Vivisection, the Culture of Science, and Intellectual Uncertainty in 
The Island of Doctor Moreau

Mason Harris  Simon Fraser University

The science fiction of H. G. Wells makes an impressive contribution to the revival of Gothic literature in the late nineteenth century, but as a rule his stories have only a partial affiliation with the genre. Wells’s usual strategy is to contain horror within a normative scientific vision which remains more or less intact throughout the story. Only The Island of Doctor Moreau, where science fails, belongs entirely to the Gothic genre. David Punter convincingly includes this story in the Gothic tradition in a brief but cogent discussion of it in his comprehensive history of the genre, The Literature of Terror.¹ The response of readers from the 1890s to the present supports Punter’s judgment. Early reviewers condemned the story for gruesomeness and blasphemy, and readers since have found it peculiarly disturbing.

While universally acknowledged, however, the unpleasantness of Moreau has proven difficult to explain. In his informative book on Wells as science-fiction writer, Frank McConnell asks, ‘what is it about The Island of Doctor Moreau that makes it, of all Wells’s science fiction, the hardest to approach, the most difficult or distasteful to contemplate?’² Punter points to the area where the answer should be sought when he observes that ‘[t]he principal problem . . . concerns the status of pain in the story’ (251). So far, however, no one has taken a serious look at how the origin of the pain, Moreau’s practice of vivisection, adds to the story’s oppressive atmosphere or interacts with its Darwinian themes. Here I will argue that Wells’s choice of vivisection to generate Gothic horror endows the story with a deep ambivalence towards science and contributes much to the mood of anxious uncertainty in which it ends.

It is Moreau’s role as vivisector that makes him so difficult to assess as scientist. Is he a great physiologist devoted to pure research, or a subtle portrayal of a mad scientist driven by the very animal forces he tries to overcome, suspect of taking a sadistic enjoyment in prolonged and exquisitely painful operations? Most critics, in trying to explain the horror of the story, lay emphasis on Moreau as overt sadist, but this seems an oversimplification.³ I will argue that Moreau’s uncanniness arises from a liminal ambiguity which renders him permanently mysterious.
As I will show, both the nature of Moreau’s research and the style of his ‘explanation’ to Prendick ally him to the great physiologists of the nineteenth century. It is only a subtle excess of zeal in his discourse that makes one uneasy. Both images of Moreau – the dedicated researcher and the sadistic torturer of animals – would have been familiar to Wells’s audience as characteristic of the rhetorical positions of the opposing sides in the late-Victorian debate over vivisection. It is by playing both sides of this controversy against each other that Wells constructs his double-image of Moreau and also gives some dark twists to Darwinian theory. In this story, pain inflicted on animals by vivisection combines readily with the animal descent of the human species as a source of horror.

Perhaps critics have avoided the vivisection theme because it seems to provide gruesome effects without intellectual content. This would not, however, have been true for Wells’s original audience. Thanks to a sensational controversy over vivisection, Moreau’s project would have evoked, for its first readers, ideas and attitudes involved with the multi-faceted conflict between science and religion in late-Victorian Britain. Most late-Victorian readers would have been aware of the close relation between Moreau’s persecution by the British public and a heated public debate, beginning in the early 1870s, over the increasing use of surgery on living animals for medical research, usually by doctors who had devoted their careers to scientific investigation. The practitioners of this method insisted that the study of processes in living organisms requires experiments on animals still alive rather than the more traditional method of dissecting dead animals. They considered themselves pioneers in a new realm of knowledge known as ‘experimental medicine’, making a decisive break from the abstract physiology inherited from the eighteenth century. The scientists who supported vivisection, led by Wells’s hero T. H. Huxley, were known to be godless Darwinists, while opposition to vivisection was often associated with a religious hostility to science in general.

The most extreme (but widely-publicized) opponents of surgical experiments on living animals asserted that only a scientist who enjoyed inflicting pain could use such a method. Anti-vivisection literature provided hideous descriptions of vivisectors’ laboratories and reproduced illustrations of experiments on living animals from manuals on vivisection, with the implication that research through vivisection must be motivated by deliberate cruelty. Frances Power Cobbe, leading spokesperson for the anti-vivisection movement, insists that vivisection, in its deliberate infliction of pain, will have a lowering effect on public morality: ‘We stand face to face with a New Vice, new, at least in its vast modern development and the passion wherewith it is pursued – the Vice of Scientific Cruelty’. Cobbe is also hostile to science in general. She argues that the scientific method can be subversive to morality simply by giving objective study of fact precedence over feeling. Vivisection would be the worst-case instance of this problem.

