

Università degli Studi di Padova

Dipartimento di Studi Linguistici e Letterari

Corso di Laurea Magistrale in Lingue Moderne per la Comunicazione e la Cooperazione Internazionale Classe LM-38

Tesi di Laurea

Too Perfect Triumph of Man:

Evolution and Degeneration in the Scientific Romances of H. G. Wells

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Anno Accademico 2017 / 2018

To my fiancé, Liviu, who has been an amazing inspiration and support ever since we met. I would not be here without him.

I would also like to thank my parents for always believing in me.

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Appendix: Summary in the Italian language

Introduction

That to strive for the better has always defined human nature is a truth as old as the Icarus myth. But just as the myth warns, such an unweaning ambition might prove tragic. While the desire for improvement has been the main fuel of mankind's progress, the hubristic testing of human limitations and boundaries can result in a crushing decline of mankind. Constantly interrogating on the meaning of life and his place in the universe, man has never settled and has been trying to acquire supremacy over nature, other species and even himself, struggling constantly for freedom and progress. The most recent scientific discoveries and technological developments only exacerbate this desire and empower humans to achieve more, but what seems a progress from this point of view, might prove, from a moral perspective, a sign of degeneration. This observation leads to a variety of interrogations, regarding the role of science in imposing man's supremacy on nature, its consequent ethical issues, as well as the relationship established by civilized men with other humans but also non-human creatures. These are deep, always pertinent questions that, although might not find an exhaustive and definitive answer, nonetheless deserve attention and critical reflection. Such interrogations lie at the base of the early narrative of Herbert George Wells but are also the concern of contemporary debates.

The novels analyzed in this work, *The Time Machine, The Island of Doctor Moreau* and *The War of the Worlds*, which are only a few of his early 'scientific romances', touch upon the issues of biological evolution and colonialism as they address the themes of man's place in the universe and his inherent bestiality; his relationship with other races; and the utopic as well as the dystopic potential of scientific and technological progress. These are also the main axes on which this thesis is constructed, with the objective to highlight the Darwinian traces in Wells's narrative and to interpret the writer's pessimistic conception on humanity and its failures towards itself and other species. Finally, Wells's warnings and concerns will be correlated to the contemporary ethical debate regarding biotechnologies, demonstrating not only the pertinency of his novels but also the role that science fiction in general can and should play in this context.

One of the most important revolutions of the Nineteenth century was certainly Darwin's evolution theory. This is the subject of the first chapter, that analyzes his works (*On the Origin of Species* and *The Descent of Man*) and their impact on moral theory and literature. Charles Darwin demonstrated that species are not created separately but evolve from a common ancestor and vary casually. The varieties that prove to be fittest in a determinate environment survive and continue to evolve, thus differentiating themselves even more from other varieties into a distinct species. Man is also an element of this universal mechanism and thus, within the Darwinian framework, mankind loses its supremacy in comparison to other species, but also the idea of a defined and stable humanity. As humans are the result of evolution, they could still evolve in the future and the direction or nature of this transformation cannot be predicted or controlled. The impact of this scientific theory was so profound that it reverberated in other disciplines, such as literature, which speculated on the scientific discoveries of the epoch and the consequences they might have. One of the most well-known examples is Mary Shelly's novel, Frankenstein, or the Modern Prometheus, which gave voice to the public's concerns regarding the corrupting power of science and its destructive potentialities. It thus initiated a tradition of the mad scientist trope, of which Wells's Doctor Moreau is also a representative. Wells himself was not interested in literature only, but, as a former student of Huxley's, under whose guidance he discovered evolutionary biology, he was profoundly invested in the scientific theories and developments of his time.

The second chapter addresses Wells's reception of the evolutionary theory, both in his early scientific essays and narrative. Works such as "A vision of the past", "Zoological Retrogression", "Bio-optimism" and "Human Evolution, an artificial process", reflect on the status of man in the universe among other species, and criticize the optimistic view on evolution. The conclusion drawn from these essays is rather pessimistic, and the first phase of his literary career, dedicated to scientific fantasies, will aim at illustrating some of the possible future scenarios of human degradation and its eventual extinction. The use of utopia and dystopia and the narrative structure of Wells's novels are also analyzed here, with a focus on key Darwinian concepts employed, such as chance, entanglement and the consequent epistemological failure. It is suggested that men cannot determine their individual destiny or collective evolution since too many factors are involved and interconnected. Therefore, they cannot predict or understand the outcome since causeeffect reasoning seems to fail, as illustrated by the protagonists' repeated failed attempts to understand the causes and meaning of the phenomena they witness. However, this is due not only to the complex nature of reality, but also to their own emotions and lack of self-control, which compromise their rationality.

This introduces one of the fundamental themes addressed by H. G. Wells in the novels selected for analysis: the relationship between species and mankind's vulnerability, not only from a biological perspective, but also from a moral point of view. In his novels Wells speculates upon man's evolution, which he illustrates by means of fantastic and degenerate characters such as the Martians, the Eloi and the Morlocks. However, the most shocking hypothesis of Wells's is that men can become animals and vice versa, as the Beast-Folk prove. This intricate connection between species and the impossibility to categorically differentiate them is mainly addressed in the third chapter, where the inherent bestiality of human nature is analyzed and the issue of moral obligations towards non-human creatures is raised. By placing Man among Morlocks, Martians and Beasts, Wells questions the anthropocentric assumption that human nature is indisputably superior and defined by rationality, and instead emphasizes the connection between civilized men and beasts by means of emotions, instincts and even cannibalism. Therefore, the third chapter is centered around the concepts of meat, humanity, identity and manliness, and it analyzes the numerous confrontations of Man with the Other, at the end of which the former is shattered, less human and more bestial while the latter gradually conquers the apparent insurmountable difference. As Wells's protagonists fail to maintain their humanity, self-control and moral values when confronted with extreme situations, it is once again suggested that man is only one of the vulnerable creatures that are struggling for survival, willing to adapt to any environment and thus compromise their identity. Wells's refusal to draw a line on the evolutionary scale, separating beast and man, savage and civilized, past and future suggests that these relationships should be conceived of as an ontological continuum with immense positive as well as negative potentialities. If biological evolution does not guarantee future improvement and progress of mankind, the question remains whether salvation can come from education, science and technology.

