ARTICLES

‘ARE WE NOT MEN?’ THE ARTIFICIAL CREATION OF HUMAN BEINGS IN *THE ISLAND OF DOCTOR MOREAU*, SHELLEY’S *FRANKENSTEIN* AND GOETHE’S *FAUST II*

Siv Frøydis Berg

Abstract. This article examines *The Island of Doctor Moreau* in the light of a specific cultural and literary tradition – in the context of stories of human-made artificial human beings, and especially with reference to two important forerunners to H. G. Wells’s novel: Mary Shelley’s *Frankenstein, or the Modern Prometheus* (1818) and the second act of Johann Wolfgang von Goethe’s *Faust II* (1832). Both these stories explore the possibilities of using organic-biological matter as raw material for artificial creation, by means of science and without divine assistance. Both stories were written in a pre-Darwinian time, in the context of the battle of ideas between materialism and vitalism. *Frankenstein* was seen to promote a materialistic and ungodly worldview, whereas the creation of Homunculus was taken as a powerful defence of vitalism. Seventy years later, when Wells wrote his novel, the episteme had changed, and evolutionary ideas were garnering much attention, in all their complexity and scope. More broadly, the article explores the more philosophical, existential and religious questions: where does human consciousness reside? What is a human being? Can human beings take the place of God?

Prendick, a shipwrecked traveller, finds himself in the middle of a nightmare: coming ashore on a remote and isolated island somewhere in the Pacific Ocean, he encounters some of the strangest and most uncanny man-made creatures Western literature has ever seen. Gradually, he understands that the ‘Beast People’ he meets are not vivisectioned humans, as he first believes – but animals transformed by means of vivisection and strict social control by the outlawed scientist Doctor Moreau. The Beast People live in a primitive society, wear clothes, walk on their hind legs, talk and chant their ‘Law’: ‘Are we not men?’

Dr Moreau has succeeded in the technical creation of artificial human beings. But this is not a tale of triumph, neither of the creative powers of the scientific genius nor of the prospects for scientific knowledge and technology. It is not even a story of the consequences of scientific invention. It is a twisted caricature of evolution, a story of human dethronement, confusion and fear. When Prendick arrives, the inevitable reversion of the Beast People is a fact: they gradually slip back to the state of the animal, and the society on the island is on the brink of collapse. The elements of gothic horror permeate the double reflection between humans and animals: on this island, the human characters seem just about as unstable as the Beast People. Prendick enters a world where, in B. D. B. Asker's words, 'the distinction between man and beast is as unstable as Dr. Jekyll's personality'.[1]

H. G. Wells's *The Island of Doctor Moreau*, written in 1896, is still a highly disturbing novel. Wells, known as a writer of the future, is often regarded as one of the most prominent figures in the literary genre of science fiction. In *The Island of Doctor Moreau*, however, his visions of the future are closely connected with those of the past; in particular, regarding old ideas about the origins of the human and the question of what a human being is. In this article, I will examine one particular aspect in Wells's novel: the origins of the human. By describing literarily the artificial creation of human beings from animal bodies, Wells interferes with creation in wider terms: do animals and humans share one common origin? What – if any – are the differences between human beings and animals?

The imagined use of animals as raw material for artificial human beings allows Wells to envision the animal in the human, and the human in the animal, on new scientific and philosophical premises, and to explore some of the most disturbing aspects of contemporary evolutionary thought. The novel, in its deepest sense, is a prophetic fable of human destiny.

Dethroning the human being: evolution and culture

Evolutionary ideas challenged culturally established views on the absolute superiority of the human being over animals and over nature in general, and the idea of the human being as created in the very image of God, perfect and complete. During the nineteenth century, the history of origin was rewritten – not only the history of the origin of the human being, but also the history of the origin of the Earth. Evolutionary thinking had an impact on general natural philosophy at the beginning of the nineteenth century, and was

[1] D. B. D. Asker, *The Modern Bestiary: Animals in English Fiction* (New York: The Edwin Mellen Press, 1996), 155.

thematised and developed for example in the works of Erasmus Darwin and Johann Wolfgang von Goethe, and later, in the establishment of such scientific disciplines as biology, medicine and geology. Evolutionary theories changed the old world picture, and within this, the natural place of the human. In the history of ideas, the nineteenth century theory of evolution is regarded as the second of three revolutions of human dethronement, the first being Nicolaus Copernicus's removal of the Earth from the centre of the Universe, and the third and final being Sigmund Freud's conceptualisation of the unconscious, showing irrational animal instincts to be the core of human nature.

Wells's literary experiment is underpinned by the conviction that the human being, similarly to other species, is the result of evolution, which is an ongoing process causing the human being to change. Contemporary theories, as propounded by T. H. Huxley, also known as 'Darwin's bulldog', posited a possible regression of the human being back to animalism.[2] Nowadays, evolutionary theory is perhaps common knowledge; back in the late nineteenth century, readers of *The Island of Doctor Moreau* would find evolutionary ideas new, highly disturbing and therefore negotiable.

