The Human and the Animal in Victorian Gothic Scientific Literature

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ABSTRACT

This doctoral thesis examines the role of animals in nineteenth-century science and Victorian Gothic fiction of the latter half of the century. It is interdisciplinary in its exploration of the interrelationship between science writings and literary prose and it seeks to place the Gothic animal body in its cultural and historical setting. This study is interested in the ways in which Gothic literature tests the limits of the human by using scientific ideas about disease, evolution, species confusion, and disability. In analysing the animal trope in Gothic scientific fiction, this thesis conceptualises the ways in which the Gothic mode functions in relation to, while setting itself apart from, contemporary scientific theories about humankind's place in the natural world.

Chapter 1, 'Man's Best Fiend: Evolution, Rabies, and the Gothic Dog', focuses on the dog as an animal whose ability to carry and communicate deadly diseases to humans exemplified the breakdown of the animal-human boundary. I read late-nineteenth-century vampire and werewolf narratives as literary manifestations of social hysteria associated with dogs and rabies. In Chapter 2, 'Shaping Evolution: Amphibious Gothic in Edward Bulwer-Lytton's *The Coming Race* and William Hope Hodgson's *The Boats of the "Glen Carrig"*', I examine the role of the frog in Victorian science as the background to Gothic fiction's portrayal of the Gothic body as an amphibious being. The next chapter explores the spider's function in Victorian natural history as the background to its role as a protean and unstable Gothic trope in fiction. Chapter four, 'Geological Underworlds: Mythologizing the Beast in Victorian Palaeontology', looks at ways in which the dinosaur in science influenced the literary imaginations of Gothic writers Arthur Conan Doyle, Arthur Machen, and Bram Stoker. Under the title '"Monsters Manufactured!": Humanised Animals, Freak Culture, and the Victorian Gothic', the final chapter concludes the study with a discussion of freak culture, making key links between unusually-shaped people in society and human/animal hybrids in the Gothic fiction of H. G. Wells, Richard Marsh, and Wilkie Collins.

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Introduction

In 1934, H. G. Wells summed up the trappings of modernity in the introduction to his *Experiment in Autobiography* using the amphibian as a metaphor for the human response to political and social change:

> We are like early amphibians, so to speak, struggling out of the waters that have hitherto covered our kind, into the air, seeking to breathe in a new fashion and emancipate ourselves from long accepted and long unquestioned necessities. At last it becomes for us a case of air or nothing. But the new land has not yet definitely emerged from the waters and we swim distressfully in an element we wish to abandon.[1]

In an old literary tradition of capitalising on the animal's kinship with the human, Wells highlights what he perceives as a similarity between species change and social change. The amphibian, a common symbol of adaptability in scientific literature, is a hybridised creature; as my chapter on the frog will show, it is neither one thing nor another. Here, it is used by Wells to suggest that just as the amphibian is not fully adapted to living on land, we are not entirely suited to modern life. Modernity, Wells suggests, progresses more quickly than we can develop our thinking. What does Wells's analogy say about the use of animals in a literary context? What does it show about how we use animals to talk about ourselves?

These are the types of questions that this thesis will seek to address. The study's aim is to explore the ways in which certain animals – namely the dog, the frog, the spider, and the dinosaur – became key to understanding what it meant to be human during the latter half of the nineteenth century. Animals were central to the search for human origins during the

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[1] H. G. Wells, *Experiment in Autobiography: Discoveries and Conclusions of a Very Ordinary Brain – Since 1866*, 2 vols (London: Victor Gollancz and the Crescent Press, 1934), 1, pp. 17-8.

Victorian period. No longer secure following the publication of Darwin's seminal work *On the Origin of Species* (1859), species categories were placed under the spotlight in part because the flux and fluidity of the organic body had been revealed as the founding basis of life. The boundaries that separated humans from other animals collapsed and, as a result, Victorian science changed the way people viewed, interacted with, and employed animals. While it is to be expected that many of these changes were concerned with the similarities between humans and apes, investigations into the structure and nature of all kinds of creatures took place in order to examine, assess, and debate humankind's place in the history of life on earth. It is perhaps the range and variety of animals that caught the attention of naturalists in the search for the meaning of humanity that allows this study to propose a new perspective on Victorian animals. Human interaction with and examination of those loved (such as the dog), those rejected and almost universally disliked (such as the frog and spider), and those extinct and imaginative animals (such as the dinosaur) reveal the extent to which Victorians engaged with the question of animality.

When George Henry Lewes wrote the following words for the *Cornhill Magazine* in 1860, shortly after the publication of Darwin's *Origin of Species*, he sought to reveal the true import of investigating animal life:

> In the air we breathe, in the water we drink, in the earth we tread on, Life is everywhere. Nature lives: every pore is bursting with Life; every death is only a new birth, every grave a cradle. And of all this we know so little, think so little! Around us, above us, beneath us, the great mystic drama of creation is being enacted, and we will not even consent to be spectators. Unless animals are obviously useful, or obviously hurtful to us, we disregard them. Yet they are

> not alien, but akin. The Life that stirs within us, stirs within them. We are all "parts of one transcendent whole."[2]

Lewes states here unequivocally that humans are one with all other animals, that they share the same life forces, that they are 'not alien, but akin'. In line with this way of thinking, the influential Darwinian naturalist George Romanes put the dog above the monkey in the frontispiece diagram of his influential study *Mental Evolution in Animals* (1883) and elevated it in anthropological terms as humankind's closest animal kin in terms of social skills, imagination and perception. In this extraordinary example of anthropological preference, by placing the dog at the top of the scale of life, and noting that its 'products of emotional development' are complex in its ability to feel and exhibit 'shame, remorse, [and] deceitfulness',[3] Romanes demonstrated that this animal had a special place in the hearts and minds of Victorians. But while the dog was elevated to human status and aligned with human intelligence, reason, and feeling, other animals, such as the frog and the spider, were maligned as the unfamiliar other, partly, perhaps, because they were further down the evolutionary scale. But also because, despite the fact that they looked and behaved so differently from humans, they were still implicated in Lewes's version of being '"parts of one transcendental whole"'. Victorian science established the fact that far from being made in God's image, separately from animals, humans had descended from the beasts that humankind loved, hated and exploited; the same animals that have given them such pleasure and pain, companionship and pestilence.

The moral philosopher Mary Midgley has argued that throughout history, changes in human relationships with animals stem from a 'supposed contrast between man and animal which was formed by seeing animals not as they were, but as projections of our own fears

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[2] George Henry Lewes, *Studies in Animal Life* (London: Smith, Elder and Co., 1862), p. 3.
[3] George Romanes, *Mental Evolution in Animals* (London: Kegan Paul, Trench & Co., 1883), frontispiece.

and desires'.[4] This thesis examines how changes in human/animal relationships came about in the Victorian period. On the one hand, it could be that Victorians gradually separated themselves from other animals in an attempt to disprove their ancestry. On the other, they embraced the animal body as their own. As the historian of Victorian culture James Turner has noted, it was during the nineteenth century that public opinion turned in favour of the animal and these conflicts were set up:

> The task of obliterating the image of nature as 'red in tooth and claw' came to preoccupy many animal lovers and compelled them to undertake the extraordinary cosmetic surgery that they performed on the image of the beast. Forget the dog's taste for warm, raw meat; cherish instead his faithful affection. How could one fear a bright, friendly, sympathetic beast? More to the point, how could one fear the animal in one's own breast when the brute was no longer a primordial savage but a sort of high-minded curate in fur? Setting animals up as models of compassion and sympathy, then, served two ends. It reassured those anxious over the implications of man's new kinship with animals. And it taught how to tame the beast that still prowled at the back of the mind despite all efforts to disguise it.[5]

Although this is a rather neat interpretation of the shift in cultural thinking about other living creatures during the nineteenth century, the role of the animal in Victorian Gothic fiction reveals a more complex and perplexing picture. Caught between these tensions of being like us yet distinctly Other, the Gothic animal disrupts our understanding of what it means to be

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[4] Mary Midgley, *Beast and Man: The Roots of Human Nature* (London; New York: Routledge, 2002), p. 24.
[5] James Turner, *Reckoning with the Beast: Animals, Pain, and Humanity in the Victorian Mind* (Baltimore: The John Hopkins University Press, 1980), p. 77.

human. As pet culture gained popularity[6] and animal rescue centres sprang up in urban areas[7], novels such as *The Sign of the Spider* (1896), *The Island of Doctor Moreau* (1896), *Dracula* (1897), *The Lair of the White Worm* (1911), and *The Lost World* (1912) revealed the fear of animal bodies that lurked at the back of the public consciousness. Animals, these texts suggested, confound spatial, temporal, and species categories. All manner of creatures, such as man-eating spiders, shape-shifting human worms, and lost-world dinosaurs, exist 'out there' beyond human control and imagination, transgressing species and geographical boundaries. Thus, the Gothic animals discussed in this thesis function as creatures of horror in relation to the human through species confusion, zoonosis, phobia, the monstrous, and human abnormality. In terms of the Gothic mode in fiction, animal bodies – and therefore human bodies – are somehow wrong. They are indeterminate, fragmentary, hybridised, and metamorphosing. Their composite bodies threaten the integrity of the 'wholeness' of the human.[8]

On the other hand, in contrast to Turner and writing from a more theoretical standpoint, the human ecologist Paul Shepard has described the way in which people deal with animal bodies from a slightly different (but no less relevant) angle, noting that animals

> play out the contradictions we feel in their human-like animality and our animal-like humanity. Each species seems whimsical, as if it were an increment of our personal, multiple self. Of each species we can say, 'I am not that – and yet, just in this one respect, it is like a part of me', and so on,

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[6] For an excellent analysis of this aspect of Victorian animal culture, see Harriet Ritvo, 'The Emergence of Modern Pet-Keeping', in *Animals and People Sharing the World*, ed. by A. N. Rowen (Hanover, N.H.: University Press of New England, 1988), pp. 13-33. For a thorough examination of the history of pet-keeping, see James Serpell, *In the Company of Animals: A Study of Human-Animal Relationships* (Oxford: Basil Blackwell, 1986) and Erica Fudge, *Pets* (Stocksfield: Acumen, 2008).

[7] For a comprehensive history of animal rescue centres in Britain, see Hilda Kean, *Animal Rights: Political and Social Change in Britain Since 1800* (London: Reaktion, 1998).

[8] As Fred Botting has shown, the Gothic mode employs aspects of excess and transgression in ambivalent ways. See Botting's introduction to *Gothic* (London: Routledge, 1995), pp. 1-20.

> as though with every 'I am not that one' we keep some bit of them. We take in the animal, disgorge part of it, discover who we are and who we are not.[9]

Species confusion, which is what Shepard theorises here, is a fundamental part of the horror of animals. Science's inability to pin down precisely what species are and how they are similar to and different from one another (and the human) is a central theme in the Victorian Gothic mode.

In his essay 'Animality, Humanity, Morality, Society', Richard Tapper argues that there are only two conflicting metaphorical uses of the animal in literature:

> Animals, or rather cultural constructions of them, are used as metaphors [...] in two rather different, even contradictory, ways. Sometimes certain animals are idealized and used as models of order and morality, in animal stories and myths. The animals are treated as agents and social beings, with motives, values and morals; and differences between them and people are implicitly denied. By contrast animals are sometimes represented as Other, the Beast, the Brute, the model of disorder or the way things should not be done.[10]

Despite this painstakingly precise (and perhaps rather limited) analysis of how animals are used as cultural and literary metaphors, Gothic fiction presents us with a more multiple understanding of the animal allegory. In some cases, animals persistently resist only positive or only negative connotations. The spider, for example, is a protean creature in Victorian science literature. It constantly oscillates between its favourable associations with industry and its detrimental characteristics of being bloodthirsty and vindictive, and this seems to have a curious effect on its use as a Gothic motif in fiction. Other animals, such as the dinosaur,

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[9] Paul Shepard, *The Others: How Animals Made us Human* (Washington: Island Press, 1996), p. 72.
[10] Richard Tapper, 'Animality, Humanity, Morality, Society', in *What is an Animal?*, ed. by T. Ingold (London: Unwin Hyman, 1988), p. 51.

spring from the seat of the human imagination into public display and science fiction literature. The dinosaur endangers the human by its osseous existence: it haunts and is haunted by evolutionary concepts. Although no longer a threat to humanity, the very principles upon which the dinosaur body is based in Victorian science – notions of extinction and regression – warn the present dominant species of the planet – humans – of their fate. Moreover, despite the way in which the dinosaur body confuses species, it still has much to say about how Victorians envisaged monstrosity. The Victorian animal world is not complete without the dinosaur, because its role in the imagination was integral to Victorian anxieties about humanity as a species: the human as an incomplete and degenerative animal.

Lorraine Daston and Gregg Mitman's collection of edited essays *Thinking with Animals: New Perspectives on Anthropomorphism* (2005) offers fresh and stimulating perceptions on the human/animal question from historians and theorisers of science. One essay of particular interest is Paul S. White's 'The Experimental Animal in Victorian Britain', in which he shows the difference in the public's reaction to the vivisection of a frog, for which few people had any sympathy, and the dog, whose dissection caused a public outcry.[11] White's essay seemingly reveals an interesting paradox in the history of the way we interact with non-human animals. According to White, the frog, ostensibly apathetic and unresponsive to human contact, receives no consideration or compassion for his plight, while the dog, the much-loved companion animal of man, is revered and praised for its devotion to our species. In simple terms, White would like to propose that this is the complete picture. However, further research into the Victorian scientific culture that White investigates, reveals that, by the 1870s, the humble frog is aligned closely with the human (in science by Darwinian scientists such as St George Mivart and in literature by major Victorian writers

[11] Paul S. White, 'The Experimental Animal in Victorian Britain', in *Thinking with Animals: New Perspectives on Anthropomorphism*, ed. by Lorraine Daston and Gregg Mitman (New York: Columbia University Press, 2005), pp. 59-81.

such as Edward Bulwer-Lytton) while the dog is heavily maligned through its association with the deadly rabies disease. Thus, the parameters of human – animal relationships and experiences are not as cut and dried as some critics may like to suggest.

This thesis suggests, then, that anxieties about and preoccupations with the limits of the human infiltrate many aspects of nineteenth-century culture and society but are manifested most pertinently in Gothic fiction. In the Gothic mode in fiction, the horror of the metamorphosing body – a concept so central to Darwin's theory of evolution by means of natural selection – is inextricably connected to concerns about the illimitability of the human form. From Charles Kingsley's *The Water Babies* (1863) to Edward Bulwer-Lytton's *The Coming Race* (1871) to Bram Stoker's *Dracula* (1897), human kinship with the animal world is seen to be based on the theory that the organic body is capable of endless, boundless, adaptable change. As Gillian Beer has noted, '[e]volutionary theory brings together two imaginative elements implicit in much nineteenth-century thinking and creativity. One was the fascination with growth […] The other was the concept of transformation'.[12] The monsters that emerge from Darwin's new scientific ideology – the universe without plan – allow much scope for Gothic interpretations of the blurred categories of the human and the animal.

The search for the human in science and philosophy was far from new in the latter half of the nineteenth century,[13] but Darwin's theory gave it fresh significance. Intrinsic to Darwin's model of evolution was the disturbing implication that the organic body was capable of morphing, of becoming entirely Other than itself, whatever that 'self' may have been to begin with. Furthermore, his scientific writings explained the mechanism, which he

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[12] Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction* 2nd edn (Cambridge: Cambridge University Press, 2000), p. 97.

[13] David Hume's *A Treatise of Human Nature* (1739) and Jean-Baptiste Lamarck's *Zoological Philosophy* (1809) were amongst some of the most significant and influential studies on the philosophical and scientific aspects of being human/animal.

called natural selection, that proved that humans were not created separately, but emerged, like all other animals, from one primitive creature. In the spirit of post-Enlightenment scientific investigation, Victorians began to look afresh at the world around them. They found signs of their animal ancestry everywhere; in the embryology of the dog, in the ontogenesis of the frog, in the character of the spider, in the rocks and ancient geological formations which harboured so many strange-looking and extinct creatures, and, significantly, in the people who resembled animals on view at many freak shows.

This thesis works within the parameters of four main fields of inquiry: literary analysis, animal studies, Gothic studies, and the history of science and medicine. The interdisciplinary nature of the thesis will allow me to draw upon an extensive range of materials in my endeavour to draw together various aspects of Victorian literary, scientific, and medical culture on the human and the animal. In the paragraphs that follow, I will outline how my work engages with and builds upon research and analyses already done in these areas.

Recent literary theory has started to question the significance of our interaction with animals in modern cultural history. Books on humankind's changing attitude towards animals such as Keith Thomas's *Man and the Natural World: Changing Attitudes 1500 – 1800* (1983) and Harriet Ritvo's *The Animal Estate: The English and Other Creatures in the Victorian Age* (1987) have reassessed where we place animals in English culture and history. Alongside the growing interest in Darwin studies over the last thirty years, which was initiated by Gillian Beer's hugely important *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction* (1983), a new and burgeoning field of scholarship has emerged: animal studies. Recent contributions to this field in terms of its application to literature include Philip Armstrong's *What Animals Mean in the Fiction of Modernity* (2007) and Deborah Denenholz Morse and Martin A. Danahay's edited collection of essays *Victorian Animal Dreams: Representations of Animals in Victorian Literature and Culture*

(2007). These books bring together the history of animals in human culture and interpretations of this history in literary critical analysis from the eighteenth century to the present. My contribution to the field of animal studies operates within the parameters set by these books, although my work focuses specifically on Gothic fiction of the latter half of the nineteenth century.

Books on the animal/human boundary such as James J. Sheehan and Morton Sosna's *The Boundaries of Humanity: Humans, Animals, Machines* (1991), Paul Shepard's *The Others: How Animals Made Us Human* (1996), Randy Malamud's *Poetic Animals and Animal Souls* (2003), and Mary Pollock and Catherine Rainwater's *Figuring Animals: Essays on Animal Images in Art, Literature, Philosophy, and Popular Culture* (2005)have looked at the question of what it means to be human from a variety of different perspectives and within a number of allied fields of inquiry including sociology, socio-biology, history, psychology, culture, language, art, and literature. The interdisciplinarity of this body of work has informed my thinking on this topic in crucial ways. It has allowed me to explore ways in which to examine the animal body from a number of interdisciplinary perspectives such as history and cultural studies, science and medicine, and literary critical theory. The most useful aspect of these critical engagements with the animal, however, has been the framework it has given me for my own study. The work contained within these volumes is part of the story of how animal studies has become such a key area of research in recent years. Furthermore, they have set the question of human/animal relationships into a modern framework in which the role of technology and mechanics now shapes current critical thinking on the human.

Kelly Hurley makes the fluidity of Darwin's vision of the material body her focus in *The Gothic Body: Sexuality, Materialism, and Degeneration at the* Fin de Siècle (1996). Here, Hurley asserts that in *fin-de-siècle* Gothic literature the human body collapses and is reshaped by fiction into what she terms 'the ruination of the human subject':

> In place of a human body stable and integral, the *fin-de-siècle* Gothic offers the spectacle of a body metamorphic and undifferentiated; in place of the possibility of human transcendence, the prospect of an existence circumscribed within the realities of gross corporeality; in place of a unitary and securely bounded human subjectivity, one that is both fragmented and permeable.[14]

Hurley is right to note that the fin-de-siècle Gothic exploits the horror of metamorphism in the evolving human subject and my study seeks to build upon, rather than set itself apart from, her theoretical analysis of this aspect of Gothic fiction. However, where I diverge from Gothic critics such as Hurley is in my understanding of the monstrous human body as associated with nineteenth-century studies of specific animals.

The animals under examination here were part of the century's search for human origins, but they also came to exemplify the limits of the human in often surprising ways. Zoonosis, Darwin claimed, was sure proof of the human/animal bond and the dog's capacity to transmit rabies to people took on fresh significance in these terms. Meanwhile, anatomists suggested that the frog's physiology might provide evidence of Darwin's development theory, and even proposed that there was a direct evolutionary link between humans and amphibians. The spider, which had previously had positive connotations of human industry and ingenuity, under the guise of evolution, took on more disturbing associations and during the latter half of the nineteenth century featured prolifically in Gothic fiction. As a prevalent Gothic signifier in genres ranging from adventure fiction to science fiction, the spider caused – and mitigated – anxieties about the limits of the human. The dinosaur in science and fiction came to denote the horror of strange forms. Fossils were unidentified and extinct creatures from the past that implicitly revealed the path of human evolution. The fact of their extinction

[14] Kelly Hurley, *The Gothic Body: Sexuality, Materialism, and Degeneration at the* Fin de Siècle (Cambridge: Cambridge University Press, 1996), p. 3.

destabilised the natural order of the world and the exhibition of a selection of various fearsome looking dinosaurs at Sydenham Crystal Palace in 1854, recreated solely from the imagination of the sculptor Benjamin Waterhouse Hawkins and the celebrated anatomist Richard Owen, invoked terrifying images of such monsters in the spectators' minds. The very idea that such humans could have developed from such beings as these tested the boundaries of both biology and the imagination. Thus, while Hurley rejects the possibility of attributing the polymorphous Gothic body to any one animal, this thesis proposes precisely the opposite in its endeavour to show how Victorian anxieties raised about species were manifested in specific animals. The categories of the human were being stretched and tested as never before and while science examined, analysed, researched, observed, and investigated what humanity might be, fiction explored the multivalent meanings of new theories about where the human/animal boundary (if such a thing exists) may lie.

Monstrosity is a principal underlying theme throughout this body of work. The representations of the animal and the human discussed in this thesis are often portrayed as monstrous because they call into question what it means to exist on the borders of the human. As Elaine L. Graham astutely notes, throughout history, 'monsters marked the "fault-line" between appropriate social spheres as well as those between separate species'.[15] Foucault's influential lectures entitled *Abnormal* given between 1974 and 1975 have much to say about monstrosity in the nineteenth century. Here he argues that human monsters are a violation of the laws of society and nature: '[t]he monster is the limit', he posits, 'both the point at which the law is overturned and the exception that is found only in extreme cases. The monster combines the impossible and the forbidden.'[16] His further asseveration that 'the abnormal

[15] Elaine L. Graham, *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture* (New Jersey, Rutgers University Press, 2002), p. 48.
[16] Michel Foucault, *Abnormal: Lectures 1974-1975* (London: Verso, 2003), p. 56.

individual is essentially an everyday monster, a monster that is commonplace'[17] further reveals the abjection of those (humans or animals) that do not conform to social or natural laws. This aspect of the breakdown in human/animal boundary is discussed at length in chapter five of this thesis on freak culture in Victorian medicine, the entertainment industry, and fiction.

David Gilmore's book on monstrosity, *Monsters: Evil Beings, Mythical Beasts, and All Manner of Imaginary Terrors* (2003) describes the monster as something caught between one thing and another, defying the scheme of nature humans impose upon the world:

> Ontologically intermediary, neither fish nor fowl, they do not fit into the mental scheme people rely on to explain the world. Being thus inexplicable, monsters are not only physically but cognitively threatening: they undermine basic understandings. [...] In other words, monsters expose the radical permeability and artificiality of all our classificatory boundaries, highlighting the arbitrariness and fragility of culture.[18]

If, as Gilmore posits confidently, monsters expose the weaknesses of human culture and if this, supposedly, is detrimental to culture, why are monsters so prevalent in Victorian fiction? What is it about them that we need, or crave? Why do monstrous humans and human monsters have such a central role to play in literature, art, and culture if they do indeed reveal the fragility of order?

Jeffrey Cohen's excellent edited collection of essays on monsters, *Monster Theory* (1996), suggests answers to these questions. According to Cohen's theorising of the polymorphous nature of the monstrous body, the indeterminate animal body has much to tell us about who and what humans are:

[17] Foucault, *Abnormal*, p. 57.
[18] David D. Gilmore, *Monsters: Evil Beings, Mythical Beasts, and All Manner of Imaginary Terrors* (Philadelphia: University of Pennsylvania Press, 2003), p. 19.

> The monster is born only at this metaphoric crossroads, as an embodiment of a certain cultural moment – of a time, a feeling, and a place. The monster's body quite literally incorporates fear, desire, anxiety, and fantasy (ataractic or incendiary), giving them life and an uncanny independence. The monstrous body is pure culture. […] Like a letter on the page, the monster signifies something other than itself: it is always a displacement, always inhabits the gap between the time of upheaval that created it and the moment into which it is received, to be born again.[19]

The monster, then, exposes the very nature of being human. It incorporates the unknowingness of the self, and confirms the uncanniness of existence. At a fundamental level, we need monsters because they allow us (not) to know who and what we are.

The sense of continual Othering of the human/animal subject that Cohen posits is reflected in Darwin's notes on the species question. In their immutableness, species, as Darwin and others were at pains to show, are made up of monstrous organisms, neither one thing nor another.[20] In this view of biology, all forms of life exist in ever-changing moments of flux and variability. While this is a disturbing concept, it is nevertheless an important part of seeing the living world as it really is. Fred Botting raises the question of species which is so central to my thesis in his excellent study *Gothic Romanced: Consumption, Gender and Technology in Contemporary Fictions* (2008):

[19] Jeffrey Jerome Cohen, 'Monster Culture (Seven Theses)', in *Monster Theory: Reading Culture*, ed. by Cohen (Minneapolis; London: University of Minnesota Press, 1996), p. 4.

[20] The celebrated German anthropologist Carl Vogt, for example, stated unequivocally in one of his lectures: 'Let us confess at once, that, in all wild animals, the estimation of these variations, and their consequent classification, depends much on the predilections of the observer, so that what one declares to be a species another takes to be only a variety.' See Vogt, *Lectures on Man: His Place in Creation, and in the History of the Earth*, trans. by James Hunt (London: Longman, Green, Longman, and Roberts, 1864), p. 13.

> Gothic and science fiction share a common fascination with the ruination of the idealised image of the species and in specific yet repeated encounters with the monstrous dissolution of the imaginary integrity of the human body. […] Formless, vile, shapes of revulsion and recognition, abhumanity defines the outer limits of monstrosity, corporeal 'Things' from supernatural and scientific dimensions that include vampires, chimeras, hybrids and zombies.[21]

In keeping with Botting's view of the ruination of species in Gothic fiction, Rosemary Jackson has referred to such literary creatures as monsters, vampires, and hybrids as 'melodramatic shapes'. 'Many fantasies', she argues, 'play upon a natural fear of formlessness, absence, death'.[22] But even if, as Jackson suggests, fear of formlessness is at the core of anxieties about species, the significance of monsters may be as multivalent and variable as the creatures themselves. After all, the species question was not just about categorising animals; it had grander assumptions to make. Part of the object of looking at and trying to identify animals, for example, was the attempt to determine humankind's place in the natural order of life. One way of trying to determine what Huxley called 'man's place in nature' was to look to the history of the earth and, as William Coleman has pointed out, geology proved a fruitful resource for such investigations:

> Technical discussion of the species problem was, despite its obvious interest to the theologian and educated man, a matter for naturalists. Their concern was the diversity of organic nature and the merits, limitations, and rich suggestion of the systems used to give order to nature. [...] This quest was fully informed by the ideal of historical

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[21] Fred Botting, *Gothic Romanced: Consumption, Gender and Technology in Contemporary Fictions* (London; New York: Routledge, 2008), p. 144.
[22] Rosemary Jackson, *Fantasy: The Literature of Subversion* (London: Routledge, 1981), pp. 121-2.

> explanation and, for all matters of temporal reference, the naturalist turned confidently to the maturing science of geology.[23]

As chapter four of this thesis will attempt to show, rocks and the fossils contained within them provided a wealth of data for naturalists. The gaps in the fossil record gave scope for Gothic interpretations of monsters that might exist between known species. Moreover, dinosaurian animals of fantastical shapes and sizes occupied the public consciousness in important ways following the Sydenham Crystal Palace dinosaur exhibition of 1854. Never before had monstrous creatures been displayed on such a scale and the effect of their exposition can be found throughout Victorian Gothic Scientific fiction. The dinosaur body in all its otherworldliness and strange forms shattered the constraints of what might be conceived as the human once and for all.

Concern with species confusion is one aspect of Victorian science that I explore in this thesis in some detail. As the historian of science Lynn Barber has noted, Darwin and his contemporaries were all too aware that species was no longer a finite concept. The instability of species was a new – and terrifying – reality of the study of Victorian natural history:

> Darwin showed that species were never clear-cut. They shaded off into varieties, into races, into sub-species and ultimately into individuals. Historically they were never stable; the varieties of today might be the species of tomorrow; the species of today might tomorrow be extinct. This sudden blurring of the sharp edges of species was a bitter blow to the closet naturalists. They could no longer feel that once a species had been named, described and preserved in a museum, it was

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[23] William Coleman, *Biology in the Nineteenth Century: Problems of Form, Function, and Transformation* (Cambridge: Cambridge University Press, 1977), p. 66.

> finished, and they could no longer even dream of achieving any full and final classification.[24]

Evolutionary notions of the lack of fixity of species exploded the myth that animal classes were archetypal fixed entities and by doing so, Gothic writers re-imagined the natural world in all kinds of grotesque forms. The abundant numbers of new species discovered on journeys of discovery or missions of empire bewildered and fascinated members of the public. The arrival of new and unusual species in Britain, notes Barber, 'had a peculiar effect on the popular imagination. While scientists endeavoured to arrive at a more precise understanding of what was possible in nature, laymen [...] increasingly tended to believe that *anything* was possible' (emphasis original).[25] In Gothic fiction, monstrous humans-animal beings fill in the gaps that science leaves empty. Victorian readers of scientific literature and Gothic fiction were deeply interested in what lies beyond the limits of the human, as the popularity of books like Darwin's *Origin of Species*, Stoker's *Dracula*, and Conan Doyle's *The Lost World* attested. Creatures designated as in-between species appealed to a readership already familiar with the idea that species was not fixed.

In the chapters that follow, I demonstrate how Victorian Gothic writers put scientific theories about humankind's origins and transformation to work in their fiction. Popular romances by writers such as Bram Stoker, Richard Marsh, Arthur Machen, H. G. Wells, and Arthur Conan Doyle, alongside various lesser-known writers such as William Hope Hodgson and Bertram Mitford, reveal a truly impressive range of narrative responses to the problem of humankind's evolutionary kinship with animals. Post-Darwinian Gothic literature refuses to maintain easy distinctions between human and animal beings, as critics such as Hurley have noted. However, while such readings of the Gothic body rely almost solely on theoretical

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[24] Lynn Barber, *The Heyday of Natural History, 1820-1870* (London: Jonathan Cape, 1980), pp. 286-7.
[25] Barber, *The Heyday of Natural History*, p. 68.

analysis, this study seeks to place it in its historical context and thus situate it within the quest for the truth about the nature of humanity that took place throughout the nineteenth century.

A number of historians of science and literary theorists have attributed Victorian fears and anxieties about the human/animal boundary (or lack thereof) predominantly to the noted similarity between apes and humans.[26] In the light of this body of research, there is a notable omission in the choice of animals under discussion in this thesis; the primate is not considered in any great depth and is not mentioned until the final chapter in a brief discussion of the missing link. The Scottish jurist and pioneering anthropologist Lord Monboddo had made a physiological connection between humans and orang-utans as far back as 1773 in his important study *Of the Origin and Progress of Language*. Huxley and other prominent nineteenth-century scientists, such as Carl Vogt in his seminal *Lectures on Man* (1864), also noticed the evident anatomical similarities between humans and simians,[27] and so it is rather obvious to point out that anxieties about where the human/animal boundary may lie would rest upon humankind's closest animal relative, the primate. What may be less apparent is the extent to which several other types of animals were being examined in the hunt for human origins throughout the Victorian period. It is on some of these animals, specifically the dog, the frog, the spider, and the dinosaur, that this thesis will focus. Indeed, the decision not to focus my research or analyses on the ape is, in part, an effort to demonstrate that the study of all kinds of animals contributed to nineteenth-century debates on the question of what makes us human.

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[26] See, for example, Turner's argument that Lombroso developed his theory of the criminal type based on the Victorian fascination with the great apes in *Reckoning with the Beast*, p. 67. See also Susan David Bernstein, 'Ape Anxiety: Sensation Fiction, Evolution, and the Genre Question', *Journal of Victorian Culture* 6.2 (Fall 2001), pp. 250-70. See also Gillian Beer, *Open Fields: Science in Cultural Encounter* (Oxford: Oxford University Press, 1996).

[27] Tellingly, Darwin was careful not to draw attention to any similarities between humans and simians in *Origin of Species*. Although doing so may have supported his argument, it would have also alienated his readership. Only after Origin is published do naturalists such as Huxley and Vogt begin to show the anatomical similarities between primates.

Chapter 1, entitled 'Man's Best Fiend: Evolution, Rabies, and the Gothic Dog', will identify the dog as an animal that, in its ability to carry and communicate deadly diseases to humans, exemplified the breakdown of the animal-human boundary. As an animal both loved and feared, it had the potential to collapse this boundary in profound and fundamental ways. Darwin referred to zoonosis as one of the most conclusive pieces of evidence for his theory and mentioned hydrophobia – the human form of the rabies virus spread by dogs – as precisely such a disease. Furthermore, by using the dog's embryology to prove the close biological relationship between the foetuses of humans and all other animals, Darwin ensured that the link between humans and all other species was complete. Meanwhile, fears about the transmission of rabies, which circulated at the same time as the growing popularity of dog shows, revealed the canine's multivalence in Victorian society. Both intensely feared and deeply admired, this species came to further typify the ambivalent interaction between biology and culture, at least in part because public feeling towards it was so fervent.

The social hysteria associated with dogs and rabies is, I argue in this chapter, reflected in acts of penetration in the method of viral transmission and the subsequent metamorphosis of the victim throughout late-nineteenth-century vampire and werewolf narratives. Put simply, I read vampire and werewolf tales as cautionary narratives about the danger of the transmission of rabies. Thus, biting – and fear of being bitten – is a direct manifestation of the anxieties about transmitting and contracting this dreadful disease. The influence of medical discourse and newspaper hype about rabies upon Gothic fiction correlates with a period of heightened anxiety about zoonosis, leading my argument into wider cultural debates about humankind's origins, as well as its relationship to, or place in, the animal kingdom.

Edward Bulwer-Lytton, one of the century's most popular and prolific writers, and William Hope Hodgson, a little-known Gothic writer of the *fin de siècle*, are the focus of Chapter 2. Entitled 'Shaping Evolution: Amphibious Gothic in Edward Bulwer-Lytton and

William Hope Hodgson', this chapter explores the Gothic body as an amphibious being, one which, like the frog, is neither fish nor mammal, yet a primordial composite of both. Descending into the depths of the Earth, the protagonist-narrator of Bulwer-Lytton's science fiction novella *The Coming Race* discovers a species of human that, in its amphibiousness, is both ancient and modern, prehistoric and advanced. These creatures have human appearance but the biology of the common frog. Three years later, in 1874, prolific science writer, evolutionist, and Darwin contemporary, St. George Mivart, suggested that the common frog held the key to the origin of humankind. These two occurrences are not, as it may at first seem, entirely disparate for the frog had an extraordinary prominence and significance in Victorian (scientific) culture. This correlation between fiction and science not only implies a dialectic relationship between the two disciplines, but also shows the ways in which they influenced one another in the search for human origins.

While the amphibious body offered Victorian scientists fascinating scope for experimentation, it also evaded easy categorisation or classification. Indeed, the extent to which the amphibian intrigued Victorian scientists can hardly be underestimated, as the prominent zoologist Thomas Bell noted in 1849: 'to the physiological inquirer, few classes of animals present a more extensive or interesting field of investigation'.[28] The frog was a physiological chimera, embodying Darwin's development theory that, as he argued compellingly in his seminal publication of 1859, species was not a fixed life form.[29] Representing an accelerated version of Darwin's theory of evolution,[30] the frog's unusual

[28] Thomas Bell, *A History of British Reptiles* (London: John van Voorst, 1849), pp. 87-8.

[29] In a useful and interesting discussion of perception and illusion in Darwin's scientific writing, James Krasner argues, 'Essential to [Darwin's] portrayal of the natural world is that things are unfocused, fluid, without specific design or fixity, and that they continually slip away from an ever-changing norm. Species blend into one another just as populations, landmasses, and bodily appendages flow and change.' See Krasner, *The Entangled Eye: Visual Perception and the Representation of Nature in Post-Darwinian Narrative* (New York and Oxford: Oxford University Press, 1992), p. 33.

[30] Bell highlights the significance of the frog's metamorphosis in his assertion that amphibians are '[i]ntermediate in their structure' between fish and reptiles and they undergo a 'remarkable change [...] thus exhibit[ing] in their own individual life a beautiful and complete example of *transition of organization*: a subject

propensity for biological bodily change and its prominence in the evolutionary scientific narrative made it a suitable metaphor for Gothic interpretations of natural selection. Scientific literature that linked frogs and humans anatomically, biologically, and organically threatened to undermine the sense of respectability fundamental to Victorian social, religious, and cultural values, jeopardizing the integrity of human history and biology, thereby creating space for Gothic readings of the variability and flexibility of species.

Chapter 3, entitled 'The Gothic Spider in Victorian Literature and Scientific Culture', examines the role of the spider in Victorian natural history and fiction. Somewhat surprisingly, the spider is a protean Gothic trope, able to attach itself to various situations in which fear and anxiety of the unknown require a Gothic signifier. While being greatly maligned by naturalists such as Philip Henry Gosse and Grant Allen, the spider became a harbinger of death in some Gothic texts such as Bertram Mitford's *The Sign of the Spider* (1896) and Wells's *The Valley of Spiders* (1903). In other novels, such as George du Maurier's *Trilby* (1894), the spider's evil nature is used as a powerful metaphor for human cruelty. Svengali, du Maurier's wicked protagonist, is described and illustrated in the novel specifically as a human spider. By attaching the arachnid motif to Svengali, du Maurier is able to play upon the prevalent perception of the animal as 'bloodthirsty and solitary' in science literature. In a metaphorical way, then, he transforms Svengali into an animal monster by forcing him to adopt the negative attributes of the spider onto his human persona.

In other novels, the perfidious spider exists beyond the realms of the civilised world. While natural history books warn of the hazardous nature of the foreign spider's bite, in adventure fiction the alien arachnid lurks in liminal spaces far from the safety of British shores. In Mitford's Haggardian tale of adventure into the interior of Africa, the story's protagonist Laurence Stanninghame encounters a man-eating spider worshipped by a tribe in

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which constitutes one of the most important theories connected with the higher departments of zoological science.' Bell, *A History of British Reptiles*, p. 76.

the Congo. Although he escapes with his life, the spider leaves an impression of the horror of the beast imprinted on Laurence's mind, and taints the Englishman with superstition and anxiety. The final section of this chapter examines the spider trope as a technological symbol of mechanical monstrosity. The spiderlike machines in Wells's *The War of the Worlds* reveal the belligerence of the Martians and the vulnerability of the human species to deal with such technology. Horrifying in their skill, vehemence, and aggression, these spidery mechanisms of modernity threaten the fundamental basis of humanity and Englishness. The ferocious spiders of empire found in natural history books invade British soil, taking on Gothic signification in their alliance with the alien life forms that inhabit them.

The central theme of the final two chapters marks a move away from 'real' animals towards, in chapter four, extinct and thus imaginary ones and, in chapter five, human animals. Chapter four, entitled 'Geological Underworlds: Mythologizing the Beast in Victorian Palaeontology', examines the extent to which primordial animals were a product of the human imagination. In line with ideas discussed in chapters two and three, chapter four deals with the ancient being, the animal from time out of mind. However, here I explore in more depth the haunting aspects of unreal creatures as they emerge from mythology into the scientific and fictional realms of Victorian culture. Reconstructed in life-size proportions by the preeminent palaeontologist Richard Owen and the sculptor and artist Benjamin Waterhouse Hawkins, the Sydenham Crystal Palace dinosaurs greeted their spectators with huge teeth and a bold glare. Here were Gothic monstrosities couched in scientific rhetoric, displayed as humankind's evolutionary kin. As Turner has astutely noted:

> These bloodthirsty creatures were the same animals that physiology, anthropology, psychology, and Darwinian evolution all certified as the near relatives of men and, worse, women. Darwinism struck a particularly troubling note because human descent from such brutes implied that even Victorians could literally have inherited

> their ferocious nature. Did the thin veneer of civilization cloak a ravening beast raging at its flimsy chains? Many souls feared that it might. […] Man, stripped of his uniqueness, had been plunged naked into the jungle of the world of nature, and it frightened him.[31]

The Gothic overtones of Turner's questioning expose the horror of the extinct body as that which cannot be defined. The dinosaur, an alien so fundamental to evolutionary theory, revealed that humanity had at least the potential to become extinct. As a creature of the imagination, caught between the deep past and the distant future, fictional representations of the dinosaur showed them dwelling in liminal spaces, far from the security of the British Isles. Lurking within the hollow of the earth in Jules Verne's *Journey to the Centre of the Earth* (1864) and E. D. Fawcett's *Swallowed by an Earthquake* (1894); inhabiting the planet of Jupiter in John Jacob Astor's *A Journey in Other Worlds* (1894); surviving on a long-forgotten and inaccessible South American plateau in Arthur Conan Doyle's *The Lost World* (1912), dinosaurs haunt the literary landscape of fin-de-siècle adventure fiction. In *Imperial Leather: Race, Gender, and Sexuality in Colonial Conquest* (1995), Anne McClintock refers to this trope as 'anachronistic space', in that 'the stubborn and threatening heterogeneity of the colonies was contained and disciplined not as socially or geographically different from Europe and thus equally valid, but as *temporally* different and thus as irrevocably superannuated by history'.[32] Simply put, placing dinosaurs outside and beyond British shores set them apart not only biologically but historically. Despite the many fossils discovered in Britain, in fiction, such gory and ferocious monsters can only exist 'out there', beyond even

[31] Turner, *Reckoning with the Beast*, p. 67.
[32] Anne McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Conquest* (New York and London: Routledge, 1995), p. 40.

the limits of empire.[33] Any attempt to return them to British soil, as *The Lost World* makes clear, must be thwarted in order to protect human civilisation and English identity. The Crystal Palace exhibition, though, implied that such creatures live amongst us still and that their nature, their monstrous taint, bears its mark in the human form.

Under the title '"Monsters Manufactured!": Humanised Animals, Freak Culture, and Victorian Gothic Fiction', this study concludes with a discussion of the Gothic role of freak culture in the latter half of the Victorian period and makes links between unusually-shaped people in society and human/animal hybrids in the fiction of H. G. Wells, Richard Marsh, and Wilkie Collins. Although more concerned with the philosophy, cultural theory, and historiography of the disabled body in Western culture rather than the Gothic aspects of freakery, books on this topic such as Marlene Tromp's *Victorian Freaks: The Social Context of Freakery in Britain* (2008), Rosemary Garland-Thomson's *Freakery: Cultural Spectacles of the Extraordinary Body* (1996), and Robert Bogdan's *Freak Show: Presenting Human Oddities for Profit and Amusement* (1988) provide a platform from which the freak can be explored within this context. Therefore, it is far from my aim to dismiss this body of knowledge, but rather to build upon it by showing how nineteenth-century British freak culture influenced Gothic writers in their characterisation of human/animal hybrids. In terms of fiction, part of this chapter will focus on disability in Wilkie Collins's *The Law and the Lady* (1875) and part will explore the impact of freakery on Wells's *The Island of Doctor Moreau* (1896) and Marsh's *The Joss: A Reversion* (1901).

In this chapter, I raise the question of what is at stake in our reading of humans *as* animals in fiction and the entertainment industry. In keeping with previous analyses of ways

[33] In his discussion of the placing of Doyle's dinosaurs, Schmitt has revealed the South American rainforest as 'the natural place to look if one is in search of still-extant dinosaurs and proto-humans' perhaps because, as he further notes, in 'economic and political as well as discursive terms, […] Latin America disrupts the smooth forward motion of the story of the Empire'. Cannon Schmitt, *Darwin and the Memory of the Human: Evolution, Savages, and South America* (Cambridge: Cambridge University Press, 2009), p. 98-9.

in which Darwinian evolutionary theory influenced Victorian Gothic writings, this line of enquiry will go some way to showing how those often publicized as freaks confirmed nineteenth-century fears about, and exemplified the widely held fascination with, human origins and the adaptability of species. Freaks were often used to 'prove' Darwinian theories, as Nadja Durbach shows in her discussion of Krao's exhibition in London during the 1880s, advertised by the great Canadian impresario G. A. Farini as 'The Missing Link: A Living Proof of Darwin's Theory of the Descent of Man'.[34] Capitalizing on the widespread interest in Darwinian Theory was a lucrative business venture for entrepreneurs during the latter half of the century, and it is my contention that such popular, prevalent, and sensationalised images of humans (biologically) 'gone wrong' directly influenced Victorian Gothic writers in their portrayal of humans disabled in an ostensibly animalistic way. Exhibitions of the animal and the human merged into one creature raised questions about the separateness of all living things. Moreover, the prevalent images of such bodies in medical and fictional literature caused anxiety about species confusion – the fact that this aspect of medicine was marketable as entertainment was, as I will make clear, a significant part of the crossover between literature, culture, and science.

The animal is such a prevalent trope in Gothic fiction that no study could hope to be comprehensive. But what I wish to do here is to focus attention on the specificity and historicity of the animal Other that has been overlooked in studies such as Hurley's *The Gothic Body*. By looking at various texts in terms of the animal roles they employ, I suggest an alternative to solely theory-based readings of metamorphosis and Gothic body horror. This study calls on readers to replace the concept of Gothic analysis as an overtly theoretical and anti-historical mode with an understanding of it as a genre that engages fundamentally with

[34] Nadja Durbach, 'The Missing Link and the Hairy Belle: Krao and the Victorian Discourses of Evolution, Imperialism, and Primitive Sexuality', in *Victorian Freaks: The Social Context of Freakery*, ed. by Marlene Tromp (Columbus: The Ohio State University Press, 2008), pp. 134-53.

the rhetoric of both science and fiction. Hence, part of what this body of work attempts to do is to take what cultural and literary theorists have written extensively on the theoretical aspects of the malleable Gothic body and apply it to a historical analysis. In doing so, I hope to show that widespread and prevailing perceptions of animals in post-Darwinian Britain contributed significantly to collapsing the boundaries between humans and other animals in Gothic fiction. To consider the role of animals in nineteenth-century literature and scientific culture is to examine some of the central cruxes of the Victorian era, and I trust that this study will go some way towards providing a fresh and insightful perspective of the period.

Chapter 1

Man's Best Fiend: Evolution, Rabies and the Gothic Dog

1. Introduction

The first dog show held in Britain in Newcastle on June 28th 1859,[1] just five months before Darwin published *Origin of Species*, presented dog owners, scientists, and breeders of show animals with creative breeding possibilities.[2] Breeders recognised that dogs had a superficial aesthetic malleability that no other animal could offer (which may account for the fact that the first cat show did not take place until 1871; the year that Darwin published *Descent* and twelve years after the first dog show). When dog shows spread to Scotland on a grand scale in 1871, in the first Scottish national show (held in Glasgow) and the first Scottish metropolitan exhibition (held in Edinburgh), it was clear that they had become an established British institution and an important part of mid-Victorian popular culture. Interestingly, then, while the first British dog show coincides with the publication of Darwin's *Origin of Species*, the second boost to the cultural revolution of the dog as a show animal takes place the same year that Darwin publishes his landmark *The Descent of Man* in 1871.

Meanwhile, through the transmission of rabies from dog to human, the canine came to be associated with disease, dirt, and death. While on the one hand breeding dogs for shows became a popular and fashionable pursuit, on the other rabies represented the regressive and aggressive version of the dog's potentially deadly bite. Thus, by entering into the discourse of science at precisely the same time that it became visible and fashionable as a show animal, the dog played an ambiguous role in society. In Gothic fiction, this chapter will argue,

[1]See Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age* (Harmondsworth: Penguin, 1990), p. 97.

[2] Dogs proved to have an aesthetic plasticity that the Victorians knew from experience other animals lacked. Breeding animals for the purpose of showing them was not a new concept to the Victorians, though breeding the dog in order to display it in public had not been done before. Rather, until 1859, dogs were bred for their usefulness to humans for hunting and other work-related pursuits (such as pulling carts etc.).

werewolves and vampires in fiction exploited the dark side of the dog, the disease-ridden underbelly of the animal that shows sought to conceal. That dogs were taken to denote a certain type of fashionable aesthetic beauty briefly disguised the fact that they could carry deadly diseases in their blood, diseases such as rabies that could inflict a painful and horrible death onto humans. To some extent, the aesthetic beauty of dog, as it was presented at the dog show, played the important role in Victorian England of masking the fact that man's best friend could so easily become man's most deadly enemy.

Cultural theorists, such as Cyndy Hendershot, make the valuable argument that Gothic bodies break down the demarcations between animal and human, consuming and disrupting established notions of what it means to be human.[3] Indeed, questions about what it means to be human and what constitutes humanity are ones that both permeate and dominate concepts of otherness that run throughout late Victorian Gothic fiction and will underpin the main points that this thesis raises. The metamorphic Gothic body as defined by critics such as Kelly Hurley explores the human body, or soul, in a state of transition, hovering between two spheres and on the cusp of monstrous, even inhuman (or inhumane?) existence. One may interpret the theoretical distinctions between these states of being as those which determine the contrast between healthy and sick, or the ever-fluctuating dichotomy between what may be considered normal and abnormal. My goal here is not to reject theoretical readings of the Gothic body, but rather to build upon them by placing it in a historical context, noting that while the hunt for humankind's origins was in progress, another cultural revolution was taking place: that of the dog.

Victorian physicians' work on rabies provides the cultural, historical, and scientific background to Gothic fiction that employs animalistic – in fact, distinctly canine – creatures that bite and subsequently transform their human prey into something half-human, half-

[3] Cyndy Hendershot, *The Animal Within: Masculinity and the Gothic* (Michigan: University of Michigan Press, 1998), pp. 9-11.

animal. The role of the dog in Victorian culture reveals the anatomic and symbolic significance of the animal within medical science and the Darwinian anthropological debate. By linking horror literature of the *fin de siècle* to the public panic about rabies that took place throughout the century, I propose that Gothic fiction engages its reader with the animal Other as that which exists between two spheres, between two bodily, or biological, definitions. This sense of bodily duality resonates within the physiology of the dog, an animal that, to the Victorians, must have represented a Gothic body in itself.

One related area of anxiety discussed here is concerned with the subcutaneous injection, necessary for vaccination against diseases such as rabies. Anti-vaccinators worried that the vaccination could – literally, metaphorically, symbolically – transform people into animals. Like the bite, inoculation meant transgressing the borders of the skin to reach the vulnerable blood and tissues below. As Nadja Durbach's fascinating research into the anti-vaccination movement has shown, compulsory vaccination and Victorian attitudes to evolutionary theory clashed. The incongruity between the dog's role as man's best friend and its part in spreading disease between humans and animals is further revealed in Stoker's use of canine features in his depiction of the vampire. By way of conclusion, I will draw on the work of scientific and literary theorist Laura Otis to show how anxieties about the dissemination of disease for the ruling country of the empire influenced Gothic writing towards the end of the century.

In this chapter, then, the intentions, processes, results, and meanings of vampiric infection are investigated through an analysis of Victorian reactions of the prevalence of rabies during the 1870s and 80s. *Dracula* makes a link between the horror of being bitten and the transformation that the rabies virus brought about in the human subject. The altered state of being that comes of being bitten by a rabid dog (clean to unclean, human to animal, sane to mad, alive to dead) is given analogy in the vampire story as Stoker relates it. Moreover,

Dracula also suggests that the cultural capital placed on the dog was undermined by its dual function as human companion and harbinger of death. People could no more trust the valued pet in the home than they could the foreign stranger that moved into the neighbourhood. The channels of transmission of rabies unsettled a populace already very much aware of the breakdown of species categories and the permeability of international borders.

In the case of *Dracula*, the threat of the vampire figure lies in the potential of its diseased body to change Victorian society into something not whole, to create a race of beings that are not human, and not English. David Punter points out that the four most important Gothic novels of the late nineteenth century (and the texts, notably, most exploitative of the metamorphic Gothic body) are Robert Louis Stevenson's *Dr Jekyll and Mr Hyde* (1886), Oscar Wilde's *Picture of Dorian Gray* (1891), H.G. Wells' *Island of Dr Moreau* (1896), and Stoker's *Dracula* (1897). In discussing these novels, Punter suggests that each of these texts put forward the same question:

> [H]ow much, they ask, can one lose – individually, socially, nationally – and still remain a man? One could put the question much more brutally: to what extent can one be 'infected' and still remain British?[4]

These questions tie into the issue of, what might be termed, species hysteria in ways that Punter may not have anticipated. Aside from the nationalistic overtones Punter wishes to convey, these lines of enquiry lead us to another, more pertinent concern in terms of what this study is aiming to achieve: to what extent can a body be changed and still remain human? To what extent can one's human blood be mingled with that of an animal Other before it is no longer human? The anti-vaccination movement highlights precisely these fears and anxieties, as Durbach has shown,

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[4] David Punter, *The Literature of Terror: A History of Gothic Fictions from 1765 to the Present Day* (London: Longman, 1980), p. 240.

> Those who objected to vaccination were also uneasy about the moral and mental effects of incorporating an animal product. [...] Anti-vaccinators feared that vaccination could 'stimulate their animal propensities' and thus 'brutify' and 'lower' human nature. [...] These concerns over physical and moral bestialization occasionally manifested themselves in anxieties about devolution, a specter raised by Darwinian theory. Even if we are 'ascended from gorillas,' Wilkinson argued, we nevertheless refuse to have our 'natures mixed again with the disease of beasts.'[5]

Vaccination unsettled and disturbed the minds of those already worried by the prevalence of rabies and the debate about the disintegration of the boundary between humans and other animals. Ideologically, it played on precisely the same fears and anxieties about species confusion, invasion of disease into the blood, and penetration of the skin. In vampire and werewolf fiction, these concerns are played out in narrative form, revealing deep-rooted unease about the biological and sociological implications of polluting the blood with animal material.

Having briefly sketched out the main points upon which my argument will rest, in what follows I will focus on how the dog's changing role in Victorian culture played an important part in late nineteenth-century vampire and werewolf narratives. Fascination with the vampire and werewolf in fiction, I argue, was fuelled by preoccupations about rabies.

2. The dog's role in nineteenth-century popular culture

There has always been a powerful bond between dogs and humans and the history of this relationship is complex and multifaceted. Dogs have always been, according to the historian of science Donna Haraway, 'a species in obligatory, constitutive, historical, protean

[5] Nadja Durbach, *Bodily Matters: The Anti-Vaccination Movement in England, 1853-1907* (Durham: Duke University Press, 2005), p. 126.

relationship with human beings'.[6] By the middle of the nineteenth century, humankind's relationship with the dog began to change, partly because it was becoming apparent that dogs were instrumental in the transmission of disease from animals to humans. White points out, as mentioned above, that although frogs were often used in Victorian animal experimentation because they inspired little pity, when dogs were used in 1874, the experiment caused a chorus of disapproval from well-meaning citizens and those involved were prosecuted by the Royal Society for the Prevention of Cruelty to Animals. This may have been, suggests White, because 'dogs embodied Victorian values more fully and consistently than did any other creature [and they] were ranked among the highest of animals because of their moral nature, not their intellect'.[7]

The dog was, without doubt, Victorian society's most anthropomorphic, indeed most loved and admired, animal. That they had the capacity, under the influence of rabies, to turn upon the very hand that fed them was a frightening prospect. The dichotomous nature of the canine has not escaped some critics' attention:

> On the one hand the dog is "man's best friend," valorized as the companion of wandering ascetics, redeemable, welcomer of the dawn, mediator to the other world, a Neolithic deity, just as the wilderness itself was the a place of refuge and contemplation. On the other hand the dog is the alien monster and hypocrite, fallen and hateful, the most corrupt of animals.[8]

Nevertheless, despite this dual nature of the beast, there was certainly plenty of evidence to suggest that, in social terms, the dog deserved to be raised in rank from lower animal to kinship with humans. Christine Kenyon-Jones notes that, as testament to the strong sense of

[6] Donna Haraway, *The Companion Manifesto: Dogs, People, and Significant Otherness* (Chicago: Prickly Paradigm Press, 2003), pp. 11-2.
[7] White, 'The Experimental Animal in Victorian Britain', p. 68.
[8] Shepard, *The Others*, p. 64.

kinship between man and dog, when Byron's dog, Boatswain, died of rabies in the autumn of 1808, the distraught owner constructed an ornate neoclassical monument upon which he emblazoned a long epitaph consisting of both an inscription and a poem. Here Byron announced the burial of one 'who possessed beauty without vanity, strength without insolence, courage without ferocity, and all the virtues of man without his vices'.[9]

In this climate of opinion, even in science writings the dog was celebrated for its kinship with humans, as George Romanes's frontispiece diagram in his influential study *Mental Evolution in Animals* (1883) revealed.[10] Other naturalists, such as W. J. Broderip, noted the good nature of the dog while referring to the scale of development of the dog in biological terms:

> Yes, dogs *are* honest creatures, and the most delightful of four-footed beings. The brain and nervous system may be more highly developed in the Anthropoid apes, and even in some of the monkeys; but for affectionate, though humble companionship, nay friendship; for the amiable spirit that is on the watch to anticipate every wish of his master – for the most devoted attachment to him, in prosperity and adversity, in health and sickness, an attachment always continued unto death, and frequently failing not even when the once warm hand that patted him is clay-cold; what – we had almost said *who* – can equal these charming familiars?[11]

Other men of science such as G. H. Fink were quick to note the relationship between dogs and humans in terms of the maladies they were liable to catch and he suggested that human treatments would work just as well on the family pet.[12] Thus, far from being the

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[9] See Christine Kenyon-Jones, *Kindred Brutes: Animals in Romantic-period Writing* (Aldershot: Ashgate, 2001), p. 11.

[10] George Romanes, *Mental Evolution in Animals* (London: Kegan Paul, Trench & Co., 1883), frontispiece.

[11] W. J. Broderip, *Zoological Recreations* 3rd edn (London: Ward, Lock, and Tyler, 1873), p. 173.

[12] G. H. Fink, *Fungi, Protophyta, and Protozoa* (London: H. K. Lewis, 1903), p. 31.

stranger in our midst, the dog was credited with being more like us than people knew, understood, or cared to admit.[13]

Furthermore, the physiology and nature of the dog inspired some of the most prominent scientists engaged in nineteenth-century evolutionary thinking. Darwin's 1837 *Notebooks on Transmutation* highlight the dog as integral to his scientific writings[14] and it seems that the dog continued to feature in Darwin's thinking on how evolution works throughout his life. Having received Darwin's manuscript on the origin of the dog, Charles Lyell wrote to Darwin on September 27, 1860:

> I am haunted with a kind of misgiving, which bye & bye I shall be able to express more clearly – that the multiple origin of the dog will furnish an argument for the multiple origin of a Mammal or of Man. Do try to consider it that way, for I incline to go far with Hooker (& with you?) in believing that whatever is true in domestication is essentially possible in Nature also, & I am not sure that you confine the multiple origin of the dog to Man's selection.[15]

Surprisingly, the sceptical Lyell attempts to convince Darwin here that the breeding techniques used by humans in the domestication of the dog are vital evidence of how evolution works to alter the attributes and characteristics of all living organisms. Darwin considered Lyell's argument carefully and used it in his later publication; in his conclusion to

[13] James Turner argues, 'Many Victorians perceived little difference between the family dog – clever, affectionate, sensitive, and capable of rather complex learning – and what they saw as some naked savage who knew nothing of agriculture, scarcely more of rudimentary tools, and whose vocabulary consisted of a few rude grunts. Darwin himself confessed to "some difficulty in conceiving how [the] inhabitant of Tierra del Fuego is to be connected with civilised man." If one had to accept a Fuegian as cousin and a Neanderthal as great-grandfather, how could one avoid admitting at least the higher animals into the family?' Turner, *Reckoning with the Beast*, p. 63.

[14] Much of Notebook B refers to the dog and uses evidence of the dog's nature and biology to support his burgeoning evolutionary ideas. See *Charles Darwin's Notebooks, 1836-1844* ed. and transcribed by Paul H. Barrett, Peter J. Gautrey, Sandra Herbert, David Kohn, Sydney Smith (Natural History Museum, London: Cambridge University Press, 2009).

[15] Letter from Charles Lyell to Darwin September 27, 1860 published in *Sir Charles Lyell's Scientific Journals on the Species Question*, ed. by Leonard Wilson (New Haven and London: Yale University Press, 1970), p. 496.

The Descent of Man (1871), he discussed the dog's embryology as evidence of the biological bond between humans and animals:

> [T]he close resemblance of the embryo of man to that, for example, of a dog – the construction of his skull, limbs and whole frame on the same plan with that of other mammals, independently of the uses to which the parts may be put – the occasional re-appearance of various structures, for instance of several muscles, which man does not normally possess, but which are common to the Quadrumana – and a crowd of analogous facts – all point in the plainest manner to the conclusion that man is the co-descendant with other mammals of a common progenitor.[16]

To demonstrate his ideas further, Darwin placed two diagrams showing the marked similarity between human and dog embryos alongside these words (see fig 1).[17] Here was indisputable illustrative evidence that humans and dogs have the same building blocks of life for, at an early stage of embryonic development, the human embryo resembles that of the dog almost precisely.[18] The anatomical comparison was clear and so the dog became an essential part of Darwin's message about the history of humankind's animal ancestry.

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[16] Charles Darwin, *The Descent of Man* (London: Penguin, 2004), p. 676. All further references to this text are to this edition and will be given in the text.

[17] No doubt his Victorian readers would have felt that this was one of the most horrifying ways of proving his theory when he, like his mentor and friend, Robert Grant, before him who had completed his MD thesis on the circulation of blood in the foetus at Edinburgh University in 1814, draws close physiological parallels between the foetuses of humans and dogs.

[18] Several medical doctors incorporated the biology of the dog into their research on human physiology. See, for example, William Senhouse Kirkes's *Handbook of Physiology* 5th edn (London: Walton and Maberly, 1863), p. 726 in which he shows a diagram of a dog embryo representing the junction of the umbilical vesicle with the intestinal canal.