Civilized men certainly seem to think so, as they struggle to overcome biological vulnerabilities and even mortality and to impose their will on nature by means of technology and science. This is the topic of the fourth chapter, dedicated to the mad scientist and the failure of reason in the characters of the Doctor Moreau, the Martians

and the Morlocks; and the fifth chapter, which demonstrates the pertinency of Wells's view and warnings in the context of contemporary ethical debates on biotechnologies. The Time Machine, The Island of Doctor Moreau and The War of the Worlds are all novels that explore the implications of the Darwinian evolution theory, mostly blurring the distinction between species. In criticizing anthropocentrism in general and imperialist smugness in particular, Wells emphasizes in his early narrative the bestial nature of man, his lack of self-control and tendency to degenerate. However, in opposition to the protagonists that illustrate this point, characters such as Doctor Moreau, the Time Traveller, the Martians and even the Morlocks enjoy a position of power not only on other people or creatures, but also on nature itself. They are characterized by self-control and cold rationality, and they manage to impose their will through science. However, the technology they develop also proves to be a vulnerability and their overdeveloped rationality compromises other human traits, such as emotion. They are merciless, consumed by their unweaning ambition and morally condemnable, and thus their progress, their "too perfect triumph" is rather a degeneration because it compromises other fundamental values such as compassion, sociability and emotion. Therefore, the fundamental question is what defines humanity and what role should reason, science and technology be allowed to play in altering the human being.

This is the topic of the last chapter, which analyzes Wells's warnings and dystopic scenarios in relation with contemporary concerns regarding biotechnologies meant to enhance humans and non-human creatures. A comparative analysis could be fruitful both in proving the pertinency and intuitive power of Wells's novels after more than a century from their publication, and in providing an imaginative appeal to the contemporary ethical debates. It will be shown that he anticipated many of the contemporary thorny issues and that his novels could be used to illustrate scientific problems that would otherwise be inaccessible or uninteresting to the wide public. Critics have observed that in describing Moreau's attempts to enhance animals, Wells anticipates contemporary or even future moral problems raised by biotechnology. However, other novels such as *The War of the Worlds* and *The Time Machine* also explore the dynamic between human and non-human, with a particular focus on selective breeding and exploitation, as well as reproductive practices and negative outcomes of artificial evolution and enhancement.

Human intervention in natural evolution started with domestication and selective breeding and has arrived nowadays to more controversial and invasive methods such as genetic engineering, xenotransplantation, creation of chimeras and human enhancement, promising even more drastic procedures in the future. These raise moral issues anticipated by Wells in his novels, such as the morality of animal enhancement, violation of the rights and dignity of animals and humans involved in scientific experimentations, and, in the case of human enhancement, the peril presented by eugenics and the loss of humanity itself by a replacement of emotions and fundamental moral values with rationality and performance. It is clear therefore that such issues raised by bioconservatives should not be neglected and a public debate is needed in order to control the direction and nature of such scientific developments which otherwise have the potential to fundamentally change society and mankind, create deep inequalities or even lead to extinction. To appeal to the wide public and involve it in this debate, an interdisciplinary dialogue is necessary and the contribution of science fiction, thanks to its pervasive and persuasive nature, could prove very valuable. Literature in general has the power to influence the public opinion and it has been observed that the media often rely on literary references to positively or negatively frame their account on biotechnology, therefore its role should not be underrated. Literary discourse manages to combine scientific imagination, social awareness and emotional appeal and thus involves every citizen in a debate which he can no longer afford to ignore. Science fiction overcomes the lack of scientific knowledge or interest of the wide public, as it appeals to the fundamental moral intuitions and feelings of all humans, such as empathy and compassion. It offers compelling and memorable scenarios which manage to grab the public attention and to alert them with regards to the potential dystopic consequences of biotechnologies.

The early narrative of H. G. Wells is one example of such contribution. More than a century after publishing his novels, Wells remains relevant thanks to his deep understanding of human nature and of the perils brought by its unweaning ambition and hubris, and his anticipations of the scientific and technological progress. The analysis of his work is helpful not only in understanding the Nineteenth century relationship between science and literature, but its application to contemporary and future science is also very fruitful. Future research in the same direction could include other novels of Wells, such as *The Invisible Man* or *The First Men in the Moon*, but also similar writers such as Mary Shelley, Aldous Huxley, Evgenij Zamyatin, Margaret Atwood, and many others.

Chapter 1. Victorian literature and the impact of the Darwinian Revolution: rethinking man and moral sense

It was in the Nineteenth century that science started to shape itself as the discipline we are all familiar with today, and "natural philosophers" became "scientists" as they started to differentiate themselves from other intellectuals. However, the split between science and literature was not felt yet and therefore science developed as a part of culture, with a strong bond to the other disciplines:

In the popular press, however, the two commingled and were accessible to all readers. Scientists quoted well-known poets both in their textbooks and in their articles for lay readers, and writers we now identify as primarily 'creative' explored the implications of scientific theories. Science was not perceived as being written in a 'foreign language'—a common complaint of twenty-first-century readers. As a growing system of knowledge expressed in familiar words, science was in effect a variety of literature.¹

Although by the end of the century scientists were arguing for the autonomy of science and the usefulness of an exclusively scientific education, initiating a process of separation which is considered complete now, the novels analyzed in this dissertation are the result of a two-way traffic between literature and science. As it will be seen, the first major scientific discoveries could not, on the one hand, leave culture, especially literature, indifferent and could not, on the other hand, be popularized without recurring to literary references, to gain credibility.

At the beginning of the Nineteenth century, imagination played an important role in the early development of science and in its reception by popular culture, and scientists resorted to literary elements to explain their theories. Towards the end of century instead, when this process was completed, and science as an established, independent discipline had been widely accepted, writers themselves tried to acquire prestige by imitating the scientific style. Not coincidentally, it was during these times that science-fiction as a genre started to become more and more important as writers tried not only to address, in their fictional works, current scientific discoveries but also to anticipate the future development of science and its impact. One of the fundamental themes addressed by H. G. Wells in the novels selected for analysis, is the relationship between species and the

¹ Laura Otis, (ed.), "Introduction", *Literature and Science in the Nineteenth Century. An Anthology*, Oxford University Press, New York, 2002, p. xvii.

relative, unstable status of mankind, not only from a biological perspective, but also from a moral point of view. It seems that men can evolve in fantastic ways (the Martians, the Eloi and the Morlocks are examples of this possible future evolution) but maybe the most shocking hypothesis of Wells's is that men can become animals and vice versa. This intricate connection between species and the inability to categorically differentiate them raises the issue of moral obligations towards non-human species. In this *entanglement*² of species described by Wells, the echo of the Darwinian revolution makes itself forcibly heard. Therefore, in writing about H. G. Wells one cannot start without taking into account Charles Darwin and the impact his works (*On the Origin of Species* and also *The Descent of Man*) had on Victorian society on a whole, including Wells.