One early reviewer who knew Wells personally suggests a contradiction between Wells’s use of vivisection as a source of horror in this story and the position he might have been expected to take in the vivisection controversy. As a disciple of
T. H. Huxley, a teacher of university-level biology, and author of text books on biology and physiology, the young Wells belonged to the scientific, pro-vivisectionist side of the controversy – and would remain so, as he makes clear in 'Popular Feeling', a later essay attacking the anti-vivisection movement. Chalmers Mitchell, eminent zoologist and colleague of the young Wells on the staff of Saturday Review, twits him in a review of Moreau published in 1896 in that journal with having abandoned ‘a reasoned attitude to life’ by producing, in the figure of Dr Moreau, ‘a cliché from the pages of an anti-vivisection pamphlet’. Mitchell complains that in addition to evoking the horrors of the vivisector’s laboratory, Wells also follows the conventions of anti-vivisection literature by having Moreau operate entirely without anesthesia: ‘Mr. Wells must know that the delicate, prolonged operations of modern surgery became possible only after the introduction of anaesthetics.’ (Scientists complained that anti-vivisection literature ignored the use of anesthesia.) On the other side of the controversy, R. H. Hutton, crusader against vivisection and editor of the influential Spectator, gives Wells’s story one of its few good reviews because he takes it as an attack on vivisection.

I suggest that in composing this Gothic science-fiction story Wells found the temptation to evoke the horrors of vivisection too strong to resist, and that in doing so he undermined the authority of science more thoroughly than he intended, thus depriving himself of his own basis for ‘a reasoned attitude towards life’. Wells objected to Mitchell’s view that Moreau’s project was impossible, but never replied to the charge of having written an anti-vivisection pamphlet.

In addition to using Moreau’s daily practice of vivisection to generate a pervasive sense of deliberately inflicted pain, the narrative also gives the vivisection controversy a crucial role in his past. While Prendick is struggling with the uncanny feeling that Moreau's strange assistants remind him of something familiar he can’t place, he ponders ‘the unaccountable familiarity’ of Moreau’s name, also lost in memory. (Memory on this island is always unpleasant, unless falsified. To remember too far back might be to encounter one’s animal inheritance.)

A phrase, ‘the Moreau Horrors’, crosses his mind and suddenly he relives his response to a well-publicized incident of ten years ago, when ‘I had been a mere lad ... and Moreau was ... a prominent and masterful physiologist, well known in scientific circles for his extraordinary imagination and brutal directness in discussion’ (51–2). Moreau’s laboratory practices were exposed by an anti-vivisectionist pamphlet ‘that to read made one shiver and creep’, written by a journalist who

obtained access to his laboratory in the capacity of laboratory assistant, with the deliberate intention of making sensational exposures ... It was in a silly season, and a prominent editor ... appealed to the conscience of the nation ... The doctor was simply howled out of the country. (52)

This public howling anticipates two hunts on Moreau’s island: the Beast People, led by Moreau, hunt first Prendick and then the Leopard Man. Here we also encounter the first of Moreau’s vivisected animals. Seemingly by accident, on the day of the
publication of the pamphlet ‘a wretched dog, flayed and otherwise mutilated, escaped from Moreau’s house’ (52).

The dating of the story would place Moreau’s departure from Britain around 1876, when the vivisection controversy, increasingly vociferous since the early 1870s, came to a climax with the passage of the Cruelty to Animals Act, intended to regulate vivisection. In 1875 wide public outrage was aroused by a denunciation in the British press of a well-known scientist by a former laboratory assistant. The target was the famous French physiologist, Dr Claude Bernard. A British doctor, George Hoggan, who had worked for four months in Bernard’s laboratory, published in The Morning Post a long letter describing the suffering inflicted on dogs by experiments conducted by Bernard and his assistants. R. H. Hutton played the role of the ‘prominent editor’, quickly reprinting the attack in the Spectator and keeping the controversy before the public with a series of editorials attacking vivisection. Hutton particularly opposed the idea of using vivisection for pure research, to define new theoretical questions rather than for specific medical benefits.

Protagonists on both sides and later commentators agree in seeing Hoggan’s letter as the most decisive and widely-publicized event in the controversy (Cobbe, 263–65; French, 68). Bernard was safe in France, but if the object of this attack had been a British scientist, he might well have found it convenient to leave the country. Earlier in his career, the escape of a vivisected dog from his laboratory also caused Bernard some embarrassment, and eventually persecution by neighbours who accused him of vivisecting children forced him to move his laboratory. In France, however, the anti-vivisection movement enjoyed nothing like the public support it received in Britain.

Even in Britain the anti-vivisection movement began to lose popular support after the passage of the Act, but its sensational publications kept the controversy in the public mind – and provided a store of gruesome associations for Wells to draw on. In Moreau Wells exploits an ambivalence both towards vivisection and the anti-vivisection movement that would be characteristic of the reading public by the 1890s. While Prendick, the narrator of the story, is deeply disturbed by the torment Moreau inflicts on animals, he also suggests that public opposition to vivisection is a kind of lunacy – ‘it was a silly season’. As we will see, he oscillates between these positions without fully affirming either.