Wells himself had focused his commitment to contemporary Darwinian thought during one formative year of 1884-1885, when he was studying at the Normal School of Science (later the Royal College of Science) in South Kensington, where T. H. Huxley was both Dean and star teacher.[3] There have been numerous accounts of how Huxley's influence can be read in Wells's scientific journalism and early novels, such as *The Time Machine* (1895), *The Island of Doctor Moreau* and *The War of the Worlds* (1898). However, if Huxley was the classical philosopher of evolution, Wells was, in Patrick Parrinder's words, 'its morbidly romantic poet'.[4] According to John Glendening, the nineteenth century produced an 'entangled bank of evolutionary theories'.[5] Interpretations of the works of Charles Darwin and T. H. Huxley gave rise to new theories which could deviate considerably from the original source. In *Shadows of the Future* (1995), Parrinder indicates how, apart from theories of evolution, exhibitions of natural history

[2] Asker, 145-6.

[3] Mason Harris, 'Introduction', in H. G. Wells, *The Island of Doctor Moreau*, ed. Mason Harris (Peterborough, Ontario: Broadview, 2009), 13-58 (18).

[4] Patrick Parrinder, *Shadows of the Future: H. G. Wells, Science Fiction and Prophecy* (Liverpool: Liverpool University Press, 1995), 52.

[5] John Glendening, *The Evolutionary Imagination in Late-Victorian Novels: An Entangled Bank* (Aldershot: Ashgate, 2007), 46.

had inspired Wells. Alfred Waterhouse's Natural History Museum was opened in 1881. According to the *General Guide*, published in 1886, the Museum put human remains on display in three different collections. In one of them, a human skeleton was exhibited in the same case with two large monkeys; another just opposite contained animal hands and feet, including one human hand.[6] Parrinder argues convincingly that such exhibitions functioned as 'centres of propaganda for the evolutionary theory', driving home the idea of 'man's place in nature' and of his evolutionary descent.[7] He refers to a remarkable exhibition mounted in 1898 and still on display in the gallery of Palaeontology and Comparative Anatomy in the Jardin des Plantes in Paris. As one entered the main doors, one was met by the sight of great lines of specimens, and at the head of them was a sculpted human figure, the one representation of a living creature amid a forest of bones. This display carried a dual message. It showed the evolutionary process and thus informed the public of the contemporary interpretation of creation and 'the secret of life', on the one hand. On the other, this was a *memento mori*, constantly reminding the viewer of death, both animal and human.

The tradition of artificial human beings

Wells was not the first novelist to imagine artificial creation. This article will examine aspects of *The Island of Doctor Moreau* in the light of a specific cultural and literary tradition – in the context of stories of human-made artificial human beings.[8] Throughout history, various forms of creation of artificial life have been expressed in myths, science, art, music, popular culture and literature. The image of the artificial human being has been a much used – and therefore useful – playground for exploring numerous old, existential and cultural questions and motifs. What is a human being? Where is the source of the human soul? Where do we come from, where do we go? Can human beings take the place of God? Themes such as *curiositas* and *hubris* are explored through the image of the artificial creator, or later, the scientist.

[6] Parrinder, 52. Other important nineteenth-century museums were to be found at the Universities of Oxford, Harvard and Yale.

[7] Ibid.

[8] This article draws on my earlier work: Siv Frøydis Berg, 'New Technology, Old Questions. Cloning and Artificial Creation of Human Beings in Shelley's *Frankenstein*, Goethe's *Faust II* and Huxley's *Brave New World*', unpublished PhD thesis, University of Oslo, 2010.

New scientific knowledge and technology have continued to challenge such old questions, thus offering possibilities to ask them once again and providing fresh answers within new horizons of experience. In *Metaphors We Live By* (1980), George Lakoff and Mark Johnson argue that our conceptual system is largely metaphoric, meaning that the way we think, experience and act is structured by metaphors.[9] This also necessarily means that metaphors are more than a passive 'medium': they contribute heavily to the shape of what is spoken about, in this case, cultural conceptions of technology and science. By conceptualising the unknown in familiar categories and by including the unknown in familiar contexts, we transform the knowledge we have of a certain area of life into the unknown. As Marilyn Strathern points out in *Reproducing the Future* (1992), '(new) ideas are thought through other (older) ideas. [...] Habitual images and familiar metaphors provide the cultural forms that make ideas communicable.'[10] The use of familiar metaphors and cultural representation also brings with them allusions to stories from the past, actualises and reinterprets them so that these stories become available in new social, cultural and scientific contexts.

Cultural representations of artificial human beings might tell us something about contemporary views on technology and science, as well as provide the opportunity to read literary expressions as imagined possibilities of how far scientific knowledge might reach as a sort of thought experiment. The general principle of imaginative speculation has often been characterised by the phrase 'What if'.[11] We can follow this with: what if human beings could be made by the human alone – by means of science, and without divine intervention? For a start, one would need some imagined raw material and an 'animating principle', and to make the creatures human, one would also need some kind of human consciousness, identity or soul. The animating principle frequently transcends the act of making a statue, robot or android move, it also involves the more philosophical, existential and religious questions: where does human consciousness reside?