Darwin started his career as a naturalist on board of HMS *Beagle*. During a five-year expedition, from 1831 to 1836, he made a series of observations that would become the basis of his groundbreaking work, *On the Origin of Species*, published for the first time in 1859, after twenty years of carefully developing his theory. Following this experience, Darwin concluded that species evolve over time and vary randomly, but those who adapt best to their environment survive and procreate, and thus are naturally selected, while those endowed with less useful mutations will become extinct. What might seem now a very reasonable and straightforward conclusion, had, at the moment of its publication, a major and controversial impact: "Precisely because we live in a culture dominated by evolutionary ideas, it is difficult for us to recognise their imaginative power in our daily readings of the world."³

Glendening argues that Darwin's experience aboard the *Beagle* opened new perspectives on biology, which were difficult to reconcile with what he had previously known. Therefore, the wilderness he explored enabled him to make amazing discoveries but also confused him profoundly:

² Used here as interconnectedness or interweaving, this is only one instance of the concept used in the Darwinian theory. As Glendening explains, "Darwinism and other approaches to evolution engaged the intellects and imaginations of many authors and readers, and the fiction that most responded to this influence incorporated the many complications that evolutionary theory, interacting with its cultural and historical contexts, encompassed and produced. These complications constitute forms of "entanglement"— the chaotic interweaving of entities, forces, conditions, or ideas—operating in tandem with principles of order that it contests and never entirely negates.", John Glendening, *The Evolutionary Imagination in Late-Victorian Novels: An Entangled Bank*, Routledge, New York, 2016, p. 7.

³ Gillian Beer, Darwin's Plots. Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction, 2nd edition, Cambridge University Press, Cambridge, 2000, p. 2.

The "entangled" character of the forest offers a model for understanding Darwin's reaction to the wildness/wilderness he perceives. Wilderness is not just a physical reality but a psychological one. As the rest of his Fuegian account demonstrates, it is not merely a rough and uncultivated nature, but, especially upon first encounter, a cognitive entanglement or confused interfusing of different interpretations and reactions.⁴

One of the most important concepts Darwin uses in narrating the impact of his first exploration of the wilderness in the *Beagle* journal is "entanglement"⁵. The jungle, with its luxuriant vegetation is entangled and makes it hard for him to penetrate it, and, more importantly, the population itself is entangled:

The natives too appear entangled, their attributes and conduct, from Darwin's uncomprehending point of view, incoherently mixed. (...) The natives' entangled hair and equally discordant expressions, speech, and gestures, inseparable from Darwin's own incomprehension, impel him to try, tentatively and inadequately, to disengage himself and his kind from the Fuegians and their disorder.⁶

The main challenge that Darwin faced when he encountered the natives was to decide where they stand on the imaginary line separating animals from humans. And, as Glendening argues, he decided to place them closer to animals and thus emphasize the difference between them and himself, the civilized man:

His various efforts to reject them offers Darwin not only self-protection but self-affirmation, since not being like these Others validates his own civilized virtues. The dynamics of Darwin's reactions, as well as their relevance to his later theory, are most evident in his tendency to relate the Fuegians to animals. For example, "their courage is like that of a wild beast" and "Their skill in some respects may be compared to the instinct of animals; for it is not improved by experience: the canoe, their most ingenious work, poor as it is, has remained the same, for the last 250 years" (Beagle 139; Journal 236).⁷

However, they are human nonetheless and therefore Darwin's connection to them cannot be denied: "Although Darwin connects the Fuegians to non-humans, he cannot quite separate them from his own kind—as implied by his failure to answer his question, "could our progenitors be such as these?""⁸

This encounter made the young naturalist understand that there are intermediary instances between animal and man and that they are closer to each other on the evolutionary scale than previously thought. As Ernst Mayr explains in the introduction to *On the Origin of*

⁴ John Glendening, op. cit., p. 1.

⁵ The concept of entanglement was used by Wells in other novels, especially in *The Island of Doctor Moreau*, whose plot is rather similar to Darwin's first encounter with the Fuegians. The protagonist of the novel is also trying to explore the jungle and the tropical forest and he is profoundly confused by the population he encounters there, just as Darwin was intrigued, appalled but also fascinated by the strangeness of the Fuegians. Not coincidentally, as Glendening points out, the island of Doctor Moreau is close to the Galapagos, that Darwin himself visited. (Glendening, *op. cit.*, p. 40)

⁶ Glendening, *op. cit.*, p. 3.

⁷ Ibidem.

⁸ *Idem*, p. 4.

Species, Darwin distanced himself from all previous philosophy and way of thinking the position of man in the world and published a work whose impact was unparalleled: "The publication of the Origin of species ushered in a new era in our thinking about the nature of man. The intellectual revolution it caused and the impact it had on man's concept of himself and the world were greater than those caused by the works of Copernicus, Newton, and the great physicists of more recent times."⁹ This phenomenon, which was later to be known as the Darwinian "revolution"¹⁰, questioned a belief which was still strong among scientists themselves: the dogma of creation. Starting from a series of empirical observations that could not be explained by the prevailing theories or even geological proofs¹¹, Darwin had to impose a new paradigm based on logical deduction, and thus revolutionized science, freeing it at once from the influence of religion and philosophy. By putting forward the idea that variation is produced by random mutations which are selected naturally if useful, Darwin eliminates the Platonic idea of essence of things as well as the belief that all species are the result of the Genesis¹². Moreover, if all species considered distinct are in fact interconnected because they are just varieties that evolved from a common ancestor, over time, in extreme directions¹³, it is no longer clear what is man's position among all other creatures. Since he no longer is the image of God, the supreme creation, but just a species superior to others, if evolution is not a complete process but always in development, the question remains what he will become in the future, and in what a different species he will evolve into. As Ruse puts it, "At some level,

⁹ Ernst Mayr, "Introduction", in Charles Darwin, On the Origin of Species, Harvard University Press, Cambridge MA, 1966, p. vii.

¹⁰ It has been debated whether this term is appropriate in relation to the publication of Darwin's work. For a short analysis of this problem see Ruse ("The Darwinian revolution: Rethinking its meaning and significance", 2009), who argues that on a scientific and even more so on a metaphysical level the evolution theory of Darwin did indeed have a major contribution; and Herbert, who defines it "a rolling revolution", Sandra Herbert, "The Darwinian Revolution Revisited", *Journal of the History of Biology*, 2005, 38: 51– 66, p. 53.

¹¹ "Those who think the natural geological record in any degree perfect, and who do not attach much weight to the facts and arguments of other kinds given in this volume, will undoubtedly at once reject my theory. For my part, following out Lyell's metaphor, I look at the natural geological record, as a history of the world imperfectly kept, and written in a changing dialect; of this history we possess the last volume alone, relating only to two or three countries.", C. Darwin, *On the Origin of Species*, cit., p. 310.