I should like to call attention to a rhetorical link between the defenses of vivisection provided by Bernard and Moreau. Bernard’s career seems well suited to provide a focal point for ambivalence towards vivisection. In his single-minded research Bernard made a notoriously ruthless use of animals. On the other hand, his research had a revolutionizing effect on medical science, illuminating, among other subjects, the nature of digestion, the function of the liver, how changes in body temperature affect the circulation of blood, and the action and medicinal value of poisons. Bernard also provided a lucid rationale for the experimental method in research. After his denunciation by Hoggan, the anti-vivisection movement saw Bernard as the arch-vivisectionist. It is in a pamphlet entitled ‘Bernard’s
Martyrs’ that Cobbe argues that deliberate sadism motivates the vivisecting scientist – quoted at length in her autobiography (290–1).

In his most famous book, An Introduction to the Study of Experimental Science (1865), which earned him membership in the Académie Française, Bernard includes a passionate defense of vivisection which became infamous in anti-vivisection literature:

> A physiologist is not a man of fashion, he is a man of science, absorbed by the scientific idea which he pursues: he no longer hears the cry of animals, he no longer sees the blood that flows, he sees only his idea and perceives only organisms concealing problems which he intends to solve . . . [A] man of science should attend only to the opinions of men of science who understand him, and should derive rules of conduct only from his own conscience.15

Bernard’s view of the animal as an intellectual problem pervades Dr Moreau’s ‘explanation’ (Chapter 14), especially in Moreau’s exalted defense of research as ‘intellectual passion’. He tells Prendick,

> ‘I went on with this research just the way it led me. That is the only way I ever heard of research going. I asked a question, devised some method of getting an answer, and got – a fresh question . . . You cannot imagine what this means to an investigator, what an intellectual passion grows upon him. You cannot imagine the strange colourless delight of these intellectual desires. The thing before you is no longer an animal, a fellow-creature, but a problem. Sympathetic pain – all I know of it I remember as a thing I used to suffer from years ago’. (115)16

Moreau’s defense places him in the great tradition of nineteenth-century physiology, of which Wells strongly approved. Like Moreau, Wells makes a passionate defense of vivisection as pure research in his essay on the anti-vivisection movement (‘Popular Feelings’, 228–30). On the other hand, Moreau’s apparent respectability could have a negative side. By endowing Moreau with the attitudes and discourse characteristic of a dedicated physiologist of his period – attitudes defended by Huxley before a Royal Commission on vivisection – Wells insures that any suspicions we may develop about Moreau will extend to science in general.17

Understanding Moreau as a colleague of Bernard and refugee from the public uproar over vivisection in the mid-1870s will help to place him in the larger context of the late-Victorian conflict between religion and science, in which the vivisection controversy was a bitterly fought skirmish. By Prendick’s account, as well as his own, Moreau had a recognized place among those resolute physiological researchers of the nineteenth century who relied on vivisection for their discoveries. The battle here, however, is larger than his chosen method of research. As Richard D. French points out in his history of the anti-vivisection movement in Victorian Britain, the real issues in this controversy ‘revolved around the place of science and scientists in Victorian culture’ (348). The question was not so much one of scientific method as of cultural dominance – defined most sharply by the emergence of T. H. Huxley as the aggressive statesman and prophet of science. As
the new priesthood of science, dedicated to the theory of evolution, challenged a
more traditional religious and literary leadership, the anti-vivisection movement
provided one line of resistance for the traditionalists. Its big names combined the
Church of England (the Archbishop of York), Evangelicalism (Lord Shaftesbury),
Roman Catholicism (Cardinal Manning), literature (Browning and Tennyson)
and the arts (Landseer and Ruskin).

Both Bernard and Moreau turn defense of vivisection into a battle-cry of the new
science, but the rationale of both manifests a mind-body split which might have
something in common with the religious attitudes they reject. Wells, a disciple of
Huxley, was throughout his career an ardent supporter of the scientific world-view,
except it seems in *The Island of Doctor Moreau*, where he presents a savage parody
of religion but at the same time renders suspect the attitudes of the new scientific
elite who opposed religious belief and sought to replace it with a higher reason. I
suggest that in this Gothic tale Wells dramatizes a psychological flaw in the new
culture of science which he was not willing to admit in his expository prose.

In his history of the vivisection controversy, French concludes that the tendency
of the Victorian anti-vivisection movement to endow animals with human char-
acteristics arose from an attempt to deny any animal element in human nature, an
issue made pressing by the Darwinian challenge to religion (384–91). I would add
that if the anti-vivisectionists made animal consciousness too human, Bernard and
Moreau, in refusing to acknowledge it at all, also divide flesh from spirit. In their
case the animal under vivisection becomes mere inert matter, thus freeing the
mind of the scientist for a bodiless exercise of pure reason. Bernard contrasts the
physicality of vivisection to the purity of scientific theory by likening ‘the science
of life’ to ‘a superb and dazzlingly lighted hall which may be reached only by pass-
ing through a long and ghastly kitchen’ (15). He declares that ‘a living organism is
nothing but a wonderful machine’ which can be taken apart to see how it works
(63, 65), while Moreau habitually describes animals as physical substance. Referring
to his new shipment of animals, Moreau remarks, ‘I’m itching to get to work
again – with this new stuff’ (48).