---

[9] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980).

[10] Marilyn Strathern, *Reproducing the Future: Essays on Anthropology, Kinship and the New Reproductive Technologies* (Manchester: Manchester University Press 1992), 4-5.

[11] Karlheinz Steinmüller, 'Science Fiction and Science in the Twentieth Century', in *Science in the Twentieth Century*, ed. John Krige and Dominique Pestre (Amsterdam: Harwood Academic, 1997), 355.

Artificial bodies are imagined as being made of clay, marble or machine parts, and animated by divine assistance. An example from the Greek creation myths is illustrative. The Greek titan Prometheus modelled the first human being in clay. In one of many cultural versions of the Prometheus myth and this creation, he is assisted by the goddess Athena: she is the one to inhale the spirit of life into the creature, at the same time animating it and adding the creature's psyche, the soul. The body is made of earth, but the soul is divine.[12] Another variety turns up in the seventeenth century, in the era of mechanics. Famous automatons and androids, such as Jaques Vacaunson's Digestive Duck and The Flute Player, and Wolfgang von Kempelen's chess-player, The Turk, sparked discussion of the origins of the human soul, and, subsequently, existence of God himself. They contributed heavily to philosophical debates about whether animals – and later also humans – could be reduced to mechanics, as René Descartes had claimed in *The Treatises of Man* (1664) and Julien Offray de La Mettrie in *L'Homme Machine* (1747).[13]

In the nineteenth century, the poetry of artificial creation enters new horizons of knowledge. For the first time, nature was imagined as a possible arena for human intervention and change. Previous imaginings in this tradition had questioned the human relationship to God. Now, the relationship between man and nature was being questioned. The most famous example is undoubtedly Mary Shelley's novel *Frankenstein, or the Modern Prometheus* (1818). Another lesser known, but still important, forerunner to Wells's novel is the creation of the 'little man', Homunculus, in the second act of Johann Wolfgang von Goethe's highly allegorical *Faust Part II* (published posthumously in 1832). Both these stories explore the possibilities of using organic-biological matter as raw material for artificial creation, by means of science and without divine assistance. Both stories were written in a pre-Darwinian time, in the context of the battle of ideas between materialism and vitalism. *Frankenstein* was seen to promote a materialistic and ungodly worldview, whereas the creation of Homunculus was taken as a powerful defence of vitalism. Seventy years later, when Wells wrote his novel, the episteme had changed, and evolutionary ideas were garnering much attention, in all their complexity and scope.

---

[12] The beautiful animated marble statue of Pygmalion, described in Ovid's *Metamorphosis*, is another example of creation of lifeless matter, animated with divine assistance. The Jewish Golem also belongs here.

[13] Martin Kemp, *The Human Animal in Western Art and Science* (Chicago: Chicago University Press, 2007), 116-26.

In what follows, I will discuss both the creation and the fate of the artificial human beings in Wells's *The Island of Doctor Moreau* in the light of Shelley's and Goethe's creation stories. These texts share two general features most typical of fictional stories about artificially created human beings. First, their imagined materialisations are deeply related to contemporary science and new technology. Second, the creatures' subsistence after creation bears the stamp of insuperable trouble. My analyses construe the novel's message as dual but cautionary. The creation of an artificial human being might be successful, but such creatures are often destined to be cultural, existential or biological failures. The ultimate challenge of artificial creation is not connected to a technique used therein, but to the sort of creature that eventually sees the light of day.

Creation

After discovering 'the secret of life' through scientific experiments, neither Frankenstein nor Wagner doubted their motif for creation: they wanted to make a human being. Frankenstein propounded on his possibilities to make any living creature, but he chose to make 'a human being in perfection', one that could possibly fulfil his dream of being the forefather of a 'new species'.[14] Wagner, on the other hand, never considered making anything but a perfect creature in the book of nature, 'a man is being made'.[15] There had long existed an alchemical tradition of creating *homunculi*, according to the best-known recipe provided by Paracelsus.[16] The term 'homunculus', meaning 'little man', was also an equivalent to the creation of the philosopher's stone, and one of the innumerable ways to describe this symbolic goal of alchemy.[17]

---

[14] Mary Shelley, *Frankenstein, or the Modern Prometheus: The 1818 Text*, ed., intro. and notes Marilyn Butler (Oxford: Oxford University Press, 1994), 32.

[15] Johann Wolfgang von Goethe, *Faust Part Two*, trans., intro. and notes David Luke (Oxford: Oxford University Press, 1994), 72 (6835).

[16] Paracelsus, 'On the Nature of Things. Book 1: Of the Generation of All Natural Things', in *The Alchemy Reader. From Hermes Trismegeistus to Isaac Newton*, ed. Stanton J. Linden (Cambridge: Cambridge University Press, 2003).