¹² "Owing to this struggle for life, any variation, however slight and from whatever cause proceeding, if it be in any degree profitable to an individual of any species, in its infinitely complex relations to other organic beings and to external nature, will tend to the preservation of that individual, and will generally be inherited by its offspring", C. Darwin, *On the Origin of Species*, cit., p. 61.

¹³ "Each species had not been independently created, but had descended, like varieties, from other species", C. Darwin, *On the Origin of Species*, cit., p. 3.

the Darwinian revolution destroyed forever the old picture of humans as somehow miraculously special, symbolically and literally as touched by magic."¹⁴

One of the most important and baffling lessons offered by Darwin regards the impossibility to predict the future¹⁵, and on this much of Wells's satire is based as well. His academic and scientific career started under the guidance of Huxley, who introduced him to Darwin's theory of evolution, which had a great impact on the writer. In this post-revolutionary universe, Wells tackles these Darwinian issues in his novels, where he speculates not only on the potential evolution of species, but also on their possible regression and suggests that their interconnectedness should represent an ethical barrier against the presupposed supremacy of one race or species over another. Exploitation and torture imposed by a superior species like mankind on the weaker one, be it under the form of vivisection or imperialism, is no longer justifiable and this is a point made by Wells repeatedly in his novels, directly or metaphorically. The well-known conclusive image of the entangled bank, to which Wells makes several allusions in his works, is an expression of awe in front of Nature and of modesty determined by the realization that we are just an element of this organic whole, unknowingly depending on the other members.¹⁶

Moreover, the very existence of humans can no longer be taken for granted, as it is in fact something for which this species must continuously fight for:

¹⁴ Michael Ruse, "The Darwinian revolution: Rethinking its meaning and significance", *PNAS*, pp. 10040–10047, vol. 106, 2009, p. 10041.

¹⁵ "When I view all beings not as special creations, but as the lineal descendants of some few beings which lived long before the first bed of the Silurian system was deposited, they seem to me to become ennobled. Judging from the past, we may safely infer that not one living species will transmit its unaltered likeness to a distant futurity.", C. Darwin, *On the Origin of Species*, cit., p. 488.

¹⁶ "It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us. These laws, taken in the largest sense, being Growth with reproduction; Inheritance which is almost implied by reproduction; Variability from the indirect and direct action of the conditions of life, and from use and disuse; a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection, entailing Divergence of Character and the Extinction of less improved forms. Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone circling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.", C. Darwin, *On the Origin of Species*, cit., pp. 489-490.

All that we can do, is to keep steadily in mind that each organic being is striving to increase at a geometrical ratio; that each at some period of its life, during some season of the year, during each generation or at intervals, has to struggle for life, and to suffer great destruction. When we reflect on this struggle, we may console ourselves with the full belief, that the war of nature is not incessant, that no fear is felt, that death is generally prompt, and that the vigorous, the healthy, and the happy survive and multiply.¹⁷

Darwin's conclusions demoted man and relativized his position in the universe, raising a question regarding the status of man as a moral agent. In other words, if men, like any other species, have to struggle for survival in a battle with members of their own or different species, the question arises whether they are morally accountable for their actions or whether everything is justified in the name of survival and evolution.

Darwin himself reflected on the consequences his discovery might have on moral theory and tried a reformulation of Kant's categorical imperative¹⁸ in 1871, when he published *The Descent of Man*. His objective was to "consider, firstly, whether man, like every other species, is descended from some pre-existing form; secondly, the manner of his development; and thirdly, the value of the differences between the so-called races of man"¹⁹. The widespread and profoundly rooted belief that man is unique in comparison to the other species rendered it necessary for Darwin to address this issue, in order to confute it, in a separate volume, as anticipated in *On the Origin of Species*:

Even if one were to ignore the dubious inference to miraculous origin, the presumption that humans, because of their special faculties, are of an essentially different kind than the lower animals effectively blocks the application to the human case of the arguments offered for evolution in the *Origin*.²⁰

¹⁷ *Idem*, p. 79.

¹⁸ The first formulation of the categorical imperative is made by Kant in the *Groundwork of the Metaphysics of Morals*, where he argues that since humans are rational creatures, morality should be founded on rationality exclusively, because it is only so that man would freely comply with duty. In addition to the rational nature, to be considered moral, an action must pass the test of two principles: "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as means, but always at the same time as an end" (Immanuel Kant, *Groundwork of the Metaphysics of Morals*, Hutchison University Library, London, 1966, p. 91.) (the practical imperative) and "Act only on that maxim through which you can at the same time will that it should become a universal law" (idem, p.84) (the categorical imperative). Later, in the *Metaphysics of Morals*, Kant explains: "The categorical imperative, which as such only affirms what obligation is, is: act upon a maxim that can also hold as a universal law. – You must therefore first consider your actions in terms of their subjective principles; but you can know whether this principle also holds objectively only in this way: that when your reason subjects it to the test of conceiving yourself as also giving universal law through it, it qualifies for such a giving of universal law", Immanuel Kant, *The Metaphysics of Morals*, Cambridge University Press, Cambridge, UK, 1996, p. 17.

¹⁹ C. Darwin, *The Descent of Man, and Selection in Relation to Sex*, Volume 1. 1st edition, London: John Murray, 1871, pp. 2-3.

²⁰ Robert T. Pennock, "Moral Darwinism: Ethical Evidence for the Descent of Man", *Biology and Philosophy* 10: 287-307, 1995, pp. 289-290.

Therefore, in order to identify a fundamental difference between humans and lower animals, Darwin argues that "of all the differences between man and the lower animals, the moral sense or conscience is by far the most important."²¹ and analyzes human morality in order to prove that it is, originally, the result of evolved intellect and natural selection, like all the other traits of the species.

Although he goes on quoting Immanuel Kant, he distances himself by replacing moral duty with an acquired, 'evolved' sentiment of sympathy:

any animal whatever, endowed with well-marked social instincts, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well developed, or nearly as well developed, as in man. For, firstly, the social instincts lead an animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them. (...) But these feelings and services are by no means extended to all the individuals of the same species, only to those of the same association.²²

In other words, man becomes a moral creature because otherwise his actions would be blamed and criticized by fellowmen and he would thus lose their company. It seems that Darwin externalizes moral sense, which is no longer an autonomous, inner criterion, but depends on the feedback provided by the members of the social group:

Consequently man would be greatly influenced by the wishes, approbation, and blame of his fellow-men, as expressed by their gestures and language. Thus the social instincts, which must have been acquired by man in a very rude state, and probably even by his early ape-like progenitors, still give the impulse to many of his best actions; but his actions are largely determined by the expressed wishes and judgment of his fellow-men, and unfortunately still oftener by his own strong, selfish desires.²³

He continues by stating that, in time, man would transform this behavior - sanctioned as moral by others - into a habit and would be compelled by reason and conscience to abide by it: "He may then say, I am the supreme judge of my own conduct, and in the words of Kant, I will not in my own person violate the dignity of humanity."²⁴ Having proved that morality, usually considered the distinctive trait of humans, is a result of evolution and does not contradict his theory, he concludes by underlining that there is only a difference

²¹ Darwin, *The Descent of Man*, cit., pp. 70-71.