But Darwin was not the only Victorian scientist to place great emphasis on the dog in his evolutionary writings.[19] Huxley's work on a species of cynocephalus (apes with doglike heads) in his seminal *Man's Place in Nature* (1863) synthesised human and dog anatomy explicitly in its representation of a hybrid between human's closest animal relative (the ape) and the canine. As a physiological chimera, the cynocephalus embodied both dog and human in one apish animal. Indeed, Stoker may have read Huxley's influential work on the cynocephalus, and consequently modelled his vampire's physiognomy on it. There are curious similarities between Stoker's vampire and Huxley's dog-ape figure. The cynocephalous' fangs are extremely long, protruding over the lips (see figure 2), and the general formation of the skull resembles a bizarre cross between a human and a dog, a similar facial anatomy, perhaps, to that of

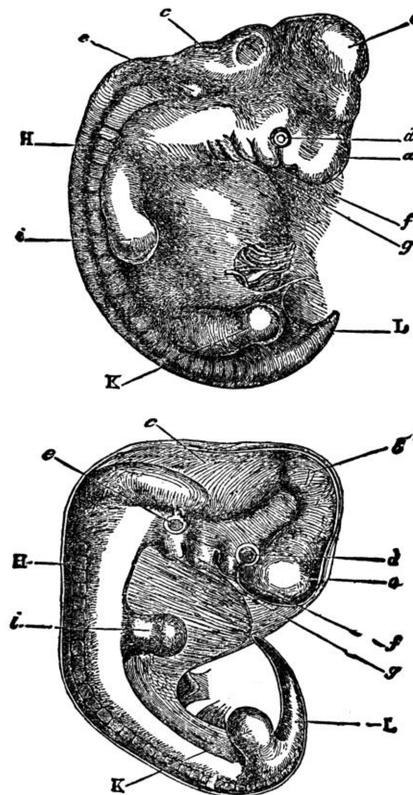

Fig. 1. Upper figure human embryo, from Ecker. Lower figure that of a dog, from Bischoff.

a. Fore-brain, cerebral hemispheres, etc.
b. Mid-brain, corpora quadrigemina.
c. Hind-brain, cerebellum, medulla oblongata.
d. Eye.
e. Ear.
f. First visceral arch.
g. Second visceral arch.
H. Vertebral columns and muscles in process of development.
i. Anterior, K. Posterior } extremities.
L. Tail or os coccyx.

Figure 1. Darwin's diagram of the similarity between human and dog embryos in *The Descent of Man* (1871)

[19] Huxley's relatively short study *Evidence as to Man's Place in Nature* (1863) demonstrates the physiological relationship between dogs and humans 28 times, with particular reference to canine embryology. In *Descent*, a much longer study, Darwin employs the dog to demonstrate his arguments 182 times. This is a significant number of times, about the same as the monkey, the creature which Darwin and Huxley had gone far to align humans with in their later works.

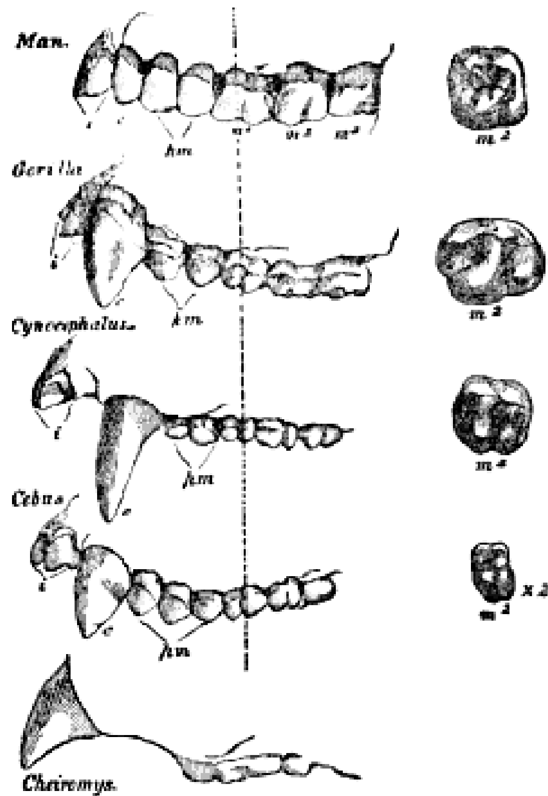

Figure 2. Diagram of the cynocephalus' jaw in comparison with various species of primates and man in Huxley's *Man's Place in Nature* (1863).

Dracula (see fig 3). In fact, the cynocephalus is a physiological chimera, embodying both dog and human in one apish animal, and it featured quite significantly in nineteenth-century scientific literature's representation of humankind's evolutionary struggle.[20]

The most disturbing aspect of the dog, though, was not its physical similarity to humans or its implied place in the history of humankind. Rather, the dog's capacity to contract and then transmit rabies to humans was its most formidable feature, sparking an interesting development in the nonfiction literature of the period. From the beginning of the 1800s, various books, pamphlets, and treatises were published on disease and pathology in the dog, a literary trend that may have paved the way for the wave of hysteria caused by rabies (a disease most often associated with dogs) several decades later.[21] This type of pseudo-scientific writing coincided with a new phase in the dog's history; with a sudden rise

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[20] Darwin discusses the cynocephalus in *The Descent of Man* and in *The Variation of Animals and Plants under Domestication*, 2 vols (1868). This creature is also discussed, complete with illustration, in J. G. Wood's *The Boy's Own Book of Natural History* (London: George Routledge and Sons, 1898), p. 15.

[21] Delabere Pritchett Blaine was the most prolific writer in this field and was sometimes referred to as the 'father of canine pathology.' See *A Domestic Treatise on the Diseases of Horses and Dogs*, 2nd edn (1803), *A Concise Description of the Distemper in Dogs: with an Account of the Discovery of an Efficacious Remedy for it*, 4th edn (1806) and his most popular work, *Canine Pathology, or a Full Description of the Diseases of Dogs; with their Causes, Symptoms, and Mode of Cure ... Preceded with an Introductory Chapter on the Moral Qualities of the Dog* (1824). Other experts in canine pathology included Hugh Dalziel, Edward Causer, George Smith Heatley, John Henry Walsh, and John Henry Steel, all of whom published extensively in the field of canine disease throughout the 1800s.

in the fashion of pet keeping[22] and as the wave of hysteria about rabies grew throughout the late 1860s onwards, the Victorian public became interested in the dog's wellbeing in new ways.

By 1871, Darwin was making bolder statements about the evolutionary relationship between man and animals following the publication of *Origin of Species* and Huxley's *Man's Place in Nature*, claiming in *Descent* that humankind's ancestry was exemplified most evidently in the transmission of disease between animals and man:

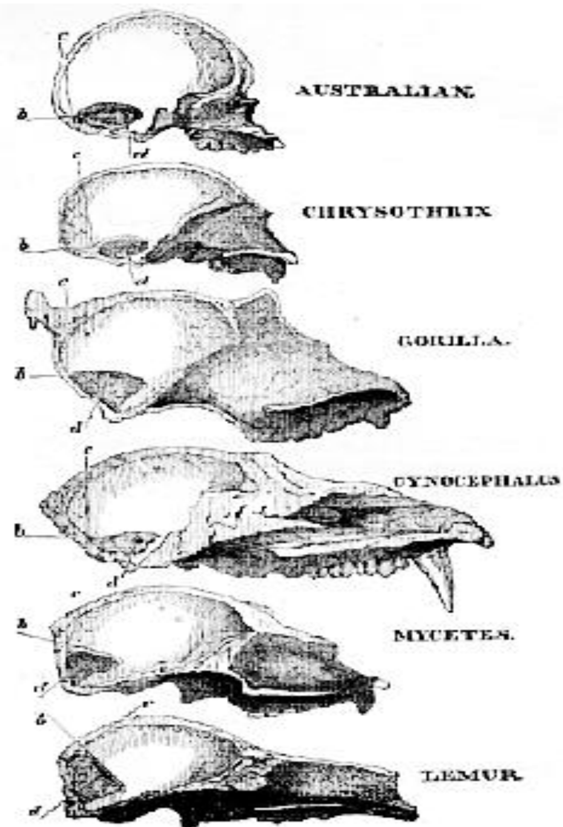

Figure 3. Diagram of the skull shapes of the cynocephalus in comparison with various species of primates and man in Huxley's *Man's Place in Nature* (1863).

> Man is liable to receive from the lower animals, and to communicate to them, certain diseases, as hydrophobia, variola, the glanders, syphilis, cholera, herpes, &c.; and this fact proves the close similarity of their tissues and blood, both in minute structure and composition, far more plainly than does their comparison under the best microscope, or by the aid of the best chemical analysis. (p. 23)

[22] For further reading on this topic, see Ritvo, 'The Emergence of Modern Pet-Keeping', in *Animals and People Sharing the World*, ed. by Andrew N. Rowan (London: University Press of New England, 1988) in which she argues that pet-keeping in its modern form is a Victorian invention. See also Frank Palmeri, *Humans and Other Animals in Eighteenth-Century British Culture: Representation, Hybridity, Ethics* (Aldershot: Ashgate, 2006), p. 35 in which he notes how one of the eighteenth century's most prominent women travel writers, Lady Mary Wortley Montagu, uses aesthetic differences in the dog to describe the various 'types' of men she has witnessed on her travels. He further argues that 'by comparing humans to such an animal, Montagu implies that in humans, too, bodily difference might correspond to differences in disposition and behaviour – and, on a collective scale, culture.' As Palmeri points out here, dogs had already entered racial and sexual discourse much earlier than the Victorian period.

Simply put, as far as Darwin is concerned, zoonosis equals conclusive evidence of the human/animal bond. The easy communication of disease between human and animals establishes the fact of the bond between all species more conclusively than any scientific test possibly could. By mentioning hydrophobia[23] first (as though this were the disease foremost on his mind), his Victorian reader would have immediately associated what he was saying with a particular 'lower' animal: the dog. Darwin had witnessed the effects of the disease in South America, as his notes in *Journal of Researches* (1839) show, and he clearly understood the disease to be of great consequence to his anthropological studies and worthy of further examination.[24] Other medical writers would later make the link between humans and dogs more explicit in terms of zoonosis. G. H. Fink, who in 1903 as retired Major of the Indian Medical Service, for example, wrote:

> Dogs, who are the favourite companions of man, are subject to many ailments known in man. I have seen rheumatism, rheumatic fever, and sunstroke in dogs, have treated them as I would a man with good results, and they respond very readily to some of the drugs used for man; the results in some instances being astonishing.[25]

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[23] Hydrophobia was the nineteenth-century term used for rabies in humans. The OED notes that etymologically the word can also be linked with madness and dread or horror of water.

[24] 'An order had recently been issued that all stray dogs should be killed, and we saw many lying dead on the road. A great number had lately gone mad, and several men had been bitten and had died in consequence. On several occasions hydrophobia has occurred in this valley. It is remarkable thus to find so strange and dreadful a disease appearing time after time in the same spot. It has been remarked that certain villages in England are in like manner much more subject to this visitation than others. […] It reached Arequipa in 1807; and it is said that some men there, who had not been bitten, were affected, as were some negroes, who had eaten a bullock which had died of hydrophobia. At Ica forty-two people thus miserably perished. The disease came on between twelve and ninety days after the bite; and in those cases where it did come on, death ensued invariably within five days. After 1808, a long interval ensued without any cases. […] In so strange a disease, some information might possibly be gained by considering the circumstances under which it originates in distant climates; for it is improbable that a dog already bitten should have been brought to these distant countries.' Darwin, *Journal of Researches into the Geology and Natural History of the Various Countries Visited by the H. M. S. Beagle, under the command of Captain Fitzroy, R.N.* 2nd edn (London: John Murray, 1889), pp. 353-4.

[25] G. H. Fink, *Fungi, Protophyta, and Protozoa* (London: H. K. Lewis, 1903), p. 31.

Fink mentions here the companionship between man and dog alongside the fact that the physiology of both species is so similar that they are both prone to the same illnesses. It is this unequivocal and specific connection between disease in humans and animals that I will explore further in the following section. The following section examines medical literature's employment of Gothic language in order to demonstrate the ways in which physicians added to the widespread panic about rabies. Their speculative accounts of the virus published between 1870 and 1900, despite statistics that suggest that it was rare in humans, contributed significantly to the public sense of alarm and terror associated with the disease.

3. Medical and cultural aspects of Rabies in the Victorian period

By the 1870s, it seemed as though the principles upon which Darwin had based his theory of evolution were being somewhat undermined by the fact that canine shape, colour, and character were so easily malleable in the hands of breeders. The dark side of artificial selection was manifest in the presence of rabies, a disease that affected dogs in a terrifying way, causing their nature and biology to go beyond the control of man. Rabies' trans-species propensities not only highlighted that humans and animals were incontrovertibly closely related, as Darwin had stated in *Descent*, but that man could neither wholly control nature nor indeed the dog itself once it had contracted the disease. Moreover, because the virus was invisible (and left no pathological trace) and its origins were obscure,[26] a sense of mystery surrounded it and superstitions arose as a result.

Prominent Victorian physicians did not underestimate the significance of rabies. In his introduction to *Rabies and Hydrophobia* (1872), for example, George Fleming asserted:

[26] 'There were numerous explanations for rabies offered up in the nineteenth century. In addition to the assertion that rabies was the inevitable result of overworking cart dogs, the disease was also blamed on the poor living conditions of the working class; the secluded, over-pampered and celibate conditions of apartment living with the bourgeoisie; mandatory muzzling which inhibited dogs' natural impulses; coprophagia and sexual frustration.' Linda Kalof, *Looking at Animals in Human History* (London: Reaktion, 2007), p. 142.

> Of all the maladies that are transmissible from the lower animals to man, there is perhaps not one which possesses so much interest, nor a knowledge of which is so important for the human species, as that which is popularly, though erroneously, designated *Hydrophobia*. It is even doubted whether any of the many diseases which afflict humanity, and are a source of dread, either because of their painfulness, their mortality, or the circumstances attending their advent progress, can equal this in the terror it inspires in the minds of those who are cognisant of its effects, or who chance to be exposed to the risk of its attack, as well as in the uniform fatality which terminates the distressing and hideous symptoms that characterise the disorder.[27]

Fleming stresses the extent to which rabies acted upon Victorian society as a source of both alarm and horror, but he also manifests something that is interesting and noteworthy. Using language overloaded with Gothic imagery, such as 'dread,' 'pain,' and 'terror,' he not only explains and ratifies the effect of rabies on the Victorian consciousness but, by sensationalising it in this way, adds to the growing anxieties about rabies and the transmission of disease between human and animals. As several critics have argued, the Gothic mode presents readers with permeable and shifting boundaries.[28] Rabies, a disease that literally transcended physical bodily boundaries between man and beast, lent itself both physiologically and conceptually to the ambiguity of the Gothic language that dominated the medical discourses in which rabies was discussed, disrupting and displacing the boundaries between reality and fiction. In 1886, the Victorian dog pathology expert Hugh Dalziel published a short treatise entitled *Mad Dogs and Hydrophobia* in an effort to correct some of the myths surrounding the disease:

[27] George Fleming, *Rabies and Hydrophobia: Their History, Nature, Causes, Symptoms, and Prevention* (London: Chapman and Hall, 1872), p. 1.
[28] See David Punter, *Gothic Pathologies: The Text, The Body and The Law* (Basingstoke: Macmillan, 1998) and Fred Botting, *Gothic: The New Critical Idiom* (London: Routledge, 1995).

> There is such a thin veil of mystery surrounding the disease – a mystery deepened by the exaggerations superstition has thrown around it; and the knowledge that it incurably shrouds the mind with such a pall of gloom and fear that it is the natural instinct of self-preservation alone that rouses us to action in its presence, and which, in its despair, often leads to acts that are as cruel as they are unwise.[29]

Speculation on the causes, symptoms, methods of transmission, and treatment of rabies increased enormously throughout the latter half of the nineteenth century. The huge volume of conjecture generated by gossip and rumours, when very few hard scientific facts existed, gradually found its way into political discourse, and during the 1870s and 1880s several committees of the House of Lords were set up in order to document and discuss the origins of the disease and possible preventative measures, such as muzzling and inoculation.[30] In one such government report published in 1878, physician Thomas Dolan asserts fervently,

> The superstitions respecting hydrophobia have lasted longer in popular belief almost than those of any other disease [...] Quacks of all kinds have not failed to avail themselves of popular ignorance, and by the boasted possession of mysterious remedies to prevent the operation of the virus, have, as Sir Thomas Watson says, sold their nostrums at no cheap rate to those who, having been bitten by the dog, are weak enough to be bitten again by the quack.

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[29] Hugh Dalziel, *Mad Dogs and Hydrophobia* (Dundee: James P. Mathew & Co., 1886), p. 1.

[30] See *The Nature and Treatment of Rabies or Hydrophobia; Being the Report of the Special Commission Appointed by the Medical Press and Circular, with Valuable Additions* (1978), Thomas Michael Dolan's *The Nature and Treatment of Rabies or Hydrophobia; Being the Report Made for the Medical Press and Circular* (1879), Charles Alexander Gordon's *Comments on the Report of the Committee on M. Pasteur's Treatment of Rabies and Hydrophobia* (1888), and *Reports from the Select Committee of the House of Lords on Rabies in Dogs, and Reports to the Local Government Board on M. Pasteur's Treatment of Hydrophobia and on the Influenza Epidemic, with Minutes of Evidence and Index* (1887-94). In 1897, Punch satirized the laws concerning muzzling dogs, showing rats attacking a muzzled dog and the caption 'Side Lights on the New Muzzling Order. What it Might Come To'. *Punch*, 24 April 1897, p. 203. The RSPCA's journal *The Animal World* featured several editorials on the cruelty and injustice of muzzling dogs, complete with diagrams showing the unsuitability of one muzzle for so many breeds of dogs and cartoon illustrations ridiculing the practice. See 'The Inefficacy of Muzzling', *The Animal World*, 2 March 1896, pp. 34-7.

> We have to make war against those vampires of modern society, who make a trade of fattening on the sufferings and weaknesses of humanity [...] if there is any hope of recovery it must come from legitimate medicine.[31]

Referring to superstition and vampirism in such a document as this hints at a culture in which rabies has become legendary in its effects, causes and symptoms. Dolan sees a social injustice in the ways in which the rabies has been exploited by trusted medical practitioners; the vampire of Victorian society is not a supernatural being that seeks the blood of its human prey. It is instead the doctor who treats his patient for rabies by using methods that are wholly unauthenticated by contemporary medical practices. The underlying implication of his words is that the other 'vampires of modern society' are precisely those who are trusted in another sense, namely humankind's faithful canine companions which feed upon the love and, when infected with rabies, blood of their human counterparts.

Prevalent in the consciousness of those who had read or heard of the sensational stories published in the press, rabies posed two main symbolic threats to nineteenth-century English society. First, rabies threatened to disrupt and destabilise social order – the biology of the infected victim (be it human or animal) exceeded social and cultural limits and laws. Second, rabies emerged from the feral landscape to invade organised spaces in Victorian England, causing unprecedented anxiety about a disease that attacked and infected the interior of the body, corrupting the bloodstream and transforming the human into something Other. Several werewolf stories from the same period warn of the dangers of humans returning to their natural habitat, the forest. In *The Werewolf* (1896), Clemence Housman reverses this principle, yet develops the same theme. Housman's werewolf may enter the domestic sphere of the house disguised in her human form, indeed may kiss and 'mark out'

[31] Thomas Michael Dolan, *The Nature and Treatment of Rabies or Hydrophobia. Being the Report of the Special Commission Appointed by the Medical Press and Circular, With Valuable Additions* (London: Baillière, Tindall, and Cox, 1879), p. 18.

her victim, yet she cannot attack her prey until they wander into the feral space of the nearby forest. Thus, this werewolf narrative proposes that evil (or disease) occupies the feral landscape, merely waiting for its victim to stray innocently from the organised space of the house into the dangerous (or 'infectious') forest. Unsurprisingly, when the marked prey enters the woodland, they are never seen again, dead or alive (the horrors of such a demise are hidden from the eyes of the reader), and so *The Werewolf* suggests that what is feral, and not civilised or cultivated, represents a threat to humankind because it epitomizes the possibility of human regression. The invasion is realized, at least in fictional terms, the following year with the publication of *Dracula*, a novel in which the vampire (and the range of unclean animals into which he metamorphoses) pervades the organised space of imperial England, disrupting the seat of power (London), from the wilderness of Eastern Europe, a blank space on England's colonial map. Like Dracula's invasion of English soil, rabies assaults and infests English society, causing mass hysteria, and the interior of the body, causing biological chaos. The Gothic aspects of the disease lie not only in the fact that rabies causes bodily cells to behave in ways that are beyond human control, but that it results in a painful and premature death.

Until Pasteur concentrated his medical work on rabies, there were few clear answers to the questions surrounding what rabies was, where it had come from, and what could be done to eradicate it (and the fear it caused) from English society. Ritvo's groundbreaking book on the history of animals in Victorian England, *The Animal Estate: The English and Other Creatures in the Victorian Age* (1989), considers the impact of the disease on social discourse in English society in some detail. Ritvo's research reveals that the actual prevalence of the virus did not warrant or reflect the level of alarm it caused. Neil Pemberton and Michael Worboys's excellent study on the history of rabies *Mad Dogs and Englishmen: Rabies in Britain, 1830-2000* (2007) has uncovered much evidence to show that, though the numbers

fluctuated, the disease was out of control for several decades of the latter half of the nineteenth century:

> Deaths from hydrophobia kept rising, from 7 in 1868 to 56 in 1871, and then fell before reaching 61 in 1874. These deaths, with the many more mad dog incidents that accompanied them, gave both diseases [rabies and hydrophobia] a high public profile. Deaths continued to be concentrated in Lancashire, the West Riding of Yorkshire, Cheshire, Staffordshire, and London. As previously, there were many melodramatic narratives of dogs running amok and press reports of the agonies of hydrophobia.[32]

The extraordinary amount of attention rabies attracted by the public, argues Ritvo, 'may have been the result of its complex and sometimes conflicting rhetorical functions rather than of its potential impact on public health'.[33]

These 'conflicting rhetorical functions' play out predominantly in newspapers (and the Gothic stories I will discuss shortly). On the one hand, the press gave space to correspondents such as Ouida, the animal rights activist, dog owner, and prolific Victorian novelist, who described the hysterical reaction to rabies as a 'disgraceful panic that has made London the laughing-stock of Europe'.[34] On the other hand, many diverse opinions as to the true nature and origins of the disease led to apprehensive polemical reports of possible outbreaks as well as sightings of rabid dogs published daily in the national newspapers. The media often acted as a non-biological form of contagion by providing, perhaps inadvertently, a forum for those wishing to sensationalise the disease, namely disingenuous medical practitioners, or as Dolan remarks in the parliamentary report, 'those vampires of modern society'. In fact, a

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[32] Neil Pemberton and Michael Worboys, *Mad Dogs and Englishmen: Rabies in Britain, 1830-2000* (Basingstoke: Palgrave Macmillan, 2007), p. 84.
[33] Ritvo, *The Animal Estate*, p. 170.
[34] *The Times*, 4 November 1886, p. 3.

disproportionate level of fear and alarm was associated with the disease considering that the statistics proved it was extremely rare in humans: at the height of the epidemic (if we can call it such), in 1877, rabies claimed only 79 human lives.[35]

In their bid to sell newspapers, the popular press propagated myths and enflamed the sense of public hysteria about rabies, thus keeping the disease at the forefront of the public consciousness.[36] Newspapers presented rabies as a disease that was ubiquitous, incurable, and deadly. [37] Dalziel helpfully gives a graphic example of a contemporary newspaper report about a rabid dog attack in which the dog is described as '"the exact type of dog that invariably spreads hydrophobia; his wild eyes flashed fire, as, foaming from the mouth, he rushed down the main street, when he flew furiously at a child who attempted to stop him with his battledore"'.[38] After giving a further example of the way in which he would have liked the matter to have been reported, Dalziel asserts, 'I deplore the sensational manner in which such serious matters are too often treated, and the loose way in which facts are assumed on insufficient data and incompetent authority'.[39]

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[35] Pemberton and Worboys note that 'The year 1877 saw the highest number of certified hydrophobia deaths in any single year in the nineteenth century. […] In the peak year of 1877 there were 79 deaths, 61 male and 18 female, which were distributed around the country. The largest numbers were in London (16) and the North-West (19) – mostly Liverpool and West Lancashire – with the remainder across southern counties; the West Riding of Yorkshire, where rabies was usually prevalent, only had a single death. As early as January, the *Lancet* was warning that "A panic may occur or be created without the justification of a peril, and it may produce the evil it madly dreads."' *Mad Dogs and Englishmen*, p. 91.

[36] Dalziel lists such myths as 'nervous excitement', 'frothing and foaming at the mouth', 'fits', 'barking like a dog'. 'The "mad dog on the rampage" is a delusion', states Dalziel, 'his ferocity is exhibited in paroxysms of rage; in the intervals he is morose or sullen, or exuberant in the display of his affections, and will rarely go out of his way to attack man'. One of the most common and 'vulgar' ideas is that the dog foams at the mouth. In real cases of rabies, there is 'but little saliva or foam'. The belief that people who have the disease bark like a dog is entirely mistaken. Victims of rabies do not take on doglike behaviour; the barking noise is 'caused by the efforts to free the throat from the mucous that collects there and irritates the patient'. See Dalziel, *Mad Dogs and Hydrophobia*, pp. 24-7.

[37] Dalziel implicates the press in the circulation of myths about the number of cases of rabies in saying that 'It is possible that the increase [in human deaths] may be more apparent than real, because the press of this country are Argus-eyed, and keenly alive to the interests of the public, and the cheap daily and weekly paper now finds its way into almost every home.' Dalziel, *Mad Dogs and Hydrophobia*, p. 3.

[38] Dalziel, *Mad Dogs and Hydrophobia*, pp. 6-7.

[39] Dalziel, *Mad Dogs and Hydrophobia*, p. 8.

In 1888, the renowned physician and rabies expert, Charles Alexander Gordon picked up on the fact that newspaper editorials that carried horror stories about cases of rabies perpetuated and augmented the issue:

> Looking upon that malady [hydrophobia], therefore, as *a nervous affection induced by shock and fear, and conduced to by apprehension*, the explanation is easy that the number of cases is increased by the sensational articles, such as have of late appeared in the journals, and by the agitation of the public mind which, by those means and others, is sedulously kept up.[40] (My emphasis)

Gordon was one of the many medical doctors who recognised that hydrophobia must be viewed as a different disease from rabies. Some doctors acknowledged the fact that hydrophobia might be 'a uniquely untreatable human condition with an intriguingly psychological aspect'.[41] Terror itself could render the human body hydrophobic, some physicians asserted. It must have seemed as though the nationwide frenzy about zoonosis added to the potency of the disease when Dolan argued in 1879 that

> the mind exercises so great an influence that it seems at times and in certain conditions, according to the idiosyncrasy of the individual, to constitute the sole and unique cause of this terrible affliction.[42]

Although by the 1880s, prevalent anxieties about the virus contributed to the medical analysis of the spread of rabies, Fleming had previously refuted this supposition vehemently in 1877, stating that rabies 'cannot be developed by fear, despondency or any other emotional

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[40]Charles Alexander Gordon, *Comments on the Report of the Committee on M. Pasteur's Treatment of Rabies and Hydrophobia* (London: Bailliere, Tindall and Cox, 1888), p. 14-5.
[41] Pemberton and Worboys, *Mad Dogs and Englishmen*, p. 69.
[42] Dolan, *Nature and Treatment of Rabies or Hydrophobia*, p. 198.

influence, but is produced by accidental inoculation'.[43] Even so, England's leading medical men expressed Dolan's theory in various forms throughout the rest of the century and the myth that rabies could be controlled by the mind of its victim even continued into the early part of the twentieth century. In 1903, David Sime suggested that

> the hydrophobia of a resolute, strong-nerved man is a very different disease from that of the timorous, irritable, broken-down "neurotic"; [...] Boldness and resolute endurance may, therefore, safely be taken as a reliable indication, not merely of the exceptional strength, but of the exceptional integrity of the nervous system and of the central nervous substance.[44]

Human death caused by rabies, then, these medical experts insist, was, at least in part, the product of a hysterical, fearful imagination. Minds full of terror and dread allowed the horrific symptoms of their fatal medical condition to take hold. To some extent, this line of argument is relevant to any reading of the Gothic mode in literature, for the horror writer's ability to create a feeling of fear in his reader directly correlates with preconceived notions of terror in the individual's mind. Although there is no scientific evidence to show that Gordon, Dolan, or Sime are correct about the physical effects of hysteria on rabies victims, what their theory shows is that the manifestation of the disease in the human body was still very much under discussion, even after the vaccine had been successfully formulated and tested. Moreover, their ideas attributed to the prevalent panic about the causes and effects of zoonosis that Darwin had earlier made so central to his evolutionary theory. Fleming clarified the popular feeling on the matter when he remarked in a letter to the editor of *The Times* in

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[43] *The Times*, 3 November 1877, p. 4.
[44] David Sime, *Rabies: Its Place Amongst Germ-Diseases and its Origin in the Animal Kingdom* (Cambridge: Cambridge University Press, 1903), p. 240.

1877 how, ‘there is no malady which at present attracts more attention from the general public, nor one which is invested with more dread, than the disease in question [rabies]’.[45]

As a disease linked medically with encephalitis (acute inflammation of the brain) and etymologically with madness,[46] rabies was associated with sin, corruption, and unholiness, even described by one newspaper as ‘evil’,[47] a term used because it may have seemed as though rabies had adopted its own biological and political agenda. As a disease capable of sending the mind out of control, rabies propagates by causing a kind of ‘madness’ that enables it to spread easily and quickly, causing its animal host to bite unwary humans and other unsuspecting animals. Although much discussion took place as to the method of transmission of the virus, most medical doctors acknowledged that a bite was necessary to spread the disease from one creature to another. W M Hunting, for example, writes in a letter to the editor of *The Times* in April 1874 that rabies is contagious ‘only by a bite’.[48] Biting – a central motif of horror and fear in Stoker’s fin-de-siècle vampire narrative – is also key to the spread of rabies. Given the increased number of cases of hydrophobia and the ensuing panic during the two years prior to the publication of *Dracula*, it is not difficult to see why Stoker engaged with the heightened sense of horror the disease evoked at this time. Although the 1870s had seen the worst of the mass hysteria over the disease, and despite the fact that the virus was soon to be eradicated in Britain, new fears sparked in 1896, just months before the *Dracula* was published. The March 1896 edition of the RSPCA’s monthly periodical, *The Animal World*, featured a long editorial on the latest anxieties about the spread of rabies. By way of suppressing widespread concerns, this editorial documented the fact out of the 11,000 dogs brought to Battersea Dogs’ Home only one was rabid and in the light of this statistic, the

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[45] *The Times*, 3 November 1877, p. 4.
[46] The OED states that the etymology of rabies is Latinate, from ‘*rabere* to rage, rave, be mad’.
[47] *The Times*, 27 June 1881, p. 6. This is fitting because the OED shows that the word ‘evil’ frequently referred to disease up until the mid-eighteenth century.
[48] *The Times*, 8 April 1874, p. 8.

author refers to the growing (and unnecessary) 'panic' about the spread of the disease.[49] Dogs, rabies, and the inefficacy of muzzling remained prevalent features of the Society's magazine for the next few years.

4. *Dracula* and the dog

Stoker's portrayal of vampirism is so specifically about widespread fears about the spread of rabies that he even uses the anatomy of the dog to make the analogy clear. One explicit example of this is his description of the vampire's teeth as 'canine'. The lengthening of the teeth is a manifestation of the vampire's desire to bite, to be cannibalistic, even animalistic. Lisa Hopkins suggests that the lengthening of Lucy's and Mina's canine teeth are a part of 'an evolutionary fast-forward sequence in which the supernatural strength and powers with which these women are about to be endowed will allow them to eliminate any competitors and, literally red in tooth and claw, triumph as the dominant predators'.[50] To put this another way, as the anthropologist David Gilmore suggests, '[t]he gaping, tooth-lined, flesh-tearing mouth is a universal synecdoche for monstrous predation'.[51] While the human is an incidental rather than maintenance host of the rabies virus, and the infection in the human is a dead-end one, what secures the continuation of the *vampire* race is the metamorphosis of the human into a monster capable of biting, and therefore infecting, others.

Other descriptions of Dracula's physiognomy reveal his canine attributes. His face is 'strong – a very strong – aquiline' and the mouth is 'fixed and rather cruel-looking, with peculiarly sharp white teeth' while 'his ears were pale and at the tops extremely pointed' (p. 28). Darwin describes canine teeth in the human as 'perfectly efficient instruments for

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[49] *The Animal World*, 2 March 1896, p. 37.
[50] Lisa Hopkins, *Giants of the Past: Popular Fictions and the Idea of Evolution* (Lewisburg: Bucknell University Press, 2004), p. 114.
[51] Gilmore, *Monsters*, p. 180.

mastication' but he categorises them as 'rudimentary' because the canine tooth 'no longer serves man as a special weapon for tearing his enemies or prey' (*Descent*, p. 59). According to Darwin, these traits are atavistic features of the human, but Stoker here attributes them to the vampire. Canine teeth remain useful to the vampire, as they do to the dog, in the act of biting. Even the vampire's ears are pointed in a peculiarly canine way and Dracula's hairy palms contradict Darwin's observation that in humans, 'it is a significant fact that the palms of the hands and the soles of the feet are quite naked' (*Descent*, p. 37). Dracula's nails are 'long and fine, and cut to a sharp point' (p. 28) like claws, and this feature of the vampire is, according to Darwin's contemporary Richard Owen, one shared with creatures that are cynodopous (dog-footed):

> In *Carnivora* the base of the last phalanx forms a 'nail-bed' much deeper than that in Man, a plate of bone being reflected forward like a sheath for the base of the terminal, prominent, and pointed part of the phalanx. The dermo-perioste of this bed develops a very dense horny sheath covering the claw-core, and reciprocally received at its base within the 'bed' or sheath formed by that part of the ungual phalanx.[52]

Stoker's use of Owen's non-retractile claws dehumanise the vampire, so that while the vampire is humanlike in shape, his features betray him; they are what Darwin describes as 'vestiges of a former condition' (*Descent*, p. 34). For the vampire, as for the dog, pointed ears, sharp white teeth, claws, and body hair are necessary accoutrements to the vampiric lifestyle. The vampire, in a distinctly canine way, requires the dog's keen senses in order to survive and Dracula's kinship with wolves proves the close physical relationship between vampire and dog, almost as though the vampire is a subspecies of the dog family.

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[52] Richard Owen, *On the Anatomy of Vertebrates*, 3 vols (London: Longmans, Green, and Co., 1868), 3, p. 623.

Similarly, the vampire's ability to snarl is an example of Charles Bell's 'snarling muscles' in his hugely influential study *The Anatomy and Philosophy of Expression as Connected with the Fine Arts* (1806). Bell describes the physical function of these muscles as 'quite peculiar to the ferocious and carnivorous animals', yet, interestingly, humans have them:

> The snarling muscles arise from the margin of the orbit, and from the upper jaw; they are inserted into that part of the upper lip from which the moustaches grow, and which is opposite to the canine teeth. Their sole office is to raise the upper lip from the canine teeth; and although they are assisted in this by others (the masticating muscles), I have ventured to distinguish them particularly as the muscles of snarling. [...] The graminivorous are incapable of it, and consequently these muscles are to be found largely developed only in the former class, not in the latter. In the carnivorous animals it can scarcely be said that there is a perfect or regular orbicular muscle, as in man, for contracting the lips; the lips hang loose and relaxed, unless when drawn aside by the snarling muscle, and they fall back into this state of relaxation, with the remission of the action of these muscles.[53]

In *The Expression of the Emotions in Man and Animals* (1872), Darwin notes a particular incident capable of bringing about an example of the snarl in the human:

> The expression of a half-playful sneer graduates into one of great ferocity when, together with a heavily frowning brow and fierce eye, the canine tooth is exposed. A Bengalee boy was accused before Mr. Scott of some misdeed. The delinquent did not dare to give vent to his wrath in words, but it was plainly shown on his countenance, sometimes by a defiant frown, and sometimes 'by a thoroughly canine snarl.' When

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[53] Charles Bell, *The Anatomy and Philosophy of Expression as Connected with the Fine Arts*, 7th edn (London: George Bell and Sons, 1877), p. 121.

> this was exhibited, 'the corner of the lip over the eye-tooth, which happened in this case to be large and projecting, was raised on the side of his accuser, a strong frown being still retained on the brow.'[54]

Stoker draws upon Bell's snarling muscles several times in *Dracula*, showing how the Gothic body exhibits animalistic traits. Reminiscent of the warning given by a rabid dog before it bites its victim, the 'horrible snarl' (p. 393) that passes over the Count's face on being detected is specifically canine, while the snarl that exemplifies Lucy's rage when she realises that the vampire hunters have discovered her lair represents a feline attribute. It is an 'angry snarl, such as a cat gives when taken unawares' (p. 271) and it is of some interest in terms of rabies. Victor Horsley's editorial 'On Rabies: Its Treatment by M. Pasteur, and on the Means of Detecting it in Suspected Cases', which appeared in *The British Medical Journal* in February 1889, claimed that rabies 'seems to acquire a specially virulent quality during its development in the cat and the wolf'.[55]

The growl that follows this snarl, however, is a distinctly canine characteristic. Throwing the child she has stolen to the ground '[w]ith a careless motion', she 'growl[s] over it as a dog growls over a bone' (p. 271). For Darwin, growling is part of his work on 'animal language' and he observes carefully in *Descent* the ways in which the dog 'speaks':

> Although barking is a new art, no doubt the wild parent-species of the dog expressed their feelings by cries of various kinds. With the domesticated dog we have the bark of eagerness, as in the chase; that of anger, as well as growling; the yelp or howl of despair, as when shut up; the baying at night [...] (p. 107)

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[54] Darwin, *On the Expression of the Emotions in Man and Animals* (London: John Murray, 1872), p. 250.
[55] *British Medical Journal*, 16 February 1889, p. 342.

Growling and snarling are remnants of the bestial forms from which humans have evolved, verifying humankind's animal ancestry. Huxley notes in *Man's Place in Nature* how the orang-utan is capable of 'giving utterance to his deep, growling voice'.[56]

Beginning with *Dracula* and moving on to a selection of late-Victorian werewolf narratives, I will develop this line of argument by assessing the impact of the anti-vaccination movement on the theme of transformation in Gothic literature. There are two parts to this section. First, I will argue that inoculation represents an analogy of biting. Second, I will make a connection between the material that enters the body through the needle to inoculate (and therefore preserve life) and the matter that enters the body via the bite to cause disease.

5. Biting and injecting: the anti-vaccination movement and Gothic fiction

By the late 1880s, groundbreaking work in almost every sphere of the public domain had taken place to try to establish a vaccine for rabies whilst at the same time fears and anxieties about the implications of evolutionary theory proliferated following the publication of seminal texts such as *Origin of Species* and *Descent of Man*. These concerns, amongst others, meant that when Pasteur discovered a vaccine for rabies in the early 1880s, he was accused of spreading, instead of preventing, the virus. The inoculation against rabies was considered to be 'at once a mistake and a danger'[57] and described as a 'homicidal treatment'.[58] Pasteur's vaccination caused unease rooted, perhaps, in the idea that, like the bite, Pasteur injected the body intravenously with the deadly disease from which it was supposed to offer protection.

Furthermore, the method of producing the vaccine caused much anxiety. It was necessary for Pasteur to infect a rabbit with rabies, allow it to die and then dry and crush its

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[56] Thomas H. Huxley, 'On the Natural History of the Man-like Apes', in *Man's Place in Nature and Other Anthropological Essays*, *Collected Essays*, 9 vols, (London: Macmillan and Co., 1894), 7, p. 48.

[57] Letter to Thomas M. Dolan from Professor Peter, in Dolan, *Pasteur and Rabies* (London: George Bell and Sons, 1890), p. v.

[58] Ibid, p. vi.

spinal cord in order to create a vaccine suitable for human use as an inoculation. Discourses tied not just to medicine and disease, but to a whole range of moral questions concerning the human treatment of animals influenced the way in which people dealt with this aspect of scientific progress. For some Victorians, this blatant exploitation of animals in the name of scientific advancement added emphasis to the anti-vaccination cause and the ongoing voracious anti-vivisection debate, as Richard D. Ryder has carefully noted.[59]

Durbach does not mention rabies in her superb book *Bodily Matters: The Anti-Vaccination Movement 1853 – 1907* (2005), despite concentrating a significant amount of her work on the 1870s, the period during which concern about the prevalence of rabies was at its height. However, Durbach's excellent research shows that, by the late 1890s, the movement was still extremely active, prompting the government to introduce the 1898 Vaccination Act (allowing people to obtain a certificate of exemption on grounds of conscience) just a few months after the publication of *Dracula*.

For the purposes of my biting/vaccination analogy, it is worth pointing out the ways in which penetration of the skin takes place in this vampire narrative. First, by biting his victim and sucking their blood, Dracula spreads his infected blood. This act, often sexualised by critics, is instead most analogous to the rabid dog's bite. Only through the bite is the vampire able to transmit the deadly virus that transforms his human prey into an animalistic creature. Moreover, the metamorphosis of the vampire's victim following the bite reveals a specifically canine animal monster. Second, Van Helsing's use of the intravenous blood transfusion is an attempt to save Lucy's life, yet the penetration of the needle into her skin only secures her premature death because her transgressive desire to 'marry three different

[59] Richard D. Ryder notes that Pasteur's work on rabies 'was under constant attack by anti-vivisectionists in the 1880s, not only on grounds of cruelty but because it was claimed that his rabies vaccine was a danger to his patients. Indeed opposition to vaccination became closely associated with the anti-vivisection movement from this time until the First World War.' Ryder, *Animal Revolution: Changing Attitudes towards Speciesism* (Oxford: Basil Blackwell, 1989), p. 107.

men or as many as want her'[60] has been symbolically realised. Although Lucy's indiscrete verbalised wish is unsanctioned by Victorian society's moral values, this is not, however, the main reason why she is punished in the novel, as some critics have argued.[61] Instead, it is this type of medical assistance, the subcutaneous injection itself, which represents in *Dracula* a kind of 'legitimate bite', which brings about her demise. Interestingly, then, Van Helsing is as guilty as Dracula for Lucy's downfall, for he is one of those 'vampires of modern society' at whom Dolan aims his wrath. In his ambivalence between the significance of the needle and the horror of the bite, Stoker suggests that the impropriety of having one's blood polluted by the blood of others via penetration of the skin by injection is equally as dangerous as the bite of an infected animal.

The novel thus validates the anti-vaccinator's argument that artificial inoculation causes a failure to distinguish between good medical practice and bad animal practice. By mirroring a world in which an affective anxiety of biting supersedes the fear of the transmission of disease, the bite itself, like the injection, becomes an ideologically terrifying and improper act. Durbach argues that penetration of the skin was interpreted by the Victorians as a violation of the body and symbolically wrong:

> If an Englishman's house was said to be his castle, anti-vaccinators also imagined his body as an equally sacred fortress – a 'little human house' – whose boundaries were not to be transgressed. 'The vaccinators not only come into [the Englishman's]

[60] Bram Stoker, *Dracula* (London: Penguin, 1991), p. 81. All references are to this edition and will be given in the text.

[61] Kathleen Spencer, for example, has suggested that it is because Lucy's character is 'flawed' and her 'sexuality is under very imperfect control' that she is vulnerable to becoming a vampire. See Spencer, 'Purity and Danger: *Dracula*, the Urban Gothic and the late Victorian Degeneracy Crisis', in *Gothic: Critical Concepts in Literary and Cultural Studies*, ed. by Fred Botting and Dale Townshend (London: Routledge, 2004), pp. 315-6. Erik Marshall has pointed to the fact that Lucy remains 'pure' until after her encounter with the vampire, at which point she 'becomes sexually voracious and openly desiring, accepting the blood of four men (each transfusion standing for a ritual of marriage) and wanting more'. See Marshall, 'Defanging Dracula: The Disappearing Other in Coppola's *Bram Stoker's Dracula*', in *The Gothic Other: Racial and Social Constructions in the Literary Imagination*, ed. by Ruth Bienstock Anolik and Douglas L. Howard (London: Eurospan, 2004), p. 292.

> house,' warned an agitator, 'but they get inside of his skin, and invade his veins, so that the blood in the body is not his own.' By scarifying the flesh and introducing disease into the system, vaccination threatened strongly held beliefs regarding bodily integrity and blood purity. It also wielded the power, anti-vaccinators maintained, to transform the individual into something 'other,' a monstrous version of the self. On these grounds, anti-vaccinators attacked vaccination as bodily assault, a violent disruption of the physical integrity of the individual that was both harmful to physical and to spiritual health. In expressing their concerns about the permeability and transformability of the individual body and a trend toward what they considered 'violationism,' anti-vaccinators participated in the construction of a gothic body.[62]

Durbach's analyses of the impact of compulsory vaccination on Victorian parents once again evoke Punter's questions about the purification of human blood. If one's blood is not one's own, then to whom does it belong? What may one become once the blood of another creature has been mingled with one's own?

The vaccine was conveyed to its human beneficiary in animal fluids, which meant that injecting a vaccine also involved inserting part of the animal into the human. To the anti-vaccinators, this posed a serious moral and conceptual problem because they feared adopting animal behaviour or appearance. The inoculation against smallpox in the late nineteenth century, a disease whose vaccination consisted of lymph cultivated from a calf, caused precisely these types of anxieties:

> Some parents feared that vaccinated children might adopt cow-like tendencies.
> A report on the Gloucester epidemic of 1895-96 maintained that parents had been unwilling for 'a beast [to] be put into their children,' as they had imagined that they might come 'to low and to browse in the fields like oxen.'[63]

[62] Durbach, *Bodily Matters*, p. 113.

An intrinsic fear of taking on the behaviour of the animal, then, underlies Victorian society's rejection of mandatory vaccination. The vociferous debate about human origins deepened anxieties about the symbolic act of breaking the skin and entering the interior of the body, in the form of either vaccination or biting, for this act reminded the anti-vaccinators of humankind's close biological ties with the animal world. Could this be why fear of regression became such a prominent theme of the movement? At least for those Victorians campaigning against compulsory vaccination, it had become clear that along with all the possible benefits of the vaccine came conceptual and ideological disadvantages that outweighed the usefulness of this new technology. Anti-vaccinators objected to the animal material (usually lymph or mucus) used to convey the vaccine because, they argued, apart from the possibility of adopting animal behaviour, animal matter could convey diseases yet unknown to humans. But it was not only Darwin's argument that zoonosis proved the close similarity between animals and humans that caused the Victorians such concern about diseases such as rabies; it was fear of the unknown, fear of breaking down biological barriers that could not be rebuilt, and a deep-rooted fear of becoming inhuman.

Although little critical attention has been given to nineteenth-century werewolf stories, which may suggest that they were not popular in Victorian literature, Chantal Bourgault du Coudray's study *The Curse of the Werewolf: Fantasy, Horror and the Beast Within* (2006) has demonstrated their prevalence throughout the century. A brief glance at her bibliography reveals that at least sixteen stories or novels about werewolves were published between 1840 and 1910.[64] Therefore, as an explicit example of biting that causes metamorphosis into a human/dog being, werewolf tales are an important marker for anxieties about the spread of rabies during the latter half of the nineteenth century. They reminded readers of the horror of

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[63] Durbach, *Bodily Matters*, p. 125.
[64] See the bibliography of Chantal Bourgault du Coudray's *The Curse of the Werewolf: Fantasy, Horror and the Beast Within* (London; New York: I.B.Tauris, 2006), pp. 182-90.

the rabid dog bite and expressed the terror and hysteria associated with rabies during this period. The wolf also drew attention to the dog's ancestry and reminded readers that the werewolf virus necessitated a return to a wild and feral state.

If *Dracula* fully explores, and exploits, the metamorphic possibilities of the bite, in some werewolf stories the bite is not enacted but instead infuses the text as a universal threat to human nature. In Algernon Blackwood's *The Camp of the Dog* (1908), for example, the werewolf that lurks in the wilderness around the campsite, is, it transpires, the astral body of a male member of the camp. In this story, the werewolf does not literally metamorphose from human to wolf; instead it is a projection of the human spirit, in the shape of a wild dog, onto the material air. Exploring the ambiguity of the role of the physical body, Blackwood addresses a question that Sabine Baring-Gould's 1865 study, *The Book of Were-Wolves: Being an Account of a Terrible Superstition*, had posed:

> Whether the soul is at all able to act or express itself without a body [...] is a question that has not commended itself to the popular mind. [...] If the body be but a cage, as a poet of our own has been pleased to call it, in which dwells the imprisoned soul, it is quite possible for the soul to change its cage. If the body be but a vesture clothing the soul, as the Buddist [*sic*] asserts, it is not improbable that it may occasionally change its vesture.[65]

Baring-Gould's work in this field is a speculative account of the werewolf superstition but it does show that the subject of lycanthropy was circulating at around the same time that rabies was becoming a serious issue. Linking werewolves with pathology, Baring-Gould notes that by the end of the Middle Ages 'lycanthropy was regarded as a disease'.[66] By the

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[65] Sabine Baring-Gould, *The Book of Were-Wolves: Being an Account of a Terrible Superstition* (New York: Dover Pub., 2006), p. 91.
[66] Baring-Gould, *The Book of the Were-Wolves*, p.74.

mid-nineteenth century, however, it is uncertain whether the connection between lycanthropy and disease still existed, although there is fictional evidence, as I will show, that towards the end of the century, lycanthropy was associated with mental illness. *The Camp of the Dog* moves towards the emergence of new theories about the role of the unconscious in the late nineteenth century. The werewolf only materializes when its human host sleeps, demonstrating that, as Bourgault du Coudray argues, 'the unconscious part of the mind [is linked] with the bestial, instinctive life of the natural, material world as opposed to the rational, cultural world of the conscious mind'.[67] Bell's physiological snarling muscles thus become externalised in psychic force in Blackwood's use of the power of the unconscious.

Translated into English and published in Britain in 1876, opportunely at the height of the rabies 'epidemic', another novella that dealt with the werewolf theme in literature was the French authors Emile Erckmann and Alexandre Chatrian's *The Man-Wolf* (1860). At the beginning of the tale, the narrator, a medical doctor called Fritz, is called away from home to help the Count of Nideck battle 'a terrible kind of illness, something like madness'.[68] '[T]he count's complaint is periodical', explains the count's huntsman, Sperver, 'it comes back every year, on the same day, at the same hour; his mouth runs over with foam, his eyes stand out white and staring, like great billiard-balls; he shakes from head to foot, and he gnashes his teeth' (p. 13). Although Bourgault du Coudray argues that *The Man-Wolf* is an example of werewolf novels that 'drew upon middle-class narratives about the decay of nobility in contrast to bourgeois vitality', the images the novella presents of the nature of the count's illness draw on descriptive terminology similar to that in accounts of rabies.

The count's mysterious malady is attributed to superstitions that involve his ancestry and the presence of a malevolent sorceress that lurks around the castle walls, who seemingly

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[67] Bourgault du Coudray, *The Curse of the Werewolf*, p. 66.

[68] M.M. Erckmann-Chatrian, 'The Man-Wolf' (originally published in French, 1860), in M.M. Erckmann-Chatrian, *The Man-Wolf and Other Tales* (1872) trans. F. A. Malleson (London: Ward, Lock, & Tyler, 1876), p. 13. Further references are to this edition and will be given in the text.

wishes his demise. Hugh Lupus, also referred to as 'Hugh the Wolf', was the head of the family of Nideck over a thousand years before the story is set. The story goes that Hugh Lupus married into a wealthy family and his dowry rendered him the head of a vast estate. Hugh Lupus murders his childless wife after five years of marriage and then, despite marrying a mysterious woman known as the 'she-wolf', refuses to give up the dowry. Because he has wronged his first wife's family, his ancestor, the present count of Nideck, is forced to re-enact the murder of Hugh Lupus's first wife every year[69] and undergoes a terrifying transformation, a description of which evokes images of a rabies victim, whilst playing on the fears about animal behaviour in humans following the vaccination procedure:

> The sight that met my eyes made the blood run chill as snow in my veins. The lord of Nideck, crouching on all fours upon his bed, with his arms bending forward, his head carried low, his eyes glaring with fierce fires, was uttering loud, protracted howlings!
>
> He was the wolf!
>
> That low receding forehead, that sharp-pointed face, that foxy-looking beard, bristling off both cheeks; the long meagre figure, the sinewy limbs, the face, the cry, the attitude, declared the presence of the wild beast half-hidden, half-revealed under a human mask! (pp. 88-9)

This scene renders a graphic illustration of what the anti-vaccinators feared would happen if animal fluids were mixed with human blood. This description of the count as a diseased being in the process of transformation is disturbing because his bestiality it is an outward manifestation of the animal within all humans. Moreover, in the actual change from human to

[69] Similarly, the protagonist of Stenbock's 'The Other Side' (1893) is plagued by a 'strange madness' that comes over him once a year for nine days. Eric S. Steinbock, 'The Other Side: A Breton Legend' *The Spirit Lamp* 4:2 (1893), pp. 52-68.

wolf, the count's metamorphosis from sick man to potential disseminator of his illness is here exposed. Moreover, while there is no mention of biting here and there is no reference to the count's (canine) teeth, the threat of human to human spread of rabies is implied.

The count's lycanthropic state is contrary to the behaviour of Sperver's faithful dog, Lieverlé. At an early stage in the story, the doctor observes the relationship between Lieverlé and his owner:

> I was quite moved with the affection of the man for that dog, and of the dog for his master; they seemed to look into the very depths of each other's souls. The dog wagged his tail, and the man had tears in his eyes. (p. 44)

Within the tale as a whole, the strength of this relationship is foreboding. A species reversal is taking place for while the dog's bond with Sperver grows stronger, the count becomes increasingly detached from the human world, remaining in his room in his near-death human/animal state.

Shortly after the count's animal episode, Sperver, Fritz, and Lieverlé set off into the mountains to find and capture the mythical she-wolf that lurks around the castle walls. When they find her, Lieverlé attacks her in order to protect his human companions but, because the men believe that the count's life depends upon keeping her alive, Sperver shoots and kills him. Consequently, the witch dies and the count recovers his strength. The universal threat of the bite, clearly not possible by human teeth, is manifest in the dog and once this threat has been removed, the count may regain his health.

Alternatively, the superstition that haunts the Nideck family, could be interpreted as a terrible secret beneath which lies anxieties about the nature of (rabid) madness itself. The count's clandestine somnambulism, during which he enacts the terrible murder of his ancestor's wife, is what ails him. While carrying out his strange night-time rituals, the count

is not fully cognisant of his actions. In an altered state of consciousness, the man is unable to control his animal desires. While under the influence of the rabies virus, the human may not be able to control its animal desires either. One of the myths associated with hydrophobia, as Dalziel points out, is doglike behaviour in the human after being bitten by a rabid dog.[70]

In Richard Bagot's 1899 novel, *A Roman Mystery*, Camillo Montelupi terrorises Helen, the novel's female protagonist, with his lycanthropic 'cruel glare' which 'transfix[es] her and chain[s] her to the spot by the force of an unfathomable depth of horror'.[71] Camillo is the insane brother of Ludovico Montelupi, Helen's husband, kept in secrecy because he 'has been mad all his life, with the madness of the Montelupi' (p. 285). His 'vicious, wolf-like grin, which had at the same time a wholly human malignity in it' (p. 283) is frightening, partly because it foreshadows an actual attack and partly because it is a combination of the human and the beast. The wolf-like grin is 'vicious', while the human aspect of his features are malignant and it is the two together that present a horrifying impression of his features. Moreover, the novel's main purpose is to manipulate his readers' fears of being bitten although, interestingly, it only does so in order to subvert such anxieties for it is *Helen*, not Camillo, who becomes 'mad' and 'wild' at the prospect of being mauled by the werewolf:

> Almost mad with terror, and conscious only of a wild desire to free herself from the terrible creature before her, Helen darted forward in a vain attempt to pass him and rush to her husband's room; but, with a lightning-like motion, the 'lupomanaro' threw himself upon her, and uttering shriek upon shriek, she sank to the ground struggling in his clutches. She felt his hot breath upon her face, and hands tearing at her neck and chest, and then she knew no more, for, consciousness failing her, she fainted away, and, as her head fell back in

[70] I refer here to Dalziel's discussion of the myth that rabies victims bark like a dog. See note 36.
[71] Richard Bagot, *A Roman Mystery* (London: Digby, Long & Co., 1899), p. 283. All further references are to this edition and will be given in the text.

> his grasp, the 'lupomarano,' with a fierce snarl of rage, fixed his teeth in her shoulder. (p. 283)

This sensational account of Helen's attack reveals something significant about how the Gothic horror of rabies works at the *fin de siècle*. Placed in its historical and cultural context, the novel can be seen as an attempt to evoke the terror and sensationalism of rabies encountered in the melodramatic and shocking reports in the daily press and in the numerous pamphlets and books on the topic published throughout the latter half of the century. By exploiting these channels of real-life anxieties, Bagot's novel took on a new and horrific significance. In his rabid dog behaviour, Camillo inspires fear, terror, and disgust in his victim (and his reader). Bagot is eager to capitalise on the horror he has described in the attack upon Helen by revealing the effect on Camillo of seeing the blood that his bite has drawn:

> The sight of the blood trickling from the wound which his bite had made maddened Camillo to a frenzy, and he would certainly have torn the unconscious woman limb from limb had his attention not been diverted from her by the sound of footsteps and the sight of lights hurriedly approaching. (p. 283)

The use of the word 'frenzy' here is important. Often used to describe the actions of the rabid dog, this term would have had a particular resonance with Bagot's readership. The idea that the sight of blood excites Camillo reveals him to be more mad than sane, and more animal than human. In him, Bagot exhibits contemporary concerns about the nature of disease in humans, the results of mental illness, and the permeability of the human/animal boundary.

In terms of the ambivalent symbolic meanings assigned to the actions of biting and inoculation in Gothic fiction, the medical attention that Helen receives following Camillo's

attack is interesting. Helen's shoulder is swollen and painful following the bite and, as her body is in danger, mythologically speaking, of assuming Camillo's rabid behaviour, her doctor gives her an injection of morphine, which dulls the pain and calms her shattered nerves, averting further moments of hysteria and therefore saving her life. In this case, perhaps because a blood transfusion is unnecessary, the injection into the skin has positive connotations. Published two years after *Dracula*, *A Roman Mystery* still represents the rabid dog as a terrifying spectre but suggests that the bite/injection are less frightening concepts than they may once have been. Helen does recover from the attack, after all, while Camillo accidentally kills himself in another frenzied episode and therefore dies with dishonour and indignity. Published just two months after a letter appeared in *The Times* claiming that rabies had been eradicated,[72] the novel's moral message is clear: rabies is no longer a threat and we should not fear being bitten. Even if this happens, the novel suggests, injection methods are a viable option for cure. This is a quite different message to the one promoted by *Dracula* two years earlier.

6. *The Hound of the Baskervilles* and other dog stories

Pemberton and Worboys refer to the works of the Brontë sisters as indicative of the fears and anxieties surrounding the spread of rabies during the nineteenth century. 'The power of mad dogs and hydrophobia in the popular imagination', they assert, 'was evident in contemporary fiction, and this was especially the case in Emily Brontë's *Wuthering Heights* published in 1847 and Charlotte Brontë's *Shirley* published in 1849.'[73] They make a good case for these novels' inclusion in the literature that deals with concerns about the prevalence of the virus. I will examine some of the other tales that deal with the theme here.

[72] *The Times*, 31 August 1899.
[73] Their analysis of these novels is interesting and worthy of attention within the terms set out in this chapter. See Pemberton and Worboys, *Mad Dogs and Englishmen*, pp. 56-60.

First published in *The Strand* in August 1901, Arthur Conan Doyle's dark detective story, *The Hound of the Baskervilles*, plays on precisely the same fears and anxieties as the werewolf and vampire narratives. In this mysterious tale of murder and deceit, Holmes and Watson investigate the case of a dog believed to haunt the wilderness of the Dartmoor landscape in search of Baskerville victims. Although initial uncertainties remain as to whether the creature is animal, machine, or ghost, by the end of the story Holmes reveals that it is a real dog, designed by humans to attack and destroy at will, *bred* to kill; therefore a biological weapon. More elusive and powerful than traditional methods of murder, the dog is an almost untraceable weapon, acting as a psychological spectre that emerges from the moorland fog to scare and terrify its intended victim literally to death. Although finally rationalised by science, this fictional account of the black dog legend of British folklore[74] makes use of Gothic imagery and rhetoric in much the same ways as medical and legal texts did about rabies. Like the black dog into which Dracula metamorphoses on the ship to England, the hound of the Baskervilles is both real and spectral, respectable and diabolical, mysterious and rationalised, encapsulating the dichotomy in the figure of the dog.

The Hound finally proves the extent to which breeding can transform and manipulate the biological structure of the dog in order to do humankind's bidding; it is therefore a manufactured monster using 'artificial means to make the creature diabolical', and in this case the 'strongest and most savage' the breeders could produce.[75] Significantly, the hound also highlights the horror of the biting motif pertaining to the rabid dog. Finally faced with their canine nemesis in the thick night-time fog of the moor, Holmes and Watson witness the materialization of 'the dreadful shape' of the dog, at this point not knowing whether it is real or spectral:

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[74] Jacqueline Simpson and Steve Roud's *The Oxford Dictionary of English Folklore* (Oxford: OUP, 2003) suggests that black dogs are often associated with the devil or evil spirits. See p. 25.
[75] Arthur Conan Doyle, *The Hound of the Baskervilles* [1902] (London: Penguin, 2003), p. 158.

> 'A hound it was, an enormous coal-black hound, but not such a hound as mortal eyes have ever seen. Fire burst from its mouth, its eyes glowed with a smouldering glare, its muzzle and hackles and dewlap were outlined in flickering flame. Never in the delirious dream of a disordered brain could anything more savage, more appalling, more hellish, be conceived than that dark form and savage face which broke upon us out of the wall of fog.'[76]

This scene would have struck terror into the heart of the reader of the rabies generation, for although the dog turns out not to be a ghost, this nightmarish apparition is, more terrifyingly, an actual dog bred and designed by human hands to kill human prey. The Gothic, through fin-de-siècle detective fiction, has come full circle and humankind's desire to control evolution has ended in criminality. In fin-de-siècle Gothic fiction, Darwin's understanding of the way that artificial selection works culminates in the crossing of biological and cultural boundaries.

A little known tale that invokes fears about the dog's potential to inflict harm onto its human companions is the 'Third Sermon' of the *Charon: Sermons from Styx* (1886) by the popular nineteenth-century occultist and writer Hargrave Jennings. In this Gothic short story, a big black dog, not unlike the hound in Doyle's story, follows a man home at midnight through the streets of London with seemingly sinister intent. When he first sees the dog, the narrator feels an immediate aversion to it and he is suspicious of its intentions. For the rest of the tale, it haunts him, like a demon or devil. This dog comes from the dark side; the man is deeply afraid of it, and profoundly troubled by its presence.

> I stood for a moment or two, and peered at the object which had struck me. I discovered it was a big BLACK DOG – so big that it seemed impossible, and so black that he appeared to me blacker than anything I had ever seen. […] But the

[76] Conan Doyle, *The Hound of the Baskervilles*, p. 149.