[17] Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1998), 146. See also William R. Newman, *Promethean Ambitions: Alchemy and the Quest to Perfect Nature* (Chicago: University of Chicago Press, 2004) and Bruce T. Moran, *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution* (Cambridge: Harvard University Press, 2005).

These two artificial creations – the Creature and Homunculus – are counterparts, in spiritual endowment as well as physical form. The perfection of the one contrasts with the imperfection of the other. Frankenstein's Creature makes his appearance as an over-dimensioned and repulsive looking adult male, but with the consciousness of a new-born, adapting his existence first through sensation, later through experience and observation. The beautiful Homunculus, on the other hand, is fully mentally equipped with *Bildung*, self-consciousness, language and knowledge of history. Yet he exists in a phial, a spirit without a body, and the moment the glass breaks, he will die: 'Be careful, please, my glass must not be cracked / That is the way things are, in fact: / For natural growth the world's too small a place, / But art must be enclosed in its own space.'[18] They are both portrayed as half-creatures, longing to enter the human state.

Moreau, in turn, does not primarily seem interested in the creation of a human being: he tells Prendick repeatedly that his concern is 'the plasticity of living forms'. This very explicit vision underlines the scientific horizon of knowledge that Moreau operates within and explores: the seemingly non-existent principal distinction between the species of humans and animals. At the same time, he shares the visions of his literary predecessors: '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!*'[19] This creature is a human being. Moreau's project is twofold. He will create humans from animals by shaping their bodies to be human, and by eliminating 'the animal spirit' and replacing it with human behaviour and consciousness. In the next two sections, I will first discuss the raw material and Moreau's scientific methods, and second, the animation, or the plasticity.

The raw material

Frankenstein collected his 'raw material' from dead bodies and took them in deep secrecy from churchyards, charnel- and slaughterhouses. The ten-foot tall figure was stitched together, ready for animation: 'His limbs were in proportion, and I had selected his features as beautiful.'[20] In *Faust Part II*, Faust's former *famulus*, Wagner creates his Homunculus of 'manifold' ingredients in a glass phial, coalescing with both the old alchemy and the new chemistry. The creature is made out of 'Materia anthropica', quite an

[18] Goethe, 74 (6881-6884).
[19] H. G. Wells, *The Island of Doctor Moreau* (Peterborough, Ontario: Broadview, 2009), 130.
[20] Shelley, 39.

unspecified material, small enough to be contained in a phial to be held on the fire for 'crystallisation', (further) development and growth.[21]

Seventy years later, Wells repeats the drama of artificial creation inflected by evolutionary ideas. Contrary to Frankenstein's raw material, Moreau's materials are alive. Perhaps like Wagner, he has no need to discover the principle of life as such. Moreau explains to Prendick: 'I wanted – that was the one thing I wanted – to find out the extreme limits of plasticity in living shape.'[22] The creation of the Beast People follows a two-step procedure. First, the vivisection by Moreau, second, the social control of their society, inscribed in the Law.

The various animals are brought to the island by Montgomery and M'ling. From their various habitats in different corners of the world, the animals are taken to Moreau's laboratory, the so-called 'House of Pain', where Moreau works on them. Prendick's descriptions of the Beast People tell us something about the variety of the raw material: we find the Leopard Man, Dog Man, Ape Man, Puma Woman, Sloth Man, Monkey Man, Wolf Woman, and Swine Men and Women. Several of the creatures are mixtures of two species: the Hyena Swine Men, the Vixen-Bear Woman, the Bear-Bull and Mare-Rhinoceros Person. The last animal to be vivisected by Dr Moreau is a female puma. She escapes during the process, and mad with pain, later kills Moreau. Within the eleven years Moreau has lived on the island, he has created more than 120 creatures, and about sixty of them are still alive when Prendick comes to the island. He notices that they are seemingly able to think, and the Ape man distinguishes between 'Small think' and 'Big think'. They can giggle, but no one can laugh. The voices of the animals are indifferent, so is their articulation. They also have some common characteristics: short legs and long upper bodies. With their heads leaning forward, they walk strangely and clumsily. Their faces are 'prognathous, malformed about the ears, with large and protuberant noses, very furry or very bristly hair, and often strangely coloured or strangely placed eyes.'[23]

---

[21] The term 'crystallisation' is one of the concepts that allude to both the old alchemy and the new chemistry. See 'Szene Laboratorium', in *Goethe. Faust. Kommentare*, ed. Albrecht Schöne (Frankfurt am Main: Inseln, 1994), 506-7. This scene provides an account of the qualities of Wagner's material, which can be used to interpret creation as a reaction against the new materialism.

[22] Wells, 127.

[23] Ibid., 134.