It is precisely in response to Prendick’s question ‘Where is your justification for
inflicting all this pain?’ that Moreau makes clear his repudiation of the flesh (112).
Moreau informs Prendick that anyone who responds to the suffering of animals
has hardly risen above animal status: ‘So long as visible or audible pain turns you
sick, so long as your own pain drives you, so long as pain underlies your proposi-
tions about sin, so long, I tell you, you are an animal, thinking a little less obscurely
what an animal feels’ (113). Moreau reveals an affinity with Puritan hostility to the
flesh when he defines both pleasure and pain as bestial inheritance: ‘This store men
and women set on pleasure and pain . . . is the mark of the beast upon them, the
mark of the beast from which they came’ (115). As the vivisected animals fail to
meet Moreau’s ideal of the human they lapse into mere physical substance: ‘the
material . . . has dripped into the huts yonder’ (115).

Wells’s mentor, T. H. Huxley, has been accused of combining Darwinian theory
with the spirit of Calvinism, especially in the emphasis his last and most influential
essay, ‘Evolution and Ethics’ (1894), places on the essential savagery of human nature. Huxley argues that because the civilized personality can be produced only by imposing a social education on an intractable inner savage, civilization must be constantly threatened with reversion to animality, and thus he finds in our animal inheritance a Darwinian version of depravity – our ‘dose of original sin’. Huxley was not overly interested in the psychological implications of this position, but Wells, Freud, and others influenced by Huxley’s tendency in Darwinism could easily draw the conclusion that the civilized personality is essentially unstable, and that we pay a high emotional price for civilization. Wells’s science fiction was published too early to be influenced by Freud, but both had common intellectual ancestors in Darwin and Huxley.

Moreau’s project has a psychological goal far more ambitious than the usual objects of physiological research. Bernard deconstructs living organisms to see how they work, with the end inevitably being the animal’s death, while Moreau seeks to reconstruct animals into human form. Along this line he develops an interest in the conversion of animal instinct into the higher feelings which anticipates Freud’s concept of sublimation. Referring to the socializing process in human society, a process he seeks to reproduce through surgery and social conditioning, Moreau informs Prendick that ‘[v]ery much . . . of what we call moral education is . . . an artificial modification and perversion of instinct; pugnacity is trained into courageous self-sacrifice, and suppressed sexuality into religious emotion’ (111–12).

As this point we might pause to consider Chalmers Mitchell’s objections to the painfulness of Moreau’s methods. Mitchell points out that only under anesthesia are the ‘delicate, prolonged operations of modern surgery’ possible. Since Moreau’s operations are essentially an elaborate kind of grafting, indeed delicate and prolonged, and, as Mitchell observes, the struggles of an animal in torment would make such operations difficult or impossible, why doesn’t Moreau use anesthesia, so readily available by the 1880s? Had he done so, this story would have far less resemblance to an anti-vivisection tract. The answer reveals a disturbing aspect of Moreau’s motivation: he deliberately inflicts prolonged and excruciating pain as part of the humanizing process: ‘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’ (120). The near-human creatures that result from this process are intended to remember their torment because excruciating pain is part of the civilizing process by which an animal becomes human.

The anti-vivisectionists emphasized the torment of vivisection by assuming that animals possess human consciousness. As Moreau’s surgery proceeds the screaming of the animal actually becomes human. When the vivisected Puma screams it seems ‘as if all the pain in the world had found a voice’ (59). Prendick provides several descriptions of the unpleasant effect as the voice of the victim becomes progressively less animal: ‘it was groaning, broken by sobs of anguish. It was no brute this time. It was a human being in torment!’ (78). Prompted by the change in the Puma’s voice, Prendick concludes that Moreau is vivisecting humans into...
animals, and, assuming that he will be the next victim, flees to the Beast People in the hope that he can evoke memories from their human past, of which Moreau's surgery has supposedly deprived them.

Here he participates in the grotesque religion of the Beast People, perhaps the most vicious attack on Christianity in Victorian literature. A parody of the Ten Commandments intended to curb all sorts of instinctual behaviour — ‘Not to go on all fours; that is the Law’ (91) — is followed by a chant divinizing both Moreau and vivisection:

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\begin{align*}
\text{His} & \text{ is the House of Pain} \\
\text{His} & \text{ is the Hand that makes.} \\
\text{His} & \text{ is the Hand that heals. (original italics)}
\end{align*}
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The chant goes on to give Moreau possession of the universe: ‘His are the stars in the sky’ (92). At this point, Prendick does not recognize that the ‘House of Pain’ is a memory of Moreau's enclosure. After being hunted by both Moreau and the Beast People, Prendick finally agrees to return to that 'pain-haunted refuge’(68) which represents civilization on the island, and have a talk with Moreau.