²² *Idem*, pp. 71-72.

²³ *Idem*, p. 86.

²⁴ Darwin, The Descent of Man, p. 86.

of degree between humans and animals, and therefore they do not belong to a different kingdom²⁵.

However, the social nature of this Darwinian moral sense makes for a weak criterion in comparison to Kant's categorical imperative, because it depends on the judgment of others²⁶ and does not seem to be compelling at all:

...he will be conscious that if his conduct were known to his fellows, it would meet with their disapprobation; and few are so destitute of sympathy as not to feel discomfort when this is realised. If he has no such sympathy, and if his desires leading to bad actions are at the time strong, and when recalled are not over-mastered by the persistent social instincts, then he is essentially a bad man; and the sole restraining motive left is the fear of punishment, and the conviction that in the long run it would be best for his own selfish interests to regard the good of others rather than his own.²⁷

This reformulation of moral sense is closer to a utilitarian one than to Kant and indeed Darwin later directly refers to this theory²⁸. Pennock points out that, besides some minor elements, such as the role played by reason and consciousness in morality, Darwin's and Kant's analyses of morality are incompatible. However, while Darwin could be labelled as Utilitarian, he transforms and reduces the Utilitarian principle as well, in a very biological sense:

Make the replacement in Mill's formula quoted above and now one gets or change accordingly "actions are right in proportion as they tend to promote reproductive fitness; wrong as they tend to produce the reverse of reproductive fitness." So, instead of acting to maximize the amount of pleasure, on Darwin's formulation one should act to maximize the number of vigorous offspring.²⁹

Another weakness of this view is its relative character, since morality will vary from a social group to another, depending on its needs and environment: "But now we need to ask whether this is a satisfactory ethical theory and whether it captures what we mean when we say that humans are moral beings. The answer to both of these questions is

²⁵ "Some naturalists, from being deeply impressed with the mental and spiritual powers of man, have divided the whole organic world into three kingdoms, the Human, the Animal, and the Vegetable, thus giving to man a separate kingdom. Spiritual powers cannot be compared or classed by the naturalist; but he may endeavour to shew, as I have done, that the mental faculties of man and the lower animals do not differ in kind, although immensely in degree. A difference in degree, however great, does not justify us in placing man in a distinct kingdom, as will perhaps be best illustrated by comparing the mental powers of two insects, namely, a coccus or scale-insect and an ant, which undoubtedly belong to the same class. The difference is here greater, though of a somewhat different kind, than that between man and the highest mammal." Darwin, *The Descent of Man*, p. 186.

²⁶ Or the measure of true morality is to respect it even when no one can evaluate your actions, this is, for example, precisely the point made by Wells in *The Invisible Man*.

²⁷ Darwin, 1871, cit., p. 92.

²⁸ "Philosophers of the derivative school of morals formerly assumed that the foundation of morality lay in a form of Selfishness; but more recently in the "Greatest Happiness principle." According to the view given above, the moral sense is fundamentally identical with the social instincts", Darwin, 1871, cit., p. 97.

²⁹ Pennock, *op. cit.*, p. 295.

almost certainly negative. Darwin's theory, brilliantly stimulating though it may be, is wanting in several important respects."³⁰

A very interesting, yet harsh analysis of Darwin's moral criterion compared to Kant's is put forward by Jakob von Uexküll³¹ in 1917. Besides comments regarding the political influence of Great Britain on the rest of the world, the critique of its colonial expansion at the expense of other populations, such as the Indian, this article presents a very original comparison between the English moral sense as extracted from Darwin's description of morality in *The Descent of Man*, with the German one, as dictated by Kant's categorical imperative. "The Englishmen are noticeably a people of civilization that live in a world of opinion with fixed rules", the author states, as they are subdued to a high number of very strict rules, accept them as dogmas, without critical thinking and consider barbarians those that abide by different rules, thus justifying their submission. The author argues that the importance of external praise and criticism is a characteristic trait of the Englishmen, and not a general human feeling of sympathy, as identified by Darwin. He also criticizes his assumption that this feeling of sympathy is decisive for human morality and states that:

World ethics is utterly impossible as long as people's praise and criticism constitutes the norm of morality. It is not, as Darwin holds, an artificial barrier that is an impediment to the extension of moral consideration to all peoples and to the lower animals. Rather, the ethics that is founded on praise and blame is itself the barrier for the extension to fellow creatures whose praise and criticism one neither hears nor takes note of.³²

Very interesting is the conclusion that, whereas the German is self-regulated, and therefore free but also lonely, the Englishman must obey to the general opinion, and therefore does not enjoy the same freedom, but has fewer responsibilities as well:

The Englishmen are not in possession of any morality, but of a replacement for morality. The Englishmen knows no higher authority than the general opinion, which is manifested as praise and blame, while the German moral doctrine explicitly demands that the general opinion is to be scorned and that one evaluates one's own actions wholly independently of the praise and criticism of others.³³

In comparing Darwin's view on morality with Kant's, the author of the article rephrases Darwin's principle: "Act in such a way that your actions are continuously determined by

³⁰ Pennock, *op. cit.*, p. 297.

 ³¹ Morten Tønnessen, "Darwin and the English Morality, Translation of Jakob von Uexküll (1917). *Darwin und die englische Moral*, Deutsche Rundschau 173: 215-242", *Biosemiotics*, 2013, 6:449–471.
 ³² Idem, p. 456.

³³ *Idem*, p. 460.

the approval and disapproval of your fellow human beings."³⁴ and argues: "Kant's German imperative makes any individual an autocratic law-giver in moral questions. It thus charges him with tremendous responsibility, but simultaneously gives him the true, the only desirable freedom."³⁵ On the other hand, in this view Englishmen do not carry this moral responsibility but at the same time are slaves of the general opinion and cannot regulate themselves.