> dog's eyes were the most remarkable point for him; for, […] they gleamed like two red-hot points. Now and then they fined away and withdrew, and then came out strongly, and emitted rays, as if from a patent lantern.[77]

Referring to the dangers of facing a stray, and possibly rabid, dog in the street the narrator anxiously declares, 'The dog may have been mad, may be mad, or may go mad; and madness is full of all sorts of desperate plays and games in which you may not be disposed to take a hand – or a foot' (p. 39). In fear and terror, the man is chased through the streets by the dog and he begins to imagine that there is 'something spectral – something dreadful – something quite out of the common way – something really which made me tremble in this mad, solemn, absurd procession which I was making of the streets with this black devil of a dog behind me!' (pp. 46-7). However, he arrives home unharmed, though anxious and distressed, and, slipping inside the front door as quickly as possible, the narrator thinks he has escaped the dog. Yet, to his dismay, he shuts the door against his canine pursuer only to find that it somehow now appears in his sitting room: 'I was haunted. I was lost. I was doomed. I was run down by hell hounds. The devil was before me in the likeness of a black dog' (p. 48) he exclaims. Inside the house, in an illusory dreamlike apparition, the man observes the dog metamorphose into a blend of mythological animals, complete with 'griffin claws' and 'dragon-wings':

> My eyes were still fixed upon the dog; but he seemed to swell out and increase in bulk – working out, now and again, more and more furiously – like a big bladder when the wind is being blown lustily into it. His sides circled out and grew shaggier; his forehead shot up into a flame-shaped peak; his mouth widened hideously, but, drawing down at the same time, it disclosed his fangs, or rather tusks, like those of an

[77] Hargrave Jennings 'Frederick the Great', *Charon: Sermons from the Styx* (London: W. H. Allen, 1886), pp. 36-7.

> elephant, with a length of tongue which was forked like that of a serpent. His legs grew mightier, terminating with long griffin claws instead of feet. His colour was changing and settling – after variegating like an opal – into an intolerably resplendent green of a scaly texture. From a point on his shoulders, dragon-wings – which mean ragged, bat-like pinions – were spreading, extending like monstrous fans. (pp. 51-2)

In such a strange vision of the phantom dog, the canine takes on the attributes of a range of mythical animals. Species confused, the dog transforms, and it becomes a nightmare animal, composite of many others. Elephant, snake, dragon, bat, the dog's size, its colour, its limbs and appendages, its teeth, the shape of its animal body are becoming Other. As the culmination of the dog's potential for Gothic horror – the threat of rabies on London's streets, the big black dog myth, the vulnerability of the lone man on his journey home followed by a stray dog – this denouement reaches into the very depths of Victorian concerns about the implications of evolutionary theory and fears about the threat of rabies. 'That monster', the narrator concludes, 'was an entire species to himself' (p. 53).

7. Conclusion

The dog is fundamental to an accurate assessment and understanding of how biological disorder, sickness, and degeneration function in the nineteenth-century Gothic novel. Dracula's body, as several critics have noted,[78] represents a projection of the human possibility for decline and degeneration. This is in part because, as I have attempted to illustrate in this chapter, pathology works its way into every corner of Victorian culture, exploiting all avenues of expression from political movements to medical analysis. In *The*

[78] See Andrew Smith's argument that Dracula is a '"Gothic" horror of diseased vampirism', in *Victorian Demons: Medicine, Masculinity and the Gothic at the* Fin de Siècle (Manchester; New York: Manchester University Press, 2004), p. 36.

Descent of Man Darwin mentions disease as a possible cause of the extinction of the human species, causing degeneration in the human being, and possibly changing human nature irreparably forever, both in body and mind.[79] By linking humans and animals through pathology, as he did in his comments on the significance of hydrophobia in *Descent*, Darwin adds to the type of discourse that ignited a society in fear of its animal ancestry.

This chapter has attempted to demonstrate how the nineteenth-century cultural revolution of the dog influenced Gothic images of animalistic creature that bite. I have argued that following the rise in keeping dogs as pets, the emergence and intensity of dog breeding for show purposes, the sense of mass panic associated with rabies, and the extensive use of the biology of the dog in popular scientific writings, the dog became an icon of loyalty, fashion, and, conversely, terror during the Victorian period. In these terms, the vampire and werewolf figures might be understood to be a metaphor for the dog and the spread of the rabies virus.

On a national level, out of scientific and medical textbooks, language and imagery related to dogs (from Bell's 'snarling muscles' to Dracula's 'canine teeth') permeated every sphere, and filtered through to every level of Victorian society. That dogs were associated with disease on the one hand, and prestigious shows on the other, testifies to the dog's dual role throughout the century. Furthermore, the dog as emblem of faithfulness and loyalty was undermined by its capacity to bite and thus transmit fatal disease to human beings. Although no direct reference to rabies is made in the Gothic fiction I have explored in this chapter, the hype surrounding the virus and its significance in scientific writings suggest that writers such as Stoker and Conan Doyle drew inspiration from this source of horror. Furthermore, the disease, like the Gothic mode itself, may represent a metaphor for much larger, colonial concerns.

[79] See Darwin's subchapter entitled "On the Extinction of the Races of Man" in *Descent*, pp. 211-22.

The *fin de siècle* is now understood as the precursor of globalisation as we understand it today. As John Plotz's fascinating new study has shown,[80] dramatic shifts in demographic populations were taking place, people and their cultures were on the move, and diseases such as rabies that fed on their human and animal hosts moved too. The permeability of physical boundaries between countries was reflected in zoonosis. Anxieties about penetrating the skin, either through biting or injecting, mirrored growing concerns about the infiltration of foreign people (and 'foreignness') into English culture, as Dracula's invasion of English society from Eastern Europe reveals.[81] The prevalence of Gothic creatures that bite their human prey suggests that metamorphosis in late Victorian literature manifests itself by both masking and revealing deep anxieties about the spread of disease across the empire and how disease (invasions) ought to be cured (dealt with). As Laura Otis has pointed out, building the empire left Britain open to new diseases and ideas: 'The very process of expansion [...] left [the colonial powers] vulnerable to the new germs, mates, and ideas brought home by their soldiers. The empires needed immune systems.'[82] These immune systems were sought in every branch of Victorian culture, from philosophy, to science, to politics. Moreover, Gothic literature itself, which was clearly both reacting and responding to the social, medical, scientific and political discourses of its day, was one of the ways in which literature contributed to a society desperately seeking an outlet for the considerable fear and hysteria associated with the spread of disease. Gothic fiction itself, then, may represent the need for cultural and social immune systems at the *fin de siècle*.

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[80] See John Plotz, *Portable Property: Victorian Culture on the Move* (Princeton; Oxford: Princeton University Press, 2008).

[81] See also Stephen Arata, 'The Occidental Tourist: Dracula and the Anxiety of Reverse Colonization', *Victorian Studies* 33 (1990): 621-45.

[82] Laura Otis, *Membranes: Metaphors of Invasion in Nineteenth-Century Literature, Science and Politics* (Baltimore: John Hopkins University Press, 1999), p. 90.

Chapter 2

Shaping Evolution: Amphibious Gothic in Edward Bulwer-Lytton's *The Coming Race* and William Hope Hodgson's *The Boats of the 'Glen Carrig'*

1. Introduction

During the 1840s, palaeontologists found archaic amphibian fossils in America and Germany that resembled huge frog-like creatures.[1] These monolithic beasts, known as labyrinthodonts from the labyrinthine structure of their teeth, presented natural philosophers with an intriguing hybrid for they seemed to embody the characteristics of both fish and reptile. Could they explain the emergence of fish-like organisms onto land? Would they reveal the secret of humankind's origins? Even if they could, the fact remained that the origin of humankind was a difficult question to address and while Darwin and other evolutionists implicated the simian in humankind's evolutionary history far more zealously than any other creature,[2] other Victorian scientific thinkers were linking humankind's genesis to all kinds of animals, even the unlikely amphibian.[3] By the time St. George Mivart published his popular treatise *The Common Frog* in 1874, the structural composition of the human, according to anatomists and popular fiction writers, seemed to correlate with many different types of animals, complicating the question of humankind's history still further. If Darwin and his contemporaries were not entirely sure how humankind had reached its modern biological form, one thing had become clear: the human was *not* a homogenous organism. It came to be seen, instead, as a seemingly diverse and anomalous mixture of many different kinds of

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[1] See Louis Figuier, *The World Before the Deluge* (1865)

[2] See Darwin, *The Descent of Man*, pp. 172-193 and St. George Mivart, *Man and Apes: An Exposition of Structural Resemblances and Differences Bearing upon Questions of Affinity and Origin* (London: Hardwicke, 1873)

[3] Rebecca Stott argues that marine animals have received little attention in Gothic studies of evolutionary discourse. See Stott, 'Through a Glass Darkly: Aquarium Colonies and Nineteenth-Century Narratives of Marine Monstrosity', *Gothic Studies*, 2:3 (2000), p. 305.

animals, and much of the species confusion confounding perceptions of the human resonated in the amphibian.

Throughout the latter half of the century, the frog was understood to be a creature at a disturbing intersection between clear species categories, thus defying ready classification. At the same time, it had a special place in morphology and morphogenesis, comparative anatomy, and evolutionary science. Examining aspects of the frog in scientific literature as the background to Victorian Gothic literature's employment of the amphibious monster, this chapter will explore the role of the amphibious body in Edward Bulwer-Lytton's *The Coming Race* (1871) and William Hope Hodgson's *The Boats of the 'Glen Carrig'* (1907), alongside brief discussion of human-frogs in other Victorian works of fiction.

The search for intermediate life forms had begun and the frog, and indeed amphibiousness as a concept, took on great importance. The amphibian exemplifies evolution gone wrong; they exist at the point where species categories become confused. It is instrumental to my reading of the Gothic body in the fiction of Bulwer-Lytton and Hodgson because, in scientific terms, the amphibious animal dodged precise analysis. It was dead-alive, fish and reptile, monstrous and human, animal and Other. As a liminal being, the frog is a transitional type that calls into question the fixity of all animal species. The 'in-betweenness' of Hodgson's weed-men, for example, parallels the sense of species confusion found in the physiology of the frog. Slimy, soft, with tentacled suckers, Hodgson's creatures are a mishmash of various species. Furthermore, as Owen's Sydenham exhibition of the primordial amphibian illustrated, the frog was the primitive ancestor of the human; however, as Huxley demonstrated in his paper 'Has a Frog a Soul?' in scientific circles the frog was also perceived to be biologically, physiologically, and metaphysically complex. So while the frog seemingly featured insignificantly in Victorian anthropology, I hope to demonstrate to

the contrary that it was, in fact, implicated in the history of humankind in important ways, which influenced Gothic fiction after 1860.

The amphibian embodied evolutionary ideas disseminated by scientists such as Mivart, Huxley, and Darwin about the lack of fixity in species. In *The Descent of Man*, for example, Darwin argues that the rudiments of previous types prove that humans originate in the form of an 'amphibian-like creature'.[4] That Darwin reveals the amphibious body to be humankind's ancestor is vital to an understanding of the *fin de siècle*'s construction of the Gothic body. In evolutionary terms, the amphibian plays a crucial role in comprehending how the development of species has taken place. If the study of the frog in natural history demonstrated that it was a creature from which humans had evolved, then this supposition suggested that it was also an animal into which they could degenerate again. Natural selection, Kelly Hurley has argued, 'destroyed a comfortably anthropocentric worldview: human beings were just a species like any other, developed by chance rather than providential design, and given the mutability of species, humans might well devolve or otherwise metamorphose into some repulsive abhuman form'.[5]

Moreover, as Hurley notes, Darwin's evolutionary theory 'described the human body not as an integral wholeness, but as a kind of Frankenstein's monster patched together from the different animal forms the human species had inhabited during the various phases of its evolutionary history'.[6] The sense of flux and fluidity that Hurley finds so resonant in Darwin and the fin-de-siècle Gothic mode captures the interrelation between science and fiction

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[4] Darwin elaborated on this point by arguing that 'man is descended from a hairy, tailed quadruped, probably arboreal in its habits, and an inhabitant of the old world. [...] The Quadruama and all the higher mammals are probably derived from an ancient marsupial animal, and this through a long line of diversified forms, from some amphibian-like creature, and this again from some fish-like animal. In the dim obscurity of the past we can see that the early progenitor of all the Vertebrata must have been an aquatic animal, provided with branchiae, with the two sexes united in the same individual, and with the most important organs of the body (such as the brain and heart) imperfectly or not at all developed. The animal seems to me to have been more like the larvae of the existing marine Ascidians than any other known form.' Darwin, *Descent of Man*, pp. 678-9.

[5] Kelly Hurley, 'British Gothic Fiction, 1885 – 1930', in *The Cambridge Companion to Gothic Fiction*, ed. by Jerrold E. Hogle (Cambridge: CUP, 2002), p. 195.

[6] Hurley, 'British Gothic Fiction', p. 195.

during the latter half of the nineteenth century. Yet by relying so much on Darwin, she overlooks the extent to which Owen's work on archetypes, for example, may have influenced Gothic writing on the animal throughout the century. As Adrian Desmond points out, Darwin was not the only scientist to see the potential of the amphibian in proving the existence of intermediate life forms. Owen, who examined the Archegosaurus (a type of archaic and extinct amphibian) in precisely these terms in 1860, understood the creature to be what Desmond terms, 'a bridge between classes',[7] or as recent scientists have put it, 'the original missing link'.[8]

2. The role of the frog in Victorian scientific culture

Figure 4. Sketch of Owen's labyrinthodont from his *Geology and Inhabitants of the Ancient World* [Handbook to the Crystal Palace] (1854).

Between the opening of the Crystal Palace at Sydenham in June 1854 and the end of 1886, nearly 60 million visitors[9] arrived to a scene that propelled the Victorian landscape into an ancient world of antediluvian monsters.[10] Richard Owen's involvement in the new venture consisted of designing what was to be the largest educational model ever made of geological

[7] Adrian Desmond, *Archetypes and Ancestors: Palaeontology in Victorian London 1850 – 1875* (Chicago: University of Chicago Press, 1984), p. 65.
[8] See Michael I. Coates, Marcello Ruta, and Matt Friedman, 'Ever Since Owen: Perspectives on the Early Evolution of Tetrapods', *Annual Review of Ecology, Evolution and Systematics*, December 2008, 571-92.
[9] J. R. Piggott, *Palace of the People: The Crystal Palace at Sydenham 1854 – 1936* (London: Hurst and Company, 2004), p. 61.
[10] As Martin J. S. Rudwick argues, the way in which fossils were recreated into life-size beasts shows that they 'are the products of *historical* development; they are constructed in the course of artistic practice in specific historical circumstances. In this particular case, the practice is not only artistic but also scientific: it involves the intersection of two traditions'. Rudwick, *Scenes from Deep Time: Early Pictorial Representations of the Prehistoric World* (Chicago and London: The University of Chicago Press, 1992), p. viii.

formations and prehistoric animals.[11] Working as consultant to the sculptor and artist Benjamin Waterhouse Hawkins, using fragmentary fossilised evidence,[12] Owen restored the labyrinthodont to life-size proportions alongside other dinosaurs clothed in flesh, posing in their natural habitat in Britain, as they would have done more than seventy million years earlier. Presenting these primitive monsters to the Victorian public as gigantic batrachian creatures with carnivorous teeth and in the form of huge, ancient, primordial frogs, labyrinthodonts connected fish with reptiles and primeval water creatures with modern land dwellers.[13] By displaying these giant Triassic frogs in such a way, Owen showed that the biological gap between fish and reptiles had been bridged many thousands of years before. The sketches that accompany Owen's description of the Crystal Palace exhibition transform the South London countryside into a prehistoric land inhabited by grotesque monsters in a display that inadvertently proved that frogs, and all animals including humans, had emerged from the primordial slime from which all life was thought to have developed.[14]

In *Routledge's Guide to the Crystal Palace and Park at Sydenham* (1854), Edward MacDermott provides some background to Owen's exposition of the labyrinthodont, locating it within a Gothic context. Worth quoting at length, MacDermott's rhetoric shows the giant monster frogs displayed at Sydenham were terrifying spectres, the stuff of nightmares:

> These interesting specimens of the earliest antediluvian vertebrate existence were first discovered by the prints left upon the rock by their gigantic feet in the same stratum as

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[11] 'The Iguanodon alone required 4 iron columns, 600 bricks, 1,550 tiles, 38 cask of stone, 100 feet of iron hooping, and 20 feet of iron bar. This simulated dinosaur was an immense scientific, technological, and cultural triumph for all concerned. Humankind had resuscitated the dead, and so the fete was planned to mark this dead act of salvage.' Barbara J. Black, *On Exhibit: Victorians and their Museums* (Charlottesville and London: University Press of Virginia, 2000), p. 21. See also Christine H. Northeast's *The Crystal Palace Park of 1854: A Guided Tour* (Cambridge: The author, 1979), p. 14.

[12] Black notes that, 'Owen's reconstruction of the Iguanodon was culturally determined and socially significant – a whole beast, an entire species based on fragmentary knowledge.' Black, *On Exhibit*, p. 23.

[13] See Desmond, *Archetypes and Ancestors*, p. 67.

[14] See Richard Owen, *Geology and Inhabitants of the Ancient World* (London: Crystal Palace Library, and Bradbury & Evans, 1854).

> that upon which they arc now placed, and they were in consequence known among geologists by the name of the *Chioretherium*, a combination of two Greek words signifying the "hand-beast." [...] A complete skull of this monster toad, upwards of two feet in width, was found in Warwickshire and is now in the Museum of the College of Surgeons; several other fragments of bones belonging to this animal were also found near the same locality. As these fierce carnivorous beasts pursued their prey over yielding morass and muddy shallows, the deep prints of their broad feet were left behind them; the soft muddy soil which like wax received these impressions, has become hardened rock, the foot prints have been preserved from destruction, and now, after the lapse of untold ages they still exist, and these rocky pre Adamite tablets faithfully record *the existence of a class of monsters before which, if now living the bravest of men would hold his breath with terror.*[15] (My emphasis)

MacDermott's use of Gothic language, nouns such as 'monster' and 'terror', in this passage shows the extent to which the reconstructed labyrinthodonts awakened the imaginations of visitors to exhibition. These 'monster toads' which MacDermott imagines fiercely 'pursued their prey' are colossal *lusus naturae* (monsters or 'freaks of nature') from the deep past, deformed, unnatural, dreadful both in their enormity and in the evolutionary ideas that they embody.

Other spectators of the dinosaur display at Sydenham responded to the labyrinthodont with equal horror. George Measom, for example, wrote in the Brighton Railway *Official Illustrated Guide*: 'One of the most frightful monsters of this curious assemblage is the Labyrinthodon, or gigantic frog; its yellowish green colour, huge glaring eyes and vast mouth

[15] Edward MacDermott, *Routledge's Guide to the Crystal Palace and Park at Sydenham* (London: Routledge, 1854), pp. 199-200.

from a disgusting ensemble, which we think would be impossible to exceed.'[16] Owen would later refer to these creatures as the 'missing link' between land and water creatures, arguing in *Palaeontology* (1860) that the

> outwardly well-ossified skull of the *Polupterus*, *Lepidosteus*, *Sturio* and other salamandroid fishes, with well-developed lung-like air-bladders [...] the absence of occipital condyle or condyles in *Archegosaurus* [and] the presence of labyrinthic teeth in *Archegosaurus* [all point to] one great natural group, peculiar for the extensive gradations of development, *linking and blending together* fishes and reptiles within the limits of such group.[17] (My emphasis)

Owen's concept of 'linking and blending together' various classes of animals is what defines amphibiousness. Only in a class of creatures that has emerged from the water and adapted to life on land over the millennia could evolution be proven as a working mechanism in nature. Owen's work on the primordial frog, which was published in *Palaeontology* and which came to the attention of the masses in the Sydenham exhibition, was an important step towards a cohesive scientific understanding of the significance of the amphibian in human evolution. His exposition of the creature, amongst other phenomena associated with frogs in Victorian England, penetrated the popular imagination in important ways because, although the labyrinthodont was not correctly constructed,[18] it represented a major breakthrough in the search for humankind's evolutionary origins. As Richard Altick has noted, 'Inaccurate

[16] Quoted in Piggott, *Palace of the People*, p. 158.
[17] The anatomical patterns Owen discovered in his examination of prehistoric amphibious species, led him to believe that such characteristics proved that a bridge between species had taken place. See Owen, *Palaeontology* (Edinburgh: Adam and Charles Black, 1860), pp. 197-8. Another extinct amphibian very similar to the labyrinthodont, the Archegosaurus, closed the fossil gap between species and was also displayed at the Sydenham Crystal Palace. In his address to the British Association in September 1859, Owen argued, 'the Archegosaurus conducts the march of development from the fish proper to labyrinthodont type'. Quoted in Desmond, *Archetypes and Ancestors*, p. 65.
[18] Owen admitted in *Palaeontology* that the 'restoration' of the labyrinthodont at the Sydenham Crystal Palace is 'with the exception of the head' 'more or less conjectural'. p. 194.

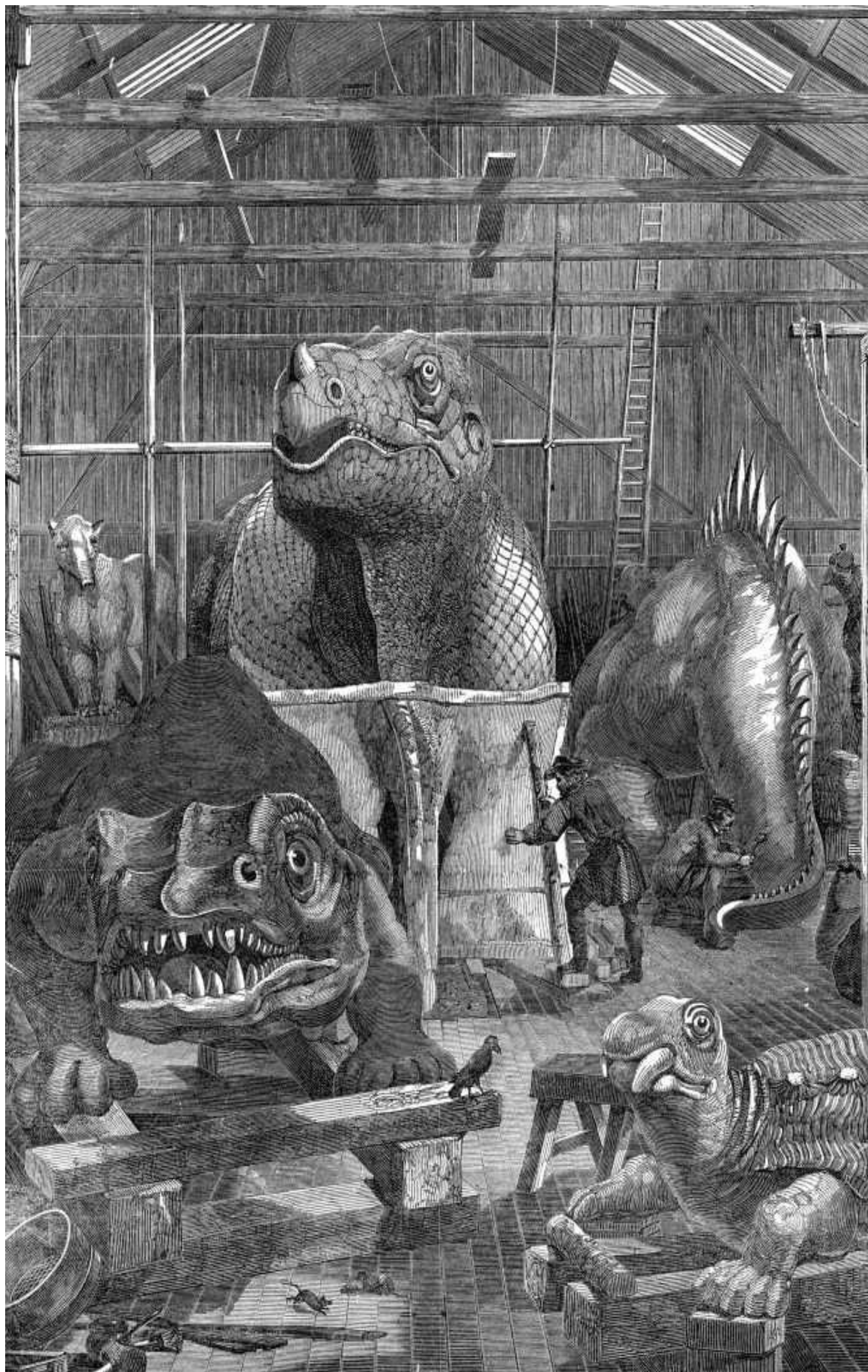

Figure 5. Waterhouse Hawkins's 'Extinct Animals Model-Room at the Crystal Palace, Sydenham'. The labyrinthodont is depicted clearly on the left of this picture. From the *Illustrated London News* (1853).

though many of the models and their assigned postures were, they had some part in forming the notions of prehistoric zoology that were afloat in the communal mind which received Darwin's momentous argument in late 1859.'[19]

Thus, one might venture to suggest that preoccupations with the frog in the mid-Victorian period are manifested in the public and popular display of the labyrinthodont in 1854 as nowhere else. Together with later explorations of the locus of the frog's soul by Huxley and treatises on the

[19] Richard Altick, *The Shows of London* (Cambridge, Mass; London: Harvard University Press, 1978), p. 484.

frog's biological structure, this exhibition made a unique claim about the history of animal life and therefore humankind's place in the evolutionary scale. The frog was a *tour de force* in the natural history book's attempt to illustrate how change took place in each being, in its progression from embryo to maturity, and in its phylogenic development in the grand evolutionary scale. Its prevalence in scientific treatises published on anatomy and the biological sciences throughout the latter half of the century extended the frog's prominent status, a prominence that we can first detect in its spectacular exhibition at the Sydenham Crystal Palace in 1854. In this part of the chapter, I reflect on the frog's place in Victorian scientific culture to reveal how anatomists used the amphibian to address complex biological questions.

In 1874, the prominent biologist Mivart[20] published his short, lexically accessible, work *The Common Frog*, which sought to provide a thorough examination of the embryology, nervous system, skeletal structure, and circulatory system of the frog.[21] Here, Mivart astutely points out that the frog begins life as a fish and metamorphoses during its lifespan into something like a reptile, yet, he argues, in its complete form it differs from both quite dramatically. The frog is, according to Mivart, a combination of many different types of animals: like the fish and the reptile, the frog has cold blood, like the bird, it can sometimes fly,[22] and like the mammal, it has two occipital condyles and four limbs. Thus, Mivart

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[20] Mivart (1827 – 1900) was a prominent and prolific evolutionary biologist in the latter half of the nineteenth century, who was taught early in his career by both Owen and Huxley. He wrote many treatises on various different types of animals, his most well-known works being *On the Genesis of Species* (1871), to be followed two years later with *Man and Apes* (1873).

[21] Mivart published this treatise in the same year that he joined the Metaphysical Society, where, four years earlier, Huxley had given his lecture 'Has a Frog a Soul?' The allusion to the Metaphysical Society will become clearer later in the chapter.

[22]In *The Malay Archipelago* (1869), Alfred Russel Wallace describes a flying frog in the tropics. 'As the extremities of the toes have dilated discs for adhesion, showing the creature to be a true tree-frog, it is difficult to imagine that this immense membrane of the toes can be for the purpose for swimming only, and the account of the Chinaman, that it flew down from the tree, becomes more credible. This is, I believe, the first instance of a "flying frog," and it is very interesting to Darwinians as showing, that the variability of the toes which have been already modified for purposes of swimming and adhesive climbing, have been taken advantage of to enable an allied species to pass through the air like a lizard.' *The Malay Archipelago*, 2 vols (London: Macmillan, 1869), 1, pp. 60-1.

circulates the biological theory that the frog is a fantastical beast made up of parts from many different animals. Moreover, he closes the evolutionary gap between amphibians and humans to reveal an amphibious creature that possesses a distinctly human-like body, complete with wrists, shoulders, hands, haunches, legs, ankles, and feet:

> The character [of the frog's limbs] is very significant, because all Batrachians, in spite of their numerous and important fish affinities, differ from all fishes, and agree with all higher classes in that they – if they have limbs at all – have them divided into those very typical segments which exist in man; namely, shoulder-bones, arm bones, wrist-bones, and hand-bones; and into haunch-bones, leg-bones, ankle-bones, and foot-bones respectively. It is difficult, then, to avoid the belief that in the Batrachian class we come upon the first appearance of vertebrate limbs, differentiated in a fashion which thenceforward becomes universal.[23]

Mivart's anthropomorphic appropriation of the frog's anatomy is striking, because by discussing the frog's body using the anatomical terminology normally associated with humans, he aligns the batrachian animal with the human in rather disturbing ways. By doing so, Mivart is able to demonstrate that amphibians possess the physical attributes of humans (and vice versa), drawing a similarity between these species that had hitherto gone unnoticed. He continues, '[t]he bones of the wrist in the frog, again, present a nearer resemblance to those in man than do those in reptiles, and this is still more the case in some other members of the frog's class, *e.g. Salamandra* and other Efts.'[24]

Elaborating on his theory of human/frog kinship, Mivart then makes an extraordinary link between human and frog anatomy in his discussion of the occipital condyles:

[23] St George Mivart, *The Common Frog* (London: Macmillan, 1874), pp. 83-4.
[24] Mivart, *The Common Frog*, p. 84.

> The skull develops from its hinder (or occipital) region a corresponding pair of articular convexities or "condyles." Now in this matter the frog differs from both birds and reptiles, every member of those classes possessing a single median (occipital) condyle for articulation with the vertebral column. Yet every member of the frog class, not only every toad and newt, but also every species of the Ophiomorpha, and even every one of the long extinct Labyrinthodons has a similar pair of occipital condyles. The interesting matter is that man and all beasts have also two occipital condyles. *Is this then a mark of affinity, and can we, as it were, reach beasts by a short cut through Batrachians*, leaving all the reptiles and birds on one side, as a special and diverging developement [*sic*]?[25] (My emphasis)

As Mivart goes on to explain, occipital condyles (small bones at the back of the skull which articulate with the first vertebra) are entirely absent in fish but binary in amphibians and mammals. By aligning frog and human anatomy in this way, Mivart makes a substantial and noteworthy anthropological claim: that of a strong evolutionary bond between humans and frogs. Mivart tied the frog, documented by Darwin as the lowest vertebrates to breathe air outside water,[26] into humankind's biological past in ways that must have made his Victorian readership very uncomfortable. His theories, and the way he laid them out in such a clear, readable way, arguably altered people's attitudes towards frogs and, indeed, many other types of animals. Mivart's work may have influenced the public imagination in crucial ways, as I will show in my discussion of gothic fiction.

Other treatises published on the frog during the 1870s and 80s did not make such bold claims, choosing instead to concentrate on the fact that, as A. Milnes Marshall pointed out in 1888, the frog is 'convenient to dissect, easy to obtain, and a fairly typical example of the

[25] Mivart, *The Common Frog*, pp. 73-4.
[26] Darwin, *Descent of Man*, p. 633.

great group of vertebrate animals.'[27] Marshall's work on the frog is a demonstrative and instructive text on the dissection of the frog. Complete with diagrams of his dissections, *The Frog* provided one of the century's standard workbooks for students of anatomy and the biological sciences. First published in 1882 and then republished and revised nine times between 1885 and 1928, the influence of this book ensured that the frog would remain at the forefront of anatomical science in the search for the basic principles of organic life.

Another study, published shortly after Marshall's, portrayed the frog's role in science as one which was central to the study of physiology in a mocking tone, describing frogs as having the 'doubtful honour' of being the physiologist's favoured animals 'daily sacrificed in numbers upon the altar of science'. These 'unlucky batrachians', Alexander Ecker argues, 'are specially adapted for experimental investigation: they have consequently fallen under a harsher tyrant than the stork in the fable, and their prophetic outcry in the frog-chorus of Aristophanes has been literally fulfilled'.[28] Ecker's study of the frog, like many others published in the late Victorian period, provides a comparative analysis between human and frog anatomy, but it is also a clear example of animals being 'adapted' not to nature, but to human requirements. The frog, he admits, provides a service to science, one which is invaluable, and which goes wholly unrewarded, except by a painful, unnatural, and untimely death.

Researching for the University of Edinburgh's zoological laboratory in 1884, J. Cossar Ewart's didactic treatise on the frog, written to specify its correct dissection methods, represents one of the most unsympathetic approaches to the study of batrachian biology of the period.[29] Portrayed as an unemotional, insensible automaton, Ewart depicts the frog as an

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[27] A. Milnes Marshall, *The Frog: An Introduction to Anatomy, Histology, and Embryology* (Manchester: J.E. Cornish; London: Smith, Elder, and Co., 1888), p. iii. This textbook was hugely popular; it ran through ten editions by 1909.
[28] Alexander Ecker, *The Anatomy of the Frog* Trans. George Haslam (Oxford: Clarendon: 1889), p. 1.
[29] J. Cossar Ewart, *The Dissection of the Frog* (Edinburgh: James Thin, Publisher to the University, 1884)

object to be used almost exclusively for the purposes of humankind. The sense of anthropocentrism that abounds such a text resonates throughout general discourse on the frog, revealing another interesting aspect of the frog's role in Victorian culture: the frog, like the dog, was 'man's best friend'. It was a necessary animal, but also a creature both useful and repulsive to humankind, purposeful and monstrous to science.

In the 1860s and 70s, the frog came under fresh examination by two of the century's most important scientific men, G. H. Lewes and T. H. Huxley. These empirical thinkers began to use the frog's post-mortem responses to physical stimuli to question the existence of an animal soul. In their research into the biology of the frog, Huxley and Lewes were pushing, and shaping, the boundaries of science's understanding of existence. Like Descartes before them, they asked important questions about whether the animal body is controlled by mechanics (in which case no will or volition is involved) or whether it is animated by a higher state of consciousness, a similar cogency to the one humankind was thought to have: a soul. As Ritvo notes, the roots of this debate go back to ancient history. Since Genesis, she asserts, 'the notion that animals are radically other, the far side of an unbridgeable chasm constructed by their lack of either reason or soul, has been a constant feature of Western theology and philosophy.'[30] Certainly, if the frog *and* the human could be said to have a soul, this would represent the closest bond between animals and humans possible. Immersed in debates about the nature and function of mesmerism on humans and other animals, the frog's ability to respond to its environment after death took on a remarkable significance. If the frog had a soul, could the human be nothing more than an automaton?[31]

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[30] Harriet Ritvo, 'The Animal Connection', in *The Boundaries of Humanity: Humans, Animals, Machines*, ed. by James J. Sheehan and Morton Sosna (Berkeley: University of California Press, 1991), p. 68.
[31] As William Carpenter suggested in his essay *Is Man an Automaton?* (1875).

3. The Metaphysical Frog

In his 1868 novel *The Moonstone*, Wilkie Collins parodied the intense fascination with natural history in his description of how the rich spent their time:

> I have seen them (ladies, I am sorry to say, as well as gentlemen) go out, day after day, for example, with empty pill-boxes, and catch newts, and beetles and spiders, and frogs, and come home and stick pins through the miserable wretches, or cut them up, without a pang of remorse, into little pieces. You see my young master, or my young mistress, poring over one of their spiders' insides with a magnifying-glass; or you meet one of their frogs walking downstairs without its head – and when you wonder what this cruel nastiness means, you are told that it means a taste in my young master or mistress for natural history.[32]

An amusing satire on the obsession with frogs and other such experimental animals this may be, but there was a more serious side to the removal of a frog's head. While Collins ridiculed the widespread interest in natural history during the mid 1860s, at precisely the same historical moment, others were exploiting the frog's ability to 'walk downstairs without its head' in order to show that its body could be manipulated in ways that extended, indeed transcended, a scientific understanding of anatomy, and within a more Gothic framework, death itself.

If the frog was unloved in Victorian society and disregarded as a pet, it was perhaps because it was the favourite specimen for scientific experimentation. Indeed, no other animal presented such fascinating physiological or anatomical possibilities for scientists during the

[32] Wilkie Collins, *The Moonstone* (London: Penguin, 2010), p. 79.

Victorian period, as Mivart notes, because the frog exhibits signs of life – or what physiologists interpreted as consciousness – several hours after physical death has occurred. Like Collins's reference to the exploitation of animals under the experimenter's knife, Mivart highlights the cruelty inflicted on the frog in the name of science:

> The Frog is the never-failing resource for the physiological experimenter. It would take long indeed to tell the sufferings of much-enduring Frogs in the cause of science! What Frogs can do without their heads? What their legs can do without their bodies? What their arms can do without either head or trunk? What is the effect of the removal of their brains? How they manage without their eyes and without their ears? What effects result from all kinds of local irritations, from chokings, from poisonings, from mutilations the most varied? These are the questions again and again addressed to the little animal which, perhaps more than any other, deserves the title of "the Martyr of Science."[33]

Mivart's description of the frog's plight in the name of science reveals the extent to which the animal suffered at the hands of human beings. There is a note of sympathy in his words, casting the frog into the role of victim, at the mercy of those, who, like Lewes and Huxley, went to great lengths to rationalise metaphysical questions using the frog's body. In his paper 'Has a Frog a Soul; and What Nature is that Soul, Supposing it to Exist?' Huxley's deliberate use of scientific language showed how the bodily structure of the human was easily identifiable with that of the frog, a point later echoed by Mivart in his analysis of human and frog anatomy.[34] Using comparative anatomy to discuss the similarities between the frog's

[33] Mivart, *The Common Frog*, pp. 4-5.
[34] For example, Huxley asserts, 'If the middle of the spinal cord of a man be injured, his lower limbs will pass into exactly the same condition of those of the injured frog.' See Huxley, 'Has a Frog a Soul?'(Unpublished

physiology and the physiology of the human, Huxley showed how the frog's body continued to animate itself after death in ways that exceed the simple reflex action of electrical impulses. After the brain or head of the animal had been removed the frog would continue to react to its environment, therefore, like the vampire figure, it occupies an 'undead' state of existence.

Thus, several leading anatomists and physiologists attributed higher metaphysical significance to what were, in essence, biological laws of nature. Nevertheless, it was the way in which the frog reacted to its environment after death which fascinated and puzzled scientists. In Lewes's seminal *On the Physiology of Common Life* (1860), in which he published the results of his experiments on the frog, he argued compellingly that it manifested extraordinary (even paranormal) powers of perception after death.[35] In one experiment, he decapitates a frog and cuts off one of its legs before pouring acid onto the separated leg, producing a rather lengthy description of the results:

> No sooner is the acid applied, than the leg is bent as before, and the stump is moved to and fro, as if to rub away the acid. But the acid is not rubbed away, and the animal becomes restless, as if trying to hit upon some other plan for freeing himself of the irritation. And it is worthy of remark that he often hits upon plans very similar to those which an intelligent human being adopts under similar circumstances. Thus the irritation continuing, he will sometimes cease the vain efforts with his stump, and stretching that leg straight out, bends the *other* leg over towards the irritated spot, and rubs the acid away. But, to show

collection: Harris Manchester College Library, Oxford). This was not Huxley's only interest in the nature of the human soul. On 7th November 1869, he gave a paper to the Metaphysical Society titled 'The Views of Hume, Kant, and Whately upon the Logical Basis of the Doctrine of the Immortality of the Soul.' At this paper, several influential people attended including W. B. Carpenter, William Gladstone (then Prime Minister), and John Lubbock. See Allan Willard Brown, *The Metaphysical Society: Victorian Minds in Crisis, 1869-1880* (New York: Columbia University Press, 1947) for further information on the society and its members.

[35] Such experiments may have influenced George Eliot, Lewes's lifelong partner, in the writing of her short Gothic tale *The Lifted Veil* (1859).

> how far this action is from one of unconscious mechanism, how far it is from being a direct reflex of an impression on a group of muscles, the frog does not always hit this plan. Sometimes it bends its irritated leg more energetically, and likewise bends the body towards it, so as to permit the spot to be rubbed against the flank – just as the child, when both his hands are held, will bend his cheek towards his shoulder and rub it there.[36]

Significantly, Lewes does not attribute his finding to 'unconscious mechanism,' but instead compares the frog's reaction to the physical response of an 'intelligent' – and presumably alive – human being. He familiarises the frog's abnormal behaviour to his reader by employing the image of a child rubbing its cheek on its shoulder. The fact that, in Lewes's rhetoric, the frog makes 'plans' after death is nevertheless disturbing, for the frog is seen as having agency in its post-mortem state. Taking the very concept of the reanimation of the frog after death ever further, he goes on, 'It is difficult to resist such evidence of *choice* as is here manifested. The brainless frog chooses a new plan when the old one fails, just as the waking child chooses.'[37] Lewes elucidates this point, attributing will and volition to the dead frog: 'One decapitated frog does not behave exactly like another; does not behave exactly like himself on different occasions; but, on the contrary, exhibits great variety in his actions; and, above all, exhibits spontaneity and choice in his actions.'[38] In giving the dead frog volition, Lewes questions the limits of life itself by suggesting that the lowly frog is not a living being whose actions are purely involuntary or mechanical.

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[36] George Henry Lewes, *On the Physiology of Common Life*, 2 vols (Edinburgh and London: Blackwood, 1860), 2, pp. 246-7.
[37] Lewes, *Physiology of Common Life*, p. 247.
[38] Lewes, *Physiology of Common Life*, p. 249. Darwin, on the other hand, argued, 'It is scarcely credible that the movements of a headless frog, when it wipes off a drop of acid or other object from its thigh, and which movements are so well co-ordinated for a special purpose, were not at first performed voluntarily, being afterwards rendered easy through long-continued habit so as at last to be performed unconsciously, or independently of the cerebral hemispheres.' Darwin, *The Expression of the Emotions in Man and Animals*, p. 40.

In his address to the Sunday Lecture Society in 1875, renowned physiologist William Benjamin Carpenter compared the behaviour of headless frogs to sleeping humans. Linking animals and humans in such complex ways, according to the historian of science Paul White, 'led to a campaign to reinterpret the phenomena of animal magnetism, mesmerism, and nervous illness in terms of reflex physiology' during which, humans also became 'experimental animals, losing their will (or their soul), so that medical science, underpinned by experimental physiology and its laboratory-based technologies, could restore it'.[39] Thus, frogs and humans underwent a role-reversal in the pursuit of scientific progress. Just as the frog suffered by having its head removed to ascertain how it would react to stimuli without it, experiments involving hypnotism, mesmerism, galvanism, and animal magnetism were carried out on humans in an attempt to locate the seat of volition.

Suspending consciousness in the human by using such methods was the flip side of the frog's uncanny ability to function beyond the limits of death, thus both experiments added to much wider debates about the borders of consciousness. Both also participated in what Janis McLarren Caldwell calls the search for the 'vital principle' of life:

> In part, the vitalist movement was a reaction against eighteenth-century mechanism, protesting that life could not be adequately accounted for by mechanical physics alone. In part, it was simply the beginning of biology, the science of life, a call for the study of the structure and function of organisms. But inevitably, perhaps more on the part of the lay public than on that of the natural philosophers themselves, metaphysical questions intruded. Was life, or the "vital principle," natural or supernatural? Of one substance within the organism, or distinct from it – superadded,

[39] White, 'The Experimental Animal in Victorian Britain', p. 66.

> so to speak? How was life related to the soul or spirit?[40]

Caldwell's questions relate directly to Lewes's and Huxley's interest in the frog. The fact that humans were capable of operating on a different level of consciousness when mesmerised or induced into a cataleptic state, behaving like will-less automata, was the opposite to the frog's ability to behave as though conscious *after* physical death had occurred, even with a 'plan' of action, as Lewes argued. If the frog were capable of conscious thought (indeed making decisions) after death, was this afterlife experience to be placed in the physical or supernatural world? Gillian Beer notes that Carpenter, and later Freud, claimed that unconscious thought 'harbored traces of existence prior to the individual's history and continuous with the extreme and infinitely remote emergence of humankind'.[41] Research into states of consciousness thus belonged to the search for humankind's origins, and the frog was implicated in this by the fact that it destabilized all accepted laws connected with will and volition and the seemingly permeable barrier between life and death.

During his public lecture delivered in the City Hall in Glasgow in 1875, Carpenter described the word automaton as 'a structure which moves by a mechanism, and which can only move in a certain way [...] a machine which has within itself the power of motion, under conditions fixed *for* it, but not *by* it', Carpenter then asks:

> Are we to regard the whole subsequent life (mental as well as bodily) of each individual, with his course of action in the world, as a necessary consequence or resultant of these conditions – as strictly determined by his inherited and

[40] Janis McLarren Caldwell, *Literature and Medicine in Nineteenth-Century Britain: From Mary Shelley to George Eliot* (Cambridge: Cambridge University Press, 2008), p. 26.
[41] Gillian Beer, 'Origins and Oblivion in Victorian Narrative', in *Sex, Politics, and Science in the Nineteenth-Century Novel*, ed. by Ruth Bernard Yeazell (Baltimore: The John Hopkins University Press, 1990), p. 64.

> acquired organisation, and by the external circumstances which act upon it?[42]

As automaton, Carpenter argues, the human body is simply a machine, one that can only move in particular ways, under fixed conditions. Alison Winter's important work on mesmerism in the nineteenth century points towards what Carpenter referred to as 'the Ego in a state of action'.[43]

> Hypnosis could demonstrably remove the will from the experimental scene, thereby revealing the extent to which behavior could proceed without it. During trance periods, sensory impressions led directly to ideas and thence to action, entirely bypassing volition. Naturally occurring examples of related phenomena included dreams, drunken behavior, insanity, and forms of hysteria.[44]

Speaking of voluntary and involuntary acts in the human body, such as the heartbeat, breathing, and coughing, Carpenter attempted to prove his contention that the human is, like the frog, an automaton. The frog's actions after death are 'provided for almost entirely by the reflex power of its automatic apparatus' exactly as in the case of a man whose legs are paralysed, and who has no power or feeling in them: '[I]f you tickle the soles of his feet, or apply a hot plate to them, the legs are drawn up'.[45]

For Huxley, experiments on frogs proved that humans and other animals were intelligent automata,[46] and the paper he read at the Metaphysical Society on November 8th 1870 served to examine his theory in the presence of some of England's greatest scientific

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[42] W. B. Carpenter, *Is Man an Automaton?* (London and Glasgow: William Collins and Sons, 1875), pp. 3-5.
[43] Carpenter, *Is Man an Automaton?*, p. 24.
[44] Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (Chicago and London: The University of Chicago Press, 1998), p. 289.
[45] W. B. Carpenter, *Is Man an Automaton?* p. 19.
[46] Huxley, 'On the Hypothesis that Animals are Automata and its History', in *Methods and Results*, *Collected Essays*, 9 vols, (London: Macmillan and Co., 1893), 1, pp. 315-20.

and philosophical minds.[47] James G. Paradis claims that Huxley's lecture was 'the essence of the agnostic position, in which the ironic formation consisted of a permanent dualistic standoff between material reality and the spiritual question of the soul.'[48] Paradis is generally derisive about Huxley's interest in the frog, and he therefore misses the significance of the lecture. Arguing that the audience fully understood and were part of Huxley's supposed satirical aims, Paradis undermines the possible importance and impact of the paper.[49] Yet despite Paradis's neglect of the wider scientific, theological, and cultural effects of this high-profile discussion of the frog's metaphysical qualities, the question was a serious one and fascinated several of the century's most prominent scientists.

If Huxley was investigating whether or not the frog possessed a soul, he also aimed to define the nature of that soul. Does the soul 'work the machinery of the body'? Or can no line 'be drawn between those bodily operations of animals which are purely and obviously mechanical, and those which are purposive and apparently rational'?[50] The features of an animal's soul may not be the same as that of a human, but if they were, they would present Huxley and other evolutionists with stronger evidence than ever that humans and animals belong to the same chain of life. The transgressive biology of the frog, then, held the potential to prove (in physiological and spiritual terms) that humans and animals shared a common past. The true objective of Huxley's lecture was not to provide epistemological proof of frogs' souls. In fact, Huxley was more interested in the human implications of his argument than what this meant for the frog species. Not the discovery of the frog's soul, but the similarities between human and frog physiology dominate Huxley's scientific analysis in his

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[47] Amongst other eminent Victorians in Huxley's audience sat John Ruskin, artist, poet, and author; John Lubbock, biologist, anthropologist, and psychologist; and James Knowles, founder of the society and soon to become editor of the powerful *Contemporary Review*.

[48] James G. Paradis, 'Satire and Science in Victorian Culture', in *Victorian Science in Context*, ed. by Bernard Lightman (Chicago and London: Chicago University Press, 1997), p. 168.

[49] Paradis argues that Huxley's lecture 'was itself absurdity to the highest degree.' See Paradis, 'Satire and Science in Victorian Culture', p. 168.

[50] T. H. Huxley, 'Has a Frog a Soul; and of What Nature is that Soul Supposing it to Exist?' (Unpublished, held in Harris Manchester College Library, University of Oxford), p. 4.

lecture. The evolutionary gap between humans and frogs was being broken down and in spite of Huxley's use of anatomical language, anthropomorphism and anthropocentrism resonate throughout the lecture. Thus, despite the final inconclusive remarks of his study, the essay demonstrates some of his most important work on humankind's place in the natural world.

4. Bulwer-Lytton's *The Coming Race* and superhuman frogs

The ideas raised by scientific investigations into the nature of the frog's anatomy and physiology had a remarkable effect on Gothic fiction of the period. When Bulwer-Lytton published *The Coming Race* in 1871, he seemed to be making a direct reference to the scientific work of Owen, Huxley, and Lewes in his portrayal of frog people, while anticipating Mivart's human-frog biology of 1874. His fictional representation of human frog ancestry belongs to a chain of scientific theories that placed the frog at the forefront of scientific research into what it meant to be human. Owen had implied in his display of primordial frogs at the Crystal Palace in 1854 that the evolutionary route to human form could be traced from a giant batrachian species; Huxley and Lewes had suggested that the frog might have freewill (even after death) just as humans have; and within three years of the publication of *The Coming Race*, Mivart would propose that there was a direct evolutionary link between the common frog and the human. Bulwer-Lytton brings these instances to conclusion in his vision of frog people. But if, like these scientific thinkers, Bulwer-Lytton seeks to question the fundamental basis of life in his representation of frog people in *The Coming Race*, he does not successfully do so; as his biographer, Allan Conrad Christensen notes, 'the all-important element of soul is still missing'.[51] Nevertheless, given Bulwer-

[51] Allan Conrad Christensen, *Edward Bulwer-Lytton: The Fiction of New Regions* (Athens: The University of Georgia Press, 1976), p. 219.

Lytton's interest in spiritualism, hypnotism, phrenology, and mesmerism, it is hardly surprising that he chose the frog as the most suitable animal to attempt to do so.

Another of Bulwer-Lytton's biographers, Leslie Mitchell, has noted the writer's interest in science, arguing that 'Lytton could claim, with some justice, that he had tried to inform himself in all the areas of scientific and historical enquiry that could have a bearing on the supernatural' even 'engag[ing] in experiments in electricity on the roof of the Pantheon in London and at Knebworth'.[52] According to Mitchell, Bulwer-Lytton's novels were 'an attempt to work out in literature what contemporary scientists were actively engaged in exploring'.[53] Although Bulwer-Lytton was not a member of the Metaphysical Society, he may well have learnt of Huxley's paper through his friend Ruskin, who was present at Huxley's lecture.[54] Moreover, his fictional engagement with scientific discourse, which extends to descriptions of huge primordial beasts that threaten to attack the Ana species, links with Owen's reconstructed dinosaurs at the Sydenham Crystal Palace exhibition.[55]

Christensen, suggests that *The Coming Race* 'seeks to portray sympathy, volition, and vitality as still purely organic and measureable quantities'.[56] Certainly, the Vril-ya people have the ability to influence the consciousness of others, an idea that resonates with Huxley's and Lewes's work on the frog's control over the workings of its own dismembered limbs

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[52] Leslie Mitchell, *Bulwer Lytton: The Rise and Fall of a Victorian Man of Letters* (London; New York: Hambledon and London, 2003), p. 142.
[53] Mitchell, *Bulwer Lytton*, p. 143.
[54] See Allan Willard Brown, *The Metaphysical Society: Victorian Minds in Crisis, 1869 – 1880* (New York: Columbia University Press, 1947), p. 153.
[55] The Vril-ya's mortal enemy, for example, exhibits 'a vast and terrible head, with open jaws and dull, ghastly, hungry eyes – the head of a monstrous reptile resembling that of the crocodile or alligator, but infinitely larger' (pp. 6-7), something similar, perhaps, to the meglasaurus or labyrinthodont at Sydenham. Moreover, closer analogies between scientific theory and Gothic fiction can be seen in the novel's assertion that thousands of years ago frogs were much larger than humans, as Owen asserts in *Palaeontology* (1860), '*Reptilia* flourished under the greatest diversity of forms, with the highest grade of structure, and of the most colossal size.' p. 284.
[56] Christensen, *Edward Bulwer-Lytton*, p. 177.

after death. They do this using energy they call 'vril'.[57] The Vril-ya have evolved so that this power can be used at will for good and evil:

> [B]y one operation of vril, which Faraday would perhaps call "atmospheric magnetism", they can influence the variations of temperature – in plain words, the weather; that by operations akin to those ascribed to mesmerism, electro-biology, odic force, etc., but applied scientifically, through vril conductors, they can exercise influence over minds, and bodies animal and vegetable, to an extent not surpassed in the romances of our mystics. To all such agencies they give the common name of vril. (pp. 22-3)

James Campbell claims that Bulwer-Lytton intended *Race* to be 'a cautionary apologue reminding us of the inherent limits of the human species'.[58] However, this reading of the text is flawed in my assessment of its cultural and scientific framework.[59] Bulwer-Lytton's theory of human frog ancestry instead proves both that there is *no* conceivable limit to humankind's evolutionary capabilitites and that even the unsophisticated biology of the frog, as Mivart explained in *The Common Frog*, can be linked directly with the more complex human anatomy. For Bulwer-Lytton, the extent to which organic bodies can be manipulated by evolutionary influences is limitless. Interestingly, because he anticipates Mivart's explanation of the close biological ties that exist between humans and frogs, Bulwer-Lytton was probably unaware of any precise physiological parallels. Nevertheless, Lewes's and Huxley's interest in the frog's metaphysical propensities may well have influenced Bulwer-Lytton's vision of super-evolved frog people.

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[57] In 1886, Johnston's Fluid Beef was renamed 'Bovril', the culmination of 'bovine' and 'vril', a drink made from beef stock. Interestingly, in 1903, Bovril was advertised in the 6d *The Private Nurses' Own Note Book* as a 'Nurse's "Second Self" – it is so handy in the sick room. The fact that Bovril is not only a stimulant but also a powerful nourisher in the highest form of condensation, ensures it a hearty welcome wherever there is sickness. Over 1,100 British Hospitals, etc., constantly use Bovril. What greater testimony to its goodness could there be?'

[58] James L. Campbell, *Edward Bulwer-Lytton* (Boston: Twayne, 1986), p. 126.

[59] Campbell further argues that the novel 'burlesques Darwinism as a debate on whether man or ape is the final product of evolution' (p. 126).

Bulwer-Lytton's *The Coming Race* was hugely successful, selling out five editions within a year of its publication.[60] The novel tells a fantastic tale of descent into the subterranean regions of the Earth where a highly-evolved humanoid race of beings dwell. The Vril-ya race, which belongs to the Ana species, has the potential to annihilate and therefore supersede humankind, effectively rendering biological progression over millions of years futile and senseless. The coming race of the novel's title is both a race of beings into which humans are evolving and a race that threatens ultimately to destroy human biology and culture. While questioning the limitability of the animal-human boundary in *The Coming Race*, then, Bulwer-Lytton also claims equilibrium between those at the top of the vertebrate scale (humans) and those at the bottom (frogs). The ambivalence about which is more highly advanced, frogs or humans, draws the two species closer together. Feeding into and from the scientific research into the amphibian and contemporary discourse on humankind's place in the natural world, this tale reveals the fascination with and anxiety about humankind's supposed evolutionary bond with the frog. As one of the late Victorian era's most explicit attempts to ratify Francis Galton's heredity theory[61] in a post-Darwinian age, the threat of usurpation of the human species by degenerate forms is a dominant feature of the novel. Deep-rooted suspicions about humankind's past and anxious fears about its future lie beneath the narrative's surface.

Shortly after his entrance to the subterranean world, the unnamed American protagonist encounters a humanoid being, a creature human, animal, and alien:

> And now there came out of this building a form – human – was it human? It stood on the broad way and looked around, beheld me and approached.

[60] See Mitchell, *Bulwer Lytton*, p. xvi.

[61] Darwin's cousin Francis Galton first wrote about his theory of heredity in 'Hereditary talent and character', *Macmillan's Magazine*, 12 June 1865, p. 158. He continued his work in this field of biology and psychology until the late 1880s, publishing his *Inquiries into Human Faculty* in 1883, in which he coined the term 'eugenics'.

> It came within a few yards of me, and at the sight and presence of it an indescribable awe and tremor seized me, rooting my feet to the ground. It reminded me of symbolical images of Eastern sepulchres – images that borrow the outlines of man, and are yet of another race. It was tall, not gigantic, but tall as the tallest man below the height of giants. (p. 9)

The creature that here 'borrows the outlines of man' and is 'yet of another race' is foreign, unnatural, repugnant. Both human and Other, it is unexplainable, untenable, in terms of classifying the species or race to which it belongs. In the presence of this terrifying and non-descript 'form' whose physical appearance is so uncanny, the American visitor experiences an overwhelming sense of dread at his host's physiognomy:

> But the face! it was that which inspired my awe and terror. It was the face of man, but yet of a type of man distinct from our own extant races. The nearest approach to it in outline and expression is the face of the sculptured sphinx – so regular in its calm, intellectual, mysterious beauty. [...] I felt that this manlike image was endowed with forces inimical to man. As it drew near, a cold shudder came over me. I fell on my knees and covered my face with my hands. (p. 9)

This 'manlike image' is intrinsically superior to the human visitor. Now in the presence of this physically advanced being, feeling alienated by his biological inferiority, he takes a submissive, even docile, stance. These creatures belong to a 'race akin to man's, but infinitely stronger of form and grander of aspect' (p. 11). This is a race emotionless and devoid of deep feeling, which shows in their physiognomy:

> They seemed as void of the lines and shadows that care and sorrow, and passion and sin, leave upon the faces of men, as are the faces of

> sculptured gods, or as, in the eyes of Christian mourners, seem the peaceful brows of the dead. (pp. 11-2)

He soon learns, however, that this subterranean environment has produced superhuman creatures evolved from humble beginnings. Aph-Lin, the American's host below ground, shows him a collection of three portraits from which 'all the principal sections of the Vril-ya race pretend to trace a common origin' (p. 61). The portraits show that the

> grandfather had the features and aspect of the philosopher, only much more exaggerated: he was not dressed and the colour of his body was singular; the breast and stomach yellow, the shoulders and legs of a dull bronze hue: the great-grandfather was a magnificent specimen of the batrachian genus, a giant frog, *pur et simple*. (p. 61)

The An species has evolved, then, from the common frog, and the sense of horror at the initial sight of the An's face is explained. Moreover, the metamorphosis from frog to human in *The Coming Race* narrates the story of evolution in a visual way by presenting a visually speeded-up process that takes place over only three generations. Like the frog's swift transformation from tadpole (fish) to frog (reptile), it seems that the Vril-ya race is capable of rapid biological change. The portraits demonstrate roughly how evolution works, advocating the concept of Darwin's 'common progenitor' (*Origin* 190), and yet there is something alarming about the Vril-ya's apparent propensity for sudden change: it is unnatural, even supernatural. Nevertheless, the ability to adapt quickly can also be seen as advantageous; those able to do so are superior in evolutionary terms.

Philosophers in the underworld, our protagonist's host explains, contradicted the belief that the Ana descended from the frog, instead arguing that the frog was clearly the descendant

of the An. Cataloguing why such a supposition might be made, Aph Lin sets out the frog's physiological superiority, in terms of the beauty of its 'symmetrical' shape, its 'hairless perfection', and its refined nervous system:

> 'The shape of the frog, taken generally, was much more symmetrical than that of the An; beside the beautiful conformation of its lower limbs, its flanks and shoulders, the majority of the Ana in that day were almost deformed, and certainly ill-shaped. Again, the frog had the power to live alike on land and in water – a mighty privilege, partaking of a spiritual essence denied to the An, since his swimming-bladder clearly proves his degeneration from a higher development of species. Again, the earlier races of the Ana seem to have been covered with hair, and, even, to a comparatively recent date, hirsute cheeks and chins, as similar bushes, my poor Tish, spread wild over yours. [...] But the degree of the frog in the scale of the vertebrata is shown in this, that he has no hair at all, not even on his head. He was born to that hairless perfection which the most beautiful of the Ana, despite the culture of incalculable ages, have not yet attained. The wonderful complication and delicacy of a frog's nervous system and arterial circulation were shown by this school to be more susceptible of enjoyment than our inferior, or at least simpler, physical frame allow us to be. The example of a frog's hand, if I may use that expression, accounted for its keener susceptibility to love and to social life in general. In fact, gregarious and amatory as are the Ana, frogs are still more so.' (p. 63)

Compared with the frog, the Ana species is believed to be an inferior class of beings. In Bulwer-Lytton's fantasy, all the attributes normally associated with humans (the beauty of a symmetrical shape, complex anatomical systems, and the capacity to show emotion) are now ascribed to the common frog, the very animal which suffered daily in the name of science. For Bulwer-Lytton, though, even the ability to be amphibious is a 'power' which the Ana

have regrettably lost. Furthermore, Bulwer-Lytton capitalises satirically on aspects of Darwin's work on the frog in the idea that the frog has a 'keener susceptibility to love'. [62] Interestingly, the Ana find the impropriety of such a voracious sexual appetite in the frog a positive attribute. Emotional states of passion and love, generally considered to be human traits, are attributed to frogs here by Darwin and Bulwer-Lytton, the frog people apparently lack the brutish force associated with their ancestors.

In summing up the frog's superiority over the Ana, Aph Lin satirically specifies the frog's more advanced moral qualities. The moralists of ages past, he explains, concluded that 'in moral conduct (viz., in the adherence to rules best adapted to the health and welfare of the individual and the community) there could be no doubt of the vast superiority of the frog'. He continues,

> 'All history showed the wholesale immorality of the human race, the complete disregard, even by the most renowned amongst them, of the laws which they acknowledged to be essential to their own and the general happiness and wellbeing. But the severest critic of the frog race could not detect in their manners a single aberration from the moral law tacitly recognised by themselves.' (pp. 63-4)

Readers may have found the idea that the frog possesses the moral qualities designed by and for human society deeply disturbing. By portraying the Ana as more 'human' than humanity, Bulwer-Lytton tests the limits of what the concept of our species might be. What is it exactly, he asks, that makes us human and separates us from animals? Is it something biological,

[62] Darwin's comments on the frog's intensely fierce sexual drive: 'It is surprising that these animals have not acquired more strongly-marked sexual characters; for though cold-blooded their passions are strong. Dr. Gunther informs me that he has several times found an unfortunate female toad dead and smothered from having been so closely embraced by three or four males. Frogs have been observed by Professor Hoffman in Giessen fighting all day long during the breeding-season, and with so much violence that one had its body ripped open.' Darwin, *Descent of Man*, pp. 397-8.

spiritual, or moral? In the light of Huxley's and Lewes's contemporaneous experiments on frogs, Bulwer-Lytton has his finger on the pulse of modern science and is able to use the latest theories on animal consciousness to question the meaning of humanity.