Moreau’s ‘explanation’ reveals that Prendick’s assumption that he is vivisecting humans into animals is the reverse of the truth: he is attempting to vivisect animals into humans, and he uses the pain of vivisection to block memory of their animal past. Like the Christian concept of Hell, memory of torment also becomes a moral disincentive — if they lapse into animality they will go back to the vivisecting table in the ‘House of Pain’.22 Finally, through inflicting torment Moreau has made himself the punitive father-god of a parodic religion which is essential to preserving the unstable identity of the Beast People, with clear implications for the role of religion in human society.

Moreau presents himself as the supreme rationalist, but his ideal of ‘burning out all the animal’ defies the implications of evolution as spelled out in Huxley’s famous essay. Moreau seems, like his author and most of the scientific elite of his time, fully committed to Darwinian theory: his project is a recapitulation of the evolutionary process; he states clearly that the human species comes from ‘the beast’ (115) and has been ‘a hundred thousand [years] in the making’ (120). But from the point of view of evolution as understood by both Huxley and Wells, burning out all the animal is impossible because we are all animals, and will carry an animal inheritance within us no matter how civilized we attempt to become. In an essay entitled ‘Human Evolution, An Artificial Process’, published a few months after Moreau, Wells, like Huxley, argues that the civilized man, artificially moulded by social education, will always have to contend with the inherited ‘natural man, who is the product of natural selection, the culminating ape, and a type of animal more obstinately unchangeable than any other living creature’. Referring to his story, Wells explains that ‘Sin is the conflict’ of artificial and inherited aspects of human nature ‘as I have tried to convey in my Island of Dr. Moreau’.23

Moreau makes vivisection a metaphor both for biological evolution and the socializing process intended to correct the deficiencies of the human species as the
product of evolution. Moreau’s claim that pure knowledge is his goal (109–10) masks an obsession with a much more specific object: to purify the human race by perfecting the process of evolution. In his quest to extirpate all the animal he is trying to do evolution one better, to repeat the process this time with no animal inheritance remaining. Both the systematic pain of vivisection and the high-minded discourse he shares with Bernard suggest the use of torture to reestablish a threatened hierarchy in which humans will be once more distinct from animal.24 Impelled by his Puritan longing to ‘burn out all the animal’, Moreau makes a god-like attempt to eliminate the animal inheritance which both Huxley and Wells see as the most enduring problem of human nature.

In his zeal to bring forth a perfected human amid the horrors of his laboratory, Moreau parallels Frankenstein’s frenzied labour to produce an ideal being in his ‘workshop of filthy creation’.25 Both Frankenstein and Moreau reject their creations as revoltingly physical and both resist acknowledgment of the conflicted consciousness which their creatures develop, preferring to dismiss them as unacceptable lumps of matter. In Moreau’s case one could conclude that even in biological research the new science is as much engaged as its religious opponents in trying to suppress the physicality of the human species and the psychological conflicts arising from our animal inheritance. Ironically, Moreau’s Beast People provide the ultimate confounding of the distinction between human and animal.

Moreau denies his own participation in the animality of the flesh, yet the obsessive intensity of his ‘delight’ in his ‘intellectual desires’ suggests a return of the animal nature he denies in the form of unconscious sadism. He speculates on a curiously Gothic locale for earlier researchers in his line: ‘It must have been practised in secret before ... in the vaults of the Inquisition. No doubt their chief aim was artistic torture, but some, at least, of the inquisitors must have had a touch of scientific curiosity’ (111). Moreau also equates the scientist with a beast of prey: ‘The study of Nature makes a man at last as remorseless as Nature’ (115).

After the hunt of the Leopard Man, Prendick falls into a grim meditation which gives the pain inflicted by Moreau its widest social meaning, making explicit the story’s implied analogy between the plight of the Beast People and the human condition: ‘A strange persuasion came upon me that ... I had here before me the whole balance of human life in miniature, the whole interplay of instinct, reason, and fate in its simplest form’ (149). Prendick concludes that the pain experienced by animals attempting to remain human is far worse than that inflicted by vivisection: ‘I began to see the viler aspect of Moreau’s cruelty. I had not thought before of the pain and trouble that came to these poor victims after they had passed from Moreau’s hands’ (149). The agony of their creation leads to the permanent agony of inner conflict: ‘they stumbled in the shackles of humanity, lived in a fear that never died, fretted by a law they could not understand; their mock-human existence began in an agony, was one long internal struggle, one long dread of Moreau – and for what?’ (149–50). Prendick cannot accept the implications of this insight, however. Rejecting his momentary identification of the Beast People with the human species, he disassociates the two entirely, viewing the Beast People with
'dislike and abhorrence' from now on. 'My one idea was to get away from these horrible caricatures of my Maker’s image, back to the sweet and wholesome intercourse of men’ (152).