The importance of society in setting behavioural standards can be seen in Wells's novels, where isolation plays a fundamental role. In *The Island of Doctor Moreau*, Montgomery and Dr. Moreau are punished for their behavior by being excluded from society. Exiled on an island, they impose their own rules. It is only in this isolated space that the scientist can freely conduct his experiments, which are not acceptable in the eyes of the English-British society, but the price he has to pay is isolation and loneliness. If one were to accept Jakob von Uexküll's description of the Englishman, Dr. Moreau would represent a perfect example: he has no inner moral sense and therefore, when exiled, he considers himself free to violate all laws, including those of sympathy. The mere idea that others might disapprove of his actions, even when confronted directly with this disapproval, does not shake his convictions or produces any remorse. If he had, on the other hand, a sense of moral duty as proposed by Kant, he would not have been able to conduct his cruel experiments. While vivisection had to be regulated at a society level in order to become unacceptable in the eyes of the Englishman, for a Kantian any act of cruelty and torture, even on animals, has always been morally unacceptable:

With regard to the animate but nonrational part of creation, violent and cruel treatment of animals is far more intimately opposed to a human being's duty to himself, and he has a duty to refrain from this; for it dulls his shared feeling of their suffering and so weakens and gradually uproots a natural predisposition that is very serviceable to morality In one's relations with other men. The human being is authorized to kill animals quickly (without pain) and to put them to work that does not strain them beyond their capacities (such work as he himself must submit to). But agonizing physical experiments for the sake of mere speculation, when the end could also be achieved without these, are to be abhorred.³⁶

From this Kantian perspective, the activity of Doctor Moreau is, without a doubt, immoral. In general, Kant's moral principles have been used as arguments against genetic engineering by those who consider it to violate the autonomy and dignity of humans and even animals, as it will be seen in the last chapter. However, this is not a unanimous

³⁴ *Idem*, p. 457.

³⁵ *Idem*, p. 458.

³⁶ Immanuel Kant, *The Metaphysics of Morals*, cit., p. 193.

opinion. In his article³⁷, Gunderson argues that, in fact, Kant's moral philosophy supports genetic engineering as a means to perfect our person and therefore our abilities as moral agents and can be used to fulfill our imperfect duties. His thesis is based on the idea that ultimate perfection achievable by genetic engineering equals increased moral capacity. However, this is not stated by Kant and in Wells's narratives, it would appear to be the contrary: in his novels, humanity does not appear to be perfect, but in an intermediate state between bestiality and post-humanity, defined by intelligence and compassion. This combination lacks on both the lower and upper level of the scale and therefore, the narrator, usually a typical man confronted to more evolved or inferior creatures, acts as a moral judge and thus enjoys a position of superiority, but at the same time maintains his flaws, bestiality and emotion. The apparent perfection of evolution, as represented by the Eloi in *The Time Machine* or by the Martians in *The War of the Worlds*, does not equal a better fulfillment of moral duties, but sometimes their annulment and therefore it deprives life from meaning and oversimplifies human traits. For Wells then, it would often seem that evolution is not desirable but rather a threat arriving from the future or from the extreme use of science.

Perfection is one of the key terms in the debate regarding evolution. Darwin's mechanism of evolution is very complex and can be interpreted twofold: on one hand, it has been considered a cruel, random process, a blind struggle against one another towards the achievement of perfection. On the other hand, Darwin himself underlines that species are co-dependent in complex ways, incomprehensible to us, and that while this organic universe is in a state of permanent, dynamic equilibrium, perfection may never be achieved:

Natural selection will produce nothing in one species for the exclusive good or injury of another; though it may well produce parts, organs, and excretions highly useful or even indispensable, or highly injurious to another species, but in all cases at the same time useful to the owner. (...) Natural selection will not necessarily produce absolute perfection; nor, as far as we can judge by our limited faculties, can absolute perfection be everywhere found.³⁸

It has been pointed out that Darwin did not have in mind perfection as the outcome of the natural selection process:

³⁷ Martin Gunderson, "Seeking Perfection: A Kantian Look at Human Genetic Engineering." *Theoretical Medicine and Bioethics*, 28 (2), 2007, pp. 87-102.

³⁸ Darwin, 1966, cit., pp. 205, 206.

The ideas of development and of retrogression or degeneration were complementary in many minds. Darwin's argument, with its emphasis on the drive towards individuation and divergence, lessened the force of replication, but it did not admit of a foreknown perfection towards which organisms were moving. That was the method of artificial not natural selection.³⁹

However, his strongly metaphorical language leaves room to interpretation and therefore it has been considered closer to narrative than scientific demonstration. Beer's *Darwin's Plots. Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction,* whose main thesis is that the relationship between Darwin and culture has been a reciprocal one, has become a seminal study of Darwin. The fact that his works immensely influenced not only biology and science in general, but also different branches of culture, such as art, philosophy, politics and literature, is not generally disputed. But the idea that Darwin himself has been influenced by literature is rather original and Beer's study becomes, from this point of view, very stimulating.

The author analyses Darwin's language, metaphors and images, and points out how they are connected to or inspired from his readings and beliefs. Even though his ideas are revolutionary and fundamentally contradict the prevalent paradigms, scientific or religious, he cannot escape their influence as he is constrained to use terms from these disciplines⁴⁰, or to avoid this by using metaphors:

Darwin was therefore obliged to dramatize his struggle with natural theological assumptions within a language weighted towards natural theology. He must write against the grain of his discourse. We can see the problem of escaping from creationist language very exactly in the changes Darwin made through several editions to passages in which the question of originating forces is unavoidable. Sometimes he makes small emendations which shift into a more openly metaphoric, even misfitting, language.⁴¹

But these metaphors raise a different issue, because they are open to interpretation and affect the reception of the intended meaning:

³⁹ Gillian Beer, Darwin's Plots. Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction, 2nd edition, Cambridge University Press, Cambridge, 2000, p. 130.

⁴⁰ A somewhat different point of view is put forward by Laura Otis, who argues that it was not (only) unconsciously that Darwin used religious language and images, but that he used them purposely with the intent to make his message more acceptable with the public: "For centuries, discussions of human origins and behaviour had been dominated by theologians and philosophers, so that when scientists wrote they had to defend their right to address these questions. Like literary writers, they often did so by incorporating the voices of accepted authorities, particularly those of religious texts. The concessions to religion in Darwin's The Origin of Species are unmistakable with its references to 'powers, having been originally breathed into a few forms'. While Darwin sometimes used religious phrases unconsciously, his keen awareness of language suggests that he crafted his final paragraph to appease readers. Knowing how deeply his arguments threatened the traditional understanding of humanity's place in the universe, he presented his theory as complementary to religious teachings, not as a replacement for them.", Laura Otis, *Literature and Science in the Nineteenth Century. An Anthology*, p. xx.

⁴¹ Beer, *op. cit.*, p. 48.