In terms of the morality of Bulwer-Lytton's frog people, it is of some interest to note that Grant Allen, the Gothic writer and science enthusiast, would later refer to the frog's ethical approach to life in his 1901 text, *In Nature's Workshop*. Here Allen discusses 'a common kind of frog [...] which closely recalls the habits of the stickleback and the pipe-fish', its fish ancestor, and he regards it as an 'eminently moral amphibian'[63] for the way in which this type of frog rears its young (the father takes care of the tadpoles). Nevertheless, in almost direct opposition to Bulwer-Lytton's treatment of the amphibian, the following section will explore another side to amphibiousness, one which manifests the combination of human and fish anatomy as corrupt, malevolent, and harmful to humanity. In Hodgson's Gothic fiction, amphibious species-confused beings subvert earlier scientific ideas about the amphibian's moral character and (in Bulwer-Lytton's terms) beauty. Instead, Hodgson employed the nineteenth century's obsession with the aquarium to capitalise on his preoccupation with the 'evolution gone wrong' trope. At the limits of the human, Hodgson seems to ask, how do we frame abject biologies?[64]

5. Amphibious Gothic in Hodgson's *The Boats of the 'Glen Carrig'*: weed-men and devil fish

When Henry Lee took up the position of naturalist at the Brighton Aquarium in 1872, his intense interest in all forms of marine life led to the publication of his *Aquarium Notes. The*

[63] Grant Allen, *In Nature's Workshop* (London: George Newnes, 1901), p. 134.
[64] See Kelly Hurley, 'Abject and Grotesque', in *The Routledge Companion to Gothic*, ed. by Catherine Spooner and Emma McEvoy (London: Routledge, 2007), pp. 137-46.

Octopus; or, the 'Devil-Fish' of Fiction and of Fact (1875). In one chapter of this book, Lee attempts to examine the extent to which Victor Hugo's representation of 'devil-fish' is scientifically accurate in his 1866 novel *Toilers of the Sea*. Providing quotations from the novel alongside scientific and empirical observations of the octopus, Lee's book represents an interesting example of scientific literature responding directly to fiction. The term 'devil-fish' that is used to describe an octopus in Hugo's novel, and again referred to as such in Lee's treatise, is reworked into Hodgson's vision of 'evolution gone wrong' in *The Boats of the 'Glen Carrig'*. Hodgson's monstrosities are termed 'devil-fish' in this novel, but I hope to show here that they are species-confused beings, whose amphibiousness undermines the fact that they are also invertebrate octopi and gastropods.

Fascination with all kinds of exotic marine life had begun in the 1850s with the aquarium craze. If Owen had succeeded in displaying the frog on a grand scale at Sydenham, at precisely the same historical moment, tropical marine animals were being displayed in their own aquatic environment and interest grew following the opening of the first public aquarium at London Zoo in February 1854, only four months prior to Owen's exhibition of giant frogs. Putting the aquarium into the domestic sphere meant that the middle-class Victorian family could participate in scientific pursuits from the comfort of their own homes and observe the creatures that inhabited the 'other' world below the sea, a sphere of life as yet unexplored.[65] Lynn Barber notes that throughout the century, aquarium-keeping was both fashionable and, with the endorsement of figures such as Bishop Wilberforce, respectable.[66] Although, of course, the aquarium was not specifically designed particularly for the observation of frogs, amphibians and other marine animals, such as turtles, were often kept.

[65] Charles Kingsley advised his Victorian readership to 'study Natural History in your own drawing room' by fashioning a freshwater aquarium the animals of which and their 'miraculous transformations, might give many hours quiet amusement'. Kingsley, *Glaucus; or the Wonders of the Shore* 4th edn (Cambridge: Macmillan and Co., 1859), pp. 192-5.
[66] See Lynn Barber, *The Heyday of Natural History, 1820 - 1870*, pp. 111-24.

Indeed, as the social historian Bernd Brunner notes, tanks were sometimes built exclusively for the purpose of keeping such animals, such as the paludarium, or marsh aquarium, which combined 'the aquarium and the terrarium [by] placing boulders and numerous plants above the water level'.[67]

The glass tank provided an excellent opportunity for watching the frog's metamorphosis, an idea that reminded the conchologist and artist G. B. Sowerby of his boyhood:

> During the breeding season every boy may sport his own aquarium in the shape of a pan or tub, in which he may place spawn or other young tadpoles for the purpose of scientific observation. Here he may watch the development of the animals in their different stages, until they become reptiles, leave the water, perch on the edge of the vessel, and leap away.[68]

Sowerby's account of a boy's fascination with the natural world is echoed the following year with the publication of R. L. Ballantyne's *Coral Island* (1858). Ballantyne's adventure story of several young boys stranded on an island in the Pacific, who use a pool, described in the story as a 'Water Garden', in order to observe its inhabitants, which are often found 'creeping amongst the marine shrubbery at the bottom' like '"two great white sea-monsters."'[69] The boys are in harmony with the creatures they find below the water, observing, examining and investigating the lives of the unusual specimens they find there. It is an interesting example of the allure of the mysterious water life that inhabited Victorian aquariums:

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[67] Bernd Brunner, *The Ocean at Home: An Illustrated History of the Aquarium* trans. Ashley Marc Slapp (New York: Princeton Architectural Press, 2005), p. 87.
[68] G. B. Sowerby, *The Popular History of the Aquarium of Marine and Freshwater Animals and Plants* (London: Lovell Reeve, 1857), p. 305.
[69] Robert Michael Ballantyne, *The Coral Island: A Tale of the Pacific Ocean* (London: T. Nelson and Sons, 1858), p. 82.

> I also became much taken up with the manners and appearance of the anemones, and star-fish, and crabs, and sea-urchins, and such-like creatures; and was not content with watching those I saw during my dives in the Water Garden, but I must needs scoop out a hole in the coral rock close to it, which I filled with salt water, and stocked with sundry specimens of anemones and shell-fish, in order to watch more closely how they were in the habit of passing their time. Our burning-glass also now became a great treasure to me, as it enabled me to magnify, and also to perceive more clearly the forms and actions of these curious creatures of the deep.[70]

Coral Island, written while the aquarium craze was at its height, encapsulates the fascination of collectors, comparative anatomists and zoologists zealously observing the strange creatures that occupied the submarine world, a sphere that humans could not inhabit and could not easily access.[71]

Amphibians such as newts and frogs were often kept in aquariums, as J. E. Taylor notes, though interestingly, he makes reference to the superstition that water newts

> have long been regarded with dislike and suspicion, and not many years ago farmers believed they could cause rheumatism and paralysis to cattle by creeping over their limbs. Even yet this superstition may be found lingering in out-of-the-way corners of England. We have ourselves heard mysterious diseases and complaints in cattle attributed to their drinking pond water in which newts

[70] Ballantyne, *Coral Island*, p. 83.
[71] 'The deeper the water, the rarer and more interesting will the animals generally be: but a greater depth than fifteen fathoms is not easily reached on this side of Plymouth'. Kingsley, *Glaucus*, p. 149.

> were known to be abundant! The readiness with which country lads pelt newts to death even yet, is a "survival" of this ancient and ignorant prejudice.[72]

Stories about amphibians that 'creep' causing 'mysterious diseases' in other animals may seem out of place in a self-help guide to managing an aquarium, but such references can also be found in several other types of natural history books. In *A History of British Reptiles*, for example, Thomas Bell mentions the popular superstition that toads that can live 'enclosed in a mass of clay', 'wholly without air or food, for hundreds of years, and at length be liberated alive'.[73] Taylor and Bell demonstrate, by including such myths in their factual treatises on the aquarium and reptiles, that the amphibious body has a tendency to attract the attention of superstition. It is a liminal body, capable of operating outside of the normal boundaries of biology.

The transpecies propensities of the frog, a creature that, as this chapter has shown, distorts the permeable boundaries between life and death, land and water, the past and future, is transposed arbitrarily onto the biology of the human in the Gothic fiction of Hodgson, breaking down the demarcations between human and inhuman, human and animal. Hodgson's Gothic fiction reveals the animal monster as a being on a deviant evolutionary path. Primitive animal shapes – slugs and amphibians – run into the human shape, but in an uncanny way they do not do so fully and thus the beings Hodgson describes exist on the cusp of various convergent identities, not whole, not wholesome. These Gothic monsters are not personified (as they are in novels such as *Dracula*, *Jekyll and Hyde*, and *The Beetle*) and no magical shape-shifting between human and animal takes place. Instead, the animal for Hodgson is of the human, not in it.

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[72] J. E. Taylor, *The Aquarium: Its Inhabitants, Structure, and Management* (London: Hardwicke & Bogue, 1876), p. 51.
[73] Bell, *A History of British Reptiles*, p. 122.

Hodgson's first published novel, *The Boats of the 'Glen Carrig'*, is a nautical horror story that tells how survivors of a sunken ship encounter amphibious humanoid monsters and undergo nightmarish adventures in a Sargasso Sea choked with seaweed. In a tale in which plot is sacrificed for the thrill of stark terror, Hodgson's narrator leads his reader from one scene permeated with fear and dread to another. The creatures he describes are terrifying in their monstrous abjection perhaps because, as Hurley has correctly noted, Hodgson's fiction is designed to 'multiply and elaborate rather than contain the possibility of a chaotic, fluctuable abhuman identity'.[74] Hodgson's Gothic monsters bridge the gap between sea and land animals (in much the same way Owen had shown frogs did), while at the same time evoking images of animal monsters in the tradition of the earlier Gothic science fiction novels of popular writers such as H. G. Wells and Arthur Machen.[75] Significantly, Hodgson's amphibious creatures emerge, not from the bowels of the earth, as in Bulwer-Lytton's vision, but from the depths of ocean. During the 1890s, Hodgson spent a number of years in the mercantile navy and his experiences at sea awakened in him a sense of apprehension about what is 'out there'. As the popular fascination with the aquarium had shown, people were deeply interested in the types of water-dwelling creatures inhabiting the ocean.

The weed-men that prey upon the lost seafarers in *The Boats of the 'Glen Carrig'* are biologically complex. They have the attributes of many different creatures and are, as Emily Alder has argued, 'uniquely suited to life in the Sargasso Sea' even if 'they present an unpalatable analogy of the evolving human body since they resemble both humans and octopi'.[76] The first time the narrator comes face to face with one of these monsters is aboard the boat, when, looking into the water, he sees 'a white demoniac face' that is 'human save

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[74] Kelly Hurley, 'The Modernist Abominations of William Hope Hodgson', in *Gothic Modernisms*, ed. by Andrew Smith and Jeff Wallace (Basingstoke: Palgrave, 2001), p. 130.
[75] I refer here to novels such as Wells's *The Time Machine* (1895), *The Island of Doctor Moreau* (1896), *The War of the Worlds* (1897) and Machen's *The Great God Pan* (1894).
[76] Emily Alder, 'William Hope Hodgson's Borderlands: Monstrosity, Other Worlds, and the Future at the *Fin de Siècle*' (unpublished doctoral thesis, Edinburgh Napier University, 2009), p. 64.

that the mouth and nose had greatly the appearance of a beak'.[77] The creature grips the side of the boat in a way that reminds the narrator of the 'great devil-fish' he saw a few days earlier. 'I saw the face come up towards me', he continues, 'and one misshapen hand fluttered almost to my throat, and there came a sudden, hateful reek in my nostrils – foul and abominable' (p.57). Hurley describes the discovery of the human subject's 'monstrous similitude in the uncanny natural world' as 'the worst scenario of all'; the monster in the weed, she argues, is 'a sort of abhuman *doppelgänger* looking back at him'.[78] In the weed-men, the integrity of the human body is broken down. The combination of the monster's 'beak', 'misshapen hand', and 'white demoniac' human face exposes the horror of the machinations of evolution.

Later, on the island they use to try to escape the sea monsters, the men stare down on 'a most unearthly sight' as they peer over a cliff to see the valley below 'swarming' violently with 'moving creatures, white and unwholesome in the moonlight' (p. 128). Such creatures have a sense of familiarity, because, although they move like 'monstrous slugs', in shape, they have an uncanny likeness to the human.

> [T]heir movements were somewhat like *the movements of monstrous slugs*; though the things themselves had no resemblance to such in their contours; but minded me of *naked humans*, very *fleshy and crawling* on their stomachs [...] [T]hese things below us had each *two short and stumpy arms*; but the ends appeared divided into *hateful and wriggling masses of small tentacles*, which slid hither and thither as the creatures moved about the bottom of the valley, and at their hinder ends, where they should have grown feet, there seemed other flickering bunches. (pp. 128-9; my emphasis)

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[77] William Hope Hodgson, *The Boats of the Glen Carrig* (London: Grafton Books, 1991), p. 57. All further references are to this edition and will be given in the text.
[78] Hurley, 'The Modernist Abominations of William Hope Hodgson', p. 135.

The description here of the anatomy of the creatures is ambiguous and vague but gives enough detail to enable the reader to imagine the strangeness of the scene. The creatures' movements and the length and form of their limbs are all features that call to mind the fact that this is an *unnatural* world, a world in which 'human slugs' cannot be accounted for in the taxonomy of species. A close encounter with the creatures reveals that they have 'great eyes, so big as crown pieces, the bill like to an inverted parrot's, and the slug-like undulating of [a] white and slimy body' (p. 129). These bodies evoke revulsion and abhorrence in the narrator: 'it is scarcely possible to convey the extraordinary disgust which the sight of these human slugs bred in me', disgust, he continues, 'born of very horror' (p. 129).

Settling for the night on a cliff edge inland, the seamen are attacked by the weed-men which the narrator sees as 'three great shapes moving with stealthiness' towards him:

> I made at the three, and, as I charged, they rose up on end at me, and I found that their vile tentacles were reached out at me. Then I was smiting, and gasping, sick with a sudden stench, the stench of the creatures which I had already come to know. And then something clutched at me, something slimy and vile, and great mandibles champed at my face; but I stabbed upward, and the thing fell from me, leaving me dazed and sick, and smiting weakly. (p. 130)

Fighting the monsters off, he sees them 'slithering' away over the cliff towards the sea. Only at this point does the narrator realise the danger that he and his comrades are in; the weed-men have clambered out of the sea and onto land in order to invade the men's camp. Unlike Bulwer-Lytton's vision of empowerment and spirituality in the amphibious body, Hodgson portrays amphibiousness as something hideous, repulsive, and abhorrent.

Species confusion dominates the Gothic theme of this passage and even precise anatomical language cannot offer clarification. The creature's 'mandibles' should offer some

clue to its species, however even this description of the creature denies any real possibility of clear classification. Mandibles, which can refer to the jaws of mammals and fish, the upper or lower parts of a bird's beak, or the crushing organs of an arthropod's mouth, here reveal the true extent of monstrosity working within the text. Mandibles might even refer to the anatomy of the frog.[79] The tentacles have an obscure meaning, except in that they allow the weed-men to survive in these alien surroundings. The monsters that Hodgson fabricates are species-confused beings, neither one thing nor another. They are horrifying in their abomination and they are abominable because, although their confused biologies may account for their adaptation to their environment, they cannot be classified. Like the frog, they are a mishmash of several other types of creatures.

The monsters' link with humanity is disturbing, as it is in the frog, though for different reasons. Hodgson's monsters predate on humans, implying a cannibalism that would sit uncomfortably with the novel's Edwardian readers.[80] The anthropologist Mary Douglas has argued that, 'In English we can say that cannibalism is abominable or even that human flesh is abominable, and it does not mean that the victim is abominable or to be detested. Eating is the ultimate predation.'[81] Her specificity in saying that the victim of cannibalism is not abominable might imply that the predator, on the other hand, is. Hodgson's creatures' cannibalism adds to their utter 'wrongness'; they are species confused not just in shape but also in diet. Moreover, their place in the scheme of life is under question due to their chaotic feeding behaviour: in the food chain, predators are supposed to feed on the next species link down, not their own.

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[79] Huxley made a direct reference to the frog's mandibles, which are used to enable it to utilise its tongue as a prehensile organ. Huxley, *A Manual of the Anatomy of Vertebrated Animals*, p. 183.
[80] There is not space here to do justice to this aspect of the novel's Gothicism. However, it is worth noting that cannibalism has a long and troubling history especially in maritime history (for example the case of the *Essex* of Nantucket in 1820) which, as a sailor, Hodgson would have known about. In the novel, evidence of the horror of cannibalism is found in the weed-men's theft of the dead cabin boy from his grave to consume him and this form of necrophagous-cannibalism is rendered particularly unsettling by the fact that the weed-men are partly human.
[81] Mary Douglas, *Leviticus as Literature* (Oxford: Oxford University Press, 1999), p. 167.

Hodgson's voracious 'human slugs' are 'species abominations'[82] for, like the frog, they are composite bodies, not whole or holy. Douglas points out in her seminal *Purity and Danger* (1966) that such creatures are vile and disgusting:

> Hybrids and other confusions are abominated. […] Holiness requires that individuals shall conform to the class to which they belong. And holiness requires that different classes of things shall not be confused.[83]

Douglas's use of the term 'abomination', both here and in her discussion of cannibalism, is vital to our understanding of Hodgson's hybrid creatures as a cultural, social, and biological malediction; a Gothic body. In a discussion of Douglas's pioneering work on cultural purity and pollution, Hurley argues that

> 'abomination' is a border entity, existing at the interstices of oppositional categories which 'impose on an inherently untidy experience' by 'exaggerating the difference between within and without, above and below, male and female, with and against'. Within Douglas' paradigm, the monstrosities of the *fin-de-siècle* Gothic are monstrous precisely because of their liminality. To be Undead, to be simultaneously human and animal, to shift from one sexed identity to another, is to explode crucial binarisms that lie at the foundations of human identity.[84]

For Hurley, duality in the Gothic body both collapses and refuses any true sense of human identity. To be both man and woman, human and animal, dead and alive simultaneously are

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[82] Hurley, 'The Modernist Abominations of William Hope Hodgson', p. 135.
[83] Mary Douglas, *Purity and Danger: An Analysis of Concept of Pollution and Taboo* (London: Routledge, 1966: 2002), p. 66.
[84] Hurley, *The Gothic Body*, pp. 24-5.

physical impossibilities. In the process of breaking down these binaries the coherent self becomes a fundamental contradiction in terms.

The concept of amphibiousness, as this chapter has shown, lent itself to the idea of disorderliness in species. It is the combination of beak, tentacles, hand, human face, and mandibles that makes Hodgson's monsters so troubling. Like the frog, these creatures cannot be pinned down as one particular type of animal or another. They have the attributes of many different species and in this, they are abominable. First, they deny the possibility of a fixed or stable human/animal identity. Second, Hodgson's monsters are abhuman because they are two things at once, exposing the dual human state of being both human and animal. Hodgson's writings reveal a world in which post-Darwinian monsters abound, exposing 'missing links' in the evolutionary scale, creatures that confront comprehensive notions of what human, and humanity, means. His monsters belie any realistic interpretation but they call into question what the limits of the human might be.

In nineteenth-century investigations into the species question, by embodying something 'in-between', something not quite whole or fully developed, the frog exemplified the phylogenic course of all life in its ontogenetic transitions from tadpole to adult and fish to reptile. Its ability to transgress the boundaries of classification from one creature to another, as we saw in Mivart, may well have provided apposite inspiration for Hodgson's Gothic monsters. The frog is an important linker because it represents the point at which this evolution has gone down the 'wrong' track to amphibiousness. Readers of books like Sowerby's *The Popular History of the Aquarium of Marine and Freshwater Animals and Plants* (1857) would have known that Hodgson's monsters cannot be octopi and amphibians *at the same time* but in this horrifying environment, they are. Hodgson thus draws on natural history in order to subvert it, to make it *wrong*, and therefore 'Gothic'.

6. Other human frogs

Whilst science questioned the limits of the human body, sensation fiction was making direct analogies between the physiology of the human and the frog. In his 1875 novel *The Law and the Lady*, Wilkie Collins's unusually shaped detective figure, Dexter Miserrimus, born without legs, is described as a 'strange and startling creature – literally the half of a man'.[85] In one scene, in a fit of excitement, throwing himself from his chair and 'poised on his hands' he resembles 'a monstrous frog', a creature that, without his chair (the trappings that validate his humanity), 'hop[s]' in a manner 'at once wonderful and horrible to behold' (p. 245). Without his lower limbs, which signify his membership of the human race in this case, Dexter is a fish out of water, misplaced and displaced in his current physical role. Feeding into the spectacle of freak show culture, the scene is overloaded with Gothic imagery: physiologically speaking, Dexter is amphibious, he represents something in-between, something not entirely human, not entirely whole. Dexter is the reverse of Bulwer-Lytton's superhuman frog vision; he is degenerate, and therefore morally and physically corrupt. There is something unwholesome about Dexter; he represents a non-supernatural example of evolution gone wrong. Like Hodgson's amphibious creatures, Dexter is anatomically confusing. He confounds species categories by causing a failure to distinguish between abnormal human shape and normal animal shape.

In *Middlemarch* (serialised between 1871-2; the year that Bulwer-Lytton published *Race*) Eliot uses the physiognomy of the frog in a similar way, describing Joshua Rigg as a man 'whose prominent eyes, thin-lipped and downward-curved mouth [...] certainly gave his face a batrachian unchangeableness of expression' (p. 332). This 'frog-faced male' is a cold-blooded individual, whose features are distinctly 'odd' (p. 328). Mrs Cadwallader's

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[85] Wilkie Collins, *The Law and the Lady* (Oxford: Oxford University Press, 1999), p. 173. All further references are to this edition and will be given in the text.

declaration that he ‘must be of another blood’ (p. 328) is later echoed by the narrator’s assertion that ‘Mr Rigg’s frog-face was alien and unaccountable’ (p. 472). The frog’s trans-species propensities resurface here to reveal that Rigg is an outsider, an alien; he does not belong to the Middlemarch community in much the same way that the human does not belong in the An’s subterranean domain.

Rebecca Stott notes that anthropomorphic discourse such as Mivart used to talk about the anatomy of the frog is often applied to other aquatic creatures in fiction and scientific writing of the nineteenth century, and that once this happens, ‘a grotesque distortion of the human form is conjured up’.[86] Charles Kingsley’s *The Water Babies*, published shortly before Mivart’s frog treatise, is a fantastic tale of aquatic metamorphosis in which, Tom, an abused child chimney sweep, is transformed by fairies into a water baby. Stott observes that the text celebrates ‘polymorphousness, metamorphosis, and the variations of form to be found in the natural world’ claiming that it is Tom’s ‘marine invertebrate body’[87] that allows him to progress (evolve from baby to adult in his ‘other’ life) and grow to maturity. Significantly, though, in his water-baby state Tom is mistaken for a frog, due to his lack of a caudal appendage (he is at first mistaken for a newt).[88] The sense of fluidity in Kingsley’s novel that Stott mistakes for ‘invertebrate’ is, in fact, a marine zoology of another kind. Tom cannot be both amphibious and invertebrate; indeed, as Huxley shows in *A Manual of the Anatomy of Vertebrated Animals* (1871), only vertebrate creatures can survive both in and out of water.[89]

But by using amphibiousness in his fantasy tale of evolutionary, Kingsley plays upon the frog as early progenitor, as well as making explicit links between human and frog biology. For Kingsley, water offers an alternative dimension for his water babies and after

[86] Stott, ‘Through a Glass Darkly’, p. 313.
[87] Stott, ‘Through a Glass Darkly’, p. 319.
[88] Charles Kingsley, *The Water Babies: A Fairy Tale for a Land Baby* (London: Penguin, 2008), p. 60. Many hundreds of water babies which accompany Mrs Doasyouwouldbedoneby are described as ‘wriggling [...] like so many tadpoles’. p. 117.
[89] See Huxley, *A Manual of the Anatomy of Vertebrated Animals* (London: J. & A. Churchill, 1871), pp. 172-92.

death, the child's body regresses into its former state (in terms of time, not species), thus evolution takes on a different significance. The child must now evolve in an ontogenetic sense into an adult, learning particular lessons on the way. Unlike Darwin's story of evolution, Kingsley has archetypes in mind; Mrs. Bedonebyasyoudid and Mrs. Doasyouwouldbedoneby are in control of Tom's development and he is progressing towards a particular evolutionary goal. In thinking back to Mivart's close analogy between humans and frogs, though, Stott's idea of Kingsley's 'grotesque distortion of the human form' takes on new emphasis. In a specific example of the horror of the human in frog-form, *The Water Babies* turns a dead child into a frog that must develop back into human form.

7. Conclusion

The frog's ontogenesis represented a biological version of speeded-up evolution and through the aquarium, its violent metamorphoses could be observed closely. Stott argues that for those interested in natural history, 'the marine or freshwater aquarium provided a constantly-changing, glass-fronted theatre of bizarre and exotic bodies, moving, metamorphosing, interacting and breeding in sensational ways.'[90] Victorian readers discovered that water was home to very many strange and wonderful creatures, as many writers on the aquarium noted throughout the latter half of the century.[91] Between 1850 and 1880, the aquarium offered those curious about marine life the opportunity to invent their own exotic sea world within their own homes. However, it also allowed Gothic fiction to create a much more sinister version of the marine underworld than the aquarium had revealed. Hodgson, for example, envisioned terrifying creatures that, like the frog, exemplified something 'in-between,'

[90] Stott, 'Through a Glass Darkly', p. 307.
[91] See, for example, Philip Henry Gosse, *The Aquarium: An Unveiling of the Wonders of the Deep Sea* (1854); Robert Stark, *The Marine Aquarium: Directions for its Preparation and Management* (1857); John George Wood, *The Fresh and Salt-water Aquarium* (1868); John Taylor, *The Aquarium; Its Inhabitants, Structure, and Management* (1876).

something not human, not fish, not gastropod, not amphibian, but all of these in one composite being. In effect, he imagined a world in which evolution has gone out of control.

The Boats of the 'Glen Carrig' is part of a transatlantic exchange of ideas about the limits of horror in Gothic amphibiousness. Robert W. Chambers's *The Harbour-Master* (1899) is a tale in which '"the remnants of the last race of amphibious human beings"' are found to be living in a 5 mile deep chasm just off the Atlantic coast.[92] Chambers describes the amphibious human as

> a man with round, fixed, fishy eyes, and soft slaty skin. But the horror of the thing were the two gills that swelled and relaxed spasmodically, emitting a rasping, purring sound – two gasping, blood-red gills, all fluted and scalloped and distended. [...] his lidless eyes were phosphorescent, like the eyes of a living codfish.[93]

The specificity of horror in the biology of the 'thing' that Chambers evokes here is not present in Hodgson's writing. However, a proliferation of Hodgsonian monsters would find their way into later American works incorporating amphibious Gothic creatures such as Irvin S. Cobb's *Fishhead* (1913), first published in the January 11th issue of *The Cavalier*. In this short story, human monstrosity has an uncanny resemblance to a fish:

> His skull sloped back so abruptly that he could hardly be said to have a forehead at all; his chin slanted off into nothing. His eyes were small and shallow, glazed, pink-yellow pupils, and they were set wide apart on his head, and they were unwinking and staring, like a fish's eyes.[94]

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[92] Robert W. Chambers, 'The Harbor-Master', in *The Innsmouth Cycle* (USA: Chaosium: 1998), p. 19.
[93] Chambers, 'The Harbor-Master', p. 22.
[94] Irvin S. Cobb, "Fishhead" in, *The Innsmouth Cycle* (USA: Chaosium: 1998), p.27

H. P. Lovecraft cited Hodgson as one of the best writers of Gothic science fiction[95] and the legacy of *The Boats of the 'Glen Carrig'* is certainly evident in one of Lovecraft's most popular Gothic stories *The Shadow Over Innsmouth* (1936), in which amphibious humans, fish-frog men, whose 'staring, unwinking eyes one never saw shut'[96] prey sexually upon the inhabitants of Innsmouth to create immortal deformed offspring. Like the decapitated frog, which to Victorian scientists seemed to transcend the limits of death, in Lovecraft, supernatural capacities for progenitive life result from copulation between amphibious species and humans.

From superstitions about newts, to the obsession with the frog as a scientific instrument, the amphibious body exemplified a sense of malleability and other-worldliness that exemplified Darwin's theory of evolution. The frog, as many scientific treatises written throughout the 1870s and 80s sought to prove, embodied the traits and physical characteristics of many different animals, it underwent violent metamorphosis before it became an air-breathing land animal, and its body, like a conscious human, would continue to respond to its immediate environment long after death. Indeed, the idea that the frog represented an animal that is not merely 'in-between' species, but also a creature surviving 'in-between' life and death, permeates scientific literature of the period. Perhaps the subtext of Lewes's and Huxley's conclusions suggests that the frog typified nineteenth-century debates about the relationship between materialism in evolutionary science (in their discussions of the close similarities between physiological reactions in humans and frogs) and spirituality (the frog's metaphysical propensities) following the publication of *Origin of Species*. The frog's role in Victorian culture, then, was complicated by its biology and its past. Far from being an animal much ignored, the fact that the frog represented an Otherness

[95] H. P. Lovecraft, *Supernatural Horror in Literature* (New York: Dover, 1973), p. 83.
[96] H. P. Lovecraft, "The Shadow over Innsmouth" in *The Innsmouth Cycle* (USA: Chaosium: 1998), p. 49.

that had a specific resonance within the Gothic mode kept it at the forefront of the public and scientific consciousness.

For historians of science exploring the cultural background of evolutionary theory, it is the ape that has come to exemplify the nineteenth century's anxieties about species brought about by Darwin's development theory. However, in this chapter I have attempted to show that from the 1850s, for Victorian scientists and readers of Victorian science, it was the frog that dominated creative and visionary evolutionary conjecture. This early progenitor, which had been proven by the leading scientific authorities of the nineteenth century to link water creatures with land dwellers, a 'parent' life-form or 'missing link', provided a prototype for anthropological investigation which played out in Gothic literature in key ways.

Chapter 3

The Gothic Spider in Victorian Literature and Scientific Culture

1. Introduction

In coining the term 'arachnophobia'[1] in his chapter on 'unconventional pets' in *Petland Revisited* (1884), the naturalist J. G. Wood suggested that the spider had gained a reputation for causing irrational fear in humans. He begins by stating that 'Even among beings which we have been accustomed to consider as most repulsive, and from which many persons would shrink in fear, there is much to learn and much to be entertained withal.' Evoking the sense of horror attached to the spider while endorsing its capacity for being an educational animal, he continues,

> Take, for example, those creatures which are perhaps as universally hated and despised as any of our native animals, the spiders of the garden and the household. What universal consternation reigns in the drawing-room if a large 'cardinal' spider should be seen leisurely taking a promenade across the carpet! How the ladies scream and jump upon chairs, and ring for the footman to crush the poor thing, and the housemaid to follow his steps with dustpan, brush, and cloth. A veritable tiger would hardly cause more disturbance, and certainly would not draw forth louder shrieks. Ladies seem to be peculiarly subject to arachnophobia [...][2]

On the one hand, Wood makes prevalent fears about spiders seem bizarre and outlandish here, while on the other, he admits that 'for this objection to house-spiders there are certainly

[1] The OED states incorrectly that the first instance of the use of the term 'arachnophobia' was in Blackwood's Magazine in 1925.
[2] J. G. Wood, *Petland Revisited* (London: Longman, Green and Co., 1884), p. 287.

some grounds, as spiders are out of place in our rooms'.[3] Nevertheless, he sees 'no reason why the beautiful cross spiders of our gardens, or the hunting spiders of our walls, should be similarly detested'.[4] Wood is ambivalent about the significance of the spider but he does suggest that the spider belongs outside; within the domestic space, it is 'out of place'. Such inconsistencies in writings about the spider abound in Victorian natural history literature; from the spider's strange shape to its unusual character, naturalists found it difficult to demarcate the limits of the species.

In February 1861, the American magazine, *Harper's New Monthly*, ran an article entitled 'More on Spiders'. The introduction to the piece summed up the incongruities of its character:

> It would be a great mistake to suppose this order (*Arachnida*) can be exhausted in a few Magazine articles. Volumes could not contain all that may be said of them: the varieties, the changes, the habits, the manoeuvres; the marvellous instinct, the philosophical subjection to circumstances; the eagerness with which life is enjoyed when they are free; and the resignation, content, and patience with which it is borne when in a state of captivity; the maternal affection, the devotion of their young; the industry, the ingenuity, the combination, the tact. The exhibitions of *almost* reflecting powers approximate this division of Natural History to that of our humanity to a degree most startling, most overwhelming, to a close observer of their habits and modes of existence.[5]

The author of this editorial is surprised by the similarities in nature and behaviour between spiders and humans. The 'reflecting powers' to which he refers here are of some interest in

[3] Wood, *Petland Revisited*, p. 287.
[4] Wood, *Petland Revisited*, p. 287.
[5] 'More about Spiders', *Harper's New Monthly Magazine*, 29 February 1861, p. 323.

that the spider's versatile character is merged with the human. However, while such a compound of human and animal should produce a positive impression of humanity, Gothic writers employ the arachnid to construct moments of horror, disgust, revulsion, and fear. If the frog is Gothic because it is uncannily similar to the human, the spider is so because its biology is so different. The spider has an 'otherness' that can never fully be defined. It is a phobic animal, creating tension in its ambiguous associations.

On the one hand, the arachnid was entirely other and outside the parameters of normal biology. In these terms, it became a way of confronting the alien, and unmasking the Other. As a creature disconnected from all other life on earth, it threatened to undermine evolutionary thinking on the human. On the other hand, the spider continued its long metaphorical connection with human ingenuity and industry. In fin-de-siècle Gothic fiction, the earlier metaphorical connotations take on material somatic meaning. Thus, caught between these two divergent symbolic modes, the spider emerges in fin-de-siècle Gothic literature as a common yet unreliable trope that probes the limits of the human by continually oscillating between these unstable and unfixed denotations.

This chapter suggests that difficulty in distinguishing precisely what the spider might represent led to it becoming a key Gothic trope in Victorian literary culture. Through the spider, phobic anxieties function within a Gothic framework and rhetoric, and issues connected with empire, race, and technology are explored. The spider provides a model of instability in Gothic literature and is thus able to function as a protean symbol of disorder. Although naturalists had to admit that there was nothing particularly fearsome about the (British) spider itself, when ascribed to other seemingly harmless animals or located in far off lands, it becomes a potent cultural symbol of the natural world gone wrong.

Whereas in earlier centuries, the spider had been universally praised as a creature emblematic of human industry, during the nineteenth century, it adopted more ominous and

disturbing connotations. In ways similar to *Harper's Magazine*'s multifaceted description of the spider, natural history books throughout the century dwelt more on the character of the spider than its biology. When Darwin discovered gregarious spiders in Brazil, an incidence he found unusual among creatures 'so bloodthirsty and solitary that even the two sexes attack each other',[6] uncharacteristically for Darwin, there was a striking omission of the physiology of the animal. Although the spider was understood to be a relatively harmless creature as far as humans are concerned, naturalists were universally disinclined to say so. It did not, like the dog, spread harmful diseases, and it was not, like the frog, implicated in human evolution. Instead, the spider had a more sinister rhetorical function in nineteenth-century natural history, as the renowned naturalist Philip Henry Gosse's immensely popular study *Life in Its Lower, Intermediate, and Higher Forms* (1857) shows. Spiders are, he argued,

> [b]loodthirsty and vindictive, treacherous and cruel even to their own kind, bold and prompt in warfare, ever vigilant, full of stratagem and artifice, highly venomous, lurking in darkness, endowed with curious instincts, and furnished with many accessory means for the capture and destruction of other animals.[7]

By suggesting that the 'common consent of mankind' regards spiders with 'revulsion and abhorrence', Gosse makes a rather hasty statement about how humans view the arachnid species.[8] However, he was essentially right to assert as much, for the spider was becoming a phobic object perhaps because, as Gosse points out here, it had an apparently excessive bodily structure and merciless nature.

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[6] Darwin, *Journal of Researches into the Geology and Natural History of the Various Countries Visited by the H. M. S. Beagle, under the command of Captain Fitzroy, R.N.* 2nd edn (London: John Murray, 1889), p. 38.
[7] Philip Henry Gosse, *Life in Its Lower, Intermediate, and Higher Forms* (London: James Nisbet and Co., 1857), pp. 184-5.
[8] Gosse, *Life* p. 184.

Conversely, children's educational literature about the natural world attempted to challenge, if not overturn, Gosse's opinion of the arachnid species.[9] G.L.M.'s *Spider Spinnings or, Adventures in Insect-Land* [1870], told from the perspective of a spider, constructs a fictional world in which spiders and other insects have the capacity for human feeling, while humanity is portrayed as 'the ungainly two-legged monster called man'[10] and the human figure is a 'treacherous and bloodthirsty monster'.[11] In the introductory chapter, the spider narrator, Ranio, openly attacks Gosse's description of spiders in *Life*. 'Even some naturalists,' he asserts indignantly, 'who ought to know better, instead of trying to combat this absurd prejudice, have joined in the vulgar outcry against us.'[12] Yet despite Ranio's vexation, Victorian men of science universally agreed with Gosse and his spider theory. In 1901, for instance, Grant Allen described the grass-spider's jaws as 'the most terrible in all his terrible race':

> Flies come near, never suspecting the presence of their hereditary foe; as soon as they are close to him, the grass-spider rushes out with a dash and secures them. His jaws are among the most terrible in all his terrible race: they are large and wide-spreading, with two rows of teeth on either side, and a pair of long fangs of truly formidable proportions.[13]

The language used here to recount this everyday and essential occurrence in the spider's life is depicted in peculiarly situated Gothic rhetoric. The repetition of the word 'terrible' and the portrayal of the 'long fangs of formidable proportions' represent the spider as a creature

[9] Such anthropomorphic tales about spiders and other insects in this period include Rose Haig Thomas's *Spiderland* (1898) and Edward Simpson's *Insect Lives; As Told By Themselves* (1898). Another novelistic natural history was published on American insects; Vernon L. Kellogg's *Insect Stories* (1908) recounts the adventures of several types of insects in their daily lives.
[10] G. L. M., *Spider Spinnings, or Adventures in Insect-Land* (London: Routledge, [1870]), p. 1
[11] G. L. M., *Spider Spinnings*, p. 51.
[12] G. L. M., *Spider Spinnings*, pp. 1-2.
[13] Allen, *In Nature's Workshop*, p. 53.

unnaturally cruel and vindictive. In his indictment of the spider, Gosse also used Gothic terminology to illustrate the spider's eating habits. Going on to explain the method of entrapping its prey, Gosse explains, 'No sooner does a thoughtless fly alight on the web, than out rushes the Spider with lightning rapidity, seizes it with her fangs, and carries it away into the den to be sucked and exhausted of all its juices.'[14] Even the spider's method of catching and eating its prey is excessive, for she 'pours out her glutinous web in extraordinary profusion' and 'plunges [her] poisonous claws' into the body of her victim,' so that finally the 'juices [are] sucked at leisure'.[15]

In 1903, the diverse metaphorical uses of the spider culminated in the publication of a selection of Will Foster's poetry. In an address 'To a Spider', the narrator claims that fine ladies 'shudder at thy bald round face/And watchful eyne'.[16] However, despite its strange form and its methods for catching its quarry, the poet celebrates the spider's skilful construction of its web.[17] He would 'forgive every sin' if only the spider would 'but spin!' for when autumn comes and all the trees and plants die, the spider 'dost spread out [its] treasures rare'. This remarkably positive view of the spider is striking, for here the poet appears to delight in the spider's deviant desire to capture and kill other, more vulnerable, creatures. The spider's webs are 'treasures rare' for they are essentially signs of life when other creatures and plants are hibernating or dying due to the cold weather. Nevertheless, the poet's language further reveals that the spider is, after all, a devious and cunning beast of prey:

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[14] Gosse, *Life*, p. 187.
[15] Gosse, *Life*, p. 190.
[16] Will Foster, *Poems* (Selby: W. B. Bellerby and Son, 1903), pp. 21-2. All further references to this poem are from this edition.
[17] Blackwall also praises the spider's 'exquisite skill' in web making because it is 'eminently calculated to attract the attention and elicit the admiration of every person who has a mind alive to the wonderful physiological phenomena exhibited by the inferior orders of animated beings'. John Blackwall, *Researches in Zoology, Illustrative of the Structure, Habits and Economy of Animals* (London: John van Voorst, 1873), p. 276.

And thou dost set thy snare with skill:

Hid patiently –

Thou lur'st thy victim 'gainst his will.

And hold'st thy prey

This sense of respect for the spider's skill mingled with a sense of horror in its mode of functionality stems from a much earlier literary and cultural period. Edmund Goldsmid's 1886 collection of essays originally written in Latin during the late seventeenth century[18] includes one essay, by the German scholar George Caspard Kirchmayer, entitled 'On the Spider', which noted on the one hand that the spider's poison causes 'great and terrible suffering' in humans and on the other, the 'wondrous art' with which the spider 'conceal[s] the snares that lie in wait for its prey'.[19]

These examples show that the spider had conflicting rhetorical functions during the nineteenth century because writers were unable to identify its precise representational meaning. In the two stories that the following section will examine, however, the spider works to highlight the vulnerability of the human body. Far from being at the top of the scale of life, human power is undermined by spiders that expose the frailty of the human form. In Richard Marsh's *The Beetle*, a giant unseen 'spider of the nightmares' clinches the narrator's defenceless body between its sticky legs, and in Wells's short story 'The Valley of Spiders', oversized arachnid monsters attack a man who has fallen from his horse. Questioning the limits of the human in these Gothic tales means depicting the human body at its most weak.

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[18] Strange superstitions had been attached to the spider for several centuries. Kirchmayer, for example, noted that spiders 'very seldom make their webs when the sky is clear, but only when it is overcast. Hence they foretell cloudy weather. […] they make their webs higher than usual when the rivers are to be in flood […] by their leaving a house they foretell it is going to fall'. George Caspard Kirchmayer, 'On the Spider', in, *Un-natural History; or, Myths of Ancient Science* trans. by Edmund Goldsmid (Edinburgh: privately printed, 1886), p. 56. J. G. Wood noted in *Petland Revisited* that 'spiders are capital barometers. They never mend or make their webs except at the approach of fine weather; their internal supply of silk being limited, and far too valuable to be wasted on wet weather, when the flies will be at home.' p. 289.

[19] Goldsmid, *Un-natural History*, pp. 49-50.

2. Strange spidery forms in *The Beetle* and 'The Valley of Spiders'

In Marsh's 1897 novel *The Beetle*, London is invaded by a supernatural shape shifting human-beetle from the East. Robert Holt, the novel's primary narrator, first encounters this monster when he breaks into a deserted house to escape from the cold. Inside, he is physically overwhelmed by a giant insect creature, the species of which he cannot discern in the intense darkness of the house:

> On a sudden I felt something on my boot, and, with a sense of shrinking, horror, nausea, rendering me momentarily more helpless, I realized that the creature was beginning to ascend my legs, to climb my body. [...] It was as though it were some gigantic spider, - a spider of the nightmares; a monstrous conception of some dreadful vision. It pressed lightly against my clothing with what might, for all the world, have been spider's legs. There was an amazing host of them, - I felt the pressure of each separate one. They embraced me softly, stickily, as if the creature glued and unglued them, each time it moved. […] What it was there was still nothing to positively show, but the impression grew upon me that it was some member of the spider family, some monstrous member, of the like of which I had never heard or read.[20]

Although described by Holt as a 'spider of the nightmares', the creature is, of course, not a spider at all but a beetle. Why does Marsh employ the spider trope here, and not the metamorphic beetle figure at the centre of the story? [21] At this early stage of the novel's

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[20] Richard Marsh, *The Beetle* (Ontario: Broadview, 2004), p. 51.

[21] See Minna Vuohelainen, 'Richard Marsh's *The Beetle* (1897): A Late-Victorian Popular Novel', *Working with English: Medieval and Modern Language, Literature and Drama* 2.1 (2006) pp. 89-100 for further details on the publishing history of *The Beetle*. As Vuohelainen points out, the story was originally serialised in *Answers* on 13 March, 1897 under the title *The Peril of Paul Lessingham: The Story of a Haunted Man*. In book form, Marsh would further capitalise on the beetle motif in the novel's title.

serialisation in *Answers* in 1897, perhaps Marsh had not decided what creature to use. Alternatively, perhaps he felt that the spider was simply more uncanny since it played on acknowledged and widespread phobias.[22] Whatever Marsh's reasoning, the spider is an apt accessory to the human-beetle's evocation of dread and disgust. In the dark, and in unfamiliar surroundings, the spider creates a moment of indescribable terror that the beetle could not. The spider acts in this story, as it would in many others, as an additional signifier of horror; the giant spidery form clasping the human body is a horrifying image and one which calls attention to the vulnerability of the human form.

'We naturally associate Spiders with cobwebs', asserts Gosse in *Life*, 'and the faculty of spinning threads from the hind part of the body is one of their most marked characteristics.'[23] The specific function of the spider's web raised much interest from both naturalists and writers of fiction. In his *British Spiders: An Introduction to the Study of the Araneidæ of Great Britain and Ireland* (1866), for example, E. F. Staveley notes that 'much attention has been drawn to the fine floating webs which sometimes seem to cover the earth, and almost to fill the air on still summer and autumn days'.[24] Similarly, in his 1873 *Researches in Zoology*, John Blackwall writes on the 'Aeronautic Spider,' whose webs are 'of various shapes and dimensions' and 'accumulate into flakes or masses of considerable magnitude'.[25] Although in these webs Blackwall finds 'small winged insects, chiefly Aphides, entangled in most of them,'[26] he dismisses the idea that these webs are made in order to catch prey and instead conjectures that in order to avoid overpopulation the webs

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[22] Marsh's words in this passage are ironic: the 'monstrous member' of the 'spider family' that he claims 'the like of which I had never heard or read' in fact calls to mind Bertram Mitford's slightly earlier novel *The Sign of the Spider: An Episode* in which a giant man-eating spider attacks an English colonial explorer.
[23] Gosse, *Life*, p. 186.
[24] E. F. Staveley, *British Spiders: An Introduction to the Study of the Araneidæ of Great Britain and Ireland* (London: Lovell Reeve & Co., 1866), p. 9.
[25] Blackwall, *Researches in Zoology, Illustrative of the Structure, Habits and Economy of Animals* (London: John van Voorst, 1873), p. 259-60.
[26] Blackwall, *Researches*, p.260.

simply allow the spiders to disperse. Staveley and Blackwall here refer to the minute gossamer spider and, by imagining this species of spider to be much bigger and therefore much more dangerous, Wells employs it in his short story 'The Valley of Spiders'. In this story, the spider's web no longer represents the spider's ingenuity and skill. Instead, as an exaggeration of Blackwall's conception of the gossamer spider's web, it is an ominous and deadly substance, not only capable of trapping its prey, but also manoeuvring the spider into a position of attack. Under the gaze of natural history and modern materialist theories, then, the web moves from old metaphor for human industry and ingenuity to a symbol of revulsion, disgust, and horror.[27]

Jules Michelet's 1875 commentary on the spider's web is one example of science writing that marks a turning point in natural history texts[28] when he writes that the web, 'woven out of itself, living and vibrating, is much more than an instrument; *it is a part of its being*' (my emphasis).[29] Wells's story works on several levels of horror because the spider exenterates itself of its slimy, sticky, viscous, viscid secretion in order to attack its prey. On the one hand, the substance exuded by the spiders in this story is a deadly material produced in order to catch and kill its prey.[30] On the other, the substance itself can be perceived as horrifying in its sliminess and viscidity.

Published in the March 1903 edition of *Pearson's Magazine*, Wells's 'The Valley of Spiders' is a tale of terror that employs the excessive web of the spider. As the story opens,

[27] The narrator of Christian Johnstone's *Scenes of Industry* states that 'as clever little arachnids, I have long felt a respect for them'. 'The spider's web, is, in fact, a wonderful structure,' he continues, 'If a cat or a dog were to form so complicated a mansion for its habitation, we should be truly amazed.' Johnstone, *Scenes of Industry: Displayed in the Bee-Hive and the Ant-Hill; with a Brief Description of the Insect World* (London; John Harris, 1827), pp. 247-8.
[28] The scientific literature offers somatic questions of identity that feed the Gothic fiction under discussion here.
[29] Jules Michelet, *The Insect* (London: T. Nelson and Sons, 1875), p. 216.
[30] On the subject of the spider's web, Michelet notes, 'Itself of a circular form, the spider seems to expand within this circle, and prolong the filaments of its nerves to the radiating threads which it weaves. In the centre of its web lies its greatest force for attack or defence. Out of that centre it is timid; a fly will make it recoil. The web is its electric telegraph, responding to the lightest touch, and revealing the presence of an imperceptible and almost imponderable victim; while, at the same time, being slightly viscous in substance, it retains its prey, or delays and entangles a dangerous enemy.' Michelet, *The Insect*, p. 216.

three men on horseback enter a gorge while tracking fugitives. Reaching the chasm, they look across the vast expanse of ground before them but can see nothing ahead. In this eerie and alien – Gothic – landscape, there is no breeze and no sign of life.[31] Suddenly, the breeze picks up and with it, a large wild dog comes into sight, running towards them at great speed, apparently escaping from some unseen enemy. Fearing that the dog is rabid, one of the men draws his sword in defence but the dog bounds by as the men are left with 'the insoluble mystery of a dog that fled from nothing but the wind'.[32] The men's horses become apprehensive and in the distance, other animals (perhaps wild hog) appear to be fleeing from some unknown terror in the valley. Shortly after these foreboding signs, the men discern 'great white balls' and 'drifting globes' of web floating towards them in the ominous breeze and within them giant spiders, 'a full foot from leg to leg',[33] seek out their prey. As one man makes a panicked attempt to escape, he inadvertently rams his horse into another and throws both man and horse to the ground. On the ground, overcome by the spiders, the fallen man cries out in pain and fear: 'With his left hand he beat at something on his body, and suddenly he stumbled and fell. He struggled to rise, and fell again, and suddenly, horribly, began to howl, "Oh – ohoo, ohooh!"'[34] The other two men leave him to be consumed by the spiders that crawl insidiously over his body.

Like Marsh, Wells plays on prevalent phobias about spiders by emphasising the general sense of distrust and suspicion that naturalists had long expounded in their work on the character of the spider. In part, he creates tension between the fiction and reality of the spider; in 'The Valley of Spiders', the gossamer spider is huge and menacing, whereas in reality this tiny spider (the only one to use its web as a means of transportation, as many nineteenth-

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[31] Fred Botting refers to such landscapes as 'desolate, alienating and full of menace'. Botting, *Gothic* (London and New York, 1996), p. 2.
[32] H. G. Wells, 'The Valley of Spiders', *Pearson's Magazine*, March 1903, p. 300.
[33] Wells, 'The Valley of Spiders', p. 303.
[34] Wells, 'The Valley of Spiders', p. 302.

century history books attested) is harmless. Wells's spiders seek the blood of large mammals, whereas nineteenth-century natural historians commented at length on the spider's seemingly shy, though obviously cunning, nature. The incongruity between the 'real' spider of natural history and the 'Gothic' one of fiction is that although the spider may be a cruel enemy, it is also timid, and will in fact *avoid* confrontation. As many Victorian books on spiders clearly stated, it would never, as implied here, attack humans unless severely provoked. Wells skilfully employs all the aspects of the spider that trigger feelings of disgust and revulsion in order to create moments of horror here: the spider's 'many legs', 'squat bodies', and 'many-jointed limbs'[35] are ghastly and gruesome in the context of human attack. Wells uses the spider here as an antagonist of humankind and thus sets the spider up as a creature entirely separate from the human species.

Moreover, partly because the web acts as the soundless harbinger of death, Wells is able to show in 'The Valley of Spiders' that the spider represents a silent threat, which comes from nowhere and vanishes as quickly as it appears. Wells's description of the floating mass of web that carries the spiders across land, which is a 'drifting terror',[36] employs ideas found in an article entitled 'The Strength of Spiders and Spider-Webs' which ran in the American journal *The Popular Science Monthly* in 1890. In this article, Henry C. McCook discusses spiders that have the strength and ability to capture prey much larger than themselves, often using their webs. McCook's descriptions of such spiders include those that have successfully captured fish, snakes, and mice – animals much larger and stronger than their spider foe.[37] In natural history literature of the 1860s and 70s, the spider's web represented the excretion of an alien material from the arachnid body, an obnoxious substance that signified the natural world at work and an external remnant of the spider's viscera. For Wells, the spider's unusual

[35] Wells, 'The Valley of Spiders', p. 301.
[36] Wells, 'The Valley of Spiders', p. 303.
[37] Henry C. McCook, 'The Strength of Spiders and Spider-Webs', *The Popular Science Monthly* Vol. 37, May 1890, pp. 41-7.

mode of transport used to assail the men has actually emerged from the insides of the spider body. The web therefore represents an aberrant and anomalous substance woven from the inside out. Wells thus employs the web to his own advantage in portraying it as an auxiliary Gothic spider trope. Moreover, the web itself is a transgressive aspect of nature; it works outside the parameters of what animals (and humans) can do. It contravenes the limits of animal (and human) behaviour and violates natural laws.

3. Anxieties of empire and spider superstitions

Making a remarkable and noteworthy distinction between English and foreign spiders in his patriotically titled work *British Spiders: An Introduction to the Aracheidæ of Great Britain and Ireland* (1866), E. F. Staveley argued that although spiders are 'ferocious in their habits', there is 'no *English* species capable of inflicting on man a poisoned wound of any severity' (my emphasis).[38] There are 'some *foreign* species,' he contends, 'of which the poison is very virulent, their bite being sometimes followed by death' (my emphasis; p.4). Calling attention to this disparity between English spiders, which are harmless, and foreign ones, which clearly are not, causes tension in natural history writing between what is perceived to be 'out there' and therefore dangerous, and what is within Britain, and therefore safe. Similarly, Allen was quick to point out the insalubrious features of the Brazilian spider:

> Queerer still than the caterpillars which pretend to be leaves or flowers for the sake of protection are those truly diabolical and perfidious Brazilian spiders which as Mr. Bates observed, are brilliantly coloured with crimson and purple, but 'double themselves up at the base of leaf stalks, so as to resemble flower buds, and thus deceive the insects on which they prey.' There is something hideously wicked and cruel in this lowest depth of

[38] Staveley, *British Spiders*, pp. 3-4.

> imitative infamy. A flower-bud is something so innocent and childlike; and to disguise oneself as such for purposes of murder and rapine argues the final abyss of arachnid perfidy.[39]

Another Victorian naturalist keen to condemn foreign spiders was Alfred Russel Wallace. In *The Malay Archipelago* (1869), Wallace implies that spiders abroad are much more treacherous than those found at home are. 'In Queensland,' he notes, 'there is an exceedingly poisonous spider, whose bite will kill a dog, and cause severe illness with excruciating pain in man.'[40] Similarly, Oliver Goldsmith's hugely popular study of natural history, was unequivocal in his assertion that foreign spiders are more dangerous than British ones:

> In this country, where all insect tribes are kept under by human assiduity, the spiders are small and harmless. […] But they form a much more terrible tribe in Africa and America. In those regions, […] it is not to be wondered at that the spiders are seen as bearing a proportionable magnitude. In fact, the bottom of the Martinico spider's body is as large as a hen's egg, and covered all over with hair. Its web is strong, and its bite dangerous. It is happy for us, however, that we are placed at a distance from these formidable creatures, and that we can examine their history without feeling their resentment.[41]

In England, Goldsmith asserts, insects are restrained by persistent human dominance; but beyond British shores, they are 'much more terrible'. The notion that geographical distance saves 'us' from these 'formidable creatures' suggests that spiders abroad were emblematic of nature (and culture) out of control. In 1839, Darwin's assertion that 'the number of spiders, in proportion to other insects, is here [in South America] compared with England very much

[39] Allen, *Falling in Love*, p. 70.
[40] Alfred Russel Wallace, *Darwinism* (London: Macmillan, 1889), p. 267.
[41] Oliver Goldsmith, *A History of the Earth and Animated Nature*, 2 vols (Edinburgh: Blackie & Son., 1868), 2, pp. 449-50.

larger; perhaps more so than with any other division of the articulate animals',[42] is supported by Wallace's declaration that in the tropics spiders swarm in 'unexampled luxuriance'.[43] Far from human checks on the size, population, and virulence of the spider, this animal has the potential to exceed the perceived limits of its species. In the wilds of South America and Africa, where the foreign (treacherous and dangerous) spider lurks, so does the allusion to biting, of being bitten, of poisonous venom infiltrating the veins and arteries of the human to cause a loss of bodily control in paralysis and a horrible death.

Victorian naturalists, then, unanimously agreed that foreign spiders were more numerous and more treacherous than British ones. In Darley Dale's 1889 *Mr. Mygale's Hobby: A Story about Spiders*, tensions between domestic and foreign spiders in natural history writing also appear in fiction. Dale's story charts the adventures of a young boy, Claude Meadows, and his friendship with an elderly gentleman, Mr Mygale, who lives alone with his spider collection. This light-hearted children's story ironically champions spiders as creatures whose 'cleverness is marvellous' in their ability to be 'as cruel as even a boy could wish, unrelenting, crafty, fierce, venomous, persevering, industrious'.[44] Throughout the tale, Mr Mygale teaches Claude, a boy who 'should like to know all about those monsters [that are] not British' (p. 33), about spiders, thereby making distinctions between 'them and us', just as Staveley does in *British Spiders*. The division between British and foreign spiders is made explicit when Mr Mygale tells Claude that

> 'there are some foreign spiders whose bite is so venomous that people have died from it; but I can hardly credit the report of one naturalist, who says there are species which, if a man treads on them, will sting him through the sole of

[42] Darwin, *Journal of Researches into the Geology and Natural History of the Various Countries Visited by the H. M. S. Beagle, under the command of Captain Fitzroy, R.N.* 2nd edn (London: John Murray, 1889), p. 36.
[43] Alfred Russel Wallace, *The Malay Archipelago*, 2 vols (London: Macmillan, 1869), 2, pp. 31-2.
[44] Charles Whymper 'Darley Dale', *Mr. Mygale's Hobby: A Story about Spiders* (London: Religious Tract Society, 1889), p. 22. All further references are to this edition and will be given in the text.

> his boot […] we have no British spiders which can inflict a serious wound on us, though some people entertain as violent a prejudice against spiders as if they were scorpions' (pp. 68-9).[45]

Mr. Mygale is ambivalent about the potency of the spider's venom because of the 'prejudice' against these creatures. Even British spiders are unloved, despite their harmlessness. Like Wood, Dale draws upon the prevalent dislike of spiders in his ironic testament to the fact that no patriotically termed 'British spiders' can harm humans. The most ferocious spiders, he points out candidly, occupy far off shores in the farthest flung corners of empire, even beyond empire:

> 'There is a *Mygale* in Ceylon, a great creature, six or eight inches in diameter when its legs are spread out […] It is very sluggish in its habits, and is a disgusting animal.[…]'
> 'Is that the *Mygale* which is said to eat birds?'
> 'No; that is found in Brazil, in the country of the Amazons, and it is called *Avicularia*. This horrible spider is covered with hairs, which come off easily, and, if they touch you, irritate your skin fearfully. One very well authenticated instance is,
> of two finches found in the web of an *Avicularia* in Brazil; one was dead, and the other covered with a filthy saliva, but I don't think the spider intended to dine or sup off his victims. I read the other day in a book on the Amazons that the author had seen an Indian child leading one of these monsters about the house by a string, as if it were a dog or a toy-horse. […] There is an extraordinary spider out there [in the Amazon], called *Acrosoma arcuatum*, which has two horn-like appendages to its abdomen. They are very

[45] Staveley also argues that 'we can hardly credit the assertion of Scaliger, quoted by Derham, that there were in his country "spinners of that virulency, [*sic*] that if a man treads upon them, to crush them, their poyson [*sic*] will pass through the very soles of his shoes." Scaliger was a native of Gascony.' Staveley, *British Spiders*, p. 4. Thus, while no naturalist appears ready to 'credit' such a story, they continue to draw attention to (and therefore circulate) the myth in books that seek to offer factual information on the natural history of the spider.

> fine and bronze-coloured. The spider makes a large web. By the way, I forgot to tell you there is a *Mygale* in Martinique which undoubtedly kills birds. It climbs trees for young humming-birds and throws itself on them, and then tries to put its poison-fangs between skull and vertebrae.' (pp. 137-9)

In providing an educational account of the spider within a fictional narrative, Dale is keen to capitalise on the popular fascination with outlandish species of animals. Despite the dangers of foreign spiders, Claude seeks to learn more about them while 'spider-hunting' on a trip to South Africa. The ship's Captain, who is an amateur naturalist, tells him about one foreign species of spider that spins a web so strong that 'even a man' could be caught (pp. 168-9).

Figure 6. Fighting the monstrous sea-spider deep below the ocean in Jules Verne's *Twenty Thousand Leagues Under the Sea* (1872).

Despite the threat of such a creature, Claude returns unharmed from his trip to collect foreign spiders and, notwithstanding the dangers, has no encounter with the terrifying species to which Mr Mygale and the Captain allude. Published by the Religious Tract Society, Dale's novel had a particular political function in allaying people's fears and anxieties about the spider. Although it undoubtedly engages with natural history literature's thinking on the spider in important and relevant ways, the story's aim is to promote the welfare of animals. It is a didactic piece of work, designed to debunk popular myths about (British) spiders' behaviour. By setting up a dichotomy between foreign spiders and British ones, it perhaps does so less successfully than intended.

In other fictional depictions of the arachnid at the turn of the century, the foreign spider that in scientific writings is 'diabolical' and 'hideously wicked' is used as a symbol of Otherness that lies beyond the borders of the British empire. Mitford was not the only writer to employ the spider in the popular adventure story,[46] but whereas for others the spider motif merely adds to the fantastic elements of the tale, for Mitford, mythopoeic superstitions associated with the spider underpin the primary machinations of the novel.[47] As in other fin-de-siècle invasion narratives, Mitford's spider is a powerful symbol of colonial encounter, emblematic of horror almost beyond human imagination.

Yet none of the earlier adventure narratives exploits the Gothic spider trope to quite the extent that Bertram Mitford does in his 1896 novel *The Sign of the Spider*. In this tale of intrepid adventure, the spider lurks in foreign lands waiting to attack unsuspecting explorers in retribution for colonial exploitation.[48] In order to achieve the riches he so desperately seeks on his colonial quest to the interior of Africa, Laurence Stanninghame, the story's hero, is forced to combat a giant man-eating spider. On his journey to seek his fortune far from the wife and children he leaves behind in England, he meets a pretty, young English woman with whom he falls in love. When, after a disappointing spell investing in stocks and shares in Johannesburg, Laurence sets off into the interior to find his fortune in slave-hunting, his new-found sweetheart, Lilith, gives him a silver box inscribed with her 'spidery' monogram

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[46] Examples of ferocious foreign spiders abound in fin-de-siècle adventure fiction and the spider trope is a prominent feature of the imperial romance narrative. In French literature, Jules Verne's popular novel *Twenty Thousand Leagues under the Sea* (1869), first published in English in 1873, features a giant underwater spider. Verne's spider is not merely foreign; it is horrifying in its enormity, ('crab-like') shape, and alien environment. Occupying a liminal space deep below the sea, Verne imagines the terror of an unknown species of spider, over three feet high, which readies to attack its human prey (see figure 6). Similarly, the Scottish adventure fiction writer R.M. Ballantyne's 1885 novel *The Rover of the Andes* uses the image of 'a monstrous hairy spider' in his intrepid tale of exploration. See Ballantyne, *The Rover of the Andes: A Tale of Adventure in South America* (London: James Nisbet & Co., 1885), pp. 195-6.