We could find a Darwinian moral in the dark conclusion of the story. None of the characters can come to terms with the fact of animal inheritance: Moreau claims to have risen above it; Prendick despairingly recognizes the Beast People as the human condition but at the same time denies this by maintaining an idealized memory of normal humanity back home – a split which will continue to divide his mind after his return to Britain – while both Montgomery and the Beast People are not consciously aware of their animal past but become hopelessly vulnerable to it. Finally, the essay on evolution Wells published shortly after the novel reveals the rational attitude, stoical yet not despairing, through which we may hope to deal with our savage inheritance.

If such a moral is implicit in the story, however, it is rendered ineffectual by the story’s pervasive uncertainty, especially arising from Prendick’s inability to come to any final assessment of Moreau. Prendick is located between the extremes of the new science and the traditional culture, as represented by Moreau and the antivivisectionists. Like Wells, Prendick has studied under Huxley and thus feels allied with the new science, but as a gentleman of private means who has taken up science as an avocation, he is far from being a professional scientist like Moreau (16, 44).

This distinction is not all to Prendick’s disadvantage, however. Moreau, like Bernard and Huxley, represents the new scientific culture of the laboratory, while Prendick evokes a more old-fashioned tradition in British science, of which Darwin himself is a late manifestation: the amateur naturalist with a private income, and perhaps a country estate, who studies nature out of doors. It is through Prendick that we learn about the terrain and vegetation of the island and the religion of the Beast People, while Moreau treats the island only as a convenient place for a laboratory. His obsessive isolation in the laboratory has a good deal to do with the growing instability of the island world he rules without acknowledging.

Unlike both Darwin and Moreau, however, Prendick lacks the true scientist’s spirit of intellectual inquiry; his thinking is rather conventional. Whatever his virtues, ambivalence between old-fashioned values and the new science leaves his judgment of Moreau forever incomplete, as we see in his repeated shifts of position as he responds to Moreau’s ‘explanation’. When Moreau, in order to prove that he is not vivisecting humans, shows Prendick the vivisected Puma, Prendick responds with all the disgust that the anti-vivisectionists felt for the horrors of Bernard’s laboratory (108). Yet when he realizes that the Beast People are not humans but ‘humanized animals – triumphs of vivisection’ he swings over to the side of the new science, feeling embarrassed to have shared the attitudes of the anti-vivisectionists: ‘Presently I found myself hot with shame at our mutual positions’ (108). But then he seems to support the anti-vivisectionist repudiation of vivisection for pure research: ‘Where is your justification for inflicting all this pain? The only thing that would excuse vivisection to me would be some application – ’ (112–13).
Time Machine, Wells’s first science-fiction novella, is narrated by a self-assured scientist whose philosophical wisdom helps to mitigate his discovery of the final decadence of the human species. In Moreau, published only a year later, the presentation of science is split between two characters, Moreau and Prendick, both of whom seem unreliable in different ways.

In this story Wells has gone from an uneasiness about the pain of vivisection – an antivivisection pamphlet might contain enough truth to make even the flesh of a supporter of experimental medicine ‘shiver and creep’ – to an undermining of the pure rationality claimed by the new science, of which he was ordinarily an adherent. The purity Moreau claims for the scientific imagination projects as its opposite the grotesque physicality of the Beast People, while Prendick in the middle finds only intermittent consolation in a counterfeit memory of the virtue of the human species – back in Britain. This story permits no solution to a Puritan horror of the animal in human nature which pervades both the religion of the Beast People and the pure science of their creator. One suspects that for Wells also this horror was implicit in Darwinian theory. As we have seen, Wells, like Huxley, finds in our conflict with our animal nature the equivalent of ‘Sin’.

Freud finds one manifestation of the uncanny effect in uncertainty about the nature of objects in the external world. Early in the story Prendick experiences this kind of uncertainty with his increasingly anxious efforts to distinguish between animal and human in his encounters with the Beast People. But Moreau’s scientific explanation only deepens Prendick’s unease, as his ambivalence towards Moreau generates a pervasive intellectual uncertainty which destabilizes all his attempts to reason things out. The Beast People, as grotesque representatives of the human condition, present an urgent intellectual problem, but in this story the failure of rational thought, for Wells always associated with science, leaves us in the anxiety of Prendick’s final state of mind, when he returns to Britain but cannot resolve his feelings about the human species he finds there.

In a story whose effect depends on an atmosphere of mounting uncertainty, it may be difficult to locate any one source of horror. Liminal characters like their creator, the Beast People inhabit an uncomfortable margin between the grotesque and the pitiably human. Their continuous dread of pain makes them permanent victims of vivisection, while their pathetic good intentions arouse a sympathy which enables us to participate in the subjectivity of vivisected animals who have become at least partially human, thus making impossible Moreau’s repudiation of the animal in human nature.