One of the major questions raised by The Origin is how far metaphors overturn the bounds of meaning assigned to them, sometimes even reversing the overt implications of the argument. Seemingly stable terms may come gradually to operate as generative metaphors, revealing inherent heterogeneity of meaning and of ideology.⁴²

Moreover, Darwin's speech builds itself from the various observations of variation and only later some conclusions are drawn. It may also be because of this that his work stimulated the imagination of writers, who were influenced, Beer states, not only on the level of narrative content but also of structure: "The second premise of my argument is that evolutionary theory had particular implications for narrative and for the composition of fiction. Because of its preoccupation with time and with change evolutionary theory has inherent affinities with the problems and processes of narrative."⁴³ How these characteristics can be also identified in Wells's narrative that seems to reflect this evolutionary perspective on the world will be addressed in the next chapter.

One of the main challenges posed by Darwin is to understand whether evolution is a story about survival or extinction, whether it is seen as a profoundly positive and progressive process, or, on the contrary, it can also involve degeneration:

Evolutionary ideas shifted in very diverse ways the patterns through which we apprehend experience and hence the patterns through which we condense experience in the telling of it. Evolutionism has been so imaginatively powerful precisely because all its indications do not point one way. It is rich in contradictory elements which can serve as a metaphorical basis for more than one reading of experience: to give one summary example – the 'ascent' or the 'descent' of man may follow the same route but the terms suggest very diverse evaluations of the experience. The optimistic 'progressive' reading of development can never expunge that other insistence that extinction is more probable than progress, that the individual life span is never a sufficient register for change or for the accomplishment of desire.⁴⁴

Whether growth is irreversible, or this is just a cultural construct; and whether transformation involves not only progress but also regression, are some of the fundamental questions around which many Victorian novels are built. H.G. Wells provides, in his early science fiction, a gloomy answer to these interrogations as he analyzes the intricate relationship between human and bestiality, the hubris of scientific ambition and how its attempt to force evolution by artificial selection can fail. In addition, Wells suggests, apparent progress may turn out to be just a hideous reduction and simplification of mankind's best qualities. The future does not necessarily promise the

⁴² *Idem*, p. 50.

⁴³*Idem*, p. 5.

⁴⁴ Beer, *op. cit.*, p. 6.

best outcome for the human species and in order to survive, mankind might not naturally improve itself but rather suffer negative, degrading transformations.

Chapter 2. H. G. Wells: a pessimist utopian

2.1. Wells's reception of the evolutionary theory

It is generally considered that Wells's destiny changed when he was offered a scholarship for the South Kensington Normal School of Science. Coming from a rather poor family, the 18-year-old was presented with the opportunity to escape his unsuccessful apprenticeships and thus became a student of Thomas Henry Huxley's. It was under his guidance that Wells became acquainted with Darwinian theory of evolution and, while he did not really pursue a career in science, the biological background exerted a considerable influence on his future science fiction or theoretical works. In this chapter it will be analyzed how evolutionary theory weighed upon some of Wells's theoretical work, but also on his early narrative, both on a content level as well as on the narrative structure.

The status of man in the universe, among other species, is a recurrent theme in Wells's writings. For example, "A vision of the past" describes the encounter of man with amphibians that used to dominate the earth in the past. Using their speech as a metaphor for the common vision of the world, Wells suggests that human vanity, the belief in people's eternal supremacy and eventual achievement of perfection are not founded and will be contradicted by future evolution:

While the narrator observes and comments on the absurdity of these claims, he fails to understand that his own speech is equally vane: "the advent of that glorious race of reasoning and soul-possessing beings, who, through the endless aeons of the future, will never cease their onward march towards infinite perfection—a race of which I—"⁴⁶

^{...} look at the wondrous world around, and think that it is for our use that this world has been formed. Look at the strata displayed in yon scarped cliff, and the facts which they record of the past history of this earth during the many ages in which it has slowly been preparing itself for the reception of us, the culminating point of all existence, the noblest of all beings who have ever existed or ever will exist. (...) During all the vast ages to come we shall continue upon this earth, while lower beings pass away and are replaced. This world is ours for ever, and we must progress for ever unto infinite perfection.⁴⁵

 ⁴⁵ H. G. Wells, "A Vision of the Past", in eds. Robert Philmus and David Hughes, H. G. Wells: Early Writings in Science and Science Fiction, University of California Press, California, 1975, pp. 155-156.
 ⁴⁶ Idem, p. 156.

With his characteristic irony and subtlety, Wells warns that, in the course of millennial future evolution, human species is rather doomed. This pessimism is one of the most important traits of his narrative, which will be often found in his scientific novels. However, it is not just a narrative element, but an idea derived from scientific discoveries such as the recent theory of evolution that shook the world and left its mark on Wells as well. As a student of biology and, in particular, a student of Huxley, Wells wrote essays such as "Zoological Retrogression", where he criticizes the optimistic view on evolution: "On the contrary, there is almost always associated with the suggestion of advance in biological phenomena an opposite idea, which is its essential complement. (...) the too sweet harmony of the spheres would be enhanced by a discord, this evolutionary antithesis—degradation."⁴⁷. He then goes on and proposes a more skeptical alternative: "The sounder view is, as scientific writers have frequently insisted, that living species have varied along divergent lines from intermediate forms, and, as it is the object of this paper to point out, not necessarily in an upward direction" ⁴⁸

In a Darwinian fashion, Wells illustrates his theory with the example of the division of the Tunicata, a creature resembling a rock or, under closer examination, an oyster or mussel. However, its embryological development is similar to a vertebrate's, yet it also proves the possibility of regression: "A creature on a level, at lowest, immediately next to vertebrate life, turns back from the upward path and becomes at last a merely vegetative excrescence on a rock."⁴⁹ More interestingly, Wells moves on to make a comparison with the human individual destiny (possibly an autobiographical reference), suggesting that marriage, family and a conventional life equal a regression similar to the Tunicata's:

Every respectable citizen of the professional classes passes through a period of activity and imagination, of "liveliness and eccentricity," of "Sturm und Drang". He shocks his aunts. Presently, however, he realizes the sober aspect of things. He becomes dull; he enters a profession; suckers appear on his head; and he studies. Finally, by virtue of these he settles down—he marries. All his wild ambitions and subtle aesthetic perceptions atrophy as needless in the presence of calm domesticity. He secretes a house, or "establishment," round himself, of inorganic and servile material. His Bohemian tail is discarded. Henceforth his life is a passive receptivity to what chance and the drift of his profession bring along; he lives an almost entirely vegetative excrescence on the side of a street, and in the tranquility of his calling finds that colourless contentment that replaces happiness.⁵⁰

⁴⁷ H. G. Wells, "Zoological Retrogression" in *H. G. Wells: Early Writings in Science and Science Fiction*, cit., p. 158.

⁴⁸ *Idem*, p. 150.

