabitants. In both works, the degenerate character is paralleled to the infamous serial killer Jack the Ripper. In

particular the anonymity London provides for Hyde and Dracula and their violent, murderous behaviour links them to this notorious Victorian criminal.

In *Dr Moreau*, Moreau's forced exile from London to an exotic island is significant in that it shows how his immoral experiments are rejected by London society. At the same time, London triggered and facilitated Moreau's scientific drive to explore the limits of vivisection. In *Moreau*, the role of the scientist is opposite to the role of the scientist in *Dracula*: the scientist Van Helsing drives Dracula out of London, whereas Moreau is the scientist who is himself driven away from London, even out of England to an exotic island.

While I have shown that the Gothic representation of degenerate monstrosities, the city and science are key to the three Late Victorian Gothic works discussed in this thesis, these themes remain significant in modern works of fiction. For example, the 2007 science-fiction horror blockbuster *I Am Legend*, directed by Francis Lawrence, explores the combination of the themes discussed in this thesis, such as degeneration in an urban metropolis and the clash between science and religion. Left as the presumably sole survivor in New York, scientist Robert Neville attempts to cure the degenerated victims affected by a destructive virus. Scientists hold responsibility for this catastrophe, as Robert states "God didn't do this; we did" (Lawrence). Whereas in the beginning of the film Robert is portrayed as a heroic scientist who attempts to cure and save these degenerates, the ending reveals that his testing experiments cruelly killed these degenerates who turned out to have a sense of morality and empathy for one another.

Even though the themes of an urban setting, the role of science and religion, degeneration and morality were typically late Victorian, *I am Legend*, as just one example of many films containing similar themes, illustrates how these themes

continue to fascinate modern society and inspire directors and writers up until this day.

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