Like Henry James’s The Turn of the Screw, this is a story where uncertainty itself becomes the final horror. In Wells’s story uncertainty has a grossly physical origin in Moreau’s surgery and its products. Working with his audience’s awareness of the opposing sides in the vivisection controversy, Wells plays some of the highest accomplishments of the science of his age against the worst imaginings of anti-vivisection literature, allowing both to seem valid at the same time. In his passionate ‘explanation’ Moreau seems akin to those daring physiologists of the nineteenth century who, like Bernard, were transforming medical science, yet if his unanesthetized
surgery is driven by an unconscious sadism, he would also correspond to the most lurid portrayal of a vivisecting scientist to be found in anti-vivisection pamphlets. Through Moreau’s rationale and practice in dealing with the Beast People the horrors of vivisection become associated with the dubiousness of the human condition in a Darwinian universe – all the more dubious because the authority of science has already been undermined by ambivalence about Moreau as vivisector.

Moreau is literally the creator of the island world, and his reconstructive surgery infects his world with a painful liminality: the Beast People alternate between animal and human, Moreau between the images of dedicated researcher and wanton sadist, while Prendick reacts to these discontinuities with conflicting responses and points of view which he can never resolve into a coherent consciousness. This evasion of clear definition in the story arises from a horror of the flesh associated with Darwinian evolution and much intensified by the use of vivisection first to evoke a lurid sense of gratuitous pain and then as a metaphor both for physical evolution and the civilizing process. Hence the theory of evolution becomes both a fact taken for granted in the story and a Gothic secret the implications of which can never be openly acknowledged. By using vivisection as a central metaphor Wells has defeated Huxleyan rationality. If evolution itself becomes permeated with the sadistic and peculiarly physical horror associated with vivisection by the opponents of science, evolutionary science can no longer provide the basis for a reasoned attitude towards the world.

In his later essays, especially ‘Evolution and Ethics’, Huxley has already gone a long way towards Gothicising Darwinian discourse. Though he insists that we will have our inherited nature always with us the rhetorical turbulence generated by his sense of universal sin suggests a strong desire to cast off the flesh – of course, impossible in a Darwinian world. Huxley provides a Calvinism with no saving grace, which could also be said of the shame-ridden cult of the Beast Folk. Moreau becomes a dark double to Huxley by realizing in his attack on animal flesh a hidden desire in Huxley’s discourse. By freeing himself from Huxley’s ethical burden Moreau releases an energy which makes him, as Punter observes, one of the great dominating characters of Gothic fiction (251–2).

If Huxley was an intellectual father-figure to the young Wells, idealized as the intrepid and ingenious scientist-adventurer who narrates *The Time Machine*, Moreau, as a ‘masterful physiologist’ with an ‘extraordinary imagination and . . . brutal directness in discussion’ reinforced by his ‘magnificent build’ and white-haired ‘serenity’, becomes a demonic father-figure to Prendick (52, 122). Disintegrating under Moreau’s influence, Prendick fulfils the Gothic role of narrator as passive victim in the tradition of such distressed narrators as William Godwin’s Caleb Williams, Mary Shelley’s Frankenstein, and James Hogg’s Robert Wringhim. As with them, we cannot trust his fragmented vision at the end. Wells’s scientifically-minded narrator falls apart in a story which gives the true voice of science to a Gothic dominator.

For Wells, to become uncertain of science is to become uncertain of everything. He did not allow this to happen again. A few years after publishing *Moreau* he
increasingly turned away from fantasy to develop a futurology in which enlightened scientists assert their authority to save civilization from itself. Never again would he reveal the inner tensions of his intellectual world as fully as in the painful uncertainties of his most Gothic story.

Notes


10 The fictional ‘Introduction’ provided by Prendick’s nephew places the main action of the story early in 1887. In his ‘explanation’, Moreau tells Prendick that he has been on
the island ‘nearly eleven years’ (115). This would place his departure from England in 1876.

Here I argue that Bernard is the most likely historical source for Moreau. There have, however, been many suggestions for the origin both of Moreau’s name and his career. In his preface to Moreau in the Atlantic Edition (1924) Wells says that Moreau was partly inspired by the fall of Oscar Wilde. This may be an afterthought from thirty years later; Bernard seems much closer to Moreau than Wilde. See Ian F. Roberts, ‘Mauerpertuis: Doppleganger of Doctor Moreau’, Science Fiction Studies, 23 (2001) 261–74, for a summary of attempts to find an original for Moreau and an alternate view of the historical figure on which Moreau may have been based. (Moreau may well be descended from more than one historical source.) E. D. Mackerness finds a fictional source for Moreau in Nathan Benjulia, a sinister vivisectionist in a late novel by Wilkie Collins, Heart and Science (1883): see ‘Nathan Benjulia, a Prototype of Dr Moreau?, The Wellsian, 2 (1978) 1–5. I consider this argument tenuous because of the difference between the two characters. Benjulia’s unconvincingly melodramatic defense of vivisection at the end of Chapter 32 does, however, show by comparison how carefully Wells designed Moreau’s defense to fit the scientific discourse of his time.