[47] Interestingly, J. R. R. Tolkien also makes use of the giant man-eating spider trope in his hugely influential *The Lord of the Rings: The Return of the King*, written between 1937 and 1949 and published in 1955. Having been lured into Shelob's lair by Gollum, a terrifying fight ensues between the man-eating spider and the novel's virtuous hero Frodo. However, it is Sam, Frodo's trusty sidekick, who eventually defeats the spider and rescues his friend (and the ring) from the terrifying mandibles of the spider.

[48] Staveley suggests satirically that foreign spiders 'act as a corrective, [in] that they have been found actively employed in clearing bedsteads of unwelcome colonists'. *British Spiders*, p. 4.

imprinted on the outside.[49] The box is a small case that contains photographs of Lilith and letters from her to Laurence. However, this small metal case, which Laurence keeps around his neck, adopts fresh significance when the Ba-gcatya tribe (the People of the Spider) attacks Laurence and his slave-hunting colleagues one day in the jungle. The People of the Spider believe that the 'spidery' monogram on the cover bears the 'sign of the spider' and this belligerent tribe decide to spare his life. Once saved, however, the Ba-gcatya's reverence for the spider has hitherto unforeseen consequences for Laurence, for it is both his redeemer and his curse. When one of his fellow white slave-hunters kills a spider in the Ba-gcatya village, the tribal king demands retribution for his offence and Laurence selflessly sacrifices himself in place of his friend. Not entirely understanding the full implications of his acquiescence, Laurence goes willingly with his captors and is drugged and abandoned in an inescapable valley enclosed by cliffs.

The valley is, as the chapter's title so aptly notes, 'The Place of Horror' for here awaits a bloodsucking monster, an arachnid of terrifying proportions and intent. Laurence wanders into the spider's lair and in the gloom of the cave he discerns

> a head, as large as that of a man, black, hairy, bearing a strange resemblance to the most awful and cruel human face ever stamped with the devil's image – whose dull, goggle eyes, fixed on the appalled ones of its discoverer, seemed to glow and burn with a truly diabolical glare.[50]

Strikingly, Mitford uses precisely the same Gothic scientific rhetoric as Allen in his assessment of how spiders catch their prey. The monster's 'diabolical glare' is clearly an outward manifestation of its gruesome nature. Strangely, the physiognomy is human, but

[49] Interestingly, Robert Louis Stevenson described a 'spidery cross' on a hill in the neighbourhood of a religious house in the Cévennes in Southern France in *Travels with a Donkey in the Cevennes* (1879).
[50] Bertram Mitford, *The Sign of the Spider: An Episode* (London: Methuen & Co., 1896), p. 262. All further references are to this edition and will be given in the text.

human gone wrong. Like Hodgson's 'humans gone wrong', there is something inherently wicked and immoral about the spider.

> Now, indeed, all stood clear. "The Spider" was no allegorical term, but literal fact. That frightful monster with which he had just come face to face was indeed the demon-god of the Ba-gcatya! It was actually fed with living men, in accordance with dark and mysterious superstition held by that otherwise fine race. Now the fate of those whose skeletons lay around stood accounted for. They had been devoured by this unimaginable horror. Alive?

The People of the Spider revere and sacrifice to a *real* spider; a giant, man-eating spider, a spider of the imagination, indeed, in Marsh's terms, of the nightmares; a spider with grotesque parodic human features and an insatiable thirst for human blood.

Moreover, like Hodgson and other writers at the *fin de siècle*, Mitford uses species confusion as an effective form of Gothic Othering here. In part because of its 'cruel human face', Mitford's spider is a species confounded being; it has the 'head of a devil', 'body and legs of a spider', and 'black hairy coat of a bear'. Laurence is uncertain about the precise species of the creature that threatens his life in the valley. He questions,

> Vampire – insect – devil – what *was* the thing? From the length and thickness of those frightful tentacle-like legs, stretching forth from the cranny – Laurence – who had not halted until he had gained the ridge dividing the hollow – estimated that the creature when spread out must be eight or ten feet in diameter. (p. 264)

Mitford magnifies the size of the spider here for maximum Gothic effect and by doing so he reveals the vulnerability of the human. Depicted here as an excessive Gothic animal, Mitford's spider exists outside the march of evolution in its disproportionately abnormal size.

'It must be some beast hitherto unknown to natural history', he rationalises, 'yet those awful tentacles—joints, hair, everything—could not but belong to an insect—were, in fact, precisely as the legs of a huge tarantula, magnified five hundred-fold' (p. 265). Here the narrator takes his reader into the mind of this creature's victim and interestingly, by doing so, is able to play upon prevalent phobic anxieties about the spider, thereby feeding from and into the public's dislike of this animal:

> Laurence had seen spiders of every variety, huge and venomous, and of grisly size, yet nothing like this. Why, the creature was as large as a bear nearly! […] What ghastly and blood-curdling freak of nature could have produced such a monstrosity as this? Why, the very sight of the awful thing huddled up, black, within the gloom of the cranny, the horrid tentacles—a hundred-fold more repulsive, more blood-curdling than though they actually were so many serpents—moving and writhing in a great quivering, hairy, intertwined mass--was in itself a sight to haunt his dreams until his dying day, did he live another fifty years. What must it mean, then, to realize that he was actually shut in—escape impossible—with the deliberate purpose of being devoured by this vampire, this demon, even as all these others had been devoured before him? (p. 265)

If its earlier associations with anthropomorphic sentimentality haunt the spider trope in Victorian literature, in Mitford's text the spider becomes a phobic object of abjection, disorder, and irrationality. It is an 'awful thing', a non-descript creature of mythology, or a vampire, a demon; fantastic, yet nevertheless real for the purposes of the story. In science, the spider that inhabits colonial spaces, far beyond British shores, is a terrifying spectre, as naturalists such as Staveley and Allen made clear. Mitford engages with contemporary science by transferring the foreign spider of natural history into the Gothic spider of

adventure fiction. By the end of the century, the mythical spider of empire found in the explicitly patriotic science literature of Staveley and Allen finally converges with the ideology of the colonial narrative.

Shortly before his life and death struggle with the giant spider, in true Haggardian style, Laurence stumbles upon the wealth that has evaded him throughout his African adventure. The diamonds he finds in the spider's lair will secure a comfortable future back in England but first he must face, and defeat, the spider. Thus, for Mitford, the man-eating spider is the myth at the site of colonial enterprise. Only by killing the spider can Laurence finally obtain the colonial exploits he has sought for so long and, more significantly, only by doing so can the hegemonic order be restored. Ultimately, the text demands that white supremacy must win out over black superstition. Moreover, imperial ideology requires that the white coloniser overcome primitive tribal urges so that the spider's death can reaffirm the order of the natural world, with humans (white Western males) at the top.[51] Laurence's final kill, after so many killings of black African slaves, works to justify the imperial cause, for what is 'out there' is different, unnatural, other, and requires white (or rather British) authority to conquer it. The novel demands that Britishness is the key to Laurence's triumph over the spider, for he succeeds where so many other races and nationalities of slave owners have failed and significantly, he does it through ingenuity, not gun power. One of the novel's main aims is to reconfirm the predominance of British culture over the colonies and this is achieved by employing the phobic spider, already much maligned in scientific writings.

In *The Sign of the Spider*, spider superstitions are eventually realised in the sudden, yet ostensibly fitting, death of Laurence's rescuer, Lindela, daughter of the tribal king's brother. Lindela betrays her people to save Laurence, and the retribution for her transgression is

[51] In *The Lost World*, Malone's horror in perceiving that humans were no longer at the top of the food chain in his encounter with the carnivorous dinosaur is a similar example. Both Mitford and Conan Doyle employ the Gothic mode in order to disrupt the natural order of life.

severe. As they lie sleeping beneath the stars, far from her native village, Lindela is bitten by an 'enormous spider' (p. 292), whose powerful venom quickly kills her. Laurence interprets this bite as a 'sign of the spider' in itself and, as he finds and kills the 'great noisome insect' that has caused the death of his rescuer, friend, and companion, 'his blood seemed to chill with superstitious fear':

> It seemed too strange, too marvellous to be a mere coincidence. Lindela had defied the traditions of her race, – and now she had met her death through the agency of the very embodiment of those traditions. She, a daughter of the Kings of The People of the Spider – had met her death through the Spider's bite. It was horrifying in its sinister appropriateness. Was it really a thing of witchcraft? Did the Fiend have actual bodily power here, in "the dark places of the earth"? Had this demoniacal influence followed her to wreak its vengeance here, at such a distance from the home and country to which she would return no more? (p. 292)

The material horror that Mitford employs in the earlier depiction of the spider has here taken on metaphysical significance. Although the spider is dead, slain by Laurence himself, its agency prevails. Superstition in the novel works on two levels. First, fears about the spider's potential to inflict death on humans are actually realised here. The foreign spider can kill at will, whereas the British one cannot. Second, on an unconscious level, Mitford plays on his readers' fear of spiders – arachnophobia – in order to heighten tensions about fear of foreignness – xenophobia. Slightly earlier, as Laurence makes his escape with his tribal rescuer, he wonders what he will 'do with her' once they return to white civilisation (p. 286). Although Laurence refuses to sell Lindela to an Arab slave-hunter they meet on their journey, and he knows well that having betrayed her father she cannot return to her native land, neither will she be permitted to enter British society alongside the novel's valiant hero. Such

an appearance of the two together (as the narrator explains 'the man, the product of the highest fin-de-siècle civilisation; the woman, the daughter of a savage race' (p. 285)) would be an uncomfortable spectacle, freakish, unnerving, abnormal, and not, for Mitford's readership, to be tolerated. Associated with the spider, Lindela is not fit for English society and the spider trope in this case becomes an additional signifier for her race, in a similar way to du Maurier's Jewish antagonist, Svengali. Despite her disloyalty to her own people in order to save Laurence, then, she is ultimately sacrificed for the sake of xenophobic anxieties and in order to uphold the racial hierarchical order of late Victorian Britain. Her death by the spider's bite leaves the reader with a lingering uncertainty about the significance of such monsters in the interior of Africa. The spider remains an ambiguous symbol of colonial encounter and imperial control in Mitford's novel, still able to strike, penetrate, and kill at will.

In the slightly earlier and immensely popular novel *Trilby* (1894), George du Maurier's depiction of his Jewish antagonist as an evil spider in a web drew on the traditional spider-fly metaphor. Du Maurier chooses the spider, of all animals, to embody Svengali's evil nature because, as Daniel Pick has noted, by the late 1890s the spider image 'emphasise[d] not only his speed and guile, but also his horror; the arachnid is, after all, the very emblem of entrapment'.[52] When associated with human nature, as it is in du Maurier's portrayal of Svengali in *Trilby*, the affectation of the spider takes on sinister and ominous meanings.

4. George du Maurier's *Trilby* and the racialized human spider

George du Maurier's hugely successful novel *Trilby* (1894) is one of a number of novels published at the *fin de siècle* that, as Nadia Valman points out, characterises the 'villainous

[52] Daniel Pick, *Svengali's Web: The Alien Enchanter in Modern Culture* (New Haven, Conn. ; London : Yale University Press, 2000), p. 13.

and power-hungry Jew', and in each case the male Jewish protagonist poses 'a special threat to, and attraction for, British women'.[53] Interestingly, in *Trilby*, du Maurier racializes his Jewish character by attaching the spider motif, but why? Svengali is explicitly portrayed as a monstrous species-confused spider in du Maurier's depiction of him in the novel as 'An Incubus', an illustration of which shows a menacing-looking human head on a spider's excessive body complete with clawed human hands on the ends of long spidery legs (see figure 7).[54] Svengali's appearance, which is discussed at some length, reveals him to be 'well-featured but sinister' and he has 'thick, heavy, languid, lustreless black hair' and 'bold, brilliant black eyes, with long heavy lids, a thin, sallow face, and a beard of burnt-up black, which grew almost from his under eyelids'.[55] Why is such a description spidery? What does du Maurier hope to express by fixing the spider image to his Jewish character? This section of the chapter will go some way towards offering a discussion of the text in these terms.

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[53] The other novels cited by Valman are Wilde's *The Picture of Dorian Gray* (1891), Marie Corelli's *The Sorrows of Satan* (1895), Stoker's *Dracula* (1897), and Julia Frankau's *Pigs in Clover* (1903). See Nadia Valman, 'Little Jew Boys Made Good: Immigration, the South African War, and Anglo-Jewish Fiction', in *'The Jew' in Late-Victorian and Edwardian Culture: Between the East End and East Africa*, ed. by Eitan Bar-Yosef and Nadia Valman (Basingstoke: Palgrave Macmillan, 2009), p. 56.

[54] Du Maurier illustrated his own novels, as well as those of several other prominent Victorian writers such as Thomas Hardy and Elizabeth Gaskell. He was also a prolific illustrator for *Punch* and other Victorian journals and magazines. Interestingly, this is not the only time that du Maurier depicted a Jewish character as a spider. In the 1867 edition of Douglas Jerrold's *The Story of a Feather*, which du Maurier illustrated, the initial letter of the first chapter shows a giant hairy spider with a human face used to represent the Jewish man who buys the feather from his shipmate on the voyage from the feather's native Africa to England. In the story, the Jewish merchant is corrupt and wily, duping the seafarer into parting with all his money and several ostrich feathers in exchange for a watch. The merchant has the spider's ingenuity and methods of entrapment, as does Svengali. See Douglas Jerrold, *The Story of a Feather* (London: Bradbury, Evans, & Co., 1867), p. 1.

[55] George du Maurier, *Trilby* (London: Osgood, McIlvaine &Co., 1895), p. 12. All further references are to this edition and will be given in the text.

As well as being described in terms of racial degeneration resonant with anti-Semitic discourse, Svengali's irregularities are portrayed in his character. He is a great musician, yet incongruently, his voice is 'very thin and mean and harsh'. He is a German Jew, who speaks French fluently 'with a German accent and humorous German twists and idioms' (p.12). Indeed, everything about Svengali is incongruous and improper. Even his wit is distasteful: 'He had a kind of cynical humour, which was more offensive than amusing, and always laughed at the wrong thing, at the wrong time, in the wrong place. And his laughter was always derisive and full of malice' (p. 55). As the story unfolds, the depths of Svengali's corrupt and contradictory nature become increasingly evident. Like the spider, Svengali is neither one thing nor another. Moreover, he is a human version of the spider that Gosse describes in *Life*; he is 'bloodthirsty and vindictive, treacherous and cruel even to [his] own kind, bold and prompt in warfare, ever vigilant, full of stratagem and artifice'. Preying on the weak and vulnerable, he 'walk[s] up and down the earth seeking whom he might cheat, betray, exploit, borrow money

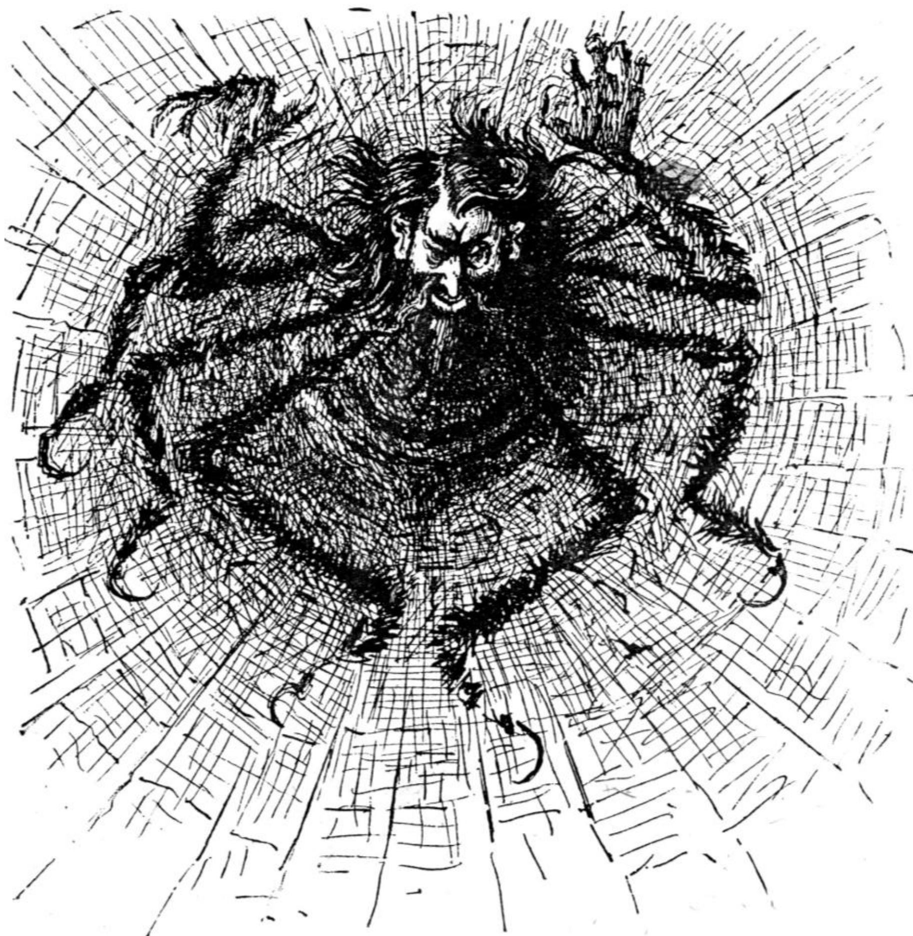

Figure 7. Du Maurier's illustration of Svengali as a spidery incubus in *Trilby*.

from, make brutal fun of, bully if he dared, cringe to if he must – man, woman, child, or dog', he is undeniably, 'as bad as they make `em' (p. 57). Moreover, as a horrible perversion and parody of nature, Svengali will seize his prey by successfully weaving his web of deception.[56] By customising the spider trope in a portrayal of racial difference, du Maurier emblematises Svengali as a depraved, immoral, and dishonourable human being. At the limits of the human, the only animal metaphor appropriate for Svengali's evilness is the much-maligned spider of natural history literature.

Although the spider-fly metaphor is not a new one in literature,[57] du Maurier uses it in a particularly cogent way in *Trilby*. Svengali's mesmeric power over Trilby (his web) enables him to ensnare her and then to exploit her to the point of death. He pursues Trilby doggedly with a terrifying maleficence, determined to catch and destroy her. Incorporating the characteristics of both cat and spider in his victimisation of Trilby, Svengali is an insalubrious incubus, a 'black spider-cat':

> Svengali was a bold wooer. When he cringed, it was with a mock humility full of sardonic threats; when he was playful, it was with a terrible playfulness, like that of a cat with a mouse – a weird, ungainly cat, and most unclean; a sticky, haunting, long, lean, uncanny, black spider-cat, if there is such an animal outside a bad dream. (p. 104)

Svengali is a (non-supernatural) human example of Marsh's 'spider of the nightmares'; he haunts and is finally haunted by the horror of his own abjection. The lack of cleanliness about the human-spider and du Maurier's allusion to 'a weird, ungainly cat […] a sticky, haunting,

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[56] After their initial meeting, Trilby exclaims, '"He's a rum `un, ain't he? He reminds me of a big hungry spider, and makes me feel like a fly!"' (p. 72).

[57] In novels such as Edith Henderson's *Human Spider: A Novel* (1892) and Rayne Butler's *In the Power of Two: The Spider and the Fly* (1896) the human spider is used to consider the role of clever and cunning fraudsters in society.

long, lean, uncanny, black spider-cat' resonates with Mary Douglas's theories of dirt and transgression.[58] Svengali is racially other and therefore 'cuts across the basic classification' of species; he is neither one thing, nor another. This creeping, crawling, swarming human/animal figure infects the earth with its existence. Du Maurier uses the spider to show that he is also Other in terms of species; maligned through his race and character (perhaps stereotypically one thing in du Maurier's view), Svengali exists on the very edges of humanity.

Few critics have dealt with the spider motif in *Trilby*, however, Daniel Pick has given this aspect of the novel some attention and, using Freudian psychoanalysis, he has made much of the spider as representative of sexual urges. For Freud, Pick notes, 'a patient's picture of a spider suggested a graphic infantile representation of "horrible" intercourse' and may 'symbolise castration'.[59] Taking a non-reductive approach to the symbolic cultural value of the spider in the novel, Pick continues,

> Pertinent though such accounts of the spider and its sexual connotations may be to understanding his cultural resonance and survival, myths of Svengali cannot be explained exclusively in those terms; notions of universal psychological terrors and desires, shared symbolic investments in, say, spider images, only take us part of the way. Svengali is not merely a function of some ancient 'arachnophobia', primitive dreams of being engulfed, poisoned or entrapped; neither is he to be located solely in terms of some overwhelming unconscious infantile phantasy of

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[58] In her seminal *Purity and Danger* (1966), which examines concepts of dirt and pollution in culture, Mary Douglas argues that 'The last kind of unclean animal is that which creeps, crawls or swarms upon the earth. This form of movement is explicitly contrary to holiness. […] Whether we call it teeming, trailing, creeping, crawling or swarming, it is an indeterminate form of movement. Since the animal categories are defined by their typical movement, 'swarming' which is not a mode of propulsion proper to any particular element, cuts across the basic classification. Swarming things are neither fish, flesh nor fowl.' *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London and New York: Routledge, 2002), p. 70.

[59] Pick, *Svengali's Web*, p. 14.

> parental intercourse between a 'dirty' intruding father and a 'hypnotised', castrated mother; still less is he the mere recapitulation of pre-modern takes of devils and satyrs, incubi or, for that matter, the perennially wandering Jew; he must surely also be sited within a definite cultural and scientific epoch, in which the psychology of races, mesmerised couples and crowds provoked extensive debate and important lines of thought in the human sciences.[60]

Although Pick is correct to suggest that there are other facets to Svengali's character, he is dismissive of the possible significance of the metaphorical spidery Svengali. Why did du Maurier choose to use the Gothic spider metaphor in *Trilby*? What did he hope to reveal about Svengali and what did he hope to bring to light about his readers' attitudes to these animals? Perhaps, given the universal feelings of mistrust associated with arachnids, he felt that only through the spider could he articulate the role of the foreigner in late Victorian society. In this case, the attachment of the unstable spider trope allows du Maurier's ethnic typecasting to render Svengali a figure displaced, invasive, and racially malevolent.

Significantly, it is on the public discovery of his deception at the music hall in London that Svengali's reign of terror ends. Having travelled throughout Europe for two years with Trilby as his 'protégée' and 'wife', it is the first concert in London which results in Svengali's premature, if much-deserved, demise. There is a distinctly patriotic message in this plot device, for like Staveley's separation of British and foreign spiders, the novel reconfirms England's status as moral arbitrator of empire and realigns London as the seat of imperial power. In much the same way that Lindela was not allowed to step upon English soil, Svengali is doomed by his appearance in London. Du Maurier makes it clear that only

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[60] Pick, *Svengali's Web*, pp. 14-5.

England's sense of moral purity can end Svengali's evil scheme and ultimately squash the spider.

5. The technological spider in *The War of the Worlds*

Under the heading 'Alarming Solar Phenomenon', in a letter to the satirical *Punch* magazine in April 1858, the amateur photographer and astronomy enthusiast 'Copernicus Hazy' described the moment the long-awaited annular eclipse seemingly arrived. As the moment approached, he explains, he saw 'a dark object stealing over the [the] upper rim' of his lens.[61] Holding his breath and anticipating a marvellous sight, 'Hazy' is shocked and amazed to perceive a giant spidery shape gradually appear:

> I had been led to expect marvels, but here was something by which red flames, crowns of glory, dark projections from the rim of the moon's shadow, BAILEY's beads, and all the other ecliptic phenomena, were cast into the shade. Here was a subject for a letter to the *Times*, and a paper at the Watford Institute! And yet terror was mingled with my triumph. What could this awful creature be, whose huge bulk nearly filled the Sun's disc? All I had ever read of the fabled monsters of classical and medieval mythology, flashed before my mind's eye. Could there be any foundation in meteorological fact for the wild Norse legend of the dragon that is one day to devour Sun and Moon?[62]

[61] Letter to Mr. Punch from 'Copernicus Hazy' entitled 'Alarming Solar Phenomenon', *Punch* 10 April 1858, p.145.
[62] Letter to Mr. Punch, p. 145.

Figure 8. Illustration of the 'spiderlike machines' by Warwick Goble for *Pearson's Magazine*'s serialisation of *The War of the Worlds* (1897).

The 'terror' and 'triumph' of his discovery are soon dissolved when he looks up for a moment in his 'mental questioning' only to discern 'a spider dangling at the end of a rope of his own spinning across the inner end of my telescope!' 'The Sun', he continues sardonically, 'had been enticed into my coach-house to be eclipsed by a miserable insect!'[63] This mock anecdote, of course, would never have made it into the *Times* but *Punch* printed it, partly because of its flagrant satire, but also perhaps because such phenomena as a giant spider motif attached to what was possibly 'out there' in unexplored space was not quite as ridiculous as it seemed. What *Punch*'s spoof shows is a shift in the cultural thinking about the spider. It is in the process here of turning into the imperial spider-like form that invades earth in Wells's *War of the Worlds* (1897). *Punch*'s letter, then, might be understood as the turning point in human and scientific understanding of movement from biology to mechanics in the *alien* arachnid that fed into later Gothic literature.

[63] Letter to Mr. Punch, p. 145.

First serialised in Pearson's Magazine between April and December 1897, H. G. Wells's imperial horror story *The War of the Worlds* employs Gosse's description of spiders as 'bold and prompt in warfare'. Although the aliens are unlikely invaders, having 'luminous discs – like eyes' whose intensity is 'at once vital, intense, inhuman, crippled and monstrous'[64] and whose bodies 'resembl[e] a little grey snake, about the thickness of a walking-stick, coiled up out of the writhing middle' (p. 21), they arrive on earth well-equipped to deal with the mass extinction of the human race. Despite their being badly adapted for life on planet earth, the vehicles in which they arrive are because they are 'spiderlike' war machines. They are therefore outward manifestations of the aliens' ingenuity, fashioned in precisely the right shape for earthly movement, but perhaps more significantly their spiderlike shape is the one required for imperial hostility. In relating his brother's experience of the alien invasion, the narrator describes how he 'realized something of the full power and terror of these monsters':

> He learnt that they were not merely a handful of small sluggish creatures, but that they were minds swaying in vast mechanical bodies; and that they could move swiftly and smite with such power that even the mightiest guns could not stand against them.
>
> They were described as "vast Spider-like machines, nearly a hundred feet high, capable of the speed of an express train, and able to shoot out a beam of intense heat." (p. 77)

The alien vehicle's spider shape that strides across the once peaceful landscape destroying all in its path is a distorted depiction of the spider of nature, which creeps beneath the undergrowth in its search for shelter and food. Wells cleverly invents a curious parody of

[64] H. G. Wells, *The War of the Worlds* (London: Penguin, 2005), p. 22. All further references to this novel will be to this edition and will be given in the text.

nature here, for the machines that are capable of such destruction are in fact giant vampiric *technological* spiders, designed for a particular purpose – to invade and colonise the English.

> [I]t presented a sort of *metallic spider* with five jointed, agile legs, and with an extraordinary number of jointed levers, bars, and reaching and clutching tentacles about its body. Most of its arms were retracted, but with three long tentacles it was fishing out a number of rods, plates, and bars which lined the covering and apparently strengthened the walls of the cylinder. (My emphasis, p. 123)

Wells heightens the sense of horror in this scene by employing the spider trope and the arachnid moves from biological brute to mechanical monster: 'it was a great body of machinery on a tripod stand'. The 'Thing', a vehicle described as 'incredibly strange' with 'metallic […] tentacles' about its 'strange body' (pp. 46-7), is an uncanny imitation of a spider-type body, yet it is not a true replica of the arachnid. It is like a spider, but is not one. Wells attaches a particularly horrifying significance to the spider's unusual, and confrontational, physique and it is thus deemed the most fitting mechanical structure for war. This is an idea Wells may have gleaned from the representation of the belligerent spider in natural history books such as Thomas Rymer Jones's *General Outline of the Animal Kingdom* (1841).[65]

Figure 9. Illustration of the 'spider-like machines' from the 1898 edition of Wells's *The War of the Worlds* published in novel form.

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[65] Natural history texts such as Thomas Rymer Jones's 1841 *A General Outline of the Animal Kingdom and Manual of Comparative Anatomy* give a graphic description of how the spider feeds on its prey: 'In *spiders* […] the mandibles are each terminated with a moveable fang, which ends in a sharp point, and is perforated near its

The polymorphous and multiplex aspects of the spider trope persisted into the twentieth century in Wells's nonfictional work. In his late 1914 essay, 'The Liberal Fear of Russia' printed in *The War That Will End War*, Wells exploits the spider trope in order to refute the idea that Russia is a powerful political enemy, arguing that,

> English people imagine Russia to be more purposeful than she is, more concentrated, more inimical to Western civilisation. They think of Russian policy as if it were a diabolically clever spider in a dark place.[66]

In this passage, Wells chides the English attitude towards a nation he describes as 'an entirely unique structure,' 'barbaric' and 'superstitious in a primitive way'. He continues,

> This is a dread due, I am convinced, to fundamental misconceptions and hasty parallelisms. Russia is not only the vastest country in the world, but the laxest; she is incapable of that tremendous unification. Not for two centuries yet, if ever, will it be necessary for a reasonably united Western Europe to trouble itself, once Prussianism has been disposed of, about the risk of definite aggression from the East. I do not think it will ever have to trouble itself.[67]

Using the spider trope, Wells is able to dispel myths of danger from Eastern Europe. The symbol of the spider is too disparate, too protean, to call to mind any concerted action against the West. While she appears to be a dominant force in world politics, she is in fact too

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extremity by a minute orifice, from which, when the spider bites, a venomous fluid of great potency is instilled into the wound inflicted; such, indeed, is the malignity of this poisonous secretion that its effects in destroying the life of a wounded insect are almost instantaneous, and in some of the large American species even small birds fall victim to its virulence'. See Jones, *A General Outline of the Animal Kingdom and Manual of Comparative Anatomy* (London: John van Voorst, 1841), p. 309. In examining the minutiae of the spider's anatomy in his description of the spider, Jones focuses on its apparatus for attack and, like many naturalists throughout the nineteenth century, he alludes to the animal's function as an effective war machine in nature, seeking out its prey with callous intent.

[66] H. G. Wells, *The War that Will End War* (London: Frank and Cecil Palmer, 1914), p. 63.

[67] Wells, *The War that Will End War*, p. 64.

disordered and unsystematic in her approach to cause conflict. Like the spider in literature, Wells's vision of an arachnid Russia is threatening but not actually dangerous.

In a later work, *The Outline of History* (1920), Wells would refer to Germany as 'an old spider lusting for power':

> Through the tradition of Frederick the Great, Machiavelli now reigned in Germany. In the head of this fine new modern state, therefore, there sat no fine modern brain to guide it to a world predominance in world service, but an old spider lusting for power. Prussianized Germany was at once the newest and most antiquated thing in Western Europe. She was the best and the wickedest state of her time.[68]

According to Wells, then, in the run up to World War I, Germany was contemporary and out-of-date, preeminent and iniquitous. The spider metaphor renders a proliferation of interpretations, but for Wells it is the one most apt for demonstrating how imperialism works, using Germany's assault on its neighbouring countries in the pursuit of power as a suitable example. Even in 1920, when Wells made this remark, the spider was a protean symbol, clearly shown in his use of the spider as a metaphor for a Germany modern and ancient, righteous and ruthless.

While Wells's *The War of the Worlds* was being serialised in *Pearson's Magazine*, Grant Allen published his popular article series 'Glimpses of Nature' in *The Strand Magazine* (running between July and December 1897). In his article on the spider, under the title 'Beasts of Prey,' in the September edition of the magazine, Allen states unequivocally that 'for sheer ferocity and lust of blood, perhaps no creature on earth can equal that uncanny brute, the common garden spider. He is small, but he is savage.'[69] The garden spider is

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[68] H. G. Wells, *The Outline of History: Being a Plain History of Life and Mankind*, 2 vols (London: George Newnes, 1920), 2, p. 693.
[69] Grant Allen, 'Beasts of prey', *The Strand Magazine* 14, (September 1897), 287-94.

transformed from Wood's idealised version of it as a 'beautiful' animal capable of making 'wonderful' webs to Allen's more matter-of-fact view of it as an 'uncanny' and 'savage' brute. Allen's work on the arachnid subject comes at an opportune moment in scientific and literary history. Coinciding with the publication of *The War of the Worlds*, it would remind readers of the horror of the spider body. Indeed an 'uncanny brute', the spider's shape and movement were exploited fully in Wells's tale of invasion, death and destruction. By the *fin de siècle*, then, literary depictions of the spider body proliferated a number of different and contrasting messages about the precise nature of arachnid horror. In its transition from biology to mechanisation and its uncanny shape and movement, spider forms are also characteristic of imperial encounter. But more than this, they function as a way to articulate doubts about the biological classification of species, fears about invasion, concerns about the morality of colonialism, and suspicions about the alien other that exists 'out there' in the corners of empire.

6. Conclusion

In this chapter I have argued that the spider in Victorian literature is an ambiguous, polymorphous animal emblem, in some cases imagined as totemic, in others, perceived as a universal object of disgust and horror. It has done so by showing that during the nineteenth century, the spider was a prevailing Gothic animal trope in various types of fictional works while simultaneously featuring extensively in natural history books as an ambivalently notorious creature. If it is difficult to pin down the precise nature of spidery horror, perhaps it is because the spider of the imagination does not correlate with the spider of science. Moreover, the apparent desire of the spider to lurk in dark corners, to scuttle across the floor, and to lie so patiently in wait for its prey are antipathetic to how humans wish to think of

themselves. Although the positive attribute of industry remains attached to the spider, by the late nineteenth century, more negative associations had become evident, particularly in its ostensible bloodthirsty, vindictive characteristics.

One aspect of the spider not fully developed in this chapter thus far is its symbolic associations with psychosis. In late Victorian novels such as Ernest G. Henham's 1898 *Tenebrae* and Marsh's short story 'The Words of a Little Child' in *Marvels and Mysteries* (1900), visions of spidery monsters reveal the hallucinations of minds disturbed by madness or alcohol. In *Tenebrae*, the narrator's mad uncle imagines 'evil' spiders, as this peculiar conversation between the young narrator as his uncle shows:

> 'A spider ran down the wall and across the floor.'
>
> 'You killed it?' I shouted, the words wrung from me by an excess of fear.
>
> 'It was a stranger to me,' he said madly. 'It was not one of my subjects, and unlike any of them. When it got half-way across the floor, it stopped and turned to glare at me. Ah, its eyes!'
>
> 'You let it escape?' I gasped.
>
> 'I had no choice. Nephew, I was afraid of the creature.'
>
> 'Such a being is a creation of the devil's. It is a thing made to be killed.'
>
> The old man drew his body forward in the chair. 'It was an evil spirit,' he muttered in a grating voice. 'There was a time – I was a different man then – when I studied such things. If the evil nature of a man could be released from his body, and given a separate existence, it would bear some shape which is naturally horrible to the eyes. There is no madness in that idea, nephew.'
>
> 'It may still be here. It may be hiding away in some dark corner.' I shuddered. 'It

> may creep forth any moment and drive me into insanity. I might fall asleep, and –' I could not finish.[70]

Interestingly, Henham portrays his character's fear of spiders as intrinsically human, but also utterly ridiculous. The narrator's frenzied ravings here are both something with which the reader can identify (as Wood's comments on women's irrational reactions to spiders show) and a symptom of his emergent madness.

In Marsh's story, the child's inebriated mother who, in a fit of drunken rage, intends to kill herself while blaming her death on her husband, sees a 'great black thing, with long 'air and a bushy tail' (257-8).[71] These creatures which, the narrator explains, 'were born of her delirium' are irrational visions, horrifying in their mental manifestation. '"There's lots of 'em, Louisa. There's one just jumped down upon your 'and. There's another creeping through the crack in the wall, ah–h!" she screeched. "They're a-coming at me! don't yer let 'em touch me! don't yer!"' (266).[72] Like Henham's tale about the spidery manifestations of psychosis, Marsh employs the arachnid as an animal of terror, one which evokes a vicarious sense of horror in the reader. These writers suggest that spiders take us, psychologically speaking, to the edge of human rationality. The spider lurks in the corners of our imagination waiting to pounce on minds susceptible to madness.

In a tale of superstition and mystery, the spider reappears in M. R. James's 'The Ash-tree', which first appeared in *Ghost Stories of an Antiquary* in 1904.[73] Like Mitford's earlier novel, James's story represents the spider as a Gothic creature of superstition and horror in that it functions as the harbinger of death, sent to hunt out and kill two particular members of one family in an act of retribution for the family's part in executing a suspected witch. Penny

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[70] Ernest G. Henham, *Tenebrae: A Novel* (London: Skeffington and Son, 1898), pp. 77-8.
[71] Richard Marsh, 'The Words of a Little Child', in *Marvels and Mysteries* (London: Methuen, 1900), pp. 257-8.
[72] Similarly, in Marsh's *Ada Vernham, Actress* (1900) the female protagonist's drunken husband suffers from visions of spiders.
[73] Michael Cox, *M.R. James: An Informal Portrait* (Oxford: Oxford University Press, 1983), p.137

Fielding understands the spider to be part of James's portrayal of 'deadly female sexuality'. She argues that, '[i]n "The Ash-tree," the hollow trunk of the tree is found to contain not only a nest of loathsome spiders, but also the remains of the suggestively-named witch Mrs. Mothersole, implying, in both the image and the name, that the female is rotten at the core'.[74] Fielding's reading of the story corresponds well with Pick's work on the spider figure in Freud, and she is right in her assertion that in James 'it is hard to say precisely of what the phobic objects consist, as they rarely take on material form'.[75] In 'The Ash-tree', though, James is unambiguous in his use of the spider as a Gothic trope, employing it as a beast of prey, a revengeful monster, and as a symbol for superstition (in this case associated with witchcraft).[76] Whereas for Mitford, then, the spider is that colonial Other that exists beyond the safety of British shores (and its innate foreignness is part of its horror), for James it is a manifestation of superstitions from the past. In 'The Ash-tree', the spider is a subtle and menacing foe, deeply sinister and uncanny, though not fully explained or rationalised. Still, both texts, published only eight years apart, explore and exploit an apparent deep-seated fear of spiders in the human psyche. Spider phobias emerge from the scientific and fictional writings of the earlier part of the nineteenth century and, by the turn of the twentieth century, come to signify the materialization of an anxious mind.

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[74] Penny Fielding, 'M. R. James and the Library of Modernity', *Modern Fiction Studies* Vol. 46 No. 33. (Fall 2000), p. 766.

[75] Fielding, 'M. R. James and the Library of Modernity', p. 749.

[76] There is an interesting link between spider and cat in *The Ash Tree* (as in du Maurier's allusion to Svengali as a 'spider-cat' in *Trilby*). The spiders that creep into the bedroom at night to attack and kill their human prey afterwards drop from the bed to the floor 'with a soft plump, like a kitten'. The analogy drawn here between the endearing kitten and the despised spider is contradictory and unsettling. In Trilby, the correlation drawn between cat and spider performs an entirely different function. As the spider-cat, Svengali is perceived as the most supreme swindler. Moreover, these creatures are metaphorically attached to the figure of Svengali rather than actually *being* him.

Chapter 4

Geological Underworlds: Mythologizing the Beast in Victorian Palaeontology

1. Introduction

In 1857, the renowned geologist Hugh Miller gave a vivid account of a visit to the British Museum. He evocatively describes the Palæozoic exhibition as a place where 'the attention is at once arrested by the monstrous forms on the walls':

> Shapes that more than rival in strangeness the great dragons, and griffins, and "laithly worms," of mediæval legend, or, according to Milton, the "gorgons, hydras, and chimeras dire," of classical fable, frown on the passing visitor; and, though wrapped up in their dead and stony sleep of ages, seem not only the most strange, but also the most terrible, things on which his eye has ever rested. Enormous jaws, bristling with pointed teeth, gape horrid in the stone, under staring eye-sockets a full foot in diameter. Necks that half-equal in length the entire body of the boa-constrictor stretch out from bodies mounted on fins like those of a fish, and furnished with tails somewhat resembling those of mammals. Here we see a winged dragon, that, armed with sharp teeth and strong claws, had careered through the air on leathern wings like those of a bat; there an enormous crocodilian-whale, that, mounted on many-jointed paddles, had traversed, in quest of prey, the green depths of the sea; yonder an herbivorous lizard, with a horn like that of the rhinoceros projecting from its snout, and that, when it browsed amid the dank meadows of the Wealden, must have stood about twelve feet high. All is enormous, monstrous, vast, amid the creeping and flying things and the great sea-monsters of this

> division of the gallery.[1]

Traditionally, museums were spaces of both education and entertainment which presented 'stuffed animals in mock-frightening dioramas or in surprising locations, preparing to leap from around corners or dropping from the ceiling'.[2] It is hardly surprising that dinosaurs were a major component of this type of showcasing of the imaginative animal. It is easy to lose oneself in the dream-like imagery of Miller's passage; like fiction, this narrative creates a sense of otherworldliness, detached from the realities of everyday life.[3] Yet, surely Miller recounts the experience of many thousands of visitors to such museums, and it is, therefore, easy to see how such dark images from deep time were propagated within Victorian popular culture. So much so, that even Dickens employs the megalosaurus in *Bleak House* (1853) to establish a sense of dreary stasis at the beginning of the novel.[4] Such images of animals from the past are, in Miller's words, 'strange', 'terrible', 'horrid' to the human imagination. They are the very root of horror; images from an unforgotten past, reawakened by science to shock and horrify a modern audience.

The OED states that the generic term 'dinosaur', coined by Richard Owen in 1841, originates from the Greek *δεινός* for fearful or terrible and *σαύρος*= *σαύρα* for lizard. Although the renowned palaeontologist Thomas Hawkins writes shortly before Owen's coinage, his descriptions of dinosaurs exemplify the appropriateness of the term:

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[1] Hugh Miller, *The Testimony of the Rocks or, Geology in its Bearings* (New York: Gould and Lincoln, 1857), p. 142.

[2] Kalof, *Looking at Animals in Human History*, p. 147. Furthermore, the museum allowed for the issues concerning extinction to be brought to the forefront of scientific culture.

[3] Similarly, William Broderip appeals to the reader's imagination in his description of the primal scene: 'Look at the reptilian relic in the stone which helps to form that cottage wall. As we gaze, the wall disappears; and, to the mind's eye, its place is occupied by a vast sea, which, when circulation animated that bone, covered its site. Through the waters of this sea, Ichthyosaurs, Plesiosaurs, Mosasaurs, and Cetiosaurs dart, swim, and gambol. If we turn landward, the sluggish river, the marshy jungle and the dreary plain seem peopled by ancient Crocodilians, Iguanodons and Megalosaurs, while Pterdactyles appear to hover in the murky atmosphere of the dragon times.' Broderip, *Zoological Recreations* (London: Ward, Lock, and Tyler, 1873), p. 377.

[4] 'As much mud in the streets, as if the waters had but newly retired from the face of the earth, and it would not be wonderful to meet a Megalosaurus, forty feet long or so, waddling like an elephantine lizard up Holborn Hill.' Dickens, *Bleak House* (London: Penguin, 1996), p. 13.

> The long, lank, skinny hands, the deathy paddles of Plesiosaurus, or spotted, or livid yellow and pale, upon them fiend-like he fled: his hide, or black and freckled, his teeth, his fangs whetted sharp, gloating upon and crunching the gristles of his dying prey: or fleeting through the Expanse of Ocean, or tempting the Profound, or cresting the Upper Waves, preying, or at watch for prey, or lulling himself upon the wide, the universal deep: coming from the Abysm of Ages, the Gog, or the Magog of Pre-Adamite Earth, Giant of Wrath and Battle, behold! the Great Sea Dragon, the Emperor of Past Worlds, maleficent, terrible, direct, and sublime.[5]

Hawkins recreates the primordial landscape complete with a 'maleficent, terrible, direct, and sublime' dragon; 'fiend-like', sharpening its 'fangs' for its repast, the extinct animal emerges in Gothic narrative from the depths of time and space to terrify its modern human audience. There is something deeply inhuman, indeed inhumane, about the scene Hawkins conveys here and explains why, perhaps, it was just such a setting that would later come to feature in Gothic fiction. Monsters are, after all, as Jeffrey Cohen insightfully argues, haunting spectres of humankind's evolutionary past:

> The monster is that uncertain body in which is condensed an intriguing simultaneity or doubleness: like the ghost of Hamlet, it introjects the disturbing, repressed, but formative traumas of "pre-" into the sensory moment of "post-," binding the one irrevocably to the other. The monster commands, "Remember me": restore my fragmented body, piece me back together, allow the past its eternal return. The monster *haunts*; it does not simply bring past and present together, but destroys the boundary that demanded their twinned foreclosure.[6]

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[5] Thomas Hawkins, *The Book of the Great Sea Dragons* (London: William Pickering, 1840), p. 24.
[6] Cohen, 'Preface', in *Monster Theory*, pp. ix-x.

Cohen's monster theory is relevant to the extinct animal body because it does precisely what he suggests. The dinosaur haunts; it rends the boundary between humans and animals, it questions the limits of biological change, it proves that species is not a finite concept. The dinosaur has been a source of intense fascination for almost two centuries, perhaps because it reaches to the very heart of fundamental questions about who we are and how we came to exist. It stirs the imagination in ways other creatures do not. Moreover, the prehistoric past is a *Gothic* space because it is both unknown and unknowable. Looking back in history meant Gothicising the animal body into monster; but why? Perhaps it was because, tellingly, human fossils were never found alongside those of dinosaurs,[7] yet they were still integral to anxieties about humankind's past, and even perhaps, the possibility of a degenerative future.[8]

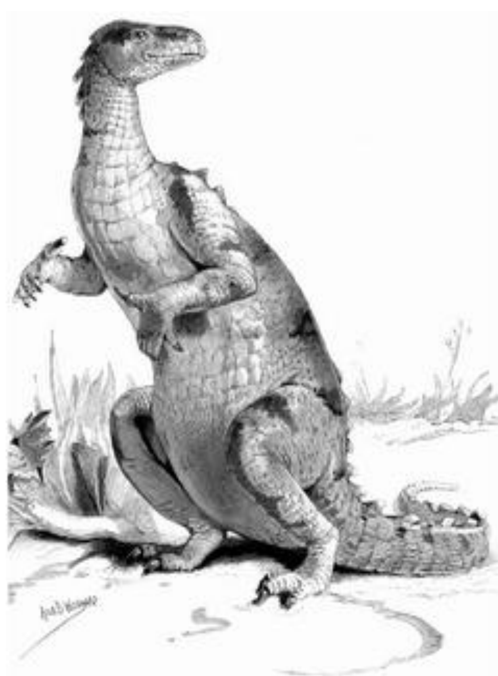

Figure 10. Alice B. Woodward's engraving of a 'Prehistoric Iguanodon', sent by The Marquess of Queensbury to his daughter-in-law in 1895 with the caption 'Perhaps an ancestor of Oscar Wilde'. Published in the *Illustrated London News*, 18 May 1895.

Furthermore, the demise of the dinosaur foretold the future of all species. Darwin and other scientific thinkers had come to realise that if animals could die out, then so could humans.[9] If, as Peter Bowler argues, 'by 1830 it was firmly accepted in responsible geological circles that divine providence was manifested in the physical world not through

[7] Richard Owen coined the word 'dinosaur' in 1841 to denote an extinct animal from the Mesozoic period.
[8] According to Rudwick, this was precisely why prehistoric earth was perceived as Other, 'What made "the ancient world" of the extinct reptiles so monstrous and alien was above that it was totally lacking in the human presence.' Rudwick, *Scenes from Deep Time*, p. 171.
[9] This idea had a significant impact on the Gothic imagination at the *fin de siècle*. Two of H. G. Wells's most popular scientific romances, for example, *The Time Machine* (1895) and *The War of the Worlds* (1897), played on fears associated with extinction in his portrayal of the downfall of the human race in the distant future and the annihilation of humankind in the battle with alien beings.

continual miracles but in the original design of the system itself',[10] it is also true to say that by the 1890s palaeontologists and biologists accepted that there appeared to be no exact plan. As Darwin had showed in *Origin*, life adapted to its environment, and, therefore, there was just no knowing to what (biological or cultural) ends this would lead. Indeed, in the Gothic science fiction of the 1890s, extinct animals indicate a return to both a prehuman past and the possibility of a posthuman (degenerate) future. Dinosaur images were even used to heavily imply the degenerative potential of the human. When, in 1895, The Marquess of Queensberry sent a copy of Alice B. Woodward's engraving of a 'Prehistoric Iguanadon' to his daughter-in-law Lady Douglas with the note 'Perhaps an ancestor of Oscar Wilde', the link between primeval being and degeneracy in humans was complete.[11]

Several historians of science have recently discussed the extent to which the natural history craze of the nineteenth century captured the Victorian imagination.[12] To some extent, this chapter builds on this body of research to show that nineteenth-century reconstructions of palaeontological findings emerged primarily from the scientific consciousness, not from scientific evidence; therefore, such images link literary portrayals of primitive, often extinct, animals to fantastical representations of human origins. It examines the dinosaur in Victorian Gothic fiction against the backdrop of palaeontological ideas about fossilised creatures, taking into account the crucial connections between geology and palaeontology. Furthermore, this chapter gives a more detailed account of the dinosaur models displayed at the Sydenham Crystal Palace in order to demonstrate how they and dinosaurs in other scientific contexts fed into the preoccupation with the human/animal past in Gothic fiction. Unlike the other

[10] Peter J. Bowler, *Fossils and Progress: Paleontology and the Idea of Progressive Evolution in the Nineteenth Century* (New York : Science History Publications, 1976), p. 29.
[11] See William Greenslade, *Degeneration, Culture and the Novel 1880-1940* (Cambridge: Cambridge University Press, 1994), pp. 70-1.
[12] These include, for example, Lynn Barber's *The Heyday of Natural History* (1980), Martin Rudwick's *Scenes from Deep Time: Early Pictorial Representations of the Prehistoric World* (1992), Stephen Jay Gould's *Dinosaur in a Haystack: Reflections in Natural History* (1996) Deborah Cadbury's *The Dinosaur Hunters: A True Story of Scientific Rivalry and the Discovery of the Prehistoric World* (2000), and Michael Freeman's *Victorians and the Prehistoric: Tracks to a Lost World* (2004).

chapters in this thesis, I am here concerned with the imaginary animal. Part of the dinosaur's intrinsic horror is that it has long been understood as a creature that, in a specifically Gothic way, erupts out of the past and into the present. Terrifying in its irrational forms and unknowable nature, the nineteenth-century dinosaur eluded science's quest for cogent comprehension. It was a mysterious being, horrifying both in its magnitude and otherworldly shape.

2. The dinosaur in science

The species question that preoccupied the Victorian scientific consciousness found a means of investigation in the dinosaur. These monsters are, in Miller's words, 'species beyond species'[13] and as such they represent terrifying spectres from the past. Like the frog, the dinosaurian body was difficult to classify because it was composed of parts from many different types of animals; in Miller's narrative the dinosaurian body is part snake, part fish, part mammal, with wings like those of a bat and horns as of a rhinoceros. Ralph O'Connor explains further:

> In their descriptions of these strange beasts, geological writers were familiarizing them for their readers by taking a known animal and adding other animals' features – the very technique used by Renaissance taxidermists to create monsters. Thus William Conybeare's Plesiosaurus was turtle-like and swan-like; Mantell's Iguanodon had affinities with the lizard, crocodile, and rhinoceros; Buckland's pterodactyle was a lizard in the form of a fiendish vampire. Monstrosity was inscribed into their names:

[13] Miller, *Testimony of the Rocks*, p. 143.

> Ichthyosaurus ("fish-lizard"), Pterodactyle ("wing-finger"), Pterichthys ("winged fish").[14]

The naming of such creatures typified the creatures' hybridity, as O'Connor points out here. But it was not simply that extinct animals were indeterminate in terms of being difficult to classify; it was also that the dinosaur fossils seemingly proved the extent to which the biological organism had evolved over vast tracts of time.

Paradoxically, however, investigations into the anatomical structure of these animals also raised questions about the extent to which particular organisms had *not* changed. Modern reptiles, for instance snakes and crocodiles, were outside of the natural scheme of life precisely because they had *not* evolved, as Mary Elizabeth Leighton and Lisa Surridge note.[15] Indeed, reptiles were symbolic of primitive life forms and their exhibition at various zoos, menageries, and aquariums fuelled the public fascination with them and ensured their place in popular culture.[16] In the 1860s, Huxley's study of the *Anthracosaurus*, an amphibian similar to the froglike labyrinthodont, persuaded him that this particular group of animals had not evolved for significantly long periods of time and could not, therefore, be included in Darwin's theory of natural selection. Instead, he argued, they exhibited signs of 'static existence'.[17] This assertion, made by Darwin's most vociferous supporter, suggests that no one could be sure exactly how evolution worked, or even if it did.

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[14] Ralph O'Connor, *The Earth on Show: Fossils and the Poetics of Popular Science, 1802-1856* (Chicago and London: The University of Chicago Press, 2007), p. 328.

[15] 'Victorians understood the crocodile to be an animal that had apparently not evolved since the prehistoric age, making it readily available for representing lower orders or earlier stages in an evolutionary taxonomy.' Leighton and Surridge, 'The Empire Bites Back: The Racialized Crocodile of the Nineteenth Century', in *Victorian Animal Dreams: Representations of Animals in Victorian Literature and Culture*, ed. by Deborah Denenholz Morse and Martin A. Danahay (Hampshire: Ashgate, 2007), p. 254.

[16] Barber notes the 'passion for keeping baby alligators which suddenly seized the womanhood of Southport in the 1870s'. *The Heyday of Natural History*, p. 13.

[17] 'So many Carboniferous amphibians – some as highly developed as their Triassic kin – had turned up by 1870 that he was able to hold them aloft as prime examples of 'persistence', in this case through a prodigious lapse of time "represented by the vast deposits which constitute the Carboniferous, the Permian, and the Triassic formations."' Desmond, *Archetypes and Ancestors*, pp. 86-7.

During the 1860s, when Huxley had doubts about whether all animals had evolved, he was articulating a general sense of malaise surrounding Darwin's theories. It was clear that research into the significance of fossils themselves was not an exact science. Owen once noted how, more than a hundred years earlier, one amphibian fossil had been mistaken for a human one[18], and in 1905 E. Ray Lankester remarked how some bones 'led to the notion of the existence of giants in former days, it not having occurred, apparently, to those who found them, that they were the bones of extinct animals and not of a great race of men'.[19] Although it was eventually proven that these remains were not human, it had become apparent that dinosaur fossils provided a platform from which it would be possible to widen the search for man's biological beginnings.[20]

In biological terms, the dinosaur was emblematic of reversion to primitive state. Thus, while fossils seemingly proved the extent to which organisms could change, which was life-affirming (in terms of the longevity of life itself), they were also remnants of death and symbolic of temporality, as Owen noted in his seminal work *Palaeontology* in 1860.[21] The cultural historian Barbara Black understands Owen's Sydenham Crystal Palace dinosaurs to be a manifestation of his ideas about temporality:

> Owen hoped that spectators would stand in subdued awe before the spectacle of the doomed prehistoric beast. But his greater ambition was that spectators

[18] 'Of the salamander family, the most noted fossil is that which was referred, when first discovered at Œningen in 1726, to the human species, as *Homo diluvii testis*.' Owen alludes here to the discovery of a giant salamander fossil, initially believed to be that of a human drowned in the flood. Owen, *Palaeontology*, p. 198. Broderip refers to these early days in palaeontology as a period when 'the blind led the blind' and he angrily asserts, 'it is difficult to believe how a physician […] could mistake the fossil bones of a salamander, or rather of a newt, for those of a human being. "Homo diluvi testis," what a comprehensive form of words [...] and yet 'twas neither man, woman, nor child, but a squab extinct reptile, that never witnessed the deluge at all.' *Zoological Recreations*, p. 325.

[19] E. Ray Lankester, *Extinct Animals* (London: Archibald Constable, 1905), pp. 2-3.

[20] On the history and importance of fossil evidence see J. William Schopf, *The Cradle of Life: The Discovery of Earth's Earliest Fossils* (Princeton, NJ; Woodstock: Princeton University Press, 2001).

[21] '[P]alaeontology demonstrates that life has been enjoyed during the same countless thousands of years; and that with life, from the beginning, there has been death. The earliest testimony of the living thing, whether coral, crust, or shell, in the oldest fossiliferous rock, is at the same time proof that it died.' Owen, *Palaeontology*, p. 3.

> would understand the beast's doom to be humankind's glory. In this redemptive discovery of dinosaurs humankind had come to know – and be blessed by – the mysterious workings of God and prehistory. Humankind shored up the Iguanodon's ruin against its own ruination, transforming the ruin in to the runic.[22]

What Owen failed to realise, however, was that the dinosaur signifies a terrible truth that would not escape his audience: the mass extinction of all and any species and implicitly therefore, the inevitable downfall of humankind. Nevertheless, although he seems to have eschewed emphasising this implication in his work, Owen was not slow to declare the significance of his labours in the introduction to his important study *Palaeontology*. In the first few pages of this book, he lays out the magnitude and value of dead and extinct animals for his reader:

> It [palaeontology] teaches that the globe allotted to man has revolved in its orbit through a period of time so vast, that the mind in its endeavour to realize it, is strained by an effort like that by which it strives to conceive the space dividing the solar system from the most distant nebulae. [. . .] At no point does it appear that the gift of life has been monopolized by contemporary individuals through a stagnant sameness of untold time, but it has been handed down from generation to generation, and successively enjoyed by the countless thousands that constitute the species. Palaeontology further teaches, that not only the individual, but the species perishes; that as death is balanced by generation, so extinction has been concomitant with the creative power which has continued to provide a succession of species; and furthermore, that, as regards the various forms of life which this planet has supported, there has been "an advance and progress in the main." [. . .] perhaps the most important and significant result of palaeontological research has been

[22] Barbara J. Black, *On Exhibit: Victorians and their Museums* (Charlottesville and London: University press of Virginia, 2000), p. 23.

> the establishment of the axiom of *the continuous operation of the ordained becoming of living things*.[23] (Original italics)

Owen was right to draw attention to the importance of the study of palaeontology; during the Victorian period, the science of extinct animals had a profound effect on scientific thinking and the public imagination.

From another angle, the dinosaur represented the Other implicit in Darwinian Theory. Although on the one hand perceived as degenerate beings when associated with the human, they also exposed the missing links in the chain between developing species.[24] Anatomical studies of fossilised bones showed that they were not as far removed from more advanced species as might have been supposed. Thus, these mindless beasts from time out of mind threatened the supposed integrity not only of the human form, but also of human progress and development:

> These bloodthirsty creatures [dinosaurs] were the same animals that physiology, anthropology, psychology, and Darwinian evolution all certified as the near relatives of men and, worse, women. Darwinism struck a particularly troubling note because human descent from such brutes implied that even Victorians could literally have inherited their ferocious nature. Did the thin veneer of civilization cloak a ravening beast raging at its flimsy chains? Many souls feared that it might. […] Man, stripped of his uniqueness, had been plunged naked into the jungle of the world of nature, and it frightened him.[25]

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[23] Owen, *Palaeontology*, pp. 2-3.
[24] For example, as Desmond notes, 'Huxley was in no doubt about a reptile-bird relationship. Since 1863 he had been teaching students that birds were "merely an extremely modified and aberrant Reptilian type", and the chicken and lizard (or the stork and "snake it swallows") even became unlikely bedfellows in a new vertebrate "province", which he called the "Sauropsida". […] With exquisite timing, he casually proposed that dinosaurs – the founders of the avian dynasty – probably had "hot blood" and a bird-like heart and lungs.' See *Archetypes and Ancestors*, p. 127.
[25] Turner, *Reckoning with the Beast*, p. 67.

Turner pinpoints the conceptual horror of the dinosaur here. He shows that the nature of the beast lurking within the human was often disclosed in palaeontological studies of extinct animals, implicitly rather than explicitly.

Published in the same year as the Sydenham Crystal Palace dinosaur exhibitions, John Mill's *The Fossil Spirit: A Boy's Dream of Geology* (1854) outlined the extent to which the imagination was necessary in geological endeavours.[26] Mill clearly intended his book to be educational and 'factual', yet he presents its scientific premise in a novelistic way, recounted by a fictional character, the fakir. In his story of creation, Mill recounts the progression of species in sixteen chapters, each chapter denoting an 'evening' that concludes with an account of all the ages of species, and how they blend into one another:

> Countless ages after I was an inhabitant of this place again, and it was a country of vast extent, diversified by hill and dale, with its rivulets, streams, and mighty rivers flowing through fertile plains; groves of palms, and ferns and forests of coniferous trees clothed its surface. I was a monster myself, and I saw monsters of the reptile tribe, so high that nothing among the existing races can compare with them, basking on the banks of its rivers, and roaming through its forests, while in its fens and marshes were sporting thousands of crocodiles and turtles; winged reptiles of strange forms shared with birds the dominion of the air, and the waters teemed with fishes, shells and crustacea. And after the lapse of many ages I was again an inhabitant of this same spot, and the country with all its innumerable dragon-forms and its tropical forests had disappeared [...] and I was an enormous deer, quietly browsing amongst groups of elephants, mastodons, and other herbivorous animals of colossal magnitude [...] After this I was here again as a monkey,

[26] Mill argues that geological treatises are usually 'entirely unfit for a lad, whose imagination must be excited and fancy stimulated.' John Mill, *The Fossil Spirit: A Boy's Dream of Geology* (London: Darton Books, 1854), p. x.

> and I have since visited the same place several times as a man; but how insensible are mankind of the great changes which are constantly taking place around them.[27]

The narrator's assertion that 'I was a monster myself' has a particular Gothic resonance here. For Mill, creatures from deep time prove the extent to which the human has evolved, and become something entirely different from what it originally was, whatever that may have been.