The Beast People's population of the island is dominated by carnivorous animals, rather than domesticated species. Moreau gave up using sheep, as they lacked the necessary 'courage'.[24] The Beast People that are closest to the humans on the island have been partly created from domestically trained animals. M'ling, Montgomery's assistant, is half-dog, and works as a servant in 'the House of Pain'. A Saint-Bernard hound turns out to be Prendick's faithful protector when the order on the island collapses. This creature is also one of the last to revert before it is finally killed by the Hyena Swine. The wildest animals, such as the Leopard Man, show the first signs of reverting to their origins. The transformation process alludes to several innovative technologies, such as tissue grafting, blood transfusion and vivisection. Moreau did not use anaesthesia, and was oblivious to the screams of pain from the animals.[25] For some readers, the cruelty of Dr Moreau was the object of the harshest reviews of the novel and Wells. Critics called it 'below his dignity', and focused on the horror and unnecessary violence. Wells's portrayal of contemporary science was called 'speculative', and he was accused of mobilising public distrust in science.[26]

Mason Harris points out that the dichotomous picture painted of Dr Moreau, as both a dedicated scientist and a sadistic torturer of animals, is created from images that would be recognisable to Wells's audience. These images relate to the two sides in the late-Victorian debate surrounding vivisection. The 1870s saw a heated public debate about the growing use of surgery on living animals for the purposes of medical research. The practitioners of vivisection were usually doctors who had devoted their careers to scientific investigations, and they argued that if they were to study processes in living organisms, it was far more useful to experiment on animals still alive than to use traditional methods of dissection. T. H. Huxley stood in the front line of the supporters of vivisection. Scientists who

[24] Ibid., 128.

[25] The theme of pain in Wells's novel is given a lengthy treatment. For an interesting discussion of pain in connection with evolutionary theories, see Glendening, 57ff. See also David Punter, *The Literature of Terror: A History of Gothic Fiction from 1765 to the Present Day* (London: Longman, 1980).

[26] Chalmers Mitchell, review in *Saturday Review*, 11 April 1896, lxxxi, 368-9, in *H. G. Wells: The Critical Heritage*, ed. Patrick Parrinder (London: Routledge and Kegan Paul, 1972), 45.

defended vivisection were called godless Darwinists, while those opposed to vivisection were often associated with a religious hostility to science.[27]

Before Prendick has a conversation with Dr Moreau, he recalls having seen Moreau's name in a newspaper in connection with a vivisection scandal that culminated in Moreau fleeing the country. Harris observes how the dating of Moreau's exile can be connected to the very climax of the vivisection controversy, namely the passage of the Cruelty to Animals Act, intended to regulate vivisection (this Act, however, turned out to be a disappointment to the anti-vivisectionists). On his remote island, Moreau is able to carry out experiments without interference. Harris argues that this enclosure in the laboratory would be 'typical of the new kind of scientist and research'.[28] A contrary view is held, for example, by Roslynn Haynes, who equates the withdrawal from the scientific community to the alchemist resembling Frankenstein.[29] It is interesting to note how the image of the new, rational scientist is merged with those of pre-modern practitioners of science, whose ultimate goal was the symbolic production of the philosopher's stone. Wells's imaginative leap involving the use of vivisection as a means to create artificial human beings goes along the same lines. The first edition of the novel was accompanied by a famously cited note which Wells removed from all subsequent editions: 'There can be no denying that whatever amount of scientific credulity attaches to the detail of this story, the manufacture of monsters – and perhaps of quasi-human monsters – is within the possibilities of vivisection.'[30] In contrast to both Frankenstein and Wagner, who have no plans for the further education of their creatures, Moreau succeeds in teaching the Beast People human behaviour and in suppressing their animal tendencies. His creatures also acquire a new and unforgettable experience in the process of creation: namely, they learn to feel pain and to fear Dr Moreau.

On leaving the 'House of Pain', the Beast People try to exist like humanoids, building themselves a village and forming a society. They

---

[27] Harris, 45. Harris discusses the vivisection controversy at length in his recent introduction to *The Island of Doctor Moreau*.

[28] Ibid., 47.

[29] Roslynn D. Haynes, *From Faust to Strangelove: Representations of the Scientist in Western Literature* (Baltimore: The Johns Hopkins University Press, 1994), 154.

[30] Wells, 174. In a comment on this note, Harris remarks that Wells here refers to an essay on the possibilities of vivisection, entitled 'The Limits of Individual Plasticity', and that Wells also gives Moreau a number of ideas from 'The Province of Pain', an essay he wrote in 1894.

complete Moreau's training by repeating his hypnotic suggestions in a ceremonial chant called the Saying of the Law:

> Not to go on all-Fours, *that* is the Law. Are we not men? Not to suck up Drink; *that* is the law. Are we not men? Not to eat Flesh or Fish; *that* is the Law. Are we not men? Not to claw Bark off Trees; *that* is the Law. Are we not men? Not to chase other Men, *that* is the Law. Are we not men?[31]

The Law seems to parody the stable order that Rudyard Kipling tried to depict in his *Jungle Book*, published one year before *The Island of Doctor Moreau*. Kipling's *Jungle Book* is a social allegory that attempts to offer a rational exposition of social stability through the endearing metaphor of the Law of the Jungle.[32] Whereas Kipling embraced the concept of the Law as a force necessary to protect civilisation, Wells holds up the Law as a governing and controlling power, preventing the Beast People from returning to the chaos of animality.