Richard D. French, Antivivisection and Medical Science in Victorian Society (Princeton: Princeton University Press, 1975), p. 100. All subsequent references are to this edition. Page numbers are given in parentheses in the text.


The anti-vivisection movement gained force in the early 1870s, when British doctors and medical students began to take experimental medicine seriously. A well-illustrated manual published in 1872 on laboratory methods for vivisection received wide hostile publicity. At a meeting of the British Medical Association in 1873, a French physiologist performed a public demonstration in which he put dogs into convulsions by injecting them with absinthe. The RSPCA charged three British doctors with having helped to arrange the demonstration; they were acquitted only because there was not sufficient evidence of their involvement. Hence Hoggan’s denunciation of Bernard in 1875 provided the climax to a growing agitation: see George Hoggan, Letter, Morning Post, 2 February 1875, reprinted in Spectator, 6 February 1875, xlvii, pp. 177–8. The proceedings of the Royal Commission to investigate vivisection, with Huxley leading the scientists and Hutton the anti-vivisectionists, were closely followed in the press. Both the press and a majority of the public found a sufficient compromise with the interests of scientific research in the requirement, imposed by the Cruelty to Animals Act of 1876, that vivisecting scientists and their laboratories be licensed by government. After that date the anti-vivisection movement was increasingly ridiculed in the press, partly due to a reaction against the excesses of anti-vivisection literature (French, Antivivisection, pp. 266–70).

After 1876 the anti-vivisection movement intensified its campaign because it felt betrayed by the weakness of the Cruelty to Animals Act (Cobbe, Life, p. 280). In Chapter 20 of her autobiography, Cobbe gives a vivid account of methods of publicity, including plastering London with handbills and posters ‘which were enlarged reproductions of the illustrations of vivisection from the Physiological Handbooks’ (283).

Claude Bernard, An Introduction to the Study of Experimental Science [1865], trans. Henry Copley Green (New York: Dover, 1957), p. 103. Subsequent references are to this edition. References will be given in parentheses in the text.
16 I am indebted to Thomas Moen, an undergraduate at Simon Fraser University, for having called my attention to the similarity of these two passages, and to the single-minded devotion to research in the careers of both Bernard and Moreau. Moreau is able so easily to depart for the South Pacific because he has no personal responsibilities. Although, unlike Moreau, Bernard was married and had two children, he married only to finance his research and vivisection was cited as a factor in his divorce (Olmstead, *Claude Bernard*, 94–100). Bernard’s close relationships were almost exclusively with other scientists.

17 In a recent study of affinities between pure science and literary decadence in Victorian culture, Christine Ferguson points out that the refusal of Bernard and his British colleagues to defend vivisection or science itself on the grounds of social utility could be seen by their contemporaries as manifesting a ‘decadent’ aloofness from sympathetic feeling and moral values (‘Decadence as Scientific Fulfillment’, pp. 469–70). Ferguson observes that isolation in the laboratory also made the new scientist seem sinister.


21 In the severely masculine world of Moreau’s research, the conquest of the female Puma may have a special significance. Comparing *Frankenstein* and *The Island of Doctor Moreau*, Steven Lehman argues that the attempt of male scientists to create children in both tales is motivated by a masculine envy of the female capacity for reproduction. See Steven Lehman, ‘The Motherless Child in Science Fiction: *Frankenstein* and *Moreau*’, *Science-Fiction Studies*, 18 (March 1992) 49–57.
22 Punter, one of the few critics to see the utility of pain in the story, observes that for Moreau ‘the important feature of the ‘humanizing’ process is the actual experience of pain for its own sake’ (Punter, The Literature of Terror, p. 251).


24 In the first and second chapters of Discipline and Punish: the Birth of the Prison, Michel Foucault discusses torture and the tortured body as an assertion of social authority.


26 Hammond sees Prendick as ‘the embodiment of an English gentleman; he is a liberal confronted with values and attitudes totally alien to his experience’ (‘The Island of Dr Moreau’, 40). Punter observes that ‘Prendick’s objections to Moreau’s procedures are constantly vitiated by his admiration for Moreau himself, grudging as it is’ (The Literature of Terror, 251).

27 Hurley best describes the grotesque physicality of the Beast People, but tends to overlook the tormented human subjectivity which enables the reader to identify with them: Hurley, The Gothic Body, pp. 102–13.

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Address for Correspondence

Mason Harris, English Department, Simon Fraser University, Burnaby, B.C., Canada, V5A 1S6. E-mail: mharris@sfu.ca