In Charles Kingsley's remarkable dream sequence in *Alton Locke* (1850), the narrator also finds himself on a journey through the evolutionary development of species. Ever conscious of ensuring that his tales involve a moral thread, Kingsley has Alton experience an evolutionary progression through various classes of animals as retribution for his earthly sins. He begins life as a coral: 'I was at the lowest point of created life; a madrepore rooted to the rock, fathoms below the tide-mark; […] I was not one thing, but many things – a crowd of innumerable polypi; and I grew and grew, and the more I grew the more I divided, and multiplied thousand and ten thousand-fold.'[28] Gradually, Alton progresses to the form of a prehistoric sloth: 'I was a mylodon among South American forests – a vast sleepy mass, my elephantine limbs and yard-long talons contrasting strangely with the little meek rabbit's head […]'[29] Alan Rauch has argued that

> it was critical for him [Kingsley] that Alton's transmutation – from brute to human – involve a transcendent element that could not be comprehended by material biology. To arrive at that special state of grace that distinguishes humans from all other

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[27] Mill, *The Fossil Spirit*, pp. 238-40.
[28] Charles Kingsley, *Alton Locke, Tailor and Poet* (London: Macmillan, 1890), p. 128.
[29] Kingsley, *Alton Locke*, p. 128.

> creatures requires active engagement in the pursuit of intellect and spiritual refinement; human beings must transcend their own animality to achieve futurity.[30]

The idea that Rauch posits here, that for Kingsley, humans must 'transcend their own animality' in order to *be* human highlights the perplexities in using animal metaphors in fiction. This is partly because the distinctions between human and animal in this part of the novel are never clear. The 'spark of humanity [is] slowly rekindling' in him throughout the dreamland narrative and he seems unable to shake off his humanity in his animal state. Finally, however, he is destined to remain an animal, deprived of those very faculties – self-awareness and divine inspiration – that define his humanity.

Similarly, H. G. Wells's dream narrative 'A Vision of the Past' (1887) is a captivating short story in which the narrator falls asleep and is transported into the deep past. Here he encounters a dinosaurian amphibian creature:

> After a time this uncouth beast began slowly to turn round towards me, and then, indeed, I beheld what appeared to me more surprising than all the other grotesque features I had observed; for this strange beast had three eyes, one being in the centre of its forehead; and it looked at me with all three in such a manner that the strangest feelings of fear and trembling were aroused within me […] it made a noise such as I had never before heard, and I live in the faith and hope I shall never hear it again. The auditory impression is ineffaceably impressed upon my memory, but I lack words, and hesitate even to attempt, to convey its horrors to the minds of my readers.[31]

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[30] Alan Rauch, 'The Sins of Sloths: The Moral Status of Fossil Megatheria in Victorian Culture', p. 223.

[31] H. G. Wells, 'A Vision of the Past', *Science Schools Journal* , 7 (June 1887), pp. 206-7. Repr. in *Early Writings in Science and Science Fiction by H. G. Wells*, ed. by Robert M. Philmus and David Y. Hughes (Berkeley: University of California Press, 1975), p. 154.

This 'uncouth' primordial beast has 'grotesque features', it is 'strange' and awakens feelings of 'fear and trembling' in the narrator. Although the noise it makes has made a strong impression upon his memory, he hesitates to 'convey its horrors' to his reader. There's a sense here of the inimical stance that the American takes towards the An in *The Coming Race*. Coming face-to-face with a monster – a three-eyed monster at that – has a curious effect on the narrator. He feels threatened and overwhelmed by the experience.

The point of Wells's cautionary tale of entering the deep past has evident educational motives. While the narrator is exploring the prehistoric environment he comes across several of these amphibious creatures speaking about their perfect form and permanence of species: '"During all the vast ages to come"', claims the misguided amphibian, '"we shall continue upon this earth, while lower beings pass away and are replaced. This world is ours for ever, and we must progress for ever into infinite perfection."'[32] Up to this point, the narrator has listened with 'great amusement' to these 'absurd claims' but can keep quiet no longer. He rushes towards the animals to tell them the truth of their fate:

> 'O, foolish creature! Think you yourself the great end of creation? Know, then, that you are but a poor amphibian; that, far from lasting for ever, your race will in a few million years – a trifle in comparison with the enormous lapses of geological chronology – be wholly extinct; that higher forms than you will, by insensible gradations, spring from you and succeed you; that you are here only for the purpose of preparing the earth for the reception of those higher forms […]'[33]

By using the dinosaur as an analogy for the human, Wells succeeds in promoting his own political message about the fate of species. No class of animals is safe from extinction – particularly dominant ones, such as dinosaurs and humans – and this (rather amusingly

[32] Wells, 'A Vision of the Past', p. 156.
[33] Wells, 'Vision of the Past', p. 156.

spoken) exchange between dinosaur and human demonstrates that, in Wells's view, any arrogant claims about being the pinnacle of evolution are mistaken. Crucially, Wells is much more direct than Owen in his portrayal of the future of humanity. Extinction, in Wellsian terms, is very much a reality and he expounds his theories on it in fiction. By employing the dinosaur trope, Mill, Kingsley, and Wells stretch the limits of the human for, in many ways, as their fiction attests, monsters *are* us, they are 'both like us and profoundly other'.[34]

In scientific treatises, extinct animals were often presented in their fossil form, exhibited merely in bone structure, without soft tissue.[35] But in Gothic fiction, extinct animals come back to haunt the literary landscape in monstrous shapes that transgress bodily boundaries, they emerge from hollow lands secreted deep within the earth, they inhabit rocky burrows beneath ground, or lurk within the vales of mysterious hills. In the Gothic mode such creatures are displaced, dislocated from the past in order to penetrate the reader's psyche to scare and terrify.[36] Those 'monstrous forms on the walls' that Miller had referred to in *Testimony of the Rocks* were brought to life in Gothic fiction and illustrations for books on the dinosaur. Given the small amount of evidence accumulated from this vast period of earth's history, and in view of the ambiguity of the shapes and forms of extinct animals, illustrations of the pre-human past were predominantly inventive and quasi-scientific, and fictional accounts of the history of life on earth abounded in Victorian literary and scientific culture.

[34] Nancy Rose Marshall, '"A Dim World, Where Monsters Fear to Tread": The Spatial Time of the Sydenham Crystal Palace Dinosaur Park', *Victorian Studies*, 49:2 (Winter 2007), pp. 286-301.
[35] For example see W. W. Watts, *Geology for Beginners* (London: Macmillan, 1898)
[36] Everett Bleilet astutely points out that dinosaurs often feature as a popular quasi-scientific component in the lost-race narrative of the late nineteenth century. Although I do not solely give attention to lost civilisation stories in this chapter, this is certainly true of the fiction I draw on to discuss how animals were used by Victorians to see into the past. Everett F. Bleilet and Richard Bleilet, *Science Fiction, the Early Years* (Ohio: Kent State University Press, 1990), p. xi.

3. Gothic palaeontology

The idea that mythical dragons were species-confused animals – just like their oddly-shaped prehistoric animal cousins – was an old one; as Edmund Goldsmid's 1886 translation of George Caspard Kirchmayer's 1691 text 'On the Dragon' showed, the dragon had long been thought to be a combination of many different types of animals:

> The creature is called the Dragon, not from its shape, but from its hurtful nature. It is a long and thin animal, while the Sea Dragon is quite different. There is a dried specimen in France of this shape, and without feet, but furnished with bat's wings. Its head is serrated, and its crest comes to a peak on its head. It has a flexible tail, two feet in length, and bristling with prickles. The skin is like that of a skate.[37]

Figure 11. 'The Sea-Dragons as They Lived': John Martin's mezzotint for the frontispiece of Thomas Hawkins's *Book of the Great Sea-Dragons* (1840).

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[37] Edmund Goldsmid, *Un-natural History or Myths of Ancient Science*, 4 vols (Edinburgh: Privately Printed, 1886), 3, p. 21.

Kirchmayer's description of the dragon reflects scientific discourse on dinosaurs throughout the 1800s, and so while the essay is very much a product of its time, it also demonstrates the fact that a link between dragon myth and dinosaur science had existed for several hundred years. This connection was undoubtedly deeply rooted in Victorian popular culture. Interestingly, as we find elsewhere in scientific literature and in the Gothic novel, the boundary between fact and fiction blurs in descriptions of the physiological indeterminacy of such mythical creatures. This dragon has a serrated crest on its head like a lizard, wings like those of a bat, and skin like that of a fish. It is a confused melange of anatomical parts and Kirchmayer is unable to 'give a decisive opinion either one way or the other as to whether the Dragon is a distinct species or merely a variety of a genus. Distinguishing characteristics can neither be derived from the places wherein it is found, not its size, nor even from the variety of its colour'.[38]

Figure 12. John Martin's mezzotint for the frontispiece of Gideon Mantell's *The Wonders of Geology* (1838).

[38] Goldsmid, *Un-natural History*, p. 30.

As versions of primal forms, modern reptiles were linked etymologically with dragons (in the word 'wyrm'), and through anatomical association, with dragons of mythology. Dinosaurs were, like dragons, grotesque beasts reconstructed from the parts of many different types of animals, old and new, primordial and modern, and the sculptors and painters involved in their artistic representations exulted in their creative possibilities. Indeed, there was very little consideration for anatomical precision in the artist's impression of the prehistoric monster. As O'Connor has correctly noted,

> Geology presented its popularizers with a difficult challenge: how to represent landscapes and animals no human eye had ever seen, eliciting wonder without compromising the "factuality" of their claims. Geological restorations necessarily belonged more to the world of fancy and imagination than did visions of the fall of Nineveh, whose history could at least be claimed back to go back to ancient eyewitness-accounts. 'The past is always a fiction', but especially the prehuman past. [39]

Martin's representations of the deep past, as Rudwick further argues, were 'nightmarish' and the mezzotint for the frontispiece of Hawkins's book, *The Book of the Great Sea-Dragons* (1840), was no different (see figure 11).[40] Here Martin painted truly ferocious beasts, prehistoric animals of all shapes and sizes that epitomised the indeterminate anatomy of the animal. His monsters have numerous protruding carnivorous teeth, webbed feet, claws, staring bulging eyes, wings, and scales, clearly making the animals more hideous and fearsome by adding dragon-forked tongues and giving the plesiosaurus, for example, a snake-

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[39] O'Connor, *The Earth on Show*, pp. 325-6.

[40] Rudwick points out in his discussion of John Martin's mezzotint for the frontispiece of Gideon Mantell's *Wonders of Geology* (1838): 'Although evidently inspired by the iguanodon and pterodactyle, the animals are portrayed with scant regard for anatomical accuracy and are derived more from the long artistic tradition represented by innumerable paintings of "Saint George and the Dragon."' Rudwick, *Scenes from Deep Time*, p. 80.

like neck. These images are appropriate for a book that depicts a fantastical world of fairytale and legend, one in which Hawkins employs dragons and monsters in order to create nightmarish scenes of primitive life:

> The Manes of the Primal Earth, melancholical and extremely tenuous, haunting the solitary wastes and ruins of the World, stalks away alone from the fickle Generations of Man, through the labyrinthian Chambers and oppressive Mists of Ages.
>
> The Antique spirit of the Earth, wrinkled with Time, and of visage, ploughed by Grief and Despair, plunging into abstracted parts, sits for ever upon the centres of things, remote from Vulgar gaze. The mortalities, certes, are sometimes found in the tomb of uncounted Ages, exuvial bones protrude ghastly through the worn out Pall of Matter, or are cast up out of the sickening Grave in earthquake pangs, but the stern and terrible Ghost of the Dead worlds is abstraction all, shapeless, and infinitely strange.[41]

Here Hawkins plays upon gory Gothic images of supersized beasts with huge carnivorous teeth and scaly skin, while at the same time romanticising the pre-human past as a time of lush vegetation and tropical conditions. His description of a scene in which the sea serpent readies for attack on its prey invokes Gothic imagery and language in rather surprising ways:

> The Cunning and cruel Snake, whetting his fangs with poison in treacherous lair, and following with malignant eye the unconscious creature of his lust, moves but at his peril. Behind the Conservative instinct, the victim in which he anticipates

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[41] Hawkins, *The Book of the Great Sea Dragons*, p. 24.

> Death and a banquet of blood, is assured of one other chance of life, extorted from the Destroyer himself.[42]

Hawkins's use of descriptive terms such as 'cunning', 'cruel', and 'malignant' is indicative of the horror of ancient monsters. While maintaining a sense of the romanticised past, he deliberately employs language that depicts the dinosaur as a terrifying and fearsome animal: the snake 'whet[s] his fangs'; his 'lair' is 'treacherous'; he 'lust[s]' the creature he stalks. It is a deeply disturbing scene, and one which awakened the imagination of some of the most prolific and celebrated Gothic writers of the early twentieth century.[43]

In Bram Stoker's Edwardian novel *The Lair of the White Worm*, Lady Arabella Marsh, the worm of the title, is a supernatural ancient primordial being that lurks within the undergrowth of England's remote spaces. As in artistic and educational depictions of the dinosaur in art, Arabella is indeterminate (is she/it human or animal?). Notably, the terms 'dragon' and 'dinosaur' are used interchangeably in some Victorian palaeontological textbooks. Like science, Stoker's Gothic novel links dragons, serpents, and primordial worms with myths of origin in the form of the primeval animal.

4. The Dragon and the Wyrm: Palaeontological Awakenings in Stoker's *The Lair of the White Worm*

Set in 1860, published in 1911, *The Lair of the White Worm* employs a rather convoluted and elaborate plot. The tale features a young man, Adam Salton, who arrives in the historic 'ancient Kingdom of Mercia' to visit his great uncle. Adam has travelled from his native

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[42] Hawkins, *The Book of the Great Sea Dragons*, p. 12.

[43] More than sixty years later, in his introduction to *Dragons of the Air: An Account of Extinct Flying Reptiles* (1901), Seeley argued that such animals are 'astonishing in their plan of construction' because 'they are unlike birds and beasts which, in this age, hover over land and sea'. He continues, 'They gather into themselves in the body of a single individual, structures which, at the present day, are among the most distinctive characters of certain mammals, birds, and reptiles.' H. G. Seeley, *Dragons of the Air: An Account of Extinct Flying Reptiles* (London: Methuen, 1901), p. 1.

Australia with the understanding that he will inherit his great uncle's estate upon his death. His great uncle's friend, Sir Nathaniel de Salis, soon befriends Adam and between them the men embark on a quest to unravel the meaning of local folklore and traditions. The land upon which his relative's estate lies has great historic significance and, early in the tale, Sir Nathaniel encourages Adam to take note of this prehistoric setting as a way of exploring some of the area's local superstitions and legends. Before long, Adam and Sir Nathaniel turn their attentions to Lady Arabella Marsh, whom they believe to be implicated (though at first they know not how) in the peculiar goings on in the region. Arabella's desire, it transpires, is to marry Edgar Caswall, the heir to a local estate called Castra Regis. Like Adam, Caswall is a newcomer to the region, having been born and brought up in Africa. Following Caswall's appearance, and as Adam and Sir Nathaniel delve ever further into the possible veracity of local legends, it gradually becomes apparent that sinister forces are at work. Amongst other strange happenings, Adam witnesses Caswall's black African servant Oolanga being murdered by Arabella, Caswall uses his mesmeric techniques on Adam's fiancée's cousin Lilla to devastating effect, and Adam and Sir Nathaniel observe (and only just escape) the legendary white worm stalking in the forest at night. These bizarre events lead the men to the rather disturbing conclusion that the primordial monster that plagues the countryside of mid-nineteenth-century England is none other than Lady Arabella Marsh, the blonde-haired, blue-eyed beauty of the tale. Arabella's indeterminacy of species – she is both worm and woman – allows her to transgress time and genus. Described as an 'unclassed animal',[44] she is a super monster in her 'greater longevity, greater size, greater strength' (p. 51). She is animal and human, primitive and modern; like the dinosaur, she bridges the gap between past and present.

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[44] Bram Stoker, *The Lair of the White Worm* (London: William Rider and Son, 1911), p. 75. All further references to this novel are to this edition and will be given in the text.

Thus, in this Gothic tale of mystery and suspense, the past literally erupts into the present. Stoker's worm/woman emerges into modernity from beneath the ground like a monstrous palaeontological spectre. Arabella's humanity is monstrous. She exists on the cusp of society, in the uncultivated spaces of the English countryside. She is an example of Cohen's theory of the returning monster in human culture:

> Monsters are our children. They can be pushed to the farthest margins of geography and discourse, hidden away at the edges of the world and in the forbidden recesses of our mind, but they always return. And when they come back, they bring not just a fuller knowledge of our place in history and the history of knowing our place, but they bear self-knowledge, *human* knowledge – and a discourse all the more sacred as it arises from the Outside. These monsters ask us how we perceive the world, and how we have misrepresented what we have attempted to place. They ask us to reevaluate our cultural assumptions about race, gender, sexuality, our perception of difference, our tolerance toward its expression. They ask us why we have created them.[45]

Arabella is just such a monster. At the limits of the human, she symbolises cultural fears and anxieties about humankind's place in the natural world. She causes the reader to reassess what the ancient, primordial, extinct animal represents in the modern world of industry and consumerism. At the edges of what it means to be human, the unclassified and unclassifiable human-worm figure – a composite of advanced and primitive biological forms – functions as a nightmarish phantom that literally incorporates the past and present at once. In her, species and time collide to create a horrifying vision of a technological monster. Moreover, by evoking the contemporary fascination with fossils and imaginative renderings

[45] Cohen, *Monster Theory*, p. 20.

of dinosaurs, Stoker plays upon his reader's deepest fears about origins and extinction. Steeped in mythology and science, *Lair* is a story that ignites the imagination. It lays bare the emotional experience of dealing with those images of ancient and extinct animals that had become so popular in the Sydenham Crystal Palace exhibition.

Furthermore, Arabella stands metonymically for the process of human evolution over vast tracts of time and space. Significantly, the monster has acquired, over time and by ontogeny rather than phylogeny, the ability to shape shift between human and worm. Stoker's monster is a 'technological' shape-shifter (using the technology of organic adaptation), a monster that has, in accordance with Darwin's theory of natural selection, adapted in order to survive in the modern world, needing to be both human and animal. The novel's amateur geologist and natural historian, Sir Nathaniel, speculates that such radical metamorphosis is possible, suggesting that it is not beyond the imagination to

> 'suppose a monster of the early days of the world – a dragon of the prime – of vast age running into thousands of years, to whom had been conveyed in some way – it matters not – a brain just sufficient for the beginning of growth. Suppose the monster to be of incalculable size and of a strength quite abnormal – a veritable incarnation of animal strength. Suppose this animal is allowed to remain in one place, thus being removed from accidents of interrupted development: might not, would not this creature, in process of time – ages, if necessary – have that rudimentary intelligence developed? There is no impossibility in all this. It is only the natural process of evolution; not taken from genii and species, but from individual instances.' (pp. 197-8)

Sir Nathaniel imagines a prehistoric animal with highly evolved intelligence. Like Huxley's theories about the *Anthracosaurus*, the White Worm's rate of biological evolution is static, though its intellect has continued to progress. Arabella's ability to shape shift

between human and worm makes her a highly sophisticated organism; she is able to adapt spontaneously to meet the needs of the moment, not just the overall time period.

Having set up the theoretical aspects of their hypothesis, Adam is more specific in the examples of other such monsters that may abound in the English countryside according to common folklore:

> 'Take, for instance, monsters that tradition has accepted and localised, such as the Worm of Lambton or that of Spindleston Heugh. If such an one [*sic*] were, by its own process of metabolism, to change much of its bulk for intellectual growth, we should at once arrive at a new class of creature, more dangerous, perhaps, than the world has ever had any experience of – a force which can think, which has no soul and no morals, and therefore no acceptance of responsibility. A worm or snake would be a good illustration of this, for it is cold-blooded, and therefore removed from the temptations which often weaken or restrict warm-blooded creatures. If, for instance, the Worm of Lambton – if such ever existed – were guided to its own ends by an organised intelligence capable of expansion, what form of creature could we imagine which would equal it in potentialities of evil? Why, such a being would devastate a whole country.' (pp. 198-9)

In a nightmarish vision of evolution gone wrong, Stoker imagines the impact of an intelligent monster on modern society – if such a creature existed, it would have no soul, and therefore no morality. In human form, but with the monster's mindset, such a creature would exist outside the normal parameters of civilisation.

There is very little published criticism available on *The Lair of the White Worm* and when it is discussed, critics tend to discard the novel as a failure, misplace it in the Gothic canon, or provide a sweeping overview of the text. David Punter's assessment of the novel,

an essay that, surprisingly, he entitles specifically 'Echoes in the Animal House', falls into the latter category. Punter makes the rather limited and seemingly vague assumption that animals in the novel 'signify danger, triumph and defeat'[46] and the significance of Arabella's transformation into snake, in his view, is entirely mythical.[47] However, given the significance of scientific research into the anatomy and nature of the dinosaur in nineteenth-century popular culture, Punter fails to note the import of the worm as a mythical *and* scientific animal and seems entirely confused by the shape-shifting trope that underpins the story:

> At one point we seem to be required to believe that the worm has somehow evolved into human form by swapping its physical grandeur for a commensurate portion of intellect. At other points we are encouraged to believe that the worm somehow inhabits Arabella's body. However, neither of these explanations conforms at all with the way actual transformations between human and animal occur, such that the worm itself can be seen rising in the darkness above the treetops, its green eyes flashing.[48]

Unable to accept that the monster is both 'real' and supernatural, belonging to the realms of Todorov's theory of 'the fantastic',[49] Punter cannot pinpoint the true nature of Arabella's monstrosity. But perhaps he is missing the point; to note Carol Senf's more astute reading of the novel, the White Worm is a 'bona fide supernatural monster', one that 'can

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[46] David Punter, 'Echoes in the Animal House', in *Bram Stoker: History, Psychoanalysis and the Gothic*, ed. by William Hughes and Andrew Smith (Basingstoke: Macmillan Press, 1998), p. 176.

[47] I mean to say here that, although the White Worm cannot be ratified by mythology, Arabella's ability to shape-shift does refer to a myth of origin that Punter has overlooked, that of Original Sin. By combining the snake of antiquity with the biological framework of the modern human, the monster is no longer confined to the primordial past; in human form it slithers into the present, seeking financial collateral in order to secure its (biological, i.e. material) future. While on the one hand she is an 'antediluvian monster', she is also 'a woman, with all a woman's wisdom and wit, combined with the heartlessness of a cocotte and the want of principle of a suffragette. She has the reserved strength and impregnability of a diplodocus' (p. 206). The interrelationship between primordial reptile and human is thus made explicit, even if the mode of distinction between the two is not.

[48] Punter, 'Echoes in the Animal House', p. 181.

[49] See Tzvetan Todorov, *The Fantastic: A Structural Approach to a Literary Genre* (Ithaca, New York: Cornell University Press, 1973).

easily be controlled by science'.[50] Just as the palaeontological animal of scientific literature is ratified in fantastical ways, so do the auspices of science control Arabella.

Kelly Hurley has read *Lair* in terms of its gender and psychoanalytical aspects.[51] She argues that Arabella's doppelganger is the worm itself, but although there is a doppelganger, the worm is not necessarily it. Arabella is not the only monstrous animal of the tale. In a narrative replete with racist overtones, Oolanga, Caswall's black African servant, is represented as the actual monster. Stoker's concept of the monstrous confounds spatial categories: black/white, male/female, foreign (specifically African)/ English. When Arabella and Oolanga first meet, for example, this doubling works to striking effect:

> As Lady Arabella and Oolanga arrived almost simultaneously, Adam began to surmise what effect their appearance would have on each other. They were exactly opposite in every quality of appearance, and, so far as he could judge, of mental or moral gifts or traits. The girl of the Caucasian type, beautiful, Saxon blonde, with a complexion of milk and roses, highbred, clever, serene of nature. The other negroid of the lowest type; hideously ugly, with the animal instincts developed as in the lowest brutes; cruel, wanting in all the mental and moral faculties – in fact, so brutal as to be hardly human. (p. 36)

That the novel manifests deep suspicions about where Oolanga fits in terms of species and race would suggest that he is the monster of the tale. However, by blurring the boundaries between human and animal, Stoker sets up racial and species binary oppositions

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[50] Carol A. Senf, *Science and Social Science in Bram Stoker's Fiction* (Westport: Greenwood Press, 2002), p. 10.

[51] Hurley has interpreted the worm as a monster that 'confuses gender distinctions: she [Arabella] acts with a forcefulness and aggression befitting a man and a savagery unbecoming a woman. Her monster-double confuses sexual distinctions: the worm inhabits an "enormously deep well-hole," suggesting an exaggerated and phantasmic version of the female genitalia, and yet this gigantic "worm" must also be read as a gigantic phallus, inappropriately bestowed upon (or lurking within) a female body.' Hurley, *The Gothic Body*, p. 124.

in order to break them down later when Arabella is discovered to be the White Worm. Thus, the tale deliberately, though somewhat ambivalently, subverts traditional human/animal roles. While Arabella is a member of the English aristocracy, white, beautiful, blonde, and blue-eyed, Oolanga is black, hideous, animalistic, and 'hardly human'. The paradox at the heart of the story, however, is that within the pure white figure of Arabella lurks a primordial beast much more potent, and much more threatening, than Oolanga could ever be. That Oolanga must die at the hands of Arabella in order to reveal and confirm her monstrous nature to her destroyers is a more precarious aspect of this line of argument, though no less relevant.

Despite Stoker's biographer Barbara Belford's assertion that Arabella 'is a giant, primordial worm'[52] I have attempted to establish here that Arabella's worm status is a metaphor for species confusion rather than a genuine shape-shifting trope. Understood in a palaeontological context, *Lair* is an 'animals come alive' story (something I will discuss further later in this chapter) and is thus a living relic from the prehuman past. The limits of Arabella's humanity are unbounded by time, which explains her indeterminacy of species. On the surface, she is simultaneously human, worm, snake, and dragon. However, she is, of course, none of these: she is simply one of the monstrous Others in Stoker's tale. The novel's plot, as several literary critics have pointed out, may be weak, but within the context of the fascination with Victorian palaeontology, the concept of such a human/animal monster existing and functioning in the modern world reveals deeply rooted anxieties about humankind's place in the natural world

5. **Arthur Machen's geological Gothic fiction**

Geological research uncovered two vital pieces of evidence in the search for humankind's origins. First, geology proved that the earth was much older than suspected and certainly

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[52] Barbara Belford, *Bram Stoker: A Biography of the Author of* Dracula (London: Phoenix, 1996), p. 318.

much older than the Bible claimed. Second, geologists uncovered hitherto concealed fossilised remains of extinct species, thereby exposing the secret history of the animal kingdom. Out of the ground emerged the bones of animals beyond human imagination in size, shape, and strength, and the implications of such findings for anthropology were recognised as hugely significant. Geology seemed to offer the key to answering the most complex matters under discussion. Who are we? Where do we come from? Where are we going? What makes us human? Paradoxically, however, while geological science sought to elucidate the origins of life, the sheer complexity of the species question pushed human origin further into obscurity, providing huge scope for Gothic tropes and themes in fiction.[53]

Arthur Machen, an obscure yet important occult writer of the late-nineteenth and early-twentieth centuries, wrote fiction in which the geological landscape holds a certain sense of mystery, suspense, and unease. For Machen, the earth withholds truths concerning the origin of species. This may be because, from Machen's childhood, argue his biographers Mark Valentine and Roger Dobson, 'the land exercised a tremendous spiritual influence on him'.[54] Valentine suggests that Machen's 1904 text, *The White People*, for example, develops 'a landscape in which all things have a sinister and hidden meaning beyond their outward appearance, in which a word or a thought or gesture will transform tree, stone, mound into sentient beings'.[55] In this novel, impressions of life have worn their way onto the landscape and the rocks' haunting features evoke horror:

> I went on into the dreadful rocks. There were hundreds and hundreds of them.
>
> Some were like horrid-grinning men; I could see their faces as if they would jump

[53] Conversely, as Lyell points out, the more science uncovered, the darker the vision of the past Victorian scientists exposed and it was geology, more than any other nineteenth-century science, which exemplified this view. Lyell commented on 'metaphysical riddles which in the present state of our knowledge are mysteries [that] by no means diminish in magnitude as we advance'. Lyell, *Sir Charles Lyell's Scientific Journals on the Species Question*, p. 358.
[54] Mark Valentine and Roger Dobson, *Arthur Machen: Apostle of Wonder* (Oxford and Northampton: Caermaen Books, 1985), p. 3.
[55] Mark Valentine, *Arthur Machen* (Bridgend: Poetry Wales Press, 1995), p. 62.

> at me out of the stone, and catch hold of me, and drag me with them back into the rock, so that I should always be there. And there were other rocks that were like animals, creeping, horrible animals, putting out their tongues, and others were like words that I could not say, and others like dead people lying on the grass.[56]

For Machen, the earth imitates, or reproduces, images of humans and animals from the past: our origins are written on the land, yet interestingly, the rocks that portray our history are qualified by the Gothic adjective 'dreadful'. Machen here recreates a geological terrain that is fundamentally Other, for these rocks lead to 'another world' (p. 73) where mystery, intrigue, and dark magic abound. In another of Machen's stories, *The Three Impostors* (1895), the hills harbour primitive beings and his anthropomorphic wasteland is the 'savage desolation' of a country that has been 'worn by the ravages of time into fantastic semblances of men and beasts' (p. 173).

In 'Novel of the Black Seal', one of the inset tales of *The Three Impostors*, a primitive, transformative human/ animal being lurks in the hills of the remote English countryside. Within the framework of the novel, this tale is fictitious, designed to dupe Mr Dyson and Charles Phillipps, the men the impostors hope will lead them to the spectacled young man they pursue through the streets of London. The story is invented by Miss Lally, who presents herself as a governess employed by a famous ethnologist, Professor Gregg, who has mysteriously disappeared. She recounts how the Professor took her and the children to a remote part of England, to 'barren and savage hills, and ragged common land, a territory all strange and unvisited, and more unknown to Englishmen than the very heart of Africa'.[57] Here, according to her tale, the Professor hoped to discover a lost primitive civilisation, a race that 'dwells in remote and secret places, and celebrates foul mysteries on savage hills […] the

[56] Machen, 'The White People', in *The White People and Other Stories* (USA Chaosium, 2003), p. 73.
[57] Machen, 'The Three Impostors', in *The Three Impostors and Other Stories* (USA: Chaosium, 2001), p. 148. All further references are to this edition and will given in the text.

customs of humanity are wholly strange to them' (p. 150). Machen's biographical notes, published in Henry Danielson's *Arthur Machen: A Bibliography* (1923), elucidate the premise upon which *The Three Impostors* was based. The creatures that haunt the unmapped spaces of Machen's English countryside are 'the Fairies, the Little People, [...] the dark, dwarfish, Pre-Celtic inhabitants of Britain'. In Machen's vision, 'these people still dwell under the hills, they are horribly evil, and they are something more – or something less – than human'.[58] When Professor Gregg brings a local boy, Jervase Cradock, to the house to do menial work for the family, the transmutable capabilities of this people (a race which, according to the professor, have 'fallen out of the grand march of evolution' (p. 166)) is soon discovered. This creature, which belongs to another time and space, reveals the dinosaur body to be even more otherworldly. The primitive monstrous body takes on a more eerie and unearthly persona in the technique Machen employs in his story within a story.

Jervase has foreign, 'alien' features; he has 'black hair and black eyes and an olive skin' and his voice is inhuman, he speaks 'in a queer, harsh voice' like 'someone speaking deep below under the earth' with 'strange sibilance, like the hissing of the phonograph as the pointer travels over the cylinder' (p. 153). However, the creature's primitive humanoid body (peculiarly snake-like in its hissing sibilance) has more horrifying capabilities, for, like Arabella Marsh, it has the potential to undergo fantastic biological change. In the professor's attempts to uncover the mysteries of this race, he recounts how the boy metamorphoses from human to tentacled snake. In the professor's narrative, he swears never to reveal 'how man can be reduced to the slime from which he came, and be forced to put on the flesh of the reptile and the snake' (p. 172). Later, however, he gives a detailed description of the metamorphosis:

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[58] Henry Danielson, *Arthur Machen: A Bibliography* (London: Henry Danielson, 1923), p. 27.

> I saw his body swell and become distended as a bladder, while the face blackened before my eyes; […] the sight I had to witness was horrible, almost beyond the power of human conception and the most fearful fantasy. Something pushed out from the body there on the floor, and stretched forth, a slimy, wavering tentacle, across the room […] I said, truly enough, that I had seen nothing truly supernatural, that a snail pushing out his horns and drawing them in was but an instance on a smaller scale of what I had witnessed; and yet the horror broke through all such reasonings and left me shattered and loathing myself for the share I had taken in the night's work (p. 173).

The professor's rational approach to the phenomenon he has witnessed suggests that, in naturalistic terms, the boy has done nothing truly strange: of course, there are animals, such as insects and amphibians, which do metamorphose. It is, however, the *human* association with such animals that creates terror. The implication of similitude with such creatures, and the loss of human individuality, form the subtext of human primitivism at the heart of this Gothic narrative. These 'survivals from the depths of being' close the gap between dinosaur and human in horrifying ways. The professor explains further,

> human flesh may now and then, once perhaps in ten million cases, be the veil of powers which seem magical to us – powers which, so far from proceeding from the heights and leading men thither, are in reality survivals form the depths of being. The amoeba and the snail have powers which we do not possess; and I thought it possible that the theory of reversion might explain things which seem wholly inexplicable. (p. 166)

If human flesh is the veil of mysterious transitive powers, it is geology, unveiled by Lyell and other geology enthusiasts, which has illuminated the history of species.[59] Moreover, in his depiction of the metamorphosis from human to snake, Machen evolves such theories into supernatural phenomenon.

In the following section, I will focus on the Sydenham Crystal Palace's impact on the Gothic adventure story. Dinosaurs, which in the fiction of Stoker and Machen have a symbolic association with the human, here confound spatial and temporal limits in bridging the gaps between species.

6. The Sydenham Crystal Palace dinosaur exhibition and the extinct animal in Victorian Gothic adventure fiction

In his lecture 'On the Visual Education as applied to Geology', delivered to the Society of Arts in 1854, Waterhouse Hawkins explained that his aim in reconstructing extinct animals was to 'call up from the abyss of time and from the depths of the earth those vast and gigantic beasts which the Almighty Creator designed with fitness to inhabit and precede us in possession of this part of the earth called Great Britain'.[60] Hawkins's localised model dinosaurs from deep time set on the edges of a suburban London setting create a sense of being lost in time and space. Martin J. S. Rudwick is correct to emphasise the significance of the Sydenham Crystal Palace dinosaurs display in the Victorian cultural consciousness. By visiting the dinosaur exhibition, Rudwick has astutely noted, 'In imagination if not in reality,

[59] In *The Antiquity of Man* (1863), Lyell stated, 'So long as geology had not lifted up a part of the veil which formerly concealed the naturalist from the history of the changes which the animate creation had undergone in times immediately antecedent to the Recent period, it was easy to treat these questions as too transcendental, or as lying too far beyond the domain of positive science to require serious discussion. But it is no longer possible to restrain curiosity from attempting to pry into the relations which connect the present state of the animal and vegetable worlds, as well as of the various races of mankind, with the state of the flora and fauna which immediately preceded.' Lyell, *The Geological Evidence of the Antiquity of Man* (Mineola, New York: Dover, 2004), p. 303.

[60] Printed in *Journal of the Society of Arts* 19 May 1854, pp. 443-9. Reprinted from this source in Steven McCarthy's *Crystal Palace Dinosaurs: The Story of the World's First Prehistoric Sculptures* (London: The Crystal Palace Foundation, 1994), pp. 89-92.

the Victorian public could believe themselves transported bodily into the deep past, and supposedly have their minds improved by the experience, while remaining safely within sight of a familiar English landscape'.[61] 'The impact', he continues, 'of three-dimensional reconstructions, modelled at full size, can hardly be over-estimated. These were creatures that were believable to the lay eye, almost as much as the exotic living animals on display at the zoo in central London. Hawkins's exhibit brought the scientists' vision of the reality of the deep past to the public imagination as never before, and it did so with the element of showbiz that has been inseparable from dinosaur displays ever since.'[62]

The historian of science Michael Freeman has also discussed at length the public's fascination with the Crystal Palace display of 'antediluvian monsters', arguing rather astutely

VISIT TO THE ANTEDILUVIAN REPTILES AT SYDENHAM—MASTER TOM STRONGLY OBJECTS TO HAVING HIS MIND IMPROVED.

Figure 13. A cartoon by John Leech for *Punch* (1855). A middle-class 'Master' Tom has his mind improved rather against his will. This satirical illustration emphasises the incongruity of the scene. A church lies within sight of the blasphemous monsters amongst which the boy and his educator stroll.

[61] Rudwick, *Scenes from Deep Time*, p. 148.
[62] Rudwick, *Scenes from Deep Time*, pp. 170-1.

that as one strolled around the Park 'one became a time-traveller'.[63] Rudwick and Freeman's impression of the impact of the scene on the spectator's imagination is given weight by a review of the exhibition published in Nelson's *Pictorial Guide Book*, which referred to the 'laidly' (hideous) antediluvian monsters as magnificent shapes, 'which [the student] has vainly taxed his imagination to conceive […] the spectator feels suddenly transported back over the gulf of ages to the ancient world!'[64] Despite the sensational reactions to these animals, the world's first prehistoric sculptures would not have been capable of penetrating the popular imagination to the extent they did without the aid of the burgeoning mass media market. Following the exhibition, the images of Hawkins's dinosaurs at Sydenham were disseminated as educational posters, public lectures, illustration books, and miniature replicas of the life-sized models, which were put on sale in Ward's catalogue of scientific supplies from the 1850s onwards.[65] Newspapers and magazines also played an often sardonic role in heightening awareness of the beasts. In one *Punch* sketch, for example, children were depicted being shown around the park unwillingly in an attempt to have their minds improved (see figure 13), and in another, visitors to the exhibition were portrayed having nightmares as an outcome of the monstrous creatures they had witnessed (see figure 14).

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[63] 'The Park at Sydenham became, in effect, a sensation. Hundreds of thousands of people flocked to see it. [...] It was no matter that the life-size models were actually rather inaccurate representations of the fossil structures that Mantell and others had discovered. Their scale and the savagery they portrayed were enough to fire popular imaginations already familiar with tales of supernatural dragons. [...] In a sense, as one proceeded through the Park, one became a time-traveller, exploring the unfathomable abyss that the early geologists like Hutton and Lyell had found themselves forced to invoke in order to make coherent their ideas about earth history.' Michael Freeman, *Victorians and the Prehistoric: Tracks to a Lost World* (New Haven; London: Yale University Press, 2004), pp. 160-1.

[64] Quoted in Piggott, *Palace of the People*, p. 158.

[65] For comprehensive discussion on the history of dinosaurs in the media, see James O. Farlow and M. K. Brett-Surman, *The Complete Dinosaur* (Bloomington: Indiana University Press, 1997), pp. 675-706 and Stephen Jay Gould, *Dinosaur in a Haystack: Reflections in Natural History* (London: Jonathan Cape, 1996), pp. 221-37.

Edward MacDermott's *Routledge's Guide to the Crystal Palace and Park at Sydenham*, aimed primarily at the adult market, invokes scenes of a romanticised prehistoric landscape, nightmarish and fantastic:

THE EFFECTS OF A HEARTY DINNER AFTER VISITING THE ANTEDILUVIAN DEPARTMENT AT THE CRYSTAL PALACE.

Figure 14. A cartoon by Henry R. Howard, entitled 'The Effects of a Hearty Dinner after Visiting the Antediluvian Department at the Crystal Palace' from *Punch* (1855).

> These were ages when a luxuriant vegetation prevailed, and huge creeping things, and carnivorous monsters, roamed through tangled brake, or pursued their prey along the shallow banks of vast inland seas. Here creatures more terrible and appalling than poet's fancy ever dreamed of, lived and died; and even now, entombed amid their rocky catacombs, though the sleep of countless ages has rolled over them, they still appear to human eyes the strangest and most terrible of created things. Jaws of monstrous size, all bristling with sharp and formidable teeth, are imbedded in rock, just as they gaped to devour their victim; and the transfixed eye-socket, huge and stony, still glares horridly

from its fossil skull, as it once did when overtaken by some resistless convulsion of nature.[66]

Figure 15. ‘The Crystal Palace and Gardens’, a coloured panoramic view drawn by Benjamin Waterhouse Hawkins and printed by George Baxter. British Museum Prints & Drawings, 1901-11-5-53.

Tellingly, although MacDermott’s account is not fictional narrative, it evokes precisely the same images as those found in popular tales about the animals of the prehistoric past. Like these stories, MacDermott’s vision of dinosaurs is one of haunting spectres from deep time that seek a return to the modern world. Dinosaurs represent ‘the strangest and most terrible of created things’ because they belong to another time and space. Moreover, they are extraordinary and terrifying because they implicitly suggest that species limits are not finite. As dinosaurs emerge from beneath the

Figure 16. Philip Delamott, ‘The Extinct Animals’. Chromolithograph. Matthew Digby Wyatt, *Views of the Crystal Palace and Park, Sydenham*, 1854.

[66] Edward MacDermott, *Routledge’s Guide to the Crystal Palace and Park at Sydenham* (London: Routledge, 1854), p. 192.

ground, fundamental questions about the true origin of life and the limits of human evolution arise, without a satisfactory explanation.

Nevertheless, despite the terrifying spectacle that the monsters clearly represented to their Victorian audience, the exhibition was in every way a huge success, even spawning a number of novels about imaginative journeys through time and space based on what could be observed at the exhibition. In one such novel, *The Sydenham Sindbad: A Narrative of his Seven Journeys to Wonderland* [1857], Mother Earth recounts the history of the natural world. While the book is unmistakably didactic in its intent, written to help children understand the exhibits they have visited, the images of such a world – and the language used to describe them – have Gothic resonance. Mother Earth describes labyrinthodonts, for example, as 'Frogs big enough to chew you into mincemeat and stow you comfortably away'.[67] Perhaps most disturbing, however, is her invocation of a primal scene:

> Mother Earth now made a pause, and seeming to give a sign by a nod of her head, where the pine-trees rose dark against the snowy mountains, a change came over the scene. The air became hot and stifling. Tall palm trees darkened the day. The great Frog croaked as loud as thunder. The Pterodactyles flapped their wings. The Sea-lizards plunged into the water and floundered about. The Land-lizards began to fight. The Palaeotherium roared in the distance, and the noise and confusion was terrible. […] I thought them hideous and frightful, and betrayed by my uneasiness a desire for change. The Mother saw it, and, with another nod of her brow, waved away the whole scene as if it had never been, and, speaking no word, disappeared into the fountains.[68]

[67] [Rand], *The Sydenham Sindbad: A Narrative of his Seven Journeys to Wonderland* (London: J. C. Brown and Co., [1857]), pp.73-4.
[68] [Rand], *The Sydenham Sindbad*, pp. 74-5.

Recognising the horror of the primordial scene for his child reader, the narrator hastily magics the scene away. Like much of the factual literature published on the Sydenham Crystal Palace exhibitions, this novel suggests that humans have no place in the distant past.

In other dinosaur stories, human beings are unwelcome intruders of liminal spaces. In these tales, dinosaurs inhabit out-of-the-way spaces, far from human civilisation, and those who transgress land barriers (and by doing so contravene species boundaries) fall foul of the animal's lair. When the protagonist of Weatherby Chesney's short story 'The Crimson Beast' begins his narrative by saying that such creatures actually do exist, it is a chilling reminder to the reader that if they did, the results would be terrifying.[69] The chapter, which forms part of *The Adventures of a Solicitor* (1898), recounts the story of two men who decide to venture into an unknown and seemingly uninhabited cave. There they discover a prehistoric monster 'smothered in slime like an eel's, only this slime was crimson, and it smelt of musk, not fish':

> It had the head of a crocodile, with teeth sticking out at the side of its jaws like those of a saw-fish's snout; its body was as big as a cow's, only twice as long, and tapering off into a tail like an otter's; and on each of its flanks it had a pair of limbs, half leg, half fin, something like a turtle's. The body was covered with a smooth, scaleless skin, crimson in colour, and covered with gouts of slime. [...] Then it began to swim slowly forward, and the full loathsomeness showed plain in the candlelight. It was absolutely without eyes; there were not even so much as sockets where eyes once had been in its ancestors. It opened its huge jaws and showed a palate sown with teeth. (pp. 191-2)

[69] 'It makes me smile sometimes grimly to myself when I hear people thanking their stars that we have no wild beasts in this snug England of ours to make the woods unsafe, or to devour the children from before the cottage door. And I smile, too, when men and women with a smattering of geology point to some fossilized bones, and speak of the greater of this earth's animals as being inhabitants of a prehistoric age, and thoroughly extinct for many a weary thousand year.' Weatherby Chesney, 'The Crimson Beast', in *The Adventures of a Solicitor* (London: James Bowden Books, 1898), p. 184.

The indeterminacy of species, such a common trait in writings about dinosaurs, is evident here once again. With jaws like those of a fish, a body twice the size of a cow, a tail similar in shape to an otter's, and limbs like those of a turtle, this monster is a melange of several different types of animals. Even in behaviour, the animal shows some resemblance to another species; when attacked, the creature 'hiss[es] like some monstrous cat' (p. 194). As in other dinosaur tales, [70] these wanderers encounter the dinosaur by entering the liminal space of its lair; they enter an 'other' world in both time and space. For hundreds of thousands of years this crocodilian monster has inhabited its cave, indifferent to and untouched by modernisation, until the explorers venture inside. Such creatures exist beyond the limits of the known world. They occupy spaces outside of what is understood and understandable.

Underground spaces play host to a wide variety of regressive animals in a number of Gothic science fiction texts.[71] In a Vernean adventure story of exploration into the centre of the earth, E. D. Fawcett's *Swallowed by an Earthquake* (1894) describes a 'superb view of the weird Mesozoic landscape'.[72] Here the narrator observes 'turtles, crocodiles, gigantic froglike monsters resembling labyrinthodons, with here and there ichthyosaurs, mostly of the smaller sorts. Overhead fly all sorts of winged things, among these *Pterodactylus spectabilis* and *Ramphorhynchus phyllurus* being easily recognisable'.[73] More detailed descriptions of the scene show how the creatures behave in their own environment:

> About a hundred yards in front of us a lizard-headed animal, with a very long serpentine neck, towering fifteen feet above the water, was approaching the raft. At first we thought

[70] Similarly, in *The Coming Race* the first animal encountered in the underworld is a living prehistoric reptile. Within moments of falling from a mineshaft into a hollow space in the earth, the narrator discovers a monster from the deep past: 'I heard close at hand a strange sound between a snort and a hiss; and turning instinctively to the quarter from which it came, I saw emerging from a dark fissure in the rock a vast and terrible head, with open jaws and dull, ghastly, hungry eyes – the head of a monstrous reptile resembling that of the crocodile or alligator, but infinitely larger than the largest creature of that kind I had ever beheld in my travels.' Edward Bulwer-Lytton, *The Coming Race* (Ontario: Broadview, 2002), p. 21.
[71] For example, Jules Verne's *Journey to the Centre of the Earth* (1864)
[72] E. D. Fawcett, *Swallowed by an Earthquake* (London: Edward Arnold, 1894), p. 70.
[73] Fawcett, *Swallowed*, p. 71.

> it was some enormous river-serpent, with the greater part of its fold submerged; but as it came nearer, we saw that the neck was attached to a huge, smooth black body, furnished with a flexible tail and two pairs of broad paddles, which were working energetically beneath the water. With its hideous open jaw filled with crocodilian teeth, its malevolently cold eyes, and long neck united to so strange a body, it presented an even more startling picture than the ichthyosaur we had first met.[74]

Like the depictions of dinosaurs in nineteenth-century art, Fawcett's monsters are indeterminate and therefore horrifying, a 'motley crew of dragons' indeed (p. 74). They occupy a liminal space on the map, or in fact, a non-existent space on the map, beneath ground. In the underworld narratives of Bulwer-Lytton, Fawcett, and Verne, the monster abounds. Liminal spaces are occupied by liminal bodies, those which represent the prehuman past. In Fawcett's vision, dinosaurs live alongside other figures of alterity, savage man. For Bulwer-Lytton, the advanced human creatures (the An race) that exist alongside the primitive creatures are able to use technological warfare against their ancient reptilian foe. Primeval reptiles exist *outside* the great march of evolution and therefore, as terrifying spectacles of the primordial past, are not fit for human co-habitation.

In some adventure narratives, ancient primordial beings represent unexplored spaces on Britain's colonial map. In H. Rider Haggard's 1894 novel *The People of the Mist*, Leonard, the novel's protagonist coloniser, encounters a race of people who worship a primordial reptile whilst seeking his fortune from a lost civilisation in the innermost depths of Africa. This is an animal 'whose name is Terror […] a holy crocodile which they name the snake, the biggest crocodile in the whole world, and the oldest, for he has dwelt there from the

[74] Fawcett, *Swallowed*, pp. 71-2.

beginning'.[75] Leonard's description of the beast is alarmingly convincing and resonates with earlier literary depictions of such ancient reptiles (such as those in 'The Crimson Beast' and *The Coming Race*):

> For as he stared, the waters beneath the feet of the idol were agitated as a pond is agitated by the rush of a pike when it dashes at its prey. Then for an instant the light gleamed upon a dull enormous shape, and suddenly the head of a crocodile reared itself out of the pool. The head of a crocodile, but of such a crocodile as he had never heard or dreamed of, for this head alone was broader than the breast of the biggest man, its dull eyes were the size of a man's fist, its yellow fangs were like the teeth of a lion, and from its lower jaw hung tentacles or lumps of white flesh which at a distance gave it the appearance of being bearded like a goat. Also, the skin of this huge reptile, which could not have measured less than fifty feet in length by four feet in depth, was here and there corroded into rusty excrescences, as though some fungus or lichen had grown upon it like grey moss on an ancient wall. Indeed, its appearance seemed to point to extreme antiquity.[76]

As in much of the palaeontology literature published throughout the nineteenth century, there is indeterminacy in the description of Haggard's primeval monster; several parts are the size of a man, it has teeth like a lion, and the appearance of being bearded like a goat. Yet it is none of these: it is a primordial reptile, a dinosaurian model of antiquity. Such encounters with dinosaurs in fiction throughout the 1890s came to represent not only something dreadful about late Victorian imperial endeavours (the dread attached to such animals surely alludes to the unpleasant business of colonisation), but also that something lurks behind rocks, beneath ground, and within unexplored caves that could expose the secret of humankind's past. Like

[75] H. Rider Haggard, *The People of the Mist* (London: Longmans, Green, and Co., 1894), p. 45. All further references are to this edition and will be given in the text.
[76] Haggard, *People of the Mist*, p. 183.

Machen's and Stoker's use of the snake as primordial beast, the reptilian dinosaur exposed the animal other implicit within the human past.[77]

One of Conan Doyle's lesser-known Gothic tales 'The Terror of the Blue John Gap', first published in the *Strand* in 1910, tells the story of a Dr James Hardcastle who, having contracted tuberculosis, spends several months convalescing on a remote Derbyshire farm. In the form of diary entries, Hardcastle's story centres on an area he describes as 'a most lonely spot', far from human civilisation, where the 'country is hollow'.[78] One morning, while passing the cavernous entrance of the Blue John Gap he hears a 'most extraordinary sound', 'a high whine, tremulous and vibrating, almost like the whinnying of a horse' (p. 306). Shortly after, he discovers blood smeared on the bushes near the cavern. Exploring further into the cave, he finds himself descending a 'strange, old-world corridor' (p. 307) into the depths of the earth. On the path downwards he notices a footprint 'too large to be caused by any possible animal' and though this unnerves him at first he realises that it would be illogical 'to associate so huge and shapeless a mark with the track of any known animal' (p. 308). Although concerned by the signs he has observed so far – the noise, the blood, the unusual footprint – and, despite proceeding cautiously, he falls into the river at the bottom of the path and extinguishes his candle. In the pitch black, far below ground, he hears the tread of a huge unidentified creature approaching him. Trapped, vulnerable, and alone, Hardcastle's thought processes are caught in Todorov's 'the fantastic', that moment of hesitation in which the character or reader must choose between the uncanny and the marvellous:

[77] In a discussion of the significance of the snake in Conan Doyle's 'The Speckled Band', Catherine Wynne argues that because it is 'slippery and beyond control, the snake is an anomalous creature'. In this story, Wynne sees the snake as a 'libidinized and Gothic symbol' which 'engages with the complex articulation of a colonial predicament.' Wynne, *The Colonial Conan Doyle: British Imperialism, Irish Nationalism, and the Gothic* (Westport: Greenwood, 2002), p. 121.

[78] Conan Doyle, 'The Terror of the Blue John Gap', in *The Lost World and Other Thrilling Tales* (London: Penguin, 2001), p. 304. All further references to this story are to this edition and will be given in the text.

> For a long time I lay upon the rock, too much horrified to move. I thought of the sound which I had heard coming from the depths of the cave, of Armitage's fears, of the strange impression in the mud, and now came this final and absolute proof that there was indeed some inconceivable monster, something utterly unearthly and dreadful, which lurked in the hollow of the mountain. Of its nature or form I could frame no conception, save that it was both light-footed and gigantic. The combat between my reason, which told me that such things could not be, and my senses, which told me that they were, raged within me as I lay. (p. 311)

This 'inconceivable monster', so 'unearthly' and 'dreadful' is beyond Hardcastle's imagination; he can 'frame no conception' on its shape or temperament. Fortunately, the doctor escapes unharmed only to come face to face with the creature soon after. Outside the animal's lair one evening, he sees the 'loom of some enormous shape, some monstrous inchoate creature' (p. 315) coming towards him:

> He had reared up on his hind legs as a bear would do, and stood above me, enormous, menacing – such a creature as no nightmare had ever brought to my imagination. I have said that he reared like a bear, and there was something bear-like – if one could conceive a bear which was tenfold the bulk of any bear seen upon earth – in his whole pose and attitude, in his great crooked forelegs with their ivory-white claws, in his rugged skin, and in his red, gaping mouth, fringed with monstrous fangs. Only in one point did he differ from the bear, or from any other creature which walks the earth, and even at that supreme moment a shudder of horror passed over me as I observed that the eyes which glistened in the glow of my lantern were huge, projecting bulbs, white and sightless. (p. 317)

Adapted to its underworld environment, the bear's sightless eyes bring 'a shudder of horror' to the doctor. Rendered alien and otherworldly by its anomalous biology, the ancient bear-like animal does not belong to the human world. Like the Sydenham Crystal Palace model dinosaurs, the animal is a nightmarish vision of 'normal' evolution gone wrong. The Megatherium, or giant ground sloth, shown here on display at Sydenham (see figure 17), may well have given Conan Doyle the inspiration to create the shaggy-haired monster of 'The Terror of the Blue John Gap'.

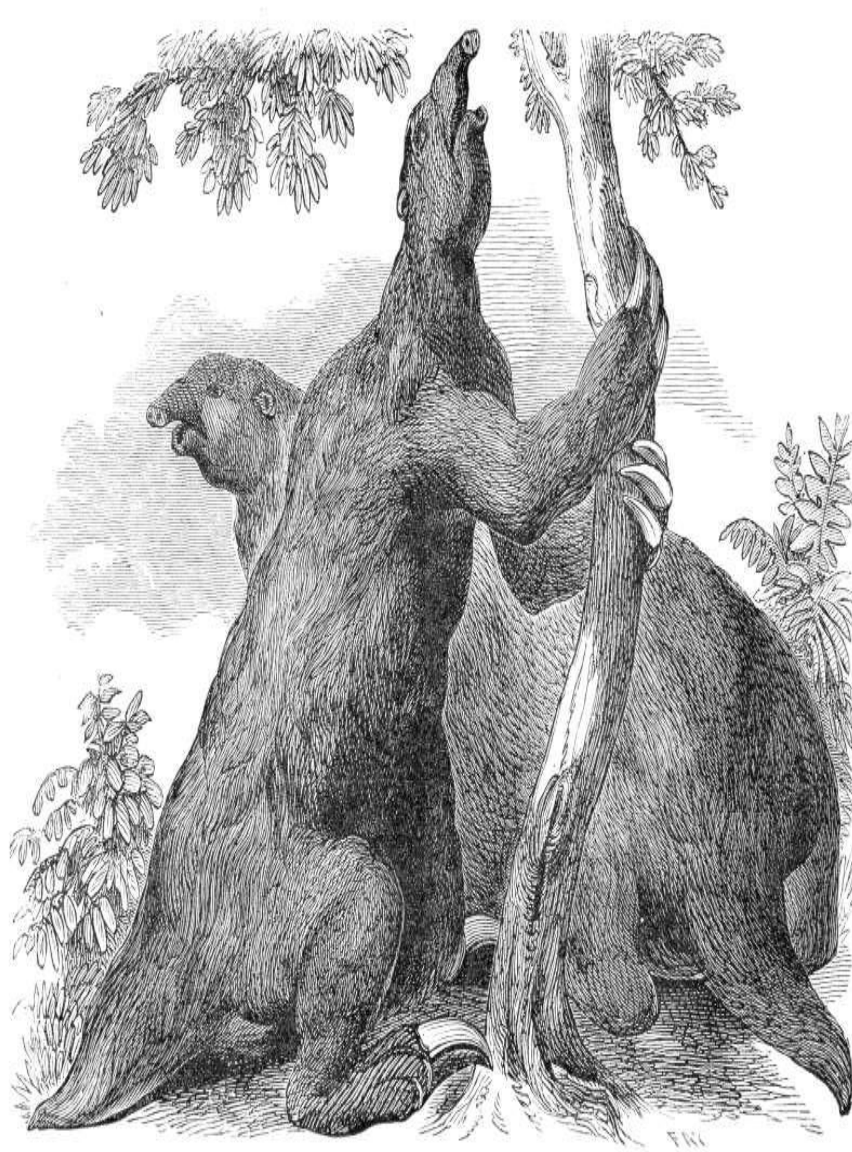

Figure 17. The Megatherium, a giant sloth-like creature, on display at the Sydenham Crystal Palace, similar perhaps to Conan Doyle's ancient bear-like creature in 'The Terror of the Blue John Gap'. Wood cut illustrations of Waterhouse Hawkins's 'Crystal Palace Prehistoric Animals' as published in *Johnson's Natural History* 1871.

Hardcastle survives this attack to die shortly after from tuberculosis. In his journal, he writes that the creature is probably 'the old cave-bear' of ancient times 'enormously enlarged and modified by its new environment' (p. 319). Although no conclusive evidence of Hardcastle's story exists, the local people barricade the entrance to

prevent the monster from stepping into the human world once more. By containing the dinosaur in this way, Conan Doyle expounds the message that the extinct animal belongs in the past. When the prehistoric and the modern worlds collide, chaos ensues.

The Lost World (1912), Conan Doyle's next dinosaur story, pursues a similar theme to 'The Terror of the Blue John Gap' but exoticises the primordial animal further by shifting it from the remote English countryside to territories beyond the boundaries of empire. In scenes similar to those illustrated in Pierre Boitard's *Paris Before Men* (1861) (see figure 18), the novel is set for the most part in unknown regions of South America. The journalist protagonist of the tale, Edward Dunn Malone, narrates an extraordinary story of exploration into unidentified and unheard of regions of the earth's surface. High up on a South American plateau, Malone and his fellow travellers stumble upon bloodthirsty relics from the past, alive in the modern world, if far from civilisation. These creatures have 'come alive' from Waterhouse Hawkins's dinosaur display at the Crystal Palace; they haunt a landscape hitherto uncharted by the civilised world, or colonised by the British. Canon Schmitt has cited *The Lost World* as an archetypal

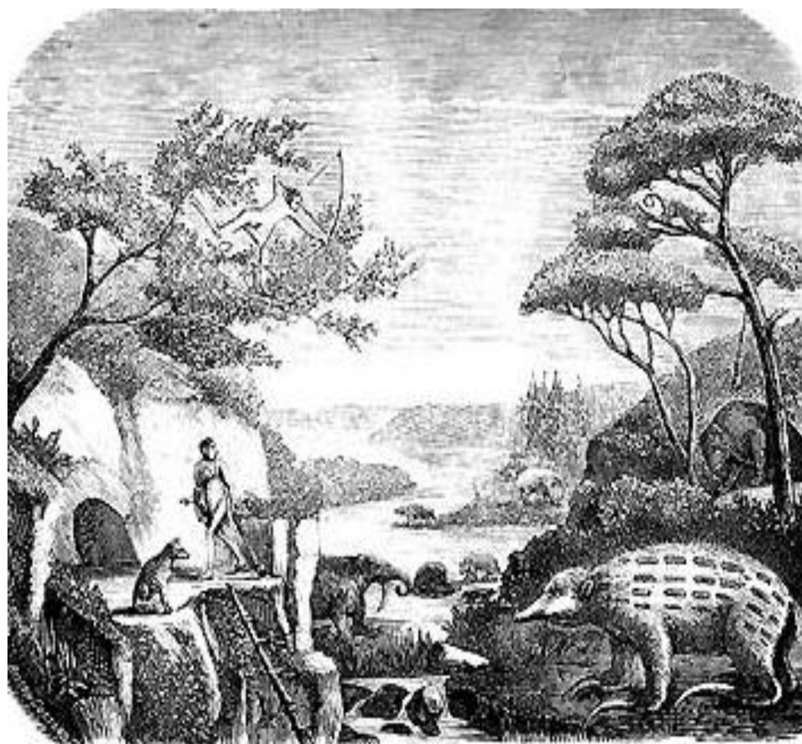

Figure 18. 'Anthropic Period; Last Palaeontological Age; Appearance of Man': the final scene in Pierre Boitard's *Paris Before Men* (1861).

example of a novel that employs Anne McClintock's theory of 'anachronistic space'.[79] 'Doyle's dinosaurs', he observes, 'obviously constitute a wildly exaggerated conception of what it meant for South America to be an anachronistic space'.[80] These animals, which should be extinct, survive separately from other creatures: they exist outside and beyond the march of evolution. Here, as in prehuman ages, the dinosaurs are the predatory species in the grand scheme of life.

Encountering the real-life dinosaur has a considerable impact on Malone's imagination, one which resonates with the effects of visiting the Sydenham dinosaurs. Evoking images of the Sydenham Crystal Palace's monstrous animals, Conan Doyle imagines Owen's primordial beasts in action. However, while the 1854 Crystal Palace reconstructions merely imply the kind of destruction such a creature could create, Conan Doyle's novel brings animals from a dead world to consciousness, as Malone's encounter with the dinosaur shows:

> It was something between a snore and a growl, low, deep, and exceedingly menacing. Some strange creature was evidently near me, but nothing could be seen, so I hastened more rapidly on my way. I had traversed half a mile or so when suddenly the sound was repeated, still behind me, but louder and more menacing than before. My heart stood still within me as it flashed across me that the beast, whatever it was, must surely be after *me*. My skin grew cold and my hair rose at the thought. [...] With my knees shaking beneath me, I stood and glared with started eyes down the moonlit path which lay behind me. All was quiet as in a dream landscape. Silver clearings and the black patches of the bushes –

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[79] See Anne McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Conquest* (New York; London: Routledge, 1995).
[80] Schmitt, *Darwin and the Memory of the Human: Evolution, Savages, and South America* (Cambridge: Cambridge University Press, 2009), p. 8.