The chanting of the Law picks up a new rhythm and discloses the almighty position held by Moreau in relation to the creatures in the village: '*His* is the House of Pain. *His* is the Hand that makes. *His* is the hand that wounds. *His* is the hand that heals. [...] *His* is the lightening flash [...] *His* is the deep, salt sea. [...] *His* are the stars in the sky.'[33] The punishment for breaking the Law is to return to the House of Pain, a threat that keeps the creatures in line. Moreau claims to have no interest in them after his laboratory experiments are complete. Even though he acts like the remote creator and the distanced God, he is there to punish the creatures when the Law is broken and the reversion begins. Moreau's horrible closed society, controlled from above by scientifically inflicted pain, is described by Frank McConnell as 'perhaps the first really totalitarian regime imagined by Western man'.[34]

Animation and plasticity

In the literary tradition of the artificial creation of human beings, animation has been prominent. Like raw material, animation can be regarded as a blank, a particularly interesting place in the text to enter, if the aim is to explore the

[31] Ibid., 114.
[32] Asker, 158.
[33] Wells, 114.
[34] Paul K. Alkon, *Science Fiction before 1900: Imagination Discovers Technology* (New York: Routledge, 2002), 47.

imaginings of where the human mind has its seat and origin.[35] Animation has several functions: it makes the lifeless creature move; it can provide an opening to investigate the imagined source of the soul, consciousness or identity of the creature. If seen together with the imagined raw material, it may also connect the artificial human being to images of nature.

The animation processes in Shelley's *Frankenstein* and Goethe's *Faust II* paint two very different pictures of consciousness and nature. On a 'dreary night of November', Frankenstein collects his 'apparatus of life' around him. He infuses a 'spark of being' into his lifeless creature, possibly imagined on the basis of the new sciences of galvanism and electricity. The Creature's body parts were selected for their beauty: 'his hair of a lustrous black, and flowing; his teeth of a pearly whiteness'.[36] Each piece was cut from different, anonymous dead bodies, with no trace of their former personality or story. At the very moment of animation, the beauty of the creature disappears. The mere sight of the moving mass of dead body parts hits the creator as breathless horror and total collapse, as if death was beautiful, but life was filled with horror. Two variations on the same theme meet in the moment of animation: the scientific instrumental approach towards nature, and the gothic focus on death. Frankenstein flees in terror, leaving the lonely Creature behind to discover what sort of creature he is. The Creature is pure body, mentally a *tabula rasa* and a noble savage. However, he gradually transfers to pure evil, as he repeatedly experiences the denial of human companionship, and finally Frankenstein's refusal to make him a bride. The creator and the creature form a symbiotic double of hatred and revenge, chasing each other to the end of the world for destruction

[35] The concept of 'blank', or 'Leerstelle', comes from Wolfgang Iser and his idea of 'the implied reader' as developed in *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett* (Baltimore: Johns Hopkins University Press, 1974) and in *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978). Iser argues that texts are never really finished and that their meaning is never absolute: there will always be unspecific places, blanks or *Leerstellen*, in the text. These are concrete places in the text that open up different meanings and interpretations, such as metaphors, allusions, allegories, plot or concepts. Through these blanks, the (implied) reader is invited to use their cultural competence, give the text new meanings and dimensions, and understand the text and its connections to the world in new ways. This view is also important for historicising a text. Umberto Eco presents similar views in *The Role of the Reader: Explorations in the Semiotics of Texts* (Bloomington, Ind.: Indiana University Press, 1979).

[36] Shelley, 39.

and death. The living dead ends his journey in the remote and sublime Arctic, returning into 'darkness and distance'.[37] The horror of the story highlights the point that animated death could not become alive.

In Wagner's laboratory (and in Goethe's playful pen), the question of animation is twofold. In alchemy, all material is considered to be in the process of change. In the laboratory, the microcosm mirrors the macrocosm. This is a poetic rendering of a vitalistic worldview which Goethe the scientist argued for in his botanical and geological investigations.[38] In the new materialistic chemistry, the material is lifeless. If Homunculus were animated from an external life spirit, or created by means of chemistry, it would have a name: Mephisto. Homunculus never materialises into 'flesh and blood', as if the chemical shortcut to creation remains impossible.

In conversations with Eckermann, Goethe revealed that Homunculus could be understood as 'pure entelechy', a Leibnizian monad, as the pure spirit of life.[39] Goethe immediately established a connection to the Faustian ambition through Homunculus's first words to Mephisto (whom he recognises as 'cousin'): 'Since I exist, I must find things to do.'[40] On his educational journey and search to gain a full existence, Homunculus leaves the laboratory and Wagner behind, bringing Mephisto and the sleeping Faust to the Classical Walpurgis Night, a site for creation *per se*. In alchemy, sleep symbolises death, and the creation of Homunculus can fruitfully be interpreted as a doubling of Faust himself.[41]

Homunculus ends his journey by breaking the glass of his phial in the waves of the Aegean sea, in the magic of the Classical Walpurgis Night amongst the ghosts of natural philosophers, demigods, sirens and other half-creatures, while Thales comments: 'Yield to your laudable temptation: / Seek the beginnings of creation! / Be poised to act, don't hesitate! / move on by

---

[37] Ibid., 191.

[38] Peter D. Smith, '"Was die Welt im Innersten zusammenhält": Scientific Themes in Goethe's *Faust*', in *A Companion to Goethe's Faust. Parts I and II* (New York: Camden House, 2001), 199. See also John Geary, *Goethe's Other Faust. The Drama, Part Two* (Toronto: University of Toronto Press, 1992).

[39] Johann Peter Eckermann, *Gespräche mit Goethe in der Letzten Jahre seines Lebens*, Hg. Heinz Schlaffer (München: Carl Hanser, 1986), 184. This particular conversation is dated 6 December 1829.

[40] David Luke, 'Introduction', in Goethe, *Faust Part Two*, xxxff.

[41] Ronald D. Gray, *Goethe the Alchemist: A Study of Alchemical Symbolism in Goethe's Literary and Scientific Works* (Cambridge: Cambridge University Press, 1952).

eternal norms, / Through many many thousand forms / And reach at last the human state.'[42] Homunculus fails as a human being, but is both the incarnation of the pre-evolutionary vital principle and the Faustian longing. More a principle than a personified subject, he is a double, or what I would call a 'clone' not only of the vitality of life, but also of Faust himself. The tale of Homunculus expands on the potential of the Faustian myth as Goethe turns it into a narrative of the evolution of life.

Because Moreau's raw material was alive, he neither needed to discover nor add the 'spirit of life' to his creatures. However, the fact that they were alive and therefore contained the animating principle made it possible for Moreau to investigate 'the plasticity of living forms'. This 'plasticity' is complex and unclear, and concerns the mental as well as the physical. It is here that we find horror in the novel: the element of plasticity embraces both humans and animals. Moreau's creation describes humans and animals as drifting along the same lines, back and forth, from animals to humans and back again.

The transformed animals are hybrids, given human shape and furnished with ideas of human identity. There is, however, one major problem with the creatures, and Moreau is very much aware of their limitations. He complains to Prendick that 'they revert. As soon as my hands are taken from them the beast begins to creep back, begins to assert itself again.'[43] The reversion is not limited to the flesh only, it is also related to a somewhat mystical, unspecific and sublime part of the mind of the animal, a kind of 'animal spirit' that Moreau believes is in the brain, and definitely out of his reach:

> And least satisfactory of all is something that I cannot touch, somewhere – I cannot determine where – in the seat of the emotions. Cravings, instincts, desire that harm humanity, a strange, hidden reservoir to burst suddenly and inundate the whole being of the creature with anger, hate, or fear.[44]

Both the 'upward striving' and the reversion are stages in the process of development that can be recognised in the tradition of artificial human

[42] Goethe, 118 (8321-8326). See also Mannfred Osten, 'Die evolutionäre Reise – zur Modernität des Goetheschen Homunculus', in *Goethe-Jahrbuch: Einhundertund-zwansigster Band der Gesamtfolge 2003* (Frankfurt am Main: Hermann Böhlaus, 2004).
[43] Wells, 130.
[44] Ibid.

beings. The technicality of creation is a success, but the creatures are doomed to fail in their search for humanity.

One of the most gripping themes in the tradition of the artificial creation of human beings is the description of the creature's self-understanding, from the moment of consciousness to their inevitable downfall. Unlike Shelley and Goethe, Wells does not give us insight into the biographies of the Beast People, but through the narrator Prendick, we are told a story that is easily recognisable, of both confusion and striving. Despite his ambiguous feelings towards the Beast People, Prendick is able to recognise their striving to be humans and pity their confusion:

> Poor brutes! 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 hand. I had shivered only at the days of actual torment in the enclosure. But now that seemed to me the lesser part. Before, they had been beasts, their instincts fitly adapted to their surroundings, and happy as living things may be. Now 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, begun in an agony, was one long internal struggle, one long dread of Moreau – and for what?[45]

Even after Moreau is killed by the puma, the Beast People show an impressive willingness to comply with the Law: 'We love the Law.'[46] When he was still alive, Moreau had described to Prendick that 'there is a kind of upward striving in them',[47] which echoes the longing of the Creature and Homunculus for a full existence and for becoming human beings. Unlike their artificial predecessors, they never come to terms with their existence. When reversion begins, they try to follow the Law, try to cover themselves and walk on two feet, consumed with shame when they break the rules, even after Moreau's death.

The human double: the beast within

Wells's novel investigates a question highly relevant in the cultural climate after Darwin: what is the difference between animals and humans? This is also a story about the beast within, centring on the confused boundaries between human beings and Beast People. The novel taps into the new

[45] Ibid., 145.
[46] Ibid., 163.
[47] Ibid., 131.

sciences presenting the possibilities for manufacturing monsters. It also expresses anxiety about human degeneration.