> nothing else could I see. Then from out of the silence, imminent and threatening, there came once more that low, throaty croaking [...][81]

In this scene, the prehistoric frog is reanimated from its fossilised existence as humankind's mortal enemy. No longer extinct, the labyrinthodont assumes a hostile and aggressive role, and its attack on Malone disturbs the natural order of the civilised world. Malone is compelled to rethink humankind's place in the grand scheme of life. By doing so, he realises how morally wrong it is that primitive prehistoric animals can assail the modern 'predominant' human:

> That these monsters should tear each other to pieces was a part of the strange struggle for existence, but that they should turn upon modern man, that they should deliberately track and hunt down the predominant human, was a staggering and fearsome thought. I remembered again the blood-beslobbered face which we had seen in the glare of Lord John's torch, like some horrible vision from the deepest circle of Dante's hell. (p. 142)

The creature's survival in the modern world demonstrates that humans are no longer at the top of the food chain; they are at the mercy of their environment, just as all animals are. This is a noteworthy moment in the novel for Malone is faced with his own mortality at precisely the same moment he is forced to contemplate the imminent future of his species.

From Malone's rather vulnerable standpoint, the labyrinthodont with its huge canine teeth and its powerful body is a formidable beast. In giving a clearer picture of the creature, Malone charges his narrative with Gothic language that exaggerates the size and power of the animal:

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[81] Conan Doyle, *The Lost World and Other Thrilling Tales* (London: Penguin, 2001), p. 142. All further references to the novel are to this edition and will be given in the text.

> Then suddenly I saw it. There was a movement among the bushes at the far end of the clearing which I had just traversed. A great dark shadow disengaged itself and hopped out into the clear moonlight. I say 'hopped' advisedly, for the beast moved like a kangaroo, springing along in an erect position upon its powerful hind-legs, while its front ones were held bent in front of it. It was of enormous size and power, like an erect elephant, but its movements, in spite of its bulk, were exceedingly alert. [...] this beast had a broad, squat, toad-like face like that which had alarmed us in our camp. His ferocious cry and the horrible energy of his pursuit both assured me that this was surely one of the great flesh-eating dinosaurs, the most terrible beasts which have ever walked this earth. (p. 143)

This 'great dark shadow' which emerges from the undergrowth is terrifying in size and strength. Moving like a kangaroo, erect like an elephant, with a 'toad-like face' and a 'ferocious cry', the ancient amphibian hunts Malone as a modern day predator would do. The dinosaur is awakened here in a fictional fantasy world where the human has become a far more insignificant animal than previously assumed. The limits of the human, for Conan Doyle, have been reset. Next to the dinosaur, the human is an inconsequential contributor to the world.[82]

When the explorers of Conan Doyle's novel return with a live pterodactyl, it is clear that the bird cannot survive long in its new, and decidedly hostile, environment. The Edwardian masses are not prepared for such a scene. As in other descriptions of the dinosaurs

[82] The fact that the monsters are unaffected by the explorers' modern weapons confirms this idea.

on the plateau,[83] the pterodactyl has chimerical, fantastical attributes. It is the stuff of Boschian nightmares:

> The face of the creature was like the wildest gargoyle that the imagination of a mad medieval builder could have conceived. It was malicious, horrible, with two small red eyes as bright as points of burning coal. Its long, savage mouth, which was held half-open, was full of a double row of shark-like teeth. Its shoulders were humped, and round them were draped what appeared to be a faded gray shawl. It was the devil of our childhood in person. (p. 200)

The 'spectacle' of a prehistoric bird in the midst of London life evokes images from the Palæozoic exhibition described by Miller. The shapes that induce a sense of terror in Miller's narrative have, in Conan Doyle's vision, essentially 'come alive' and the effect on the mass London audience causes scenes of hysteria driven by dread and terror of the animal:

> There was a turmoil in the audience—someone screamed, two ladies in the front row fell senseless from their chairs, and there was a general movement upon the platform to follow their chairman into the orchestra. For a moment there was danger of a general panic. Professor Challenger threw up his hands to still the commotion, but the movement alarmed the creature beside him. Its strange shawl suddenly unfurled, spread, and fluttered as a pair of leathery wings. Its owner grabbed at its legs, but too late to hold it. It had sprung from the perch and was circling slowly round the Queen's Hall with a dry, leathery flapping of its ten-foot wings, while a putrid and insidious odour pervaded the room. The cries of the people in the galleries, who were alarmed at the near approach of those glowing eyes and that murderous beak, excited the creature to a frenzy. Faster

[83] One dinosaur is described as 'a strange creature, half-seal, half-fish' (p. 179); another is referred to as 'a great running bird, far taller than an ostrich, with a vulture-like neck and cruel head which made it a walking death' (p. 179).

> and faster it flew, beating against walls and chandeliers in a blind frenzy of alarm. (p. 201)

An ancient demon spreads its wings over the modern metropolis, causing mass panic and alarm; the monstrous bones of the pterodactyl have finally returned to their native English ground. The pterodactyl cannot remain on English soil, however, because although it has served the purpose of ratifying the adventurers' tale, it also represents a threat to the future of the dominant (human) species. On the South American plateau, the dinosaur merely represents a horrifying truth about the origin of the human species. However, the dinosaur's return to London acts as an imminent threat to the prospect of human survival on earth and the novel takes on the trappings of an allegorical tale about the horrors of reverse colonisation. In a story that rates the importance of the extermination of the ape-men over the extinction of the dinosaur, Conan Doyle is careful to ensure that the extinct animal can flee the modern world. Ultimately, *The Lost World* is shrewd in its effort to restore order before its conclusion, and the demoniac bird escapes the clutches of the men of science just in time to relieve the English of the overwhelming evidence of live dinosaurs. Tellingly, though, Conan Doyle not only brings the Sydenham exhibitions to life, he brings them to life in London, the home of Victorian palaeontology, the life-size models, and the extinct species themselves. The dinosaur's return to the modern world is therefore not simply a metaphor *for* the Gothic, it *is* intrinsically Gothic, playing upon the fears and anxieties about species that had, only a generation before, been manifest in the display of archaic, primal beasts at the Crystal Palace.

In evolutionary terms, the plateau plays host to a number of life forms and varieties of species, including humans at different stages of development. Apart from the numerous species of dinosaurs that inhabit the plateau, ape-men and ‘savages’ compete with one another for survival. For the superior European man, both ‘types’ of human are unacceptably substandard, yet it is obvious that Malone favours the Indian ‘type’ over the ape when he describes them as ‘little, clean-limbed, red fellows, whose skins glowed like polished bronze in the strong sunlight’ (p. 157). They are ‘hairless, well formed, and good-humoured’ (p. 163) in contrast to the ape-men who have ‘long arms and enormous chests’ and resemble ‘very hairy and deformed human beings’ (p. 156). Like illustrations of ‘fossil man’ in Boitard’s *Paris Before Men* (see figure 19), Conan Doyle presents the ape-men as lesser creatures, ones that are embarrassingly connected to modern humans, perhaps because they are conclusive evidence that evolution works.[84] The ape-men must, therefore, be destroyed in order to maintain the myth of British/human dominance; significantly, it is only possible to do so with the aid of the explorers’ advanced technology,

Figure 19. ‘Fossil Man’: the frontispiece of Pierre Boitard’s *Paris Before Men* (1861)

[84] Conan Doyle also satirically makes the chief ape-man a doppelganger of Professor Challenger, the story’s eminent scientist who leads the group of explorers to the plateau. Lord John tells Malone the story of how he and the others encountered the ape-men: ‘You'll smile, young fellah, but 'pon my word they might have been kinsmen. I couldn't have believed it if I hadn't seen it with my own eyes. This old ape-man--he was their chief--was a sort of red Challenger, with every one of our friend's beauty points, only just a trifle more so. He had the short body, the big shoulders, the round chest, no neck, a great ruddy frill of a beard, the tufted eyebrows, the 'What do you want, damn you!' look about the eyes, and the whole catalogue. When the ape-man stood by Challenger and put his paw on his shoulder, the thing was complete.’ *The Lost World*, p. 152.

their 'tubes of strange weapons' (p. 182). Interestingly, while the dinosaurs are permitted to survive indefinitely on the plateau, the ape-men only survive for three days after the arrival of the Englishmen. In an account of the swiftest annihilation of any species in history, Conan Doyle leaves his reader in no doubt about the political message he wishes to convey. Stages of evolutionary development, he asserts, must be disconnected by time, if not space. The limits of the human must be checked, regulated, and restricted in order to maintain order.

7. Conclusion

It may have been because such huge gaps existed in nineteenth-century palaeontological findings that depictions of primordial beasts were able to awaken a sense of terror in Victorian and Edwardian readers.[85] Darwin's *Origin of Species*, as illuminating in some respects as it may have been, essentially raised far more questions than it answered in terms of where humans had come from and where (both biologically and spiritually) they were going. Moreover, searching for scientific evidence to fill in the palaeontological gaps was no simple task.

In fiction, however, these blanks made an ideal space for the writer's imagination. Size, for example, seems to have been of paramount importance in depicting Gothicised animals from the prehuman past. In *The Wonders of Geology*, Gideon Mantell envisaged a world in which roamed 'monsters of the reptile tribe, so huge that nothing among the existing races can compare with them'.[86] At a meeting of the British Association, Buckland argued that

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[85] Darwin pointed to 'The Imperfection of the Geological Record' in his chapter of this title in *Origin*. Fossils, he noted, could only be found in special circumstances, though he admitted that the lack of fossil evidence of intermediate forms ('missing links' between species) was 'the most obvious and forcible of the many objections which may be urged against my theory.' Darwin, *Origin of Species* (London: Penguin, 1985), p. 438.

[86] 'The manner in which geologists have been able to restore the history of the primeval earth, affords one of the most brilliant triumphs of the human intellect. Chemistry, botany, mineralogy, and physical geography have all aided in unfolding this enigma; but it is perhaps to comparative anatomy, which enables us to identify an animal by a single bone, that the principal merit is due. […] The mastodon, the megetherium, the paleotherium, and

dinosaurs 'were of so colossal a size that an elephant would seem but a shrimp by comparison'.[87] Dinosaurs epitomised excess; oversized animal bodies, out of control, transgressive surfeit bodies of colossal proportions. Fred Botting associates excess with the representation of evil, a concept that, when applied to the work of Machen, Stoker, and Conan Doyle ratifies the human palaeontological animal. 'Like base matter', Botting argues, 'evil retains an otherness and activates an excess that cannot be assimilated: it remains, as uncertain object and elusive energy, Other, heterogeneous to all human economies of rationality and utility.'[88] Excessive and extinct, animal bodies from the past take on evil personas when associated with humans. Machen's narrator is distrustful of the 'little people' of the hills, those he thinks of as demoniac fairies with their regressive transformative properties. Stoker's human worm is a manifestation of evil within the excessive body of the palaeontological animal. Arabella's quests for economic gain alongside her insatiable desire to feed on human meat are wicked, vices which the novel cannot excuse (therefore, she is finally destroyed forever). She is intrinsically malicious, vile, and immoral. Evil for Conan Doyle, manifests itself in the 'missing link' motif that underscores the text. For him, evil is inherent in creatures that bridge the gap *between* dinosaur and human, it is not implicit within both, as it is for Stoker and Machen.[89]

Moreover, dinosaurs were portrayed in art and fiction as outlandish animals, represented in otherworldly, strange, peculiar, and bizarre shapes. G. F. Richardson, the curator of Gideon Mantell's Brighton museum when it opened in 1836, described the Iguanodon, for instance, as symbolic of the existence of 'monsters wilder and more wondrous

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pterodactyle are thus restored to our natural history, and live again in literature [...]' Gideon Mantell, *The Wonders of Geology* (London: Relfe and Fletcher, 1838), p. 262.

[87] Buckland quoted in Freeman, *Victorians and the Prehistoric*, pp. 138-9

[88] Botting, 'Signs of Evil: Bataille, Baudillard and Postmodern Gothic', in *Gothic: Critical Concepts in Literary and Cultural Studies*, ed. by Fred Botting and Dale Townshend (London: Routledge, 2004), p. 312.

[89] Malone 'read[s] hatred and menace in the evil eyes' of the ape-men on the plateau (*The Lost World*, p. 117).

than ever Oriental fancy ha[d] portrayed!'[90] This sense of otherworldliness is taken to extremes in John Jacob Astor's 1894 novel *A Journey in Other Worlds*. Here the concept that dinosaurs belong to an alternative spatial dimension results in a tale of space exploration in which all kinds of strange dinosaurian animals are found to be living in abundance on Jupiter. In Astor's novel, dinosaurs are no longer relics of the prehuman past, but symbolic of future progression, of scientific exploration to other worlds, in another time and space. In late Victorian science fiction, Gothic animal tropes are achieved through the conflation of temporality and distance.

In H. G. Wells's *The Time Machine* (1895), a novel I will return to in my conclusion, the time traveller journeys to 802,701 AD, where he discovers the remnants of a nineteenth-century museum. Here, he recognises 'some extinct creature after the fashion of the Megatherium' alongside 'the huge skeleton barrel of a Brontosaurus',[91] a palaeontological specimen is confined to the glass case of the museum, while it is the human of the *future* that has become distinctly and irrevocably Other, devolving into two subspecies. In the boy's own adventure story, on the other hand, extinct animals 'come alive' thousands of miles from Britain's shores (in far off lands, below ground, or in space). They are part of British colonial exploits in foreign lands, and as such they symbolise an empire 'biting back'. There remains one last point to be made, perhaps: the plausibility of the subject matter. Malone's narrative is a journalistic piece of work, destined for the national press. Its veracity is called into question in this way; like Kipling's Gothic short story 'A Matter of Fact', the journalist's sighting of primordial animals is rendered unreliable by the commercialisation of the tale and is, therefore, 'safe', unreal, and essentially unpublishable (except in quasi-fictional form). Ultimately then, extinct animals emerge from while being contained within the imagination,

[90] G. F. Richardson, *Sketches in Prose and Verse: Second Series, Containing Visits to the Mantellian Museum* (London: Relfe and Fletcher, 1838), pp. 6-7.
[91] H. G. Wells, *The Time Machine* (London: Penguin, 2005), pp. 64-5.

within which they can, to some extent, be both controlled and contained. Ultimately, in true Gothic mode, in the dinosaur body, the past is always present.

Chapter 5

'Monsters Manufactured!': Humanised Animals, Freak Culture, and Victorian Gothic Fiction

1. Introduction

There has been burgeoning interest in the field of disability studies in the last twenty years and the criticism that has emerged has had a significant impact on literary and historical research in Victorian culture.[1] However, despite the wealth of criticism recently published on the topic, the Gothic interpretations, implications, and associations of 'freak culture' have yet to be fully examined. So far, much of the criticism in this field has pointed out that the Victorian fascination with the freak is representative of post-Darwinian scientific theories about the human body's apparent malleability.[2] It is in the light of this research that this chapter examines the disabled figure in terms of its Gothic connotations in discourses of literature, culture, and medical science, exploring the role of the freak[3] in terms of the ideological and rhetorical function of human/animal hybridity.

This chapter examines human/animal hybrids in fiction against the backdrop of popular freak culture during the latter half of the Victorian period in an attempt to reveal the ways in

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[1] Recent studies of Victorian freak culture include Robert Bogdan, *Freak Show: Presenting Human Oddities for Amusement and Profit* (1988), Rosemarie Garland-Thomson, *Freakery: Cultural Spectacles of the Extraordinary Body* (1996), Rachel Adams, *Sideshow U.S.A: Freaks and the American Cultural Imagination* (2001), Marlene Tromp (ed.), *Victorian Freaks: The Social Context of Freakery in Britain* (2008), Nadja Durbach, *Spectacle of Deformity: Freak Shows and Modern British Culture* (2009) and Lillian Craton, *The Victorian Freak Show: The Significance of Disability and Physical Differences in 19th Century Fiction* (2009).

[2] Durbach, for example, discusses the Darwinian aspects of freakery both in her excellent chapter in Marlene Tromp's *Victorian Freaks* and her own book *Spectacle of Deformity*.

[3] I have chosen to use this term – like Adams, Bogdan, Craton, Durbach, Fiedler, Garland-Thomson, and Tromp – for several reasons. Bogdan and Fiedler offer long lists of terms used to refer to people who were exhibited for money and so partly for clarity, and partly because, as Bogdan correctly notes, the vocabulary associated with such people is a 'hodgepodge of medical terminology and show-world hype', I will make further use of this expression here. My use of the word refers solely to those who sold their disability for profit and to those described as freaks in primary sources such as newspapers, journals, and fictional works of literature. See Bogdan, *Freak Show: Presenting Human Oddities for Amusement and Profit* (Chicago and London: The University of Chicago Press, 1988), pp. 3-6 and Fiedler, *Freaks: Myths and Images of the Secret Self* (New York: Simon and Schuster, 1978), p. 16.

which this form of entertainment influenced Gothic writers and to demonstrate that the exhibition of people that resembled specific animals functioned as part of the search for appropriate species categorisation. This section aims to show how this popular entertainment spectacle evoked ideas about biological and natural limits of the human, and how these ideas infiltrated literary conceptions of the disabled body. The human/animal freak figure exemplifies the sense of species specificity that links humans to other animals. Here were people who had specific animal features sold for purposes of public display, and this exhibition of the animal in the human brought questions about the limits of the human to the fore in new and shocking ways. By concluding with the topic, I aim to demonstrate further the extent to which the limits of the human defied clear distinctions in terms of species.

The display of monstrosity to the public was not only a Victorian convention; as critics such as Stephen Pender and Richard Altick have shown, the public's fascination with strange bodily forms can be traced much further back.[4] However, the Victorian period was, as Martin Howard has argued, 'the peak period for the commercial exhibition of abnormality'.[5] In the latter half of the nineteenth century, an extraordinary trend in the entertainment industry was emerging alongside the cultural milieu of progress and industrialism. On the one hand vulnerable to the peculiar materialism of their strangely formed bodies, and on the other desperate to make a living from them, freaks both challenged the accepted norms of the human body and confirmed them. Bodies that blurred the boundaries between human and animal, in particular, raised questions about the limits of human biology and physiology while simultaneously interrogating human origins. In viewing the human/animal freak, it was impossible to reject the animal that was symbolically and implicitly evident in the human, and the prevalence of this spectacle in Victorian culture was both a constant reminder of the

[4] See Stephen Pender, '"No Monsters at the Resurrection": Inside Some Conjoined Twins', in *Monster Theory*, pp. 143-67.
[5] Martin Howard, *Victorian Grotesque* (London: Jupiter, 1977), p. 54.

lack of species boundaries and a material exposition of where the line of demarcation could (not) be drawn.

There was a remarkable irony in the display of the freak body, however, for although it was clearly a depraved act of injustice to observe humans in this way, to objectify them, to animalise them, to make them distinctly Other, yet the spectacle of the freak appealed to human curiosity.[6] Prevalent attitudes to freak culture, as Leslie Fiedler shows, were in a constant state of flux for while the freak body exposed the horror of 'wrong' biology for all to see, the rise of Darwinism towards the latter half of the century led the public to see that humans and animals emerged from one primitive organism. Moreover, Darwin had argued that through the process of natural selection, humans and all other animals were progressing towards a higher state of perfection, yet biological anomalies such as freaks suggested that this might not be the case.

In examining the historical and cultural phenomenon of the freak show in America, Robert Bogdan has claimed that the primary role of the freak was its commoditisation, 'produced' in order to be exhibited for money. Bogdan may be correct in suggesting that, seemingly, the freak show's principal function in society was to generate profit while entertaining its audience.[7] However, despite the successful trade in viewing the bizarre and outlandish aesthetics of the human body, many noted that the industry was clearly immoral in its flagrant exploitation of the weak and vulnerable.[8] Freak show culture hinged on a kind of prostitution of the human body, rationalised, perhaps, by the idea that such bodies were *not*

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[6] Fiedler argues that 'Curiosity is a typically Victorian word, memorialized in the title of Dickens's most freak obsessed work, *The Old Curiosity Shop*, and reminding us that in that era the interest in freaks had reached a high point.' *Freaks*, p. 15.

[7] In *Freak Show* Bogdan discusses several instances of deception and it certainly seems as though freak show audiences were aware of instances of fraud. William Alden's *Among the Freaks* (1896) is replete with tales of the types of deception used to hoodwink curious audiences and anecdotal evidence given in 1868 by Francis Buckland describes a similar experience. Buckland, *Curiosities of Natural History* (London: Richard Bentley, 1868), p. 56.

[8] Dickens's *All the Year Round*, for example, condemned the industry as well as those who took part in viewing freaks in reaction to the posthumous exhibition of Julia Pastrana.

fully human. Disturbingly, the business of portraying disabled people as beings outside the parameters of humanity was particularly gruesome; the freak show displayed the human body in grotesque and macabre ways. Why, then, in view of its clearly unethical subtext was the freak show such a marketable and profitable success? Was it because the freak appealed specifically to its audience's new sense of its animal origin following Darwin's work on humankind's place in nature and does this account for its popularity? Or did the freak manifest a site of acknowledgeable difference between human society and the animal kingdom?

This chapter takes up these questions as they relate to a particular mode of literature: the Gothic fiction of the late-nineteenth century. By Gothic, I refer to works that employ themes and plots associated with sensation, horror, and science fiction. The literature under discussion here will test two theories: that the repulsion associated with the sideshow spectacle lies not in the site of difference it clearly presents, but in the repressed anxieties about the similarities it manifests between human and animal, and that the freak show provided a visual and discursive Gothic rhetoric through which fiction and other forms of writing could express anxieties about nineteenth-century body politics, fuelled by concerns raised by science. The theoretical aspects of this chapter build upon the work of cultural and literary critics, such as Elizabeth Grosz,[9] who have claimed that nineteenth-century freak culture reveals anxieties about difference. However, this chapter will suggest that the horror of the oddly-shaped body lies in its aesthetic *similarities* to humans. In my reading of freakery, I propose that the limits of the human are not only tested, but they also are broken down to expose the animal implicit and explicit in the human being.

[9] Elizabeth Grosz's reading of the freak as an 'intolerable' anomaly who 'exist[s] outside and in defiance of the structure of binary oppositions that govern our basic concepts and modes of self-definition' is not entirely correct in my understanding of the freak as Gothic body, as I will show. Grosz, 'Intolerable Ambiguity: Freaks as/at the Limit', in *Freakery: Cultural Spectacles of the Extraordinary Body*, ed. by Rosemarie Garland-Thomson (New York: New York University Press, 1996), p. 57.

Thus, by examining the freakish characters in Wilkie Collins's *The Law and the Lady* (1875), H. G. Wells's *The Island of Doctor Moreau* (1896), and Richard Marsh's *The Joss: A Reversion* (1901) in the context of the popularity of the human/animal freak, this chapter suggests that human/animal monsters on display amplify the questions about the limits of the human that this thesis has examined. The interchangeability of human and animal bodies in fiction distorts and, to some extent, obscures the boundary line between species. But none of these novels portray the lives of actual freaks. Indeed, although disabled characters abound in nineteenth-century popular fiction (they are particularly prevalent in the works of Dickens for example), the sideshow spectacle is strangely missing. Instead, Gothic fiction finds alternative ways to express the horror of the freak encounter. In *The Island of Doctor Moreau*, for example, Wells appears to be conducting an experiment into the very nature of freakery itself by imagining what a human/animal hybrid would be, were it in fact possible to construct one.

Freak show culture finds expression in Gothic fiction in surprising and notable ways. First, it employs similar rhetoric and images of the freakish body. Second, it forces the reader into the role of viewer, demanding that the reader adopt a clearly immoral standpoint. The sensationalism of the freak show transfers into fiction without difficulty; yet, although the enforcement of spectatorship should sit uneasily with the reader, in this context it appears to render it more appealing and the novel instead becomes a vehicle through which legitimate spectatorship may take place. Moreover, the freak moves from public display to the private imagination, from the conspicuousness of the street to the privacy of the domestic sphere. In the novel, the reader is invited to conjure up all manner of evolutionary nightmares: the 'monstrous frog' of Collins's novel, the 'monsters manufactured' of Wells's tale, or the 'missing link' monkey-man of Marsh's Gothic narrative.

2. Theorising freakery

There is a long history of human freaks being aligned with animals during the nineteenth century. Perhaps unsurprisingly, Linda Kalof notes that in the early 1800s 'monstrous, talented, or deformed' domestic animals were often exhibited alongside freak figures such as 'giants, dwarves, hair-covered children and albinos'.[10] More interesting is the fact that prior to the 1850s, freaks (predominantly, that is, tribal peoples brought back from travels in the empire) were often exhibited at zoos, and in this setting they presented a salient feature of the modern British entertainment industry. Significantly, Randy Malamud's work on the history of the zoo has shown that by exhibiting the freak and the exotic animal together, 'the boundary between animal and human displays blurs.'[11] It has seemed to some critics that putting the freak next to the exotic animal showed similarity between them and difference from their spectator, thus apparently separating the normal from the abnormal and reasserting the hegemonic order of the natural world. As a setting which, according to Bob Mullan and Gerry Marvin, 'conjure[s] up notions of distance and of the wondrous',[12] the zoo was considered the ideal venue for the exhibition of freaks brought to Britain from across the empire; but why? For Ritvo, the menagerie constituted an 'effort to control the natural world' in that 'the zoo represented the triumph of human reason over the profusion and disorder of nature'.[13] However, although this is a noteworthy point, Ritvo has failed to note that if the zoo's main purpose was to create a living museum of animals and to categorise them for public view, it was also a place for displaying the unusual, the monstrous, and the exotic,

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[10] Kalof, *Looking at Animals in Human History*, p. 115.

[11] Randy Malamud, *Reading Zoos: Representations of Animals and Captivity* (Basingstoke: Macmillan, 1998), p. 85.

[12] Bob Mullan and Gerry Marvin, *Zoo Culture* (London: Weidenfeld & Nicolson, 1987), p. 2.

[13] Harriet Ritvo, 'The Order of Nature: Constructing the Collections of Victorian Zoos', in *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century*, ed. by R. J. Hoage and William A. Deiss (Baltimore and London: John Hopkins University Press, 1996), p. 46.

spectacles which implicitly undermined the ability to classify or catalogue species fully or definitively.[14]

As Ritvo's authoritative book on the history of zoological classification in nineteenth-century British science has shown, the historical and cultural issues surrounding the existence of freaks were complex and multifaceted. In the case of hermaphrodites (those freaks which challenged the boundaries of gender in ways similar to those who stretched the limitations of the human), Ritvo notes that being displayed as monstrosities meant that their 'presence ceased to be subversive and disruptive, and on the contrary worked to confirm the very boundaries that they would otherwise have seemed to challenge'.[15] In terms of freaks that questioned the boundary between sexes, then, Ritvo argues that their display reaffirms the boundaries and acts as a confirmation of what male and female states are. Is it the same case for human/animal hybrids, then? Can we say that they perform the same ideological function?

In some ways, the answer to these questions is yes. Certainly, while probing the possible limits of the animal/human boundary, the freak clearly also reaffirms bodily norms. In viewing the freak body, the spectator makes an affirmation: 'I am not *that*, I am *normal*.' However, given the significance of evolutionary discourse during the latter half of the nineteenth century, in the case of the human/animal body, perhaps this is not entirely correct; instead the viewer questions, 'am I *that*? Is that *me*?' In the visual contract that takes place between the observer and the observed in this case, the freak is that entity which repels and attracts because it threatens to dissolve species categories. Strange bodies do not obey biological rules or laws; they subvert and invert them; they deny the accepted limits of humanity; they are perverse. Yet the human/animal freak is also implicitly, entirely Other; it is strange, alien, different, foreign, perplexing, and curious. It is beyond understanding,

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[14] As Gilmore has argued, 'monsters expose the radical permeability and artificiality of our classificatory boundaries'. David D. Gilmore, *Monsters*, p. 19.
[15] Ritvo, *The Platypus and the Mermaid and other Figments of the Classifying Imagination* (Cambridge; London: Harvard University Press, 1997), p. 168.

existing outside what is understood to be real and genuine.[16] Yet this interpretation of the freak's unnatural body does not wholly suffice, for it is unmistakably familiar too. In the visual contract between freak and spectator, the viewer considers the prospect that *that* could so easily be *me*. Pertinent to this understanding of freakery is Sara Ahmed's theory of strangeness. She argues,

> Strange bodies are precisely those bodies that are temporarily assimilated *as* the unassimilable within the encounter: they function as the border that defines both the space into which the familiar body – the body which is unmarked by strangeness as its mark of privilege – cannot cross, and the space in which such a body constitutes itself as (at) home. The strange body is constructed through a process of incorporation and expulsion – a movement between inside and outside, which renders that the stranger's body has already touched the surface of the skin that appears to contain the body-at-home. The economy of xenophobia – the production of the stranger's body as an impossible and phobic object – involves, not just reading the stranger's body as dirt and filth, but the re-forming of the contours of the body-at-home, through the very affective gestures which enable the withdrawal of co-habitation with strangers in a given social space. The withdrawal remains registered on the skin, on the border that feels.[17]

Simply put, Ahmed posits the unfamiliar body as the Other within. In her terms, the strangeness of the freak body is perceived as an entity that is *like* a human body, *like* what we are but it is *not* (exactly) us. In observing the human/animal freak figure, the Victorian public were able to situate the animal body as that which is simultaneously both outside and inside the limits of the human. This rhetorical and ideological joining together of human and animal

[16] See David D. Gilmore's *Monsters* for a discussion of the history of monsters in different cultures.
[17] Sara Ahmed, *Strange Encounters: Embodied Others in Post-Coloniality* (London: Routledge, 2000), p. 54.

in one being enabled the ratification of the blurring of species boundaries. The stranger – the strange bodied stranger – is identified as something both outside the borders of what it means to be human and undeniably recognisable as human. Perhaps it is this dual function of the freak – its ability to both disguise and reveal our darkest fears about evolutionary origins – that made the freak show so successful as a cultural institution.

Margrit Shildrick has argued that what we encounter in the monster is our other self, the self we want to know but cannot. Her argument about the limits of monstrosity is central to my understanding of the freak's symbolic value:

> So long as the monstrous remains the absolute other in its corporeal difference it poses few problems; in other words it is so distanced in its difference that it can clearly be put into an oppositional category of not-me. Once, however, it begins to resemble those of us who lay claim to the primary term of identity, or to reflect back aspects of ourselves that are repressed, then its indeterminate status, neither wholly self nor wholly other – becomes deeply disturbing. In short, what is at stake is not simply the status of those bodies which might be termed monstrous, but the being in the body of us all. To valorise the monster, then, is to challenge the parameters of the subject as defined within logocentric discourse.[18]

The image of the monstrous body is that which, when reading meaning into it, transcends our linguistic ability to ascertain precisely what 'it' is. Moreover, Shildrick suggests here that similitude is key to the horror of monstrosity; beings which resembles some aspects of what is considered 'normal' are disturbing, while those who are wholly normal or wholly abnormal are not. Monsters reflect the vulnerability of our own being; in this, she contends that they are never truly identifiable:

[18] Margrit Shildrick, *Embodying the Monster: Encounters with the Vulnerable Self* (London: Sage Publications, 2002), pp. 2-3.

> In seeking confirmation of our own secure selfhood in what we are not, what we see in the monster are the leaks and flows, the vulnerabilities of our own embodied being. Monsters, then, are deeply disturbing; neither good nor evil, inside nor outside, not self or other. On the contrary, they are always liminal, refusing to stay in one place, transgressive and transformative. They disrupt both internal and external order, and overturn the distinctions that set out the limits of the human subject.[19]

If monsters do 'overturn the distinctions that set out the limits of the human subject', why do we not shun freaks; hide them away; dispel them from view? Why are we so attracted to such images of strange bodies? In accordance with Shildrick, Richard Kearney has argued that

> Strangers, gods and monsters represent experiences of extremity which bring us to the edge. They subvert our established categories and challenge us to think again. And because they threaten the known with the unknown, they are often set apart in fear and trembling. Exiled to heaven or hell; or simply ostracized from the human community into a land of aliens.[20]

But Victorian freaks were *not* 'set apart in fear and trembling'; *not* 'ostracized from the human community'; rather, they were invited into the Victorian home on postcards, photographs, and carte-de-visites,[21] and, of course, most notably, in fiction. They were part of

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[19] Shildrick, *Embodying the Monster*, p. 4.

[20] Richard Kearney, *Strangers, Gods and Monsters: Interpreting Otherness* (London: Routledge, 2003), p. 3.

[21] See Christopher R. Smit, 'A Collaborative Aesthetic: Levinas's Idea of Responsibility and the Photographs of Charles Eisenmann and the Late Nineteenth-Century Freak-Performer', in *Victorian Freaks: The Social Context of Freakery*, ed. by Marlene Tromp (Columbus: The Ohio State University Press, 2008), pp. 283-312. Arnold I. Davidson has argued that in the case of visual representations of freaks such as Avery Childs the Frog Boy and Fred Wilson the Lobster Boy, 'these photographs insist on the humanity of their subjects' rather than the animality. This argument reveals that in visual terms at least, the human/animal freak was caught between their humanity and their ambiguous animal selves. See Davidson, 'The Horror of Monsters', in *The Boundaries of Humanity: Humans, Animals, Machines*, ed. by James J. Sheehan and Morton Sosna (Berkeley: University of California Press), p. 62.

the family entertainment industry in literature, visual imagery, and performance, and, surprisingly, they functioned within the acceptable limits of Victorian society.[22]

Elaine L. Graham posits that '[m]onsters stand at the entrance to the unknown, acting as gatekeepers to the acceptable. Their showings-forth serve as warnings; and the horror of monsters may be sufficient to deter their audience from encroaching upon their repellent territory.'[23] According to Graham, then, freaks, as inhabitants of monstrous bodies, *should* 'deter their audience from encroaching on their repellent territory'; but in fact they do not. Instead, their bodies invite spectatorship and speculation. Elaborating on her theory of monstrosity, Graham argues,

> The monstrous body is pure paradox, embodying contradictory states of being, or impossibilities of nature. It is both a site of wonder – as dividing portent – and loathing, as evidence of heinous sin. […] The establishment of normative demarcations, paradoxically, engenders the very perversions such an act seeks to annihilate. The repressed will never completely vanish.[24]

It is Graham's main point here, her assertion that '[t]he repressed will never vanish', which provides a satisfactory, if disturbing, solution to the difficulty of why, in popular culture, medicine, and literature, the freak was scrutinized rather than rejected. The uncanny nature of freakery, which implicitly links with Freud's theory of repression, reveals the intricacies of my reading of the freakish Gothic body as a site of alterity and selfhood. The fascination with animal-shaped bodies contrasted sharply with the disgust such bodies evoked from their spectators. It is, therefore, in the interstices between fear and desire of the disabled body that the freak show takes its place in Victorian literature and culture.

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[22] Like the dog, the freak performed a dual role in society; it existed within the realms of scientific curiosity on the one hand and as a figure of human curiosity on the other.
[23] Graham, *Representations of the Post/Human*, p. 53.
[24] Graham, *Representations of the Post/Human*, p. 53.

3. Scientific and medical perspectives on freakery

In *The Descent of Man*, Darwin employed the microcephalic person, a well-known Victorian freak figure, to show that humans could present certain animal characteristics. In his section on how arrested development works to reveal instances of human reversion to animal state, he discusses the case of 'microcephalous idiots' whose 'skulls are smaller and the convolutions of the brain are less complex than in normal men':

> The frontal sinus, or the projection over the eyebrows, is largely developed, and the jaws are prognathous to an '*effrayant*' degree; so that these idiots somewhat resemble the lower types of mankind. Their intelligence, and most of their mental faculties, are extremely feeble. They cannot acquire the power of speech, and are wholly incapable of prolonged attention, but given much to imitation. They are strong and remarkably active, continually gambolling and jumping about, and making grimaces. They often ascend stairs on all-fours; and are curiously fond of climbing up furniture or trees. […] Idiots also resemble the lower animals in others respects […] They are often filthy in their habits, and have no sense of decency; and several cases have been published of their bodies being remarkably hairy. (p. 54)

The anatomy and nature of microcephalic people are animalistic, Darwin observes, in that they have overdeveloped eyebrows, noses, and jaws, and they behave in a way that is distinctly inhuman in their 'gambolling and jumping about', 'making grimaces', moving 'on all-fours', and 'climbing up furniture and trees'. Their lack of speech further reveals their inhumanity and their hairiness is yet additional evidence of their brutish state. Crossing the boundary between species, in science and culture, the microcephalous individual rendered

anxieties about species confusion to the fore, and medical discourse about this unusual physiological phenomenon added to such concerns. An article about a microcephalous girl published in the *British Medical Journal* in 1884 described her as having a face 'not larger than that of a new-born child, with a sharply projecting nose and prominent jaws' whose 'features resemble those of a bird of prey.'[25]

The fact that freaks were classified as neither one thing nor another was a crucial part of being able to 'sell' them to the public, as Durbach explains:

> The extraordinary bodies they displayed were wondrous, promoters explained, precisely because they defied classification. Their exhibits were not examples of known medical conditions, showmen argued, but instead were "unique," "singular," and "rare." Terms like "nondescript" were frequently applied to such acts to emphasize their inability to be accurately categorized. This, of course, was a marketing strategy: to insist your act was the only one of its kind ensured a larger audience. At the same time, though, it challenged the medical profession's attempt to classify these bodies as medical cases and thus to close down other interpretations of their deformities.[26]

Often, though, Darwinian science was used to support the showmen's propaganda, for the freaks on display were publicised as either examples of missing links or intermediate forms. Darwin's unequivocal assertion that 'no clear line of demarcation has as yet been drawn between species and sub-species […]or, again, between sub-species and well-marked varieties, or between lesser varieties and individual differences' means that the differences encountered '*blend into each other* in an insensible series' (my emphasis).[27] This idea of

[25] *British Medical Journal*, 4 October 1884, p, 671.
[26] Durbach, *Spectacle of Deformity*, p. 26.
[27] Darwin, *Origin of Species*, p. 107.

species blending into one another is of particular importance here. Darwin, amongst other science writers throughout the century,[28] further clarified that 'naturalists have no golden rule by which to distinguish species and varieties'[29] and so, by capitalising on the scientific myth of classification and a natural world which refuses to be 'tidied up', freak show culture described its human subjects either as beings between species, or as a combination of more than one species. Even the lexis associated with the freak suggested that this was the case. Seemingly unable to invent more sophisticated names and in apparent recognition of the lack of species definition, here were copious examples of the human in animal form, from 'Ape Woman' to 'Elephant Man' to 'Camel Girl'.[30] In this freakish representation of the human/animal body, the past erupts into the present in an uncanny way. As Gothic signifier, the human/animal freak performed a specific role in Victorian culture; that of blurring, and thereby setting, the boundaries of the normal (and the human). The Gothic aspects of freakery are to be found in the body that renders the human/animal boundary permeable. Thus, freak

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[28] Lewes, for example, argued that 'the *thing* species does not exist: the term expresses an *abstraction*, like Virtue, or Whiteness; not a definite concrete reality, which can be separated from other things, and always be found the same. Nature produces individuals; these individuals resemble each other in varying degrees; according to their resemblances we group them together as classes, orders, genera, and species; but these terms only express the *relations of resemblance*, they do not indicate the existence of such *things* as classes, orders, genera, or species.' George Henry Lewes, *Studies in Animal Life* (London: Smith, Elder and Co., 1862), p. 129. Huxley's discussion of the species question relates precisely the same difficulty. See Huxley, 'The Darwinian Hypothesis' (1859). Reprinted in *Collected Essays*, 9 vols (London: Macmillan, 1893), 2, pp. 1-21.

[29] Darwin, *Origin of Species*, p. 305.

[30] Medical literature employed precisely the same type of language. George Gould and Walter Pyle's *Anomalies and Curiosities of Medicine* (1898), a book which offers its readers a detailed study of human disability, is a graphic anthology of macabre freak show acts rather than the medical textbook it claims to be. With descriptions of disabled people such as 'Jo-Jo the dog-faced boy' whose 'face was truly that of a skye-terrier' (p. 232), the woman born without her lower limbs, exhibited as the 'turtle woman' (p. 268), people suffering from ichthyosis such as the 'alligator-boy' (p. 824) and the 'porcupine-man' (p. 824), it is evident that the book exploited the popularity of freak culture. The book's depiction of Julia Pastrana, whose 'pronounced prognathism [...] gave her a simian appearance' (p. 229), is shown in a graphic drawing of her head and, although the book presents no picture of her, the myth that Krao was 'Darwin's missing link' is perpetuated here (p. 231). In discussing the case of the Elephant Man, Gould and Pyle describe him as a 'gruesome spectacle', 'exhibited' by his doctor before the Pathological Society of London (p. 827). By using the language of exposition and by seeking to excite the curiosity of their readership in precisely the same way as the promotional material for freaks sensationalised their human/animal subject, this book represents a curious example of how, by the *fin de siècle*, the sideshow had merged with the world of medicine. Gould and Pyle, *Anomalies and Curiosities of Medicine, Being an Encyclopaedic Collection of Rare and Extraordinary Cases and of the Most Striking Instances of Abnormality in All Branches of Medicine and Surgery, Derived from an Exhaustive Research of Medical Literature from its Origin to the Present Day, Abstracted, Classified, Annotated, and Indexed* (London: The Rebman Publishing Co., 1898).

bodies expose the horror of similitude and homology in evolutionary theory, and not the difference.

Attempts at understanding the scientific basis of disability were made by physicians, sideshow managers, and the media throughout the nineteenth century. Medical journals such as *The Lancet* and *The British Medical Journal* published many articles on deformity, although the medical practitioners contributing to these journals were generally unable to offer satisfactory explanations for the phenomena. In fact, the medical community continued to promulgate the rather old-fashioned yet disturbing and deep-rooted superstition of maternal impression, even if this was often done in a rather tongue-in-cheek manner. Although an enduring and long-established myth, the occurrence of maternal impression, which described the belief that a mother's psychological state could affect the physical appearance of the unborn foetus, was still a prevalent and widely-believed explanation for monstrous births at the end of the nineteenth century.[31] Joseph Merrick's doctor, Frederick Treves, for example, noted that Merrick believed he had been the product of a fright his mother had had when chased by a circus elephant during her pregnancy and, significantly, he offers no alternative explanation or objection to this supposition.[32] The writer of the article '"A Living Centaur"', published in *The Lancet* in 1900, did not neglect to mention that '[t]he influence of maternal impression is, of course, forthcoming as an explanation of the

[31] On feminist interpretations and the history of maternal impression, see Shildrick's *Embodying the Monster*, pp. 37-47. Bogdan has noted that the theory of maternal impression was 'alive and well' in America at the end of the nineteenth century (see *Freak Show*, pp. 110-1) and this is certainly the case in Britain too. Durbach has proved quite conclusively that maternal impression was a prevalent belief (much discussed in the pages of the *Lancet* and the *British Medical Journal* up until the turn of the twentieth century (see Durbach, *Spectacle of Deformity*, pp. 43-4). Robert James Lee's 1875 study *Maternal Impressions* and Charles J. Bayer's book of the same title (1897) discuss the question of whether a mother's mental condition could affect the physiology of the foetus in some detail. George Gould and Walter Pyle also discuss this topic at some length in their *Anomalies and Curiosities of Medicine* (1898) (see pp. 81-5).

[32] Treves, 'A Case of Congenital Deformity', in *The Transactions of the Pathological Society of London* (London: Smith, Elder, and Co., 1885), p. 498. In fact this is also mentioned in an article about Merrick's condition in the *British Medical Journal*, 11 December 1886, pp. 1188-9 and Treves refers to the story again in his later memoirs *The Elephant Man, and Other Reminiscences* (1923).

condition, the story being that his mother was bitten in the arm by a vicious horse when five months pregnant'.[33]

Sideshow promoters often attempted to obscure the origins of their act in order to entice the public to speculate for themselves about what kind of creature they encountered. They did so by capitalising on rhetoric that would highlight the ostensibly mysterious origins of their acts and in such cases the freak was deliberately unnamed. The physiological quandary that the acts represented thus became evident. One such sideshow act was P. T. Barnum's popular exhibition 'What is it?' A marketing pamphlet for this exhibition, shown at the Royal Surrey Zoological Garden in 1846, claimed that its promoters did not even know what 'it' was (see figure 20). The questions used as an advertising ploy in the exhibition pamphlet reveal the extent to which species confusion was profitable: 'Is it an Animal? Is it Human? Is it an Extraordinary FREAK of NATURE? or, is it a Legitimate Member of Nature's Works? Or is it the long sought for LINK between Man and the Ourang-Outang, which

Figure 20. Handbill for 'What Is It?' Royal Surrey Zoological Garden 1846 © The British Library Board. Evan.2878

[33] *The Lancet*, 27 January 1900, p. 251.

Naturalists have for years decided does exist, but which has hitherto been undiscovered?' This handbill sensationalises the blurring of the species boundary by playing on the language of excess in the use of the term 'extraordinary' and on the language of law and respectability in the use of the word 'legitimate'. By employing this technique, the advertisement drew in crowds curious to discover for themselves the taxonomy of the spectacle. As well as a detailed illustration of the freak, which shows a bear-shaped creature with a human head, the advertisement employs a particular set of vocabulary, certain to rouse the curiosity of its readership:

> The Exhibitors of this indescribable Person or Animal do not pretend to assert what it is […] Its Features, Hands, and the upper portion of its Body are to all appearances Human; the lower part of its Body, the hind Legs, and Haunches, are decidedly Animal! It is entirely covered, except the Face and Hands, with long flowing Hair of various shades. IT IS LARGER THAN AN ORDINARY SIZED MAN, but not quite as tall. "WHAT IS IT" is decidedly the most extraordinary Being that ever astonished the World.[34]

This exhibition pamphlet, then, whose language is replete with hyperbolic adjectives such as 'indescribable' and 'extraordinary' and the verb 'astonished', aims to convey a sense of wonder that will captivate its spectator. The significance of its sensationalism is its ability to unravel the mystery of science, while simultaneously inviting viewers to speculate for themselves what such a creature might be. Having both an educational and a sensational role, 'What Is It?' is both ratified by and representative of myths of Victorian science.

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[34] *What Is It?* ([London], [n.p.], [1841]), The British Library, 'What is it?', an act shown at The Royal Surrey Zoological Gardens, c.1846, Evan. 2878, in The British Library's *Online Gallery* <http://www.bl.uk/learning/images/bodies/large4806.html> [accessed 29 March 2010]

Forty years later, in the case of Krao, a hirsute child marketed as ‘Krao the missing link’, promoters advertised her deformity as both education and entertainment. By the time Krao came under the glare of the public eye, several human exhibitions, such as ‘What Is It?’, had already profited from prevalent theories of evolution. However, in the post-Darwinian milieu of the 1880s, Krao was exhibited as a specific example of how evolution works. While being exhibited at the Westminster Aquarium in March 1883, Krao’s advertising pamphlet claimed that she was ‘a living proof of Darwin’s theory of the descent of man’[35] and as ‘the wonder of wonders’, Krao’s unusual physiology was sold to the public as ‘a perfect specimen of the step between man and monkey’. This piece of shrew advertising is arguably what secured her fame and popularity.

Gillian Beer has argued that those advertised as missing links for display in the freak show were ‘people animalised by imprisonment, by the spectators’ gaze, by being cast as “other”. […] Here, in a freakish setting, the link can be claimed as *connecting*.’[36] But connecting humans with other creatures was a tricky undertaking, as her theory of why the missing link had to stay missing in Victorian social and scientific discourse shows:

> The emphasis on the *missing* link both suggested that such a link might in the future be found and yet emphasised the break between mankind and the ‘lower orders’ of nature. […] So long as the gap remained, mystery prevailed and the supremacy of the human could remain intact. Perhaps for this reason, the ‘missing link’ was most often imagined as monstrous, a discovery to be dreaded not welcomed.[37]

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[35] *'Krao' the 'missing link,' a living proof of Darwin's theory of the descent of man* ([London], [Aubert], [1883]), Oxford, Bodleian Library, John Johnson Collection of Printed Ephemera, Human Freaks 5 (1), in *The John Johnson Collection: An Archive of Printed Ephemera* <http://johnjohnson.chadwyck.com> [accessed 25 March 2010]

[36] Gillian Beer, *Forging the Missing Link: Interdisciplinary Stories* (Cambridge: Cambridge University Press, 1992), p. 23.

[37] Beer, *Forging the Missing Link*, p. 22.

Nevertheless, Krao, according to her advertisement, is not an *imagined* monster, but a real, living specimen of the 'step between monkey and man'. She is an intermediate form, caught between species, represented as 'in the transmission state'.[38] Beer is correct in her assertion that 'the fear disguised [in the missing link] was not, in the end, of otherness but of *sameness*: the "other" of social class, or racial theory, or primate life, might prove to be indistinguishable from those who set out to describe it'.[39] Nowhere was this more apparent than in the rhetoric of the medical men who examined Krao during her time in London. Although medical journals, such as *Nature* and the *British Medical Journal*, were entirely unconvinced by the promotional hype that claimed Krao was not fully human[40] and newspapers universally agreed that she was clearly *not* a

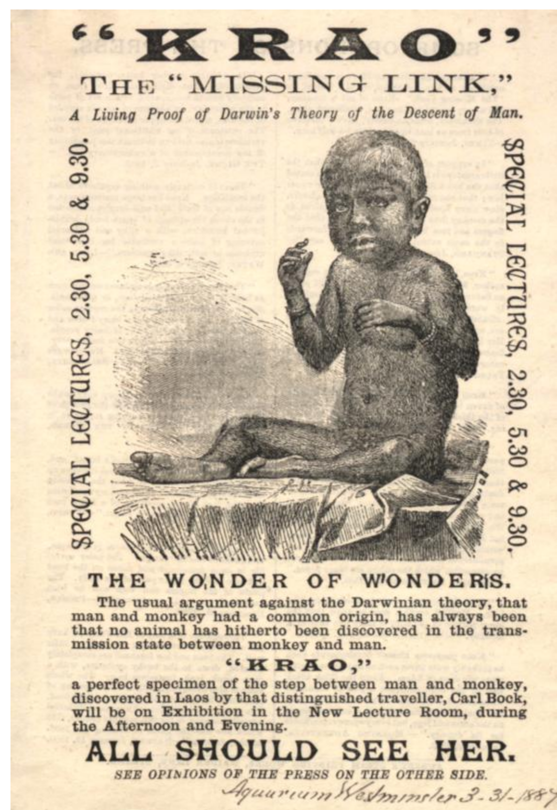

Figure 21. Handbill for '"Krao" the "missing link"', at the Westminster Aquarium, 31 March 1887. © John Johnson Collection, Oxford.

[38] *'Krao' the 'missing link,' a living proof of Darwin's theory of the descent of man* ([London], [Aubert], [1883]), Oxford, Bodleian Library, John Johnson Collection of Printed Ephemera, Human Freaks 5 (1), in *The John Johnson Collection: An Archive of Printed Ephemera* <http://johnjohnson.chadwyck.com> [accessed 25 March 2010]
[39] Beer, *Forging the Missing Link*, p. 41.
[40] In an article published in *Nature* in 1883, for example, while Krao was being displayed at the Westminster Aquarium, the physician A. H. Keane remarked that she 'certainly presents some abnormal peculiarities, but they are scarcely of a sufficiently pronounced type to justify the claim. She is, in fact, a distinctly human child, apparently seven years old, endowed with an average share of intelligence, and possessing the faculty of articulate speech. […] Apart from her history one might feel disposed to regard this specimen merely as a "sport" or a *lusus naturae*, possessed rather of a pathological than anthropological interest.' Nevertheless, he continues, because of the story of her origins, she 'of course, at once acquires exceptional scientific importance.' On the one hand, this discourse would only serve to sensationalise Krao's sideshow act further and increase her popularity with the public. On the other, it proves that lingering doubts prevailed about what freaks actually represented. If they were clearly more human than animal, did they really deserve a place in the limelight? See *Nature*, 11 January 1883, pp. 245-6.

hideous, foul, or abhorrent specimen of humanity,[41] nobody could deny that she was not normal. What seemingly underscored and justified her right to the media limelight were her questionable origins. Even if she was not as repulsive as some of her fellow human/animal exhibits, her origins were evidently problematic. Although she promoted herself throughout her life as 'the missing link', which implied she was the subject of evolutionary adaption and not the progeny of bestiality, her physiology still inferred that she was the result of interspecies breeding.[42]

The story of Julia Pastrana's origin, on the other hand, more explicitly engaged with the horror of sexual intercourse with animals. In 1857, Pastrana's handbill (see figure 22), which advertised her as 'the nondescript' and 'the bear woman', related her 'pedigree':

> In 1830, several Root Digger Indian women went some distance from their homes to bathe; on returning, Julia's mother got lost, and lived in the mountains six years, some hundreds of miles from any human beings. She was then discovered by a Mexican with this child, but two years of age, who was then receiving its support from nature's fount.[43]

The implication here is clear; Julia's mother, who was lost in the mountains for a number of years 'hundreds of miles from any human beings' and emerged with a child, has participated in sexual intercourse with a wild animal. Thus, the spectacle of Pastrana's animality hinges

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[41] 'Krao is not a monster', asserted *The Times*, 'but a very bright-looking and intelligent child', 2 January 1883, p. 9. 'Krao is of the feminine sex and has nothing repulsive in her appearance', noted *The Daily Telegraph*, 1 January 1883, p. 2. 'Her face, indeed, in spite of the thick hair about it, is not at all displeasing', wrote the *Daily News*, 1 January 1883, p. 2.

[42] After viewing her show, one incensed member of the public wrote to the London County Council to complain about her exhibition, arguing that 'in the interest of decency' the act should not be allowed to continue. For this outraged correspondent, the horror of the spectacle was that it encouraged the public to 'behold the results of copulation between a woman and one of the most filthy beasts.' Quoted in Durbach, *Spectacle of Deformity*, p. 113.

[43] *Miss Julia Pastrana* ([London], [n.p.], [1857]), Oxford, Bodleian Library, John Johnson Collection of Printed Ephemera, Human Freaks 3 (6), in *The John Johnson Collection: An Archive of Printed Ephemera* <http://johnjohnson.chadwyck.com> [accessed 25 March 2010]

on the horror of species transgression; anxieties about human origins form the basis of the public's fascination with Pastrana's animal characteristics. Pastrana's title of 'The Nondescript', which often accompanied other numerous titles such as 'bear woman', 'ape woman', and 'baboon lady', left open the question of her actual origins. In terms of species, it was seemingly impossible to pin down precisely which animal she resembled. Moreover, her publicity material capitalised on the apparent discrepancies between her unusual facial characteristics and her typically feminine body shape and refined social skills.

In his *Curiosities of Natural History* series (1868), published after Pastrana's death, Francis Buckland recalled her as a woman 'exhibited in Regent-street, who was remarkable for the immense quantity of long black hair that grew on and about her face. An idea was also promulgated that she was not altogether human […]'.[44] As his description continues, Buckland emphasises the sense of incongruity between her bestial physicality and her charming and gentle nature:

Figure 22. Handbill for *Miss Julia*, The Regent Gallery, 1857. © John Johnson Collection, Oxford.

> I well recollect seeing and speaking to poor Julia Pastrana when in life. She was about four feet six inches in height; her eyes were deep and black, and somewhat prominent,

[44] Buckland, *Curiosities of Natural History*, p. 40.

> and their lids had long, thick eyelashes; her features were simply hideous on account of the profusion of hair growing on her forehead, and her black beard; but her figure was exceedingly good and graceful, and her tiny foot and well-turned ankle, *bien chaussé*, perfection itself. She had a sweet taste in music and dancing, and could speak three languages. She was very charitable, and gave largely to local Institutions from her earnings.[45]

The horror of Pastrana is conveyed in the clash between her 'hideous' animal features and her 'exceedingly good and graceful' female figure. Applied to Pastrana, Grosz is correct in her assertion that the freak is 'an object of horror and fascination' because it is 'an *ambiguous* being whose existence imperils categories and oppositions dominant in social life' (original italics).[46] This is partly because her hybridity, as Rebecca Stern has noted, 'offered a walking metaphor for disorder: standing at the crossroads of male and female, animal and human, savage and civilised, Pastrana refused to keep *this* separate from *that*. […] Pastrana epitomized the hybrid's potential to muddy the waters of classification.'[47] If Pastrana was a 'walking metaphor for disorder' while she was alive, her hybridity took on a more explicit Gothic subtext when her body was put on display throughout Europe after her death in 1860. Her posthumous exhibition was extremely popular, though in 1862, Dickens's widely-read magazine *All the Year Round* rebuked those 'morbidly disposed' for taking part in such a macabre spectacle.[48] Interestingly, the writer in *All the Year Round* describes Pastrana as an

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[45] Buckland, *Curiosities of Natural History*, pp. 41-2.
[46] Grosz, 'Intolerable Ambiguity: Freaks as/at the Limit', p. 57.
[47] Rebecca Stern, 'Our Bear Women, Ourselves: Affiliating with Julia Pastrana', in *Victorian Freaks: The Social Context of Freakery in Britain*, ed. by Marlene Tromp (Columbus: The Ohio State University Press, 2008), p. 206.
[48] The writer, furious with society's apparent lack of propriety, goes on: 'Now I have not only to record that this thing while alive was shown among us, and that in a civilised country was paraded about and advertised in order that nobody who was morbidly disposed might lose a chance, and that there were found people to respond to the appeal of the advertisers, but, still worse; when most mercifully this poor thing died, there were people found who still looked upon its carcase as a property, who stuffed or preserved it in some way known to themselves, and brought it here again, ghastly and dead, stuck it in an attitude dressed up like a dancer, and showed it

'unhappy monster […] some mixture of a terrible baboon and the lowest type of savage humanity, a humiliating link with the brutes, a creature which, though like the female sex, was bearded like a man, like a goat, or what not?'[49] Seemingly uncertain as to just what Pastrana represents, the author of the piece fails to differentiate between her mixed gender and obscure species, putting both as possible reasons for her unusual shape and hair growth.

Arthur Munby's remarkable poem about Pastrana, published nearly fifty years after her death, demonstrates the extent to which anxieties about species confusion resonate in English literature and culture even beyond the turn of the twentieth century.[50] In one sense, the poem simulates the freak show experience and reveals the mixed sensations of horror and amusement that the sideshow evoked in its spectator. In another, it exposes the incongruity of the animal and the woman in one body. The poem begins with its narrator at the zoo, observing a 'big black ape from over the sea', who 'splutter'd and grinn'd in a fearsome way'.[51] Fascinated and appalled by the sight, he is unable to look away:

> Who could help staring? I, at least,
> Had never set eyes on so strange a beast –
> Such a monstrous birth of the teeming East,
> 	Such an awkward ugly breed:
> She had large red ears and a bright blue snout,
> And her hairy limbs were firm and stout:
> Yet still as I look'd I began to doubt
> 	If she were an ape indeed. (p. 5)

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unchecked – not in a miserable booth at a fair, not in the back regions of Bethnal-green or Whitechapel, but in the best part of this great and civilised city, at the best season of the year 1862, when London was especially full of cultivated and educated persons.' 'Small-beer Chronicles', *All the Year Round*, 6 September 1862, pp. 610-1.

[49] 'Small-beer Chronicles', *All the Year Round*, 6 September 1862, p. 610.

[50] Stern has shown how Pastrana's 'body signified powerfully for the Victorian audiences that viewed her initially, and it continues to signify powerfully now'. 'Our Bear Women, Ourselves', p. 202.

[51] Arthur Munby, 'Pastrana', in *Relicta* (London: Bertram Dobell, 1909), p. 5. All further references to this poem are to this edition and will be given in the text.

He sees a ‘singular look’ in her ‘fierce brown eyes’, the ‘look of a creature in disguise’ (p. 5), and he questions her animality. Although he is ‘young’, ‘strong’, ‘tall’ and ‘blest with a human shape’ (p. 8) he feels threatened by ‘a desperate brute with a monstrous face’ and fears the ape’s ‘foul embrace’ (p. 8). There is anxiety in the language used here that the animal Other will overcome (or become) him.

In the dining room of an inn later that day, seemingly safe from the exotic and outlandish animals in the zoo, he encounters the ‘baboon lady’ (one of the many animal monikers that labelled Pastrana during her life) and significantly, again, it is her eyes which disclose her true identity to the viewer:

> Sure I remember those bright brown eyes?
> And the self-same look that in them lies
> I have seen already, with strange surprise,
>   This very afternoon;
> Not in the face of a woman like this,
> Who has human features, and lips to kiss.
> But in one who can only splutter and hiss –
>   In the eyes of a grim baboon! (p. 10)

Munby’s narrator suggests that the exchange in viewing is uncomfortable, problematic, and unpleasant: the eyes, which are looked into and looked out of, form part of a visual contract which conveys experience and perception. After death, in Pastrana’s taxidermized state,[52] Stern notes that her ‘capacity for response [is] suspended, her body [is] rendered passive, mute, and visually inert’.[53] Like a favourite pet or a wild hunted animal, Pastrana’s

[52] Perhaps Pastrana was permitted to be exhibited postmortem because she was considered to be more animal than human. Her mummification was, perhaps in fact, a kind of taxidermy (ideologically, if not literally).
[53] Stern, ‘Our Bear Women, Ourselves’, p. 214.

indeterminate body is frozen in time and space. Finally, unable to look or talk back, her spectators can observe without fear of reprisal.

Perhaps the most famous and enduring freak story in British history is that of Joseph Merrick, the 'Elephant Man'. Exhibited during the 1870s and 80s throughout Europe as a sideshow act, and memorialised in film in 1980,[54] the image and story of this man have proliferated for more than a hundred years. As in the cases of Krao and Pastrana, what has fascinated the public for so long is the incongruity between his animal appearance and his charismatic character. Of all the primary sources available concerning Merrick's condition, Treves's memoirs, *The Elephant Man and Other Reminiscences* (1923), are the most comprehensive and meticulous, if also the most biased and personal. In recounting how he first encountered the Elephant Man's sideshow act in November 1884, Treves recollects observing a coarsely drawn picture of the exhibition:

> This very crude production depicted a frightful creature that could only have been possible in a nightmare. It was the figure of a man with the characteristics of an elephant. The transfiguration was not far advanced. There was still more of the man than of the beast. *This fact – that it was still human – was the most repellent attribute of the creature.* There was nothing about it of the pitiableness of the misshapened or the deformed, nothing of the grotesqueness of the freak, but merely the loathsome insinuation of a man being changed into an animal.[55] (my emphasis)

[54] The Elephant Man penetrated the public consciousness once more in 1980 in David Lynch's rendering of Merrick's story on film. The movie received eight Academy Award nominations and stars such celebrated actors as John Hurt as Merrick, and Anthony Hopkins, who plays Treves.
[55] Treves, *The Elephant Man and Other Reminiscences* (London: Cassell, 1923), pp. 1-3.