Throughout cultural history, the common feature of artificial human beings has been that they are monstrous. They are at once human and non-human, thus representing cultural boundaries of what is considered to be human – and, at the same time, what is not.[48] In cultural expression, artificial human beings might look and behave like us, but they are always, and at the same time, something else. This duality, captured in Freud's concept of the uncanny, or *unheimlich*, describes the unresolved balance between the familiar and the strange. Prendick's description of the Beast People's chanting of the Law is illustrative:

> Suddenly, as I watched their grotesque and unaccountable gestures, I perceived clearly, for the very 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. Each of these creatures, despite its human form, its rag of clothing, and the rough humanity of its bodily form, had woven into it, into its movements, into the expression of its countenance, into its whole presence, some now irresistible suggestion of a hog, a swinish taint, the unmistakable mark of the beast.[49]

This uneasiness takes us into some of the most interesting aspects of artificial human beings, namely, the literal descriptions of the reactions towards them. As the technical and scientifically based creation highlights contemporary stories about knowledge and expectations for science, technology and progress, the described public response towards these creatures reveals aspects of human identity. Artificial human beings manifest the human Other, the doppelganger, and perhaps also, its surrogate. Potentially, the creation of artificial human beings threatens the existence not only of the human race, but also of our culture, society and future. They exist to test continually the cultural boundaries drawn to define humanity itself. In this regard, the cultural expressions of artificial humans might be considered as fictional forms pointing out what it means to be a human being.

---

[48] For discussions of monstrosity, see Jeffrey Jerome Cohen, 'Monster Culture (Seven Theses)', in *Monster Theory: Reading Culture*, ed. Jeffrey Jerome Cohen (Minnesota: University of Minnesota Press, 1996), 2-18.

[49] Wells, 100.

Prendick's response towards the Beast People is highly disturbing. As Kelly Hurley remarks, 'the Beast People are uncanny because they remind Prendick not only of "some familiar animal", but also of himself [...]. [T]he novel continually, and with varying degrees of subtlety, makes the point that the beast-community is a mirror of the human community at large.'[50]At the end of the novel, Prendick is unable to resolve his ambivalence towards the other characters or to feel secure in defining the boundaries between man and animal. After the deaths of Moreau and Montgomery, Prendick is forced to live amongst the Beast People, witnessing their reversion and their final transformation back to the animal state. Arriving in London, he feels like a stranger and is met as one, which he explains by implying his own mark of the beast: 'No one would believe me; I was almost as queer to men as I had been to the Beast People. I may have caught something of the natural wildness of my companions.'[51] On returning to society and leaving the horrors of Moreau's island behind, he is still haunted not only by the memories, but also by the deepest fear of degeneration, that the beast within should show itself in the urban jungle:

> I could not persuade myself that the men and women I met were not also another, still passably human, Beast People, animals half-wrought into the outward image of human souls; and that they would presently begin to revert, to show first the bestial mark and then that. [...] Then I look at my fellow-men; and I go in fear. I see faces keen and bright; others dull or dangerous; others, unsteady, insincere – none that have the calm authority of a reasonable soul. I feel as though the animal was surging up through them; that presently the degradation of the Islanders will be played over again on a larger scale.[52]

As a lonely man in the crowd, Prendick foreshadows one of the most prevalent motifs of modernist literature and art. However, the narrator's experience of existentialist loneliness goes far beyond the famous urban motif. On the island of Dr Moreau, he witnessed the secret of life, played out on a large scale. By using animals as raw material, a scientist was accelerating natural evolution, and as a response to the impossibility of taking such a shortcut to creation, degeneration occurred on a similarly large scale. The animal spirit could not be dispelled, and its traces, the beast within, are now to be found in every face in the city. They are manifest not only in

[50] Kelly Hurley, *The Gothic Body: Sexuality, Materialism and Degeneration at the Fin de Siècle* (Cambridge: Cambridge University Press, 1996), 105.
[51] Wells, 172.
[52] Ibid., 172-3.

evolutionary equivalents of Robert Louis Stevenson's Mr Hyde, but also in the likes of Prendick himself.

Of the critics that reviewed *The Island of Doctor Moreau*, one merited Wells's approval. An unsigned review in the *Guardian*, dated 3 June 1896, suggests that the novel is close to blasphemy:

> Sometimes one is inclined to think the intention of the author has been to satirize and rebuke the presumption of science; at other times his object seems to be to parody the work of the Creator of the human race, and cast contempt upon the dealings of God with His creatures. [...] The inevitable reversion of these creatures to bestiality is very well described; but it ought to have been shown that they revert inevitably because they are only man-made creatures.[53]

By using living animals as raw material, Wells has explored the horrors of evolutionary ideas: that man is himself an animal, and that he can never escape the continual threat of degeneration.

[53] *H. G. Wells: The Critical Heritage*, 53.