Treves is unambiguous here in his assertion that the 'most repellent attribute of the creature' was that it was 'still human'. What evokes disgust and horror in the doctor is the fact that the man, whom he portrays as metamorphosing into an animal, has retained some human characteristics. Treves seems unconcerned about the actual process of metamorphosis; only the hybridity of Merrick's strange bodily form is hideous. This passage is perhaps the most notable in all the primary literature on Merrick for its use of overtly Gothic language. Using terms such as 'frightful', 'nightmare', 'repellent', and 'loathsome', Treves describes Merrick as a creature beyond the bounds of what can be conceived of as human. Further referring to Merrick as a 'curious creature', 'it', a 'thing', 'the most disgusting specimen of humanity', and 'a degraded or perverted version of a human being',[56] Merrick is identified here as a subhuman, even nonhuman, being.

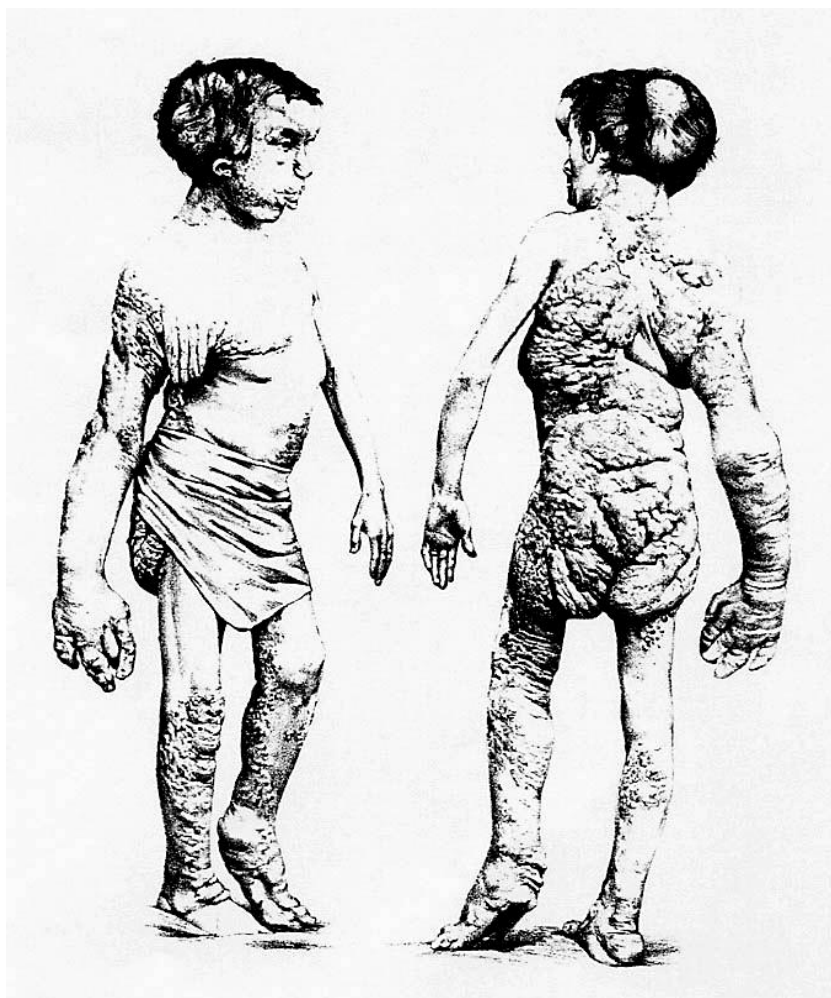

Figure 23. The Elephant Man as displayed in the *British Medical Journal* in 1886.

[56] Treves, *The Elephant Man*, p. 3.

The conclusion to Treves's chapter on Merrick makes a clear distinction between the physicality and the character of the man:

> As a specimen of humanity, Merrick was ignoble and repulsive; but the spirit of Merrick, if it could be seen in the form of the living, would assume the figure of an upstanding and heroic man, smooth browed and clean of limb, and with eyes that flashed undaunted courage.[57]

The sharp contrast here between Merrick as human being (and the physical limits of what that might mean) and Merrick's 'spirit', an unseen and therefore concealed catalogue of qualities, is striking. Although Treves acknowledges that Merrick's 'humanity' is in his character, and not his physical form, he conflates Merrick's outward appearance with his character traits and by doing so implies that Merrick can never be a truly 'upstanding' or 'heroic' person because he lacks the body ideologically conducive to these qualities. Unable to show expression in his face or speak coherently, Merrick was dispossessed of 'normal' human experience.

A further example of how freak show culture was integrated into medical literature can be seen in the many articles on the medical aspects of freakery that were published in *The Lancet* between its foundation in 1823 and the end of the nineteenth century. From numerous cases of monstrous births to people who developed horns in later life, the journal documents all kinds of unusually-shaped people. In '"A Living Centaur"', the writer asserts:

> Under this fantastic title a curious example of genu recurvatum congenitale is on exhibition at the present time at the Royal Aquarium. The freak in question is a negro, 23 years of age, who gives an exhibition of his equine attainments by running, trotting, and pacing on all fours. [...] When running on all fours and

[57] Treves, *The Elephant Man*, p. 36.

> viewed from the side the gait bears a curious resemblance to that of a trotting horse [...] The claim of the "living centaur" to be a descendant of Ixion and Nephele will, we fear, not stand investigation, but he is at any rate an interesting and marked example of a somewhat uncommon congenital deformity.[58]

The language of exposition is employed here in rather ingenious ways. The word 'exhibition' is used twice; once to refer to the sideshow and then again to allude to the demonstration of what his unusually-shaped body can do. The writer concedes that, 'on all fours' (an expression usually used to refer to the movements of animals), the man's pace has a 'curious resemblance' to that of a horse. Although the physician here does not sensationalise the story by validating the claim that the 'centaur' is descended from the race of centaurs in Greek mythology, he does use adjectives such as 'interesting', 'marked', and 'uncommon' to describe the man. This rhetoric served to publicise, and therefore market, this disabled man's sideshow act. Thus, interestingly, it was not only freak shows that used the medical profession to their own advantage, but medical practitioners

Figure 24. Humorous picture of the Pig-faced Lady published gratis with the *Police News* 7 January 1882. © John Johnson Collection, Oxford.

[58] *The Lancet*, 27 January 1900, pp. 250-1.

simultaneously exploited the status and notoriety of freak culture in order to popularise their work.

It was not only humans portrayed as animals that caught the public's attention at the freak show. The Pig-faced Lady – about whom a popular myth had been expounded since the mid-seventeenth century[59] – was advertised as a woman born with pig-like features (see figure 24). However, in several expositions of the spectacle, such as the one at Hyde Park Fair in 1837, the showmen actually used a shaven bear dressed as a woman, as Jan Bondeson's discussion of the phenomenon explains fully.[60] This case of animal freakery proved how easily notions of species could confound the senses. This bear successfully masqueraded as a woman with a pig face, drawing in crowds of people curious to see for themselves what a pig-faced lady would look like and how she would behave. Satisfied with what they found, records show that spectators did not question that the creature before them was indeed a woman with porcine attributes.[61] In the Pig-faced Lady, then, species merge into one monstrous being that defies easy identification.[62] The creature could be a woman

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[59] For further details on the history of this phenomenon as understood during the Victorian period, see Robert Chambers (ed.), *The Book of Days: a Miscellany of Popular Antiquities in Connection with the Calendar including Anecdote, Biography, & History, Curiosities of Literature, and Oddities of Human Life and Character*, 2 vols (London & Edinburgh: W. R. Chambers, 1864), 2, pp. 255-7.
[60] Jan Bondeson explains how freak-show organisers prepared the bear for the public: 'showmen procured a fine black bear, and proceeded to shave the hair off its snout, neck and front paws. The beast, which had previously been drugged with a tub of warm, strong ale, or with some other concoction of Mickey Finn, was then lugged into a comfortable armchair, and dressed in an elaborate lady's costume with a padded bosom, frills and ribbons. Elegant shoes were fastened to the bear's rear paws, to hide the claws and give the resemblance of human fingers and toes. Finally, a large wig with elaborate blonde ringlets was stuck on its head, and a large fashionable hat on top of the wig.' Bondeson, *The Pig-faced Lady of Manchester Square and Other Medical Marvels* (Stroud: Tempus, 2004), p. 86.
[61] Bondeson notes that 'It is recorded that the many Irish expositions of pig-faced ladies were all uniformly successful; nor was any charge of fraud brought against the 1828 Bartholomew Fair exhibition, or that held in Hyde Park in 1843.' *The Pig-faced Lady of Manchester Square*, p. 87.
[62] Laurel Erickson has discussed the Pig-faced Lady myth in relation to Marian Halcombe's sexuality in Wilkie Collins's *The Woman in White* (1860). Through her discussion of the aesthetics of the Pig-faced Lady in terms of sexuality and gender, she recognises the problem of human/animal hybridity that underpins the idea of difference in the freak figure: 'What the Pig-faced Lady and Marian have in common is a physical appearance that problematizes nineteenth-century understandings of difference. The recognition without reconciliation that the two invoke in their admirers foils binary classifications. […] As queer subjects they elude categorization, dissolve boundaries, and rupture the seamlessness of a social body based upon sexual difference.' Erickson, '"In Short, She Is an Angel; and I Am–": Odd Women and Same-Sex Desire in Wilkie Collins's *Woman in White*', in *The Foreign Woman in British Literature: Exotics, Aliens, and Outsiders*, ed. by Marilyn Demarest Button

dressed as a pig, or a pig made up like a woman, or even, as was the case in many instances, a bear drugged, shaven, dressed, and with all the accoutrements necessary to convince the paying public that it was a genuine hybrid of these two species.

Human/animal freakery revealed, on conscious and subconscious levels, deep-rooted anxieties about human origins. Whether the human/animal body was, as the showmen often claimed, a true hybrid (as in a 'cross' between an animal and a human), or a throwback to an animal ancestor, or, as the medical community often attributed the monster, the product of a hysterical pregnant woman, or even an animal impersonating a woman, the freak body bore out the mark of the shame of its (ancestral) parents. The exhibition of the human and animal in one cohesive being rendered feelings of terror as well as amusement mixed with horror and curiosity. Moreover, the freak represented more than physical hybridity. The incongruity of the freak's noble – all too human – nature and their animalised bodily form created tension between the Other and the familiar. Their implicit uncanniness, that sense of 'not me' 'not that' is part of the denial of recognition. At what point did one stop being human if one was no longer recognisable as human? At what point was an animal no longer animal if it was publically displayed, and accepted to be, human? Gothic fiction exploits the dichotomy intrinsic in the human/animal deformed figure in much the same way as the freak show did. Using hyperbolic language and disturbing images of deformity similar to that found in other forms of literature connected with the freak, the Gothic engages with freak culture in a number of interesting ways, as the remainder of this chapter will show.

Wilkie Collins's deformed detective figure in *The Law and the Lady* is not a freak exhibited for money. Instead, although certainly freakish in physicality and character, Miserrimus Dexter's body politics subvert the viewer/reader's expectations of what we

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and Toni Reed (Westport, Connecticut: Greenwood Press, 1999), p. 102. By aligning sexual Otherness with species Otherness, Erickson shows another facet to ways in which human/animal hybridity in the freak show infiltrated Victorian culture.

expect of disability as a literary and cultural trope. As Flint argues convincingly, 'Dexter presents an instance of someone whose physical limitations are to an extent compensated for by his mental capacities.'[63] For Collins, the disabled body does not debilitate the mind; in many ways, it liberates it.

It is important to understand something of the culture and history of freakery in Britain in order to get an accurate picture of what Collins and Wells aim to show in their portrayal of human/animal beings. It has been necessary, therefore, to uncover these specific examples of freakery to fully appreciate the stories' analyses of Victorian Britain, and I will now demonstrate the ways in which these instances inform a reading of the novels. Although, clearly, the novels do not solely deal with this aspect of contemporary culture, their engagement with the freakish (specifically hybridised human/animal) body is crucial to an analysis of the texts as a whole. The novels under discussion in the remainder of this chapter reveal a deep-seated anxiety about and fascination with the permeability of species boundaries and, in their use of the human/animal body, represent a culmination of the themes with which this thesis has been primarily concerned. If Victorian readers interpreted the human as an amalgamation of other animal bodies, perhaps the political message that underpins these texts aims to push aside difference while promoting the acceptance of sameness fundamental to the freak's status as Other.

4. Miserrimus Dexter and the Contexts of Literary Freakery

Freaks abound in nineteenth-century fiction[64] and their place and function in the Gothic genre has not yet been fully explored by literary and cultural theorists. The fiction examined here

[63] Kate Flint, 'Disability and Difference', in *The Cambridge Companion to Wilkie Collins*, ed. by Jenny Bourne Taylor (Cambridge: Cambridge University Press, 2006), p. 156.
[64] Some examples are the six-foot-tall Mrs. Wragge in Collins's *No Name* (1862) and the blue-skinned man in his *Poor Miss Finch* (1872), the dwarf Quilp in Dickens's *The Old Curiosity Shop* (1841) and Oscar Wilde's

employs sensational images of difference and presents those body types recognisable as belonging to the realms of freak show culture. Both reflecting and transposing the fears and anxieties encountered in the freak show experience, Gothic fiction – whether under the umbrella genres of sensation or science fiction – employs the hyperbolic language and imagery of freakery. As Teresa Mangum's excellent article on Dexter's freakishness has shown, there is a clear correlation between sensationalism in fiction and in freak show culture in terms of language, imagery, and narrative devices.[65] This section will explore the character of Dexter in Wilkie Collins's lesser-known novel *The Law and the Lady* and the genre of sensationalism, which, as Craton has noted, reflects the scandal and melodrama of the sideshow spectacle.[66] In this novel, the reader takes on the role of the viewer and, as Mangum argues persuasively, *The Law and the Lady* 'asks who can look at whom (a function of social relations) under what circumstances (a function of plot)'.[67] To return to the theory of freakery that I established in an earlier section of this chapter, it is a novel (through the characterisation of Dexter) that constantly calls attention to the observation of that being which is simultaneously outside and inside the limits of the human. While reading, the reader as viewer experiences that sensational encounter with the abject, the Other, the uncanny, but the freak cannot stare back, cannot seek redress. Like Pastrana's posthumous exhibition, Dexter is an unreal replica of the freak. He is a safe object of observation, though equally capable of satisfying human curiosity.

'The Birthday of the Infanta', in *The Happy Prince and Other Tales* (1888), the crippled Jenny Wren and the one-legged Silas Wegg in Dickens's *Our Mutual Friend* (1865).

[65] Mangum asserts that '[l]ike freaks and freak shows, Collins and the sensation genre he helped to popularize occupied peculiar physical and imaginative spaces in Victorian culture.' Teresa Mangum, 'Wilkie Collins, Detection, and Deformity', *Dickens Studies Annual* 26 (1998), p. 289.

[66] Craton makes the link between sensationalism in literature and the sideshow act clear: '[s]ensationalism is defined by the visceral response it seeks from its audience, one that depends on surprise, horror, titillation, and distaste – and thus holds close ties to the freak show.' Lillian E. Craton, *The Victorian Freak Show: The Significance of Disability and Physical Difference in Nineteenth-Century Fiction* (New York: Cambria Press, 2009), p. 123.

[67] Mangum, 'Wilkie Collins, Detection, and Deformity', p. 286.

There is a plentiful supply of freakish humans in the fiction of Collins[68] and Flint links his prolific use of physical deformity to his own bodily shortcomings.[69] However, given the popularity of the freak show and the pervasiveness of disability in everyday Victorian life, it is more likely that Collins's employment of the trope in his fiction has much to say about the curiosity that freaks evoked. Flint is correct in her assertion that 'Collins seems fascinated not so much by the difference of the disabled, but by their similarity to the able-bodied'[70] and this is a point that is central to my argument in this chapter.

The reader's first encounter with Dexter is in the report of a criminal trial that has taken place to determine whether Eustace Macallan has murdered his wife. Eustace is the newly-wed husband of the narrator and protagonist, Valeria. Shortly after their wedding, Valeria discovers that her husband has been tried for the murder of his previous wife and the (Scottish) verdict given was 'not proven'. Because this ruling compromises her husband's reputation, Valeria takes it upon herself to investigate the crime, and her enquiries into the case lead her to Dexter. Although Dexter is not on display for profit, the context in which he is first presented to the reader is a public setting and the performance it demands echoes that of the sideshow spectacle. Moreover, in sharp contrast to his ungainly shape, the courtroom is an environment which necessitates strict social, moral, and cultural boundaries. His entrance thus gives the impression of a sensational spectacle:

> Gliding, self-propelled in his chair on wheels, through the opening made for him among the crowd, *a strange and startling creature – literally the half of a man –*

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[68] Holmes asserts that Collins 'was one of the most prolific producers of disabled characters in Victorian literature, along with his friend, colleague, collaborator, and competitor Charles Dickens', although, surprisingly, her discussion of Collins's work does not mention *The Law and the Lady*. Martha Stoddard Holmes, *Fictions of Affliction: Physical Disability in Victorian Literature* (Ann Arbor: The University of Michigan Press, 2004), p. 74.

[69] Both Holmes and Flint refer to Collins's health problems (such as poor eyesight) as inspiration for his disproportionate use of the disabled figure in his novels. Holmes, *Fictions of Affliction*, p. 74 and Flint, 'Disability and Difference', p. 153.

[70] Flint, 'Disability and Difference', p. 154.

> revealed himself to the general view. A coverlid, which had been thrown over the chair, had fallen off during his progress through the throng. The loss of it exposed to the public curiosity the head, the arms, and the trunk of a living human being: absolutely deprived of the lower limbs. To make this deformity all the more striking and all the more terrible, the victim of it was – as to his face and body – an unusually handsome, and unusually well-made man. [...]Never had a magnificent head and body been more hopelessly ill-bestowed than in this instance! Never had Nature committed a more careless or a more cruel mistake than in the making of this man! (My emphasis, p. 173)

The absence of the coverlid exposes Dexter's deformity to the audience and because of this visual lack, his handsome good looks are 'all the more striking and all the more terrible'. Incompatible with his otherwise odd physiology, Dexter's attractive features are betrayed by the utter horror of his misshapenness. If Dexter has to be Other, he ought to be entirely Other, completely unlike 'normal' men but, like Pastrana, he is a hybrid being (half gentleman, half depraved animal body). The merging of the two aspects of his form – the absence of his lower limbs and the attractiveness of the upper half of his body – create a troubling disparity.

Unlike the freak on display in Victorian culture, Dexter is able to eloquently express his awareness of his borderline freak status. In response to the audience's evident hilarity at his entrance in this manner, he pleads with the audience not to laugh at him, and in doing so he articulates a rebuke of those who pay to ogle freak spectacles.

> 'People generally laugh when they first hear my strange Christian name,' he said, in a low, clear, resonant voice, which penetrated to the remotest corners of the Court. 'I may inform the good people here that many names, still common among us, have their significations, and that mine is one of them. [. . .] My name,

> "Miserrimus," means, in Latin, "most unhappy." It was given to me by my father, in allusion to the deformity with which it was my misfortune to be born. You won't laugh at "Miserrimus" again, will you?' (pp. 173-4)

The inverted commas he uses to refer to his name is of some interest here – 'Miserrimus' is not who or what he really is, like the term freak, it is a label applied to him to denote his deformity. Furthermore, given the widely held beliefs about the origins of monstrosity, Dexter's declaration of the derivation of his deformity is noteworthy. He feels the need to justify his lack of legs by accounting for it in this public way, thereby dispelling myths of interspecies breeding or missing link narratives. The appropriation of his name, however, does give the impression that superstition is associated with his history.

On the prospect of meeting Dexter, Valeria feels that his 'horrible deformity' will not trouble her, despite the advice her husband's friend, Major Fitz-David, gives her: 'My dear lady, the man's mind is as deformed as his body. [. . .] He is a mixture of the tiger and the monkey. At one moment, he would frighten you; and at the next, he would set you screaming with laughter' (p. 191). Unperturbed, Valeria arranges a meeting with Dexter in her quest to clear her husband's name. On her first visit to his home, she finds a 'fantastic and frightful apparition, man and machinery blended in one – the new Centaur, half man, half chair' (p. 206). Accompanied by her mother-in-law, the two women watch, hidden by the darkness of the room, and are witnesses to one of his monomaniac episodes:

> "I am Shakespeare!" cried the frantic creature now. "I am writing 'Lear,' the tragedy of tragedies. Ancients and moderns, I am the poet who towers over them all. Light! light! the lines flow out like lava from the eruption of my volcanic mind. Light! light! for the poet of all time to write the words that live forever!" He ground and tore his way back toward the middle of the room. As he approached the fire-place a last morsel of unburned coal (or

> wood) burst into momentary flame, and showed the open doorway. In that moment he saw us! The wheel-chair stopped with a shock that shook the crazy old floor of the room, altered its course, and flew at us with the rush of a wild animal. We drew back, just in time to escape it, against the wall of the recess. The chair passed on, and burst aside the hanging tapestry. The light of the lamp in the circular room poured in through the gap. The creature in the chair checked his furious wheels, and looked back over his shoulder with an impish curiosity horrible to see. (pp. 206-7)

Poised between the magnificence of Shakespearean poet and the horror of animal goblin, Collins draws implicit parallels between the freak in Victorian culture and the disabled body in literature. Through his portrayal of the deformed detective, a man/animal being, mad but also brilliant, class and biological distinctions are broken down. Shortly after, the animal imagery is underscored when, springing from the chair, Dexter becomes a spectral vision of 'a head and body in the air, absolutely deprived of the lower limbs': 'The moment after, the terrible creature touched the floor as lightly as a monkey, on his hands. The grotesque horror of the scene culminated in his hopping away on his hands, at a prodigious speed, until he reached the fireplace in the long room' (p. 207). Valeria presents Dexter as a 'frantic creature', a 'terrible creature', monkey-like, capable of hopping on its hands 'at prodigious speed'. Such depictions convey the sense of alienation she experiences as viewer of Dexter's spectacle. Though Dexter is no sideshow freak, such scenes are reminiscent of circus acts and in performing in this way, he aligns himself with the world of sensational freak spectacle.

In direct opposition to this manic outbreak, however, Dexter undergoes a radical metamorphosis in appearance and disposition. From mad freak to handsome gentleman, Dexter is the embodiment of alterity because, by oscillating throughout the novel between accepted modes of normal and abnormal, he is unable to be both nor neither. In the following

passage, taken from the scene shortly after the previous frenzied episode, Valeria comments on the complete reversal of his now latent deformity. Transformed in attire, character, and demeanour, Dexter is apparently composed, poised, and almost serene:

> I saw plainly now the bright intelligent face and the large clear blue eyes, the lustrous waving hair of a light chestnut colour, the long delicate white hands, and the magnificent throat and chest which I have elsewhere described. The deformity which degraded and destroyed the manly beauty of his head and breast was hidden from view by an Oriental robe of many colours, thrown over the chair like a coverlet. […] It may well have been due to want of perception on my part – but I could see nothing mad in him, nothing in any way repelling, as he now looked at me. […] Looking at him as a whole (and speaking of him, of course, from a woman's, not a physiognomist's point of view), I can only describe him as being an unusually handsome man. A painter would have revelled in him as a model for St. John. And a young girl, ignorant of what the Oriental robe hid from view, would have said to herself, the instant she looked at him, "Here is the hero of my dreams!" (pp. 213-4)

What lies beneath the stylish and refined apparel, Valeria cannot help but note, - that absence of legs -, is what reveals Dexter as monster. When his lack is covered from scrutiny, examined 'as a whole', he is an 'unusually handsome man' (notably Valeria remarks that the deformity exists); when it is on view, Dexter's unhinged mind becomes, as the Major suggests, 'as deformed as his body'. This link between madness and deformity is not a distinctly Victorian literary trope, as critics have shown[71], however, it is dealt with in this novel in a way that resonates with freak show culture in important ways. Dexter's

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[71] Shakespeare's *Richard III*, for example, employs the motif of deformity to denote the corruption of his protagonist. See Mitchell and Snyder's essay 'Disability Studies and the Bind of Representation', in *The Body and Physical Difference: Discourses of Disability in the Humanities*, ed. by David T. Mitchell and Sharon L. Snyder (Ann Arbor: The University of Michigan Press, 1997), pp. 13-6.

performances in the courtroom scenes and in his own home, unaware of the presence of his viewers, are uncomfortable moments of reader spectatorship: the reader takes on the role of observer and eyewitness to Dexter's mania. As part of his theatrical display, the reader must participate in this scrutinization of his (undesired and undesirable) exhibition. As the novel progresses, these instances become more remarkable and elaborate.

At their next meeting, Valeria observes Dexter in another panic-stricken state. Here, though, she seems disturbed by Dexter's transformation from handsome man to what she terms 'monstrous frog'. Like Treves's repulsion at the humanity of Merrick in the light of his animalistic body, Valeria suffers from that uncanny recognition of human and animal in one body:

> He was off on his furious wheels – half man, half chair – flying like a whirlwind to the other end of the room. Even this exercise was not violent enough for him in his present mood. In an instant he was down on the floor, poised on his hands, and looking in the distance *like a monstrous frog*. Hopping down the room, he overthrew, one after another, all the smaller and lighter chairs as he passed them; arrived at the end, he turned, surveyed the prostrate chairs, encouraged himself with a scream of triumph, and leaped rapidly over chair after chair on his hands – his limbless body now thrown back from the shoulders, and now thrown forward to keep the balance – in a manner *at once wonderful and horrible to behold*. "Dexter's Leap-frog!" he cried, cheerfully, perching himself with his birdlike lightness on the last of the prostrate chairs when he had reached the further end of the room. (My emphasis; p. 259)

As in the article about the 'Living Centaur' in *The Lancet*, Dexter's modus operandi here is crucial to the way in which we read his body politics. He poises and hops like a 'monstrous

frog'; he reminds one of some creature that exists between the life-size labyrinthodont on display at the Sydenham Crystal Palace in 1854 and a freak show act at the circus. Later referred to by another character as 'the most grotesquely-horrible exhibition you can imagine!' (p. 268), Dexter's hopping is a regressive characteristic and thus evokes anxieties about what evolution might mean for the future of the human species. In this anomalous state, the exhibition of his body is 'at once wonderful and horrible to behold', and the tension produced in the use of these contrasting adjectives 'wonderful' and 'horrible' is striking.[72]

Yet Dexter is also playing a role both in the novel and in an imaginary experience that is not his. He tells Valeria,

> 'I have an immense imagination. It runs riot at times. It makes an actor of me. I play the parts of all the heroes that ever lived. I feel their characters. I merge myself in their individualities. For the time, I *am* the man I fancy myself to be.' (Original italics; p. 218)

Dexter has an innate sense of alterity which he is able to project onto other characters; he is a polymorphous being that has no real sense of who or what he is. He is no one and everyone; a hero and an everyman; remarkable and ordinary. The emphasis placed on the present participle '*am*' here is significant; it is Dexter's insistence on his value as a human being in a society in which such a body as his, though not for sale, has a price.

Mary Rosner has argued that 'Dexter's culture fails to control him' and although much of her argument about his monstrosity seems to be based on this assertion, she admits that 'labelling him in conventional Victorian ways – as unhealthy in mind and body – fails to

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[72] Denisoff has commented that 'Collins more than once emphasizes the contrast between this lack and Miserrimus's beauty and impressive stature' but he relates this more to the feminisation of Dexter than a signification of him as a debilitated or disabled character. Dennis Denisoff, 'Framed and Hung: Collins and the Economic Beauty of the Manly Artist', in *Reality's Dark Light: The Sensational Wilkie Collins*, ed. by Maria K. Bachman and Don Richard Cox (Knoxville: The University of Tennessee Press, 2003), p. 48.

explain him fully'.[73] Perhaps, though, it is Dexter's intelligent mind – his ability to imagine another life for himself outside the confines of his malformed body – which *refuses* to allow Victorian culture to control him. His powerful assertion '"I *am* the man I fancy myself to be"' both rejects stereotypical readings of his unusual body and avows his membership of the human race.

5. Manufacturing Monsters in H. G. Wells's *The Island of Dr Moreau* and Richard Marsh's *The Joss: A Reversion*

Although the human/animal freak figure was representative of the animal figuratively, rhetorically, and biologically trapped within the human, H. G. Wells's early scientific romance, *The Island of Dr. Moreau* (1896), bridges the gap between human and animal, not by showing how humans can have regressive features, but by suggesting that animals are capable of attaining human faculties as in the case of some of the freaks this chapter has examined such as Krao and Pastrana. Wells suggests both the possibility of empathy between humans and animals and he questions the limitability of the human species. By subverting the freak's degenerative role, Wells is able to construct beings which resemble, mimic, and imitate humanity and by doing so he expands the limits of the human in much the same way as freak culture had reduced them. Moreau's hybrid beings are *not* freaks but, just as shrewd sideshow managers used materialist theory to promote their acts, Wells's vision of such monsters seeks a reassessment of the fundamental material of the human. Wells conducts his own experiment into the concept of what it means to be human.

The unsophisticated, though sensational, rhetoric of the freak show world – those numerous examples of terms such as 'Ape Woman', 'Bear Lady', 'Elephant Man', 'Camel Girl', 'Turtle Woman', amongst many others – are notably reemployed in *The Island of*

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[73] Mary Rosner, 'Deviance in *The Law and the Lady*: The Uneasy Positionings of Mr. Dexter', Victorian Newsletter 106 (Fall 2004), p. 12.

Doctor Moreau. Using precisely the same monikers for his Beastfolk,[74] the novel is replete with animal-humans such as 'Ape-man', 'Leopard-man', 'Satyr-man', 'Ocelot-man', 'Swine-woman', 'Monkey-man', 'Beast-man', 'Wolf-man', 'Ox-boar-man', and 'Dog-man'. In the rhetoric of representing both the human/animal freak and Wells's Beastfolk, the evolutionary past of all creatures breaks out into the present. Freakery led Wells to employ precisely the same idiomatic terms in his fictional representation of unusually-shaped animals. Like the freaks so prevalent in Victorian popular culture, Wells's Beastfolk are what Kelly Hurley terms 'multiple hybrids', 'chaotic bodies' which are made up of '"complex bodies"'. [75]

Notably, Prendick is horrified not by the difference between animal and human in the Beast People, but by the similarity. Prendick sees something of himself in the animals, something of his own animality:

> Suddenly, as I watched their grotesque and unaccountable gestures, I perceived clearly for the first time what it was that had offended me, what had given me *the two inconsistent and conflicting impressions of utter strangeness and yet of the strangest familiarity*. The three creatures engaged in this mysterious rite were human in shape, and yet human beings with the strangest air about them of some familiar animal.[76] (p. 42; my emphasis)

The uncanniness of the Beast People is disturbing; they are 'human in shape', yet tainted with 'some familiar animal'. They present the human observer with 'two inconsistent and conflicting impressions' of what their material status may be. On his first encounter with

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[74] Nick Redfern suggests that the 'ambiguity of the Beast Folk is demonstrated in their naming', though he does not mention the evident link with the similar naming of Victorian freaks. Redfern, 'Abjection and Evolution in *The Island of Doctor Moreau*', *The Wellsian* 27 (2004), p. 41.

[75] Though, as Hurley further notes, the 'complexity here denotes indifferentiation and abomination rather than integrity and perfection', as we might expect it to. Hurley, *The Gothic Body*, p. 103.

[76] H. G. Wells, *The Island of Dr Moreau* (London: Penguin, 2005), p. 42. All further references are to this edition and will be given in the text.

one of the Beast People in the forest, Prendick questions 'What on earth was he? – man or animal? What did he want with me? (p. 43). In moving towards the creature and calling out, '"Who are you?"' (p. 43), Prendick's use of the pronoun 'who' is significant. for, as it transpires, so convinced is he by the Beast Folk's human shape that he understands them to be humans moulded into animal shapes. But Prendick has misunderstood; Moreau is conducting an experiment by putting animals through a 'humanizing process', a method of vivisection that requires sculpting animals into human form. They are 'monsters manufactured', as Moreau terms them, 'carven and wrought into new shapes' (p. 71) and his ability to transform them is testament to the pliability of organic life both in material physicality and character. To varying degrees, depending on the animals from which they have been composed, the Beast People have acquired human characteristics such as speech, they live by Moreau's law, they assimilate human ways and mannerisms. Like the uncanny form of Julia Pastrana, both ape and woman, bear and lady, animal and human, these Beast Folk confuse Prendick's awareness of selfhood; as Nick Redfern argues, '[i]t is Moreau's creations – the Beast Folk – that threaten Prendick's definition of himself as a civilised man'.[77] The island's animal/human hybrids not only challenge Prendick's perception of himself as a civilised man, but also question his status as man at all.

By collapsing evolutionary boundaries, Wells subverts notions of identity in the most profound ways. In line with prevalent degeneration theories of the 1890s, Wells imagines creatures that can never escape their animal ancestry. Humanity, it seems, cannot be learned, cannot be 'manufactured'; it is something acquired over millennia. Whatever humanity *is*, the Beast People do not, indeed cannot, achieve it: 'the stubborn beast flesh grows, day by day,

[77] Redfern, 'Abjection and Evolution in *The Island of Doctor Moreau*', p. 41.

back again ...' (p. 77). Their reversion, what Huxley terms 'retrogressive metamorphosis',[78] becomes a constant source of anxiety to Prendick,[79] and as Mark R. Hillegas has pointed out, the novel not only shows that the 'evolutionary or cosmic process is savage and cruel and senseless and can never lead to ethical or social progress but that civilization is only a thin disguise hiding the fact that man is essentially bestial in nature, himself a product of the cosmic process'.[80]

Moreau acknowledges the uncanny encounter in his discussion with Prendick about his vivisecting mission:

> 'These creatures of mine seemed strange and uncanny to you so soon as you began to observe them; but to me, just after I make them, they seem to be indisputable human beings. It's afterwards as I observe them that the persuasion fades. First one animal trait, then another, creeps to the surface and stares out at me … But I will conquer yet. Each time I dip a living creature into the bath of burning pain, I say: this time I will burn out all the animal, this time I will make a rational creature of my own. After all, what is ten years? Man has been a hundred thousand in the making.' (p. 78)

Moreau's monomaniac and megalomaniac approach to biology creates a world of 'evolutionary chaos' in which 'the animal and the human overlap and in which the conflicting

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[78] Huxley defines 'retrogressive metamorphosis' as 'progress from a condition of relative complexity to one of relative uniformity'. T. H. Huxley, 'Prolegomena' (1894). Reprinted in *Evolution and Ethics*, *Collected Essays*, 9 vols (London: Macmillan, 1894), 9, p. 6.

[79] 'Yet every now and then the beast would flash out upon me beyond doubt or denial. An ugly-looking man, a hunch-backed human savage to all appearance, squatting in the aperture of one of the dens, would stretch his arms and yawn, showing with startling suddenness scissor-edged incisors and sabre-like canines, keen and brilliant as knives. Or in some narrow pathway, glancing with a transitory daring into the eyes of some lithe, white-swathed female figure, I would suddenly see (with a spasmodic revulsion) that she had slit-like pupils, or glancing down note the curving nail with which she held her shapeless wrap about her.' *The Island*, p. 84.

[80] Mark R. Hillegas, *The Future as Nightmare: H. G. Wells and the Anti-Utopians* (New York: Oxford University Press, 1967), p. 36.

obligations of evolution and ethics have become hopelessly tangled'.[81] His 'indisputable human beings' are part of Wells's affirmation that being human is no longer a fixed identity; the limits of the human are expanded here within a specific scientific tradition. In the mythopoeia of Shelley's *Frankenstein*, Wells 'invents' humans but, in the light of Darwinian theory, he plays upon the inconsistencies of species variation referred to in *Origin of Species*. On the one hand, 'the Beast-People represent the dual nature of man – the bestial instincts which are his evolutionary inheritance, and the cultural acquirements uneasily and painfully superimposed upon them', on the other, they 'represent the nineteenth-century confusion as to man's origins'.[82] In cultural scientific terms, the Beast People play upon that uncanniness of the stranger and the fascination with exploring the materiality of the human. My theory that it is the similarity of the Other body to the human that creates horror is supported in this novel, particularly in the portrayal of M'ling.

Montgomery's servant, M'ling, is perhaps the most freakish creature in the novel for it is in him that the human and animal truly merge. Prendick's first encounter with him replicates the conflict in the visual contact of spectator and freak. He seems to recognise something familiar in M'ling, yet at the same time he is strange and alien-looking:

> I had never beheld such a repulsive and extraordinary face before, and yet – if the contradiction is credible – I experienced at the same time an odd feeling that in some way I *had* already encountered exactly the features and gestures that now amazed me. (p. 14)

Using (now rather outdated) Jungian psychology to support her claim, Carrie Rohman has suggested that 'Prendick's vague recognition of M'ling [...] says more about him than it does

[81] John Huntington, *The Logic of Fantasy: H. G. Wells and Science Fiction* (New York: Columbia University Press, 1982), p. 68.
[82] Roslynn D. Haynes, *H. G. Wells: Discoverer of the Future* (Basingstoke: Macmillan, 1980), p. 35.

about the Beast Man because it indicates his own evolutionary kinship with animality'.[83] However, in examining the language used to describe this moment of horrifying recognition the reader encounters precisely the kind of terminology used in Victorian freak show advertisements. The use of adjectives 'repulsive', 'extraordinary', 'odd' and the verb 'amazed' are borrowed from the sensationalism of freakery. Furthermore, the fact that M'ling 'exactly' imitates human features and gestures troubles Prendick, for he is aware of the intrinsic 'contradiction' in his words. How can this strange creature be so like him, yet not human?

The answer to this question comes later in the novel, when, shortly before Prendick is served tea by M'ling, his thoughts turn to the 'indefinable queerness of the deformed and white-swathed man on the beach' and of the other strange people he has met on the island, how they were all 'remarkably taciturn, and when they did speak, endowed with very uncanny voices'. 'What was wrong with them?' he questions. A close encounter with M'ling provides a disturbing answer:

> I could hardly repress a shuddering recoil as he came, bending amiably, and placed the tray before me on the table. Then astonishment paralysed me. Under his stringy black locks I saw his ear! It jumped upon me suddenly, close to my face. The man had pointed ears, covered with a fine fur! (p. 33)

Despite having pointed fur-covered ears, though, M'ling is the 'most human-looking of all the Beast Folk' and has been trained to 'prepare food' and 'discharge all the trivial domestic offices that were required' (p. 83). Prendick's 'astonishment' (again, lexis often found in the freak show pamphlet) is brought about by the appearance of an animal ear on a human head.

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[83] Carrie Rohman, 'Burning Out the Animal: The Failure of Enlightenment Purification in H. G. Wells's *The Island of Dr. Moreau*', in *Figuring Animals: Essays on Animal Images in Art, Literature, Philosophy, and Popular Culture*, ed. by Mary Sanders Pollock and Catherine Rainwater (Basingstoke: Macmillan, 2005), p. 124.

The incongruity here between his social manners and his animal attributes is striking and reminiscent of those of Pastrana. Moreover, M'ling's lack of species specificity is reminiscent of Pastrana's publicity material; like Pastrana, as a creature made up of 'bear, tainted with dog and ox' (p. 83), M'ling is indefinable in terms of his precise species.

Prendick seems to respect, though with a sardonic sneer, the making of this 'complex trophy' of a creature, for though it is the most grotesque, it is also the most uncanny, the 'most human-looking' of all the animal/human beings on the island. Like the abnormal bodies of freaks such as Pastrana and 'What Is It?', M'ling's is a Gothic body and one that, as Hurley has argued, is 'admixed, fluctuating, abominable' and 'can best be called an abhuman body'. In Hurley's terms, the abhuman body can either retain

> vestiges of its human identity, but has already become, or is in the process of becoming, some half-human other […] Or the abhuman being may be some unimaginable "thing" incorporating, mimicking, or taking on a human form, thereby another kind of threat to the integrity of human identity.[84]

Prendick's encounter with the Leopard Man reveals one redeeming feature of the human species in the face of Moreau's cruelty, however. Prendick's empathy for the Leopard Man seemingly stems from perceiving the animal as partly human:

> It may seem a strange contradiction in me – I cannot explain the fact – but now, seeing the creature there in a perfectly animal attitude, with the light gleaming in its eyes, and its imperfectly human face distorted with terror, I realized again the fact of its humanity. (p. 94)

[84] Hurley, 'British Gothic Fiction, p. 190. For a full explanation of Hurley's theory of the abhuman see Hurley, *The Gothic Body*, pp. 3-20.

The 'fact of its humanity', however, is a fallacy: the Leopard Man is *not* human biologically or genetically; he is a manufactured monster, a terrible hybrid of animal fibre and 'distorted' human appearance. Yet in terror, Prendick acknowledges its vulnerability, and is able to adopt an empathetic understanding of its predicament. In a moment of profound anagnorisis, Prendick's fear of and pity for the animal-human being turns to compassion because it has 'stumbled in the shackles of humanity, lived in a fear that never died, fretted by a law [it] could not understand' (p. 95). Significantly, then, only in the feelings rendered by the encounter with the animal Other does Prendick feel most human.

In what Rohman calls the novel's 'two-way trafficking of identity-deconstruction',[85] the animal body is humanised, not only physically, but philosophically in *The Island of Doctor Moreau*. Just as Moreau and Montgomery turn animal on the island before their deaths, animalisation of the human is further attested in that Prendick's return to London brings him no relief from the horror of the Beast People.[86] In England, Prendick shuns human contact because he perceives in his fellow man the imminent and violent emergence of humankind's animal ancestry. Unable to repress memories of his experiences on the island, he fears that the men and women he meets in the street are in fact 'still passably human Beast People, animal half-wrought into the outward image of human souls' who might 'presently begin to revert, to show first this bestial mark and then that'. He sees 'faces keen and bright, others dull and dangerous, others unsteady, insincere; none that have the calm authority of a reasonable soul'. With these thoughts, Prendick 'shrink[s] from them, from their curious glances, their inquiries and assistance, and long[s] to be away from them and alone' (p. 130). As Philip Armstrong astutely argues, 'once Prendick can no longer tell

[85] Rohman, 'Burning Out the Animal: The Failure of Enlightenment Purification in H. G. Wells's *The Island of Dr. Moreau*', p. 130.
[86] Several critics have noted the relationship in terms of plot and political ideology between *The Island of Doctor Moreau* and *Gulliver's Travels*. See for example Hillegas's link between *The Island of Dr Moreau*, Defoe's *Robinson Crusoe*, and Swift's *Gulliver's Travels* in *The Future as Nightmare*, p. 35. See also J.R. Hammond, '*The Island of Doctor Moreau*: A Swiftian Parable', *The Wellsian* 16 (Summer 1993), pp. 30-41.

(physiologically) anthropomorphized animals apart from (metaphorically) zoomorphized humans, deconstruction of the distinction 'beast' and 'folk' is complete'.[87] The novel is thus an attempt to destabilise traditional perceptions of what constitutes the human and what makes up the animal. In Rohman's analysis of this aspect of the novel, Prendick 'recognizes the undecidability of the species boundary, and there is a certain horror in that recognition. Ultimately, Prendick places himself in a liminal species category that seems more animal than human'.[88] As in my theory of the human/freak confrontation, then, Rohman acknowledges that the Gothic elements resonant in Prendick's encounter with the Beast People are manifest in the similarity and not, as some critics have argued, in the difference.

Wells's interrogation into the fabric of humanity extrapolates troubling messages that made its contemporary readers uncomfortable. *The Island of Doctor Moreau* was not well received by reviewers in the year of its publication and the rhetoric used to describe it echoes that of the hyperbole of freak show culture and sensation fiction. One reviewer, Chalmers Mitchell, read the novel with disgust and 'the frankest dismay'. 'Mr Wells', he proclaimed grandly, 'has put out his talent to the most flagitious usury' in giving 'revolting details with the zeal of a sanitary inspector probing a crowded graveyard'.[89] The *Guardian*, an Anglican Weekly, concurred with this opinion, stating that it was a book 'no one could have the courage to recommend, and we are not inclined to recommend it either. It is certainly unpleasant and painful, and we cannot find it profitable.'[90] In spite of the immense success of *The Time Machine* a year earlier, *The Island of Doctor Moreau* so perturbed the late Victorian imagination perhaps because, according to one anonymous reviewer for the *Manchester Guardian*, this 'curious fantasy […] is intrinsically horrible' in its capacity to

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[87] Philip Armstrong, *What Animals Mean in the Fiction of Modernity* (London: Routledge, 2008), p. 78.
[88] Rohman, 'Burning Out the Animal', p. 132.
[89] Chalmers Mitchell, review of *The Island of Doctor Moreau*, *Saturday Review* (April 11, 1896), in Patrick Parrinder, *H. G. Wells: The Critical Heritage* (London: Routledge and Kegan Paul, 1972), p. 44.
[90] Unsigned review of *The Island of Doctor Moreau*, the *Guardian* (June 3, 1896), in Parrinder, *H. G. Wells: The Critical Heritage*, p. 53.

'grip the mind with a painful interest and a fearful curiosity'.[91] Although the reviewer does not say so, it was precisely this sense of curiosity that made people pay to see the freak. Wells was tapping into a hugely successful entertainment industry market in writing a science fiction novel about the horror of human/animal hybridity.

Despite the barrage of attacks from reviewers, perhaps the novel's man-making mythopoeia is not the founding horror of the piece. The shocked and appalled reception of the novel, when examined under the light of freak culture, seems to suggest that Wells had touched upon a nerve in late Victorian popular culture. In his rendering of the Beast People, the relationship between human and sideshow freak – that body that is *like* an animal but not – resurfaces here in literary form. The animal *in* the human, the pinnacle showpiece of British entertainment, is refashioned in a new, yet rhetorically familiar way in this text. Moreover, as in the case of Dexter, the reader's role as spectator of the strange Beast People is analogous to the shameless viewing of unusually-shaped human beings, and so perhaps Wells's engagement with freak culture demonstrates why we cannot tear our eyes away from the disabled body. The manufactured monster is, after all, indisputably, *us*.

As well as fictional depictions of the manufacturing of monsters, fraudulent claims to freakery constituted a large part of the sideshow business, as Richard Altick's excellent study *The Shows of London* (1978) has demonstrated. William Alden's humorous *Among the Freaks* (1896) features several stories concerning the invention / manufacturing of freakery. But perhaps the most clear indicator of this phenomenon was Francis Buckland's *Curiosities of Natural History* (1868). Here Buckland describes an encounter with a 'spotted child' whose spots, he discovers, are the result of 'a strong solution of nitrate silver which had stained the skin a jet black, and which showed up well on her white skin'. Although he freely acknowledges the fraudulence, Buckland praises the child's mother for 'being an ingenious

[91] Unsigned review of *The Island of Doctor Moreau*, the *Manchester Guardian* (April 14, 1896), in Parrinder, *H. G. Wells: The Critical Heritage*, p. 48.

woman thus to turn her child to account without in any way injuring it'.[92] Buckland is unconcerned about the commercialisation of the child and indifferent to the fact that he, alongside countless others, has been deceived by such a vicious, profit-making organisation.

Published five years after *The Island of Doctor Moreau*, Richard Marsh's Gothic tale of mystery and monstrosity *The Joss: A Reversion* (1901) features a freakish character, English by birth, who invades London suburbia from an obscure island in the Far East. Like Dexter, Benjamin Batters is a man without legs, but unlike him, he has not been born this way; he is a manufactured monster. The origins of his deformity, Batters explains, derive from his being vivisected by the natives of the island in order to turn him into a particular shape conducive to his role as joss. '"They made me the thing you see"', he tells the ship's captain as he makes his escape, '"cut me to pieces; boiled, burned, and baked me; skinned me alive. Then they dipped me into a paint-pot and made of me a god."'[93] In this postcolonial horror narrative, the Englishman is mutilated by subjects of the empire, turned into a god by being physically dismembered and psychologically scarred in the process. Batters has undergone dreadful acts of violence, forced to undergo tortures which moulded the shape of his body into a freakish, otherworldly being, a distinctly inhuman creature: 'It was hard to believe that such a creature could be human'(p. 268), states the captain of the ship commissioned to bring him back to England. In precisely the same way as Moreau's Beast People (though for quite different reasons), Batters has been shaped by pain and anguish into a creature less than human, yet more than animal. Described by one character in the novel as a 'nightmare creation of some delirious showman's fancy' (p. 247), the portrayal of Batters's deformity employs the language of freak spectatorship. Indeed, descriptions of him employ similar

[92] Buckland, *Curiosities of Natural History*, p. 56.
[93] Richard Marsh, *The Joss: A Reversion* (London: F. V. White & Co., 1901), p. 253. All further references are to this edition and will be given in the text.

language to that used to describe Dexter; Batters is no more than a ‘thing’ or a ‘creature’ and his humanity is under question:

> The face and head were as hideous as any of the horrors round about, and yet – could the thing be human? Long parti-coloured hair – scarlet, yellow, green, all sorts of unnatural colours – descending from the scalp nearly obscured the visage. There seemed to be only one eye and no nose. If there were ears they were hidden. Was it some obscure creature or the mockery of a man? There were no signs of legs. The thing was scarcely more than three feet high. […] There was certainly nothing in the way of breeches. Arms, on the other hand, there were and to spare. A pair dangled at the sides which were longer than the entire creature. Huge hands were at the ends. (pp. 246-7)

This questioning of Batters’s humanity is significant. As in the case of freaks such as Krao and ‘What Is It?’, the narrator shows that in an encounter with Batters, the spectator is unable to identify him as human, despite the uncanny recognition of the Other taking place. Excessive in his too many arms and regressive in his lack of legs, nose, and ears, Batters is a ‘creature’, a ‘thing’, ‘hideous’, and ‘obscure’. If Wells had shown that animals could be turned into humans, Marsh contemplated the possibility that humans could be transformed into animals. Both authors exploited the malleability of the organic form in their exploration of the limits of the human, but neither relied on the superstition of maternal impression or the sensation of interspecies breeding. Instead, they both employ the idea of the missing link that Krao and ‘What Is It?’ embodied earlier in the century. Just as the exhibitors of these freaks avoided having to pinpoint precisely the type of creature they were showing, Marsh is careful not to make any direct reference here to just what Batters might be. The reader is invited to read on to obtain further details of this creature’s strange form and nature. Marsh’s

manufactured monster is an animalised human; an inverted version of Wells's Beastfolk. Vivisected for the sake of superstition, not science, his warped and disfigured body reveals the true horror of freakery: in him, humanity is ever-present, yet ever-changing (and changeable).

As a missing link figure, then, Batters is aligned most closely to the ape in his movements:

> The creature scrambled off his throne by means of his arms and hands, like some huge baboon. As I had suspected, he appeared to have no legs. Reaching the ground he moved at what, under the circumstances, was an extraordinary pace. Wheels had been attached to the stumps of his legs. Using his hands as a monkey does its forearms, he advanced upon these wheels as if they had been castors. (p. 250)

Man, animal, and machine merge in Batters: he has survived his ordeal at the hands of his captors on the island by adapting to his new body. Still, the construction of his deformed body has had psychological and emotional effects on his personality and he takes on a malevolent and malicious role in the novel, seemingly wishing to harm his niece and her friend for his own gain.

One of the novel's several primary narrators, Frank Paine, a solicitor, recounts his first encounter with Batters, an incident which he refers to as 'the Affair of the Freak'. Walking home one evening from dinner with a friend, Paine comes across a crowd in the street jostling and jeering at some object they are pushing to the ground and generally mistreating. On enquiry, a bystander tells him that it is 'one of Barnum's Freaks' (p. 150), and Paine, seeing that the situation may become serious, picks up the individual and puts him in a cab to aid his escape. Looking around him at the crowd, he notes the similarity between those involved in the attack and the person or animal under attack: 'Unless their looks belied them, in a moral,

mental, and physical sense, the majority of them were "freaks," if the word had any meaning' (p. 151). As he walks away from the scene, Paine realises that he knows nothing about the being he has put into the cab:

> I had only the clay-piped gentleman's word for the fact that he, or she, was a freak at all. The creature – I call it a creature for lack of knowledge as to what he, she, or it, really was – was so enveloped in an odd-shaped cloak of some dark brown material, that, practically, so far as I had been able to see, nothing of it was visible. For all that I could tell the creature beneath the cloak might not have been human. There was nothing to show – except in the way it was shrouded, and that might have been owing to the action of the crowd – that it was what is commonly called a freak. Its connection with the Barnum Show at Olympia might be as remote as mine. (pp. 151-2)

The Joss questions the nature of freakery, asking how do we become monsters? How do we determine what monstrosity is and how ought we to deal with it? Beyond the sensation of the Gothic mode, the novel engages with contemporary issues concerning species limits. Batters is a man-made monster, but his monstrosity is not skin deep. He is a corrupt individual, and within the remit of the story, this is justification for his maltreatment and malformation at the hands of the natives. But the story is not so politically straightforward. It employs a number of freak figures besides the misshapen Batters, all of whom seek retribution for the theft of their god and jewels from the island. These people are taken directly from the freak show arena and include a microcephalous skeleton man 'of uncommon height and uncommon thinness' whose small head gives him the appearance of 'a monstrously attenuated monkey' (p. 169) and a giant who has 'a pair of enormously long arms' whose 'upright height would be gigantic' (p. 201). These would-be freak figures of the commercial world are subjects of empire, whose strange bodies penetrate and disturb

Victorian London life, causing chaos and destruction in their endeavour to discover the whereabouts of the joss and the jewels. Thus, Marsh comments on the multivalent meanings rendered in the freak by questioning whether Batters is a human/animal freak and by suggesting that even ‘ordinary’ people resemble those bodies on display at the freak show.

Conclusion

Thus far, I have argued that in the narrative frameworks of past and present, evidence of the collapse of human/animal boundaries proliferated throughout Victorian literature in a variety of ways. In the following section, which I offer by way of partial conclusion, I will examine briefly how the Victorians' imagined future deals with the limits of the human. The way in which the evolutionary destiny of the human species occupies the literary imagination of H. G. Wells, one of the *fin de siècle*'s most foremost Gothic scientific writers, is of particular interest and it is on the first of his Gothic scientific romances that this thesis will conclude.

1. Monstrous futures: H. G. Wells's *The Time Machine* and the final breakdown of species boundaries

As Gillian Beer's recent article on extinction[1] has shown, Huxley tended to evoke the dark side of evolution in a far more pragmatic way than Darwin. Indeed, Darwin's claim that 'as natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection'[2] is refuted unequivocally in Huxley's essay 'The Struggle for Existence in Human Society' (1888):

> It is an error to imagine that evolution signifies a constant tendency to increased perfection. That process undoubtedly involves a constant remodelling of the organism in adaptation to new conditions; but it depends on the nature of those conditions whether the direction of the modifications effected shall be upward or downward [. . .] The time must come when evolution will mean adaption to a universal winter, and all forms of life

[1] See Gillian Beer, 'Darwin and the Uses of Extinction', *Victorian Studies* 51 (Winter 2009).
[2] Darwin, *Origin of Species*, p. 459.

> will die out, except such low and simple organisms as the Diatom of the arctic and antarctic ice and the Protococcus of the red snow.[3]

Of course, by the late 1880s, when Huxley wrote these words, doubts about the true course of natural selection had begun to creep into scientific discourse. The malleability of the organic body, science revealed, means that it can develop in any direction, depending on its environment. This sense of random change might have disturbing consequences for humans, as Huxley's former student, H. G. Wells, was prepared to show in *The Time Machine*.

Only too aware of the extent to which evolution can 'go wrong', in his essay 'Zoological Retrogression' (1891) Wells discusses the plasticity of living organisms:

> Excelsior biology is a popular and poetic creation – the *real* form of a Phylum, or line of descent, is far more like the course of a busy man moving about a great city. Sometimes it goes underground, sometimes it doubles or twists in tortuous streets, now it rises overhead along some viaduct, and, again, the river is taken advantage of in these varied journeyings to and fro. Upward and downward these threads of pedigree interweave, slowly working out a pattern of accomplished things that is difficult to interpret, but in which scientific observers certainly fail to discover that inevitable tendency to higher and better things with which the word 'evolution' is associated.[4]

For Wells, evolution did not necessarily lead to progress.[5] His first novel, *The Time Machine* (1895), suggested that the principles upon which natural selection is based can act

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[3] T. H. Huxley, 'The Struggle for Existence in Human Society' [1888], repr. in *Collected Essays*, 9 vols (London: Macmillan, 1894), 9, p. 199.
[4] Wells, 'Zoological Retrogression' [1891], repr. in *H. G. Wells: Early Writings in Science and Science Fiction* (Berkeley; London: University of California Press, 1975), p. 159.
[5] See J. R. Hammond, *H. G. Wells and the Modern Novel* (Basingstoke: Macmillan, 1988), p. 75.

as the antithesis of human progress and culture. Before he encounters humans from the future, the Time Traveller asks himself anxiously,

> What might not have happened to men? What if cruelty had grown into a common passion? What if in this interval the race had lost its manliness, and had developed into something inhuman, unsympathetic, and overwhelmingly powerful? I might seem some old-world savage animal, only the more dreadful and disgusting for our common likeness – a foul creature to be incontinently slain.[6]

What, he asks tellingly, 'might *not*' have happened to humankind? What might they *not* have become? The possibilities, Wells implies, are endless. By 1895, the idea that the theory of evolution has changed perceptions of the human is clearly resonant; in *The Time Machine*, species boundaries are utterly mutable to the point that the human of the future is not recognisable. Thus, the Time Traveller's fears about being an otherworldly alien of the past are not realised because in the future, humans have split into two entirely separate, competing species that do not even identify him as one of their own species. Indeed, they show no sense of wonder at his regressive features, and are entirely changed in character, lacking the desire to examine him to any great extent. In *The Time Machine*, the human is no longer human. Humanity as we know it is lost and has been replaced by the apish Morlock and the 'beautiful', 'graceful', but 'frail' Eloi. But surely this is the point: humanity is not a fixed or stable concept; it is variable. As the novel progresses, it becomes apparent that the Morlock and the Eloi are not the most disturbing renderings of the future of the species that the novel has to offer. Taking the theme of the novel to extremes, in the far distant future, Wells's dark vision of the fate of humanity is of 'some black object flopping about' (p. 85). In a post-

[6] H. G. Wells, *The Time Machine* (London: Penguin, 2005), p. 22. Further references are to this edition and will be given in the text.

human, post-Eloi and post-Morlock future, Wells foretells the end of the earth and all the creatures on it:

> The darkness grew apace; a cold wind began to blow in freshening gusts from the east, and the showering white flakes in the air increased in number. From the edge of the sea came a ripple and a whisper. Beyond these lifeless sounds the world was silent. Silent? It would be hard to convey the stillness of it. All the sounds of man, the bleating of sheep, the cries of birds, the hum of insects, the stir that makes the background of our lives – all that was over. (p. 85)

In this barren landscape, thirty million years in the future, the Time Traveller observes the last living being on the planet. Described indeterminately as 'the moving thing', it is 'a big round thing, the size of a football perhaps, or, it may be, bigger, and the tentacles trailed down from it […] it was hopping fitfully about' (*Time Machine*, p. 85). The last vestige of all life, and therefore the final product of human evolution, is this unintelligent, alien-looking, tentacled organism.

Interestingly, then, Wells's imagined biological organisms of the future actually take us back in time to the beginning of life. Wells's depiction of the future is reminiscent of the horror of the primordial slime that scientists such as Lyell, Darwin, Owen, and Huxley had discussed for over half a century. Inspired by the prevalence and popularity of scientific narratives about the deep past and in a dramatic twist on the theory of natural selection, the Gothic imagination in this 'last species' story destabilizes the notion of progression that Darwin was so keen to suggest. In *The Time Machine*, Wells's vision of the future of species exposes the limits of the human in a wholly modern way, showing that we can neither capture the past nor control the future of ever-changing species. *The Time Machine* shows that, by the end of the Victorian period, British Gothic fiction writers examined and exploited the

scientific understanding that species – including the human – is not a hard and fast concept. The limits of the human had been stretched and distorted irrevocably.

2. Looking at animals in the search for the limits of the human

Looking at animals – even *being* animal in the case of the freak – was a key part of trying to discover what it might mean to be human during the nineteenth century. Certain animals seem to have had special significance in the quest for the limits of the human during the Victorian period. The dog, rated so highly in the scale of life as to be thought almost human in character; the frog, so abused by science and unloved by the Victorian public; the ubiquitous yet ambiguous spider; and the trope of the imaginary dinosaur all played their part in asking questions about who and what humans are and how our species came to exist. When freaks were sold to the public with animal monikers, the human mergence with the animal was made linguistically and culturally complete.

In the latter decades of the nineteenth century, following the publication of Darwin's *Origin of Species*, there seems to have been a fresh understanding that animals could uncover the mystery of human origins and not just their outside form, but also their behaviour could reveal the deepest aspects of what makes us human.[7] Questions raised about the nature and existence of animal souls, their metamorphosis, their anatomy, and character enthralled and absorbed the public imagination, marking the beginning of a new relationship between humans and other animals that has led to campaigns for animal welfare across the globe in the twentieth and twenty-first centuries. The limits of species came under intense examination when people began to look at the differences between humans and other animals and found far fewer incongruities than they had imagined possible. Animals had not been

[7] Darwin's *Expression of the Emotions in Man and Animals* (1872) played an important part in revealing the homogenous aspects of human and animal characters.

created separately and expressly to do man's bidding, as authoritative myths stated. They were sentient beings; even the frog has feelings, even the spider, much-maligned in Victorian culture, has its own way of life, radically different from the human but no less important in its own way.

Although imaginary renderings of such creatures helped them to try to make sense of their place in the natural world, Victorians struggled to come to terms with the idea that humankind is not unique or specially created. In considering themselves part of the animal kingdom, they found scope for compassion and fascination with the animal world. However, the flip side of these positive aspects of looking at nature was that it revealed the horror of similitude with animals, causing a sense of the loss of human identity. Victorians had to admit that humans are monsters too.

So, what did animals truly represent during the Victorian period? What did they tell Victorians about themselves? There are no straightforward answers to these questions, as this thesis has shown. The unwelcome similarities that drew humans into the animal world (and vice versa) caused disorder in the classificatory system, and in humankind's moral and social order. But more disturbing was the realisation that the animal body is never a certain or static entity, so the limits of the human became distended, twisted, and bent out of shape. No longer conceivably modelled in God's image, human identity was at risk of disintegrating entirely. In Gothic fiction, the human morphs into a doglike creature in the form of vampire or werewolf, or a dinosaurian primordial snake with tentacles. Alternatively, the human's evolutionary journey goes wrong and it gets stuck in what science called an 'intermediate form' between species, as in the case of William Hope Hodgson's weed-men and Edward Bulwer-Lytton's coming race. In Victorian Gothic fiction and scientific literature, the human is not a fixed or stable entity.

The incomprehensibility of human ascendancy was qualified in the animal body and although this was unquestionably frightening, it was also intriguing. The wonder of the natural world and the search for the meaning of the human occupied the public imagination in ways that inspired and terrified Victorians. The legacy of the Victorian sense of wonderment about species – what these are, where they came from, how they proliferated in so many varieties, and what they might become in the future – has had a lasting effect on investigations into the nature of the human race. Critics today are keen to remove any remaining boundaries that appear to set us apart from animals. The persistent use of such terms as 'nonhuman animals' or 'other animals' to describe other species reveals the extent to which animals have become part of what it means to be human in the twenty-first century.

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