⁴⁹ *Idem*. p. 162.

⁵⁰ *Idem*, pp. 162-163.

There are many other examples of degradation that can be found in nature, proving that evolution knows not only an upward, progressive dynamic but can in fact manifest itself as a regression. Some of our ancestors owe their survival not to their advantages in the struggle for life, not to their ability to fight but to flight, that is to avoid a too harsh competition and retreat to a more uncomfortable environment yet less competitive: "They preferred dirt, discomfort, and survival to a gallant fight and death."⁵¹ As the example of the mud fish illustrates, sometimes, in order to survive, one must abandon the clear waters and learn to adapt to a not so hospitable environment, even if that equals degradation:

There is, therefore, no guarantee in scientific knowledge of man's permanence or permanent ascendency. He has a remarkably variable organisation, and his own activities and increase cause the conditions of his existence to fluctuate far more widely than those of any animal have ever done. The presumption is that before him lies a long future of profound modification, but whether that will be, according to present ideals, upward or downward, no one can forecast. Still, so far as any scientist can tell us, it may be that, instead of this, Nature is, in unsuspected obscurity, equipping some now humble creature with wider possibilities of appetite, endurance, or destruction, to rise in the fulness of time and sweep homo away into the darkness from which his universe arose. The Coming Beast must certainly be reckoned in any anticipatory calculations regarding the Coming Man.⁵²

In "Bio-optimism" his stance is even more dramatic and categoric:

... is life therefore any the less a battle-field? Has anything arisen to show that the seed of the unfit need not perish, that a species may wheel into line with new conditions without the generous assistance of Death, that where the life and breeding of every individual in a species is about equally secure, a degenerative process must not inevitably supervene? As a matter of fact Natural Selection grips us more grimly than it ever did, because the doubts thrown upon the inheritance of acquired characteristics have deprived us of our trust in education as a means of redemption for decadent families. In our hearts we all wish that the case was not so, we all hate Death and his handiwork; but the business of science is not to keep up the courage of men, but to tell the truth.(...) The names of the sculptor who carves out the new forms of life are, and so far as human science goes at present they must ever be, Pain and Death. And the phenomena of degeneration rob one of any confidence that the new forms will be in any case or in a majority of cases "higher" (by any standard except present adaptation to circumstances) than the old.⁵³

The conclusion drawn from these reflections and examples is rather gloomy and menacing, and the first phase of his literary career, dedicated to scientific fantasies, will aim at illustrating some of the possible future scenarios of human degradation and its eventual extinction.

⁵¹ *Idem*, p. 167.

⁵² *Idem*, p. 168.

⁵³ H.G.Wells, "Bio-optimism", in *H. G. Wells: Early Writings in Science and Science Fiction*, cit., pp. 208-209.

At the time of these revolutionary discoveries, science and ethics were often interconnected and therefore Wells's biological background weighed on his literary activity not only in providing inspiration but also a moral direction:

In his discursive writings he constantly relies on science as the basis for defining the possibilities of homo sapiens, both as an individual and socially, and thence he infers judgments of value as to man's role and destiny. Where he addresses himself explicitly to ethical matters, the context of his speculations is specifically and fundamentally Darwinian.⁵⁴

This new biological picture of the human species' destiny cannot but reflect itself in ethics as well, and this preoccupied both Huxley and Wells, which explored the connection between evolution and ethics. In "Human Evolution, an artificial process", as the title suggests, Wells introduces the important concept of artificial evolution. He tries to distinguish between natural evolution, that is responsible for the differentiation of species, including the human one, and artificial evolution. While the natural one stopped its action on the human species somewhere in the Paleolithic age, the changes observable in the social body can be attributed to the artificial evolution which manifested for the human species as "an evolution of suggestions and ideas"⁵⁵. Given that man breeds significantly less and slower than other species, natural selection cannot operate as effectively:

Taking all these points together, and assuming four generations of men to the century—a generous allowance— and ten thousand years as the period of time that has elapsed since man entered upon the age of polished stone, it can scarcely be an exaggeration to say that he has had time only to undergo as much specific modification as the rabbit could get through in a century. (...) In view of which facts, it appears to me impossible to believe that man has undergone anything but an infinitesimal alteration in his intrinsic nature since the age of unpolished stone.⁵⁶

However, despite the fact that human nature has remained unchanged, and that man has ancient and strong instincts such as sexual passion, anger and a desire for killing, other traits, although prejudicial to the species itself, can be observed. Behaviours such as monogamy and anger restraint, that distinguish the civilized man from his stone-age ancestor, are far from natural and can be explained only as an outcome of the artificial process that is the basis of the social body. Speech has been fundamental in developing a more complex and cooperative industry than hunting and agriculture and led to the progress of humanity. The human community thus acquired a tradition that, with the

⁵⁴ Robert Philmus, David Hughes (eds), *H. G. Wells: Early Writings in Science and Science Fiction*, cit., p. 179.

⁵⁵ H.G. Wells, "Human evolution, an artificial process", in *H. G. Wells: Early Writings in Science and Science Fiction*, cit., p. 211.

⁵⁶ *Idem*, pp. 213- 214.

development of writing, gradually became culture and State. These are the artificial institutions that differentiate the civilized social body from the stone-age humans. Given that the instinctive, primitive nature of man is unchanged, a conflict arises between natural, primitive instinct and the culture-shaped intellect and behaviour. Before the Darwinian revolution such a conflict was hidden behind the pretense that men are a different species and, in conformity with their superiority, have to abide by strict, moral and religious rules in order to overcome these lower, bestial and inhuman instincts. Once men were included by Darwin, among all the other species, in the natural, violent struggle for survival, their primitive, violent and sexual instincts were better understood as part of human nature, but nonetheless feared. The previously vague effort to be a respectable citizen and a good Christian took now the shape of the overt conflict between the beast and the civilized, the ape and the man:

That in civilised man we have (1) an inherited factor, the 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; and (2) an acquired factor, the artificial man, the highly plastic creature of tradition, suggestion, and reasoned thought. In the artificial man we have all that makes the comforts and securities of civilisation a possibility. That factor and civilisation have developed, and will develop together. And in this view, what we call Morality becomes the padding of suggested emotional habits necessary to keep the round Palaeolithic savage in the square hole of the civilised state. And Sin is the conflict of the two factors—as I have tried to convey in my *Island of Dr. Moreau.*⁵⁷

In front of such a reality, one can adopt different positions and become fatalistic, optimistic or anti-utopian. Wells himself has been considered contradictory as he seems to embrace all these attitudes:

Yet such virtuosity cannot mask the fundamental ambiguity that constitutes both the richness and the weakness of Wells. Is he horrified or grimly elated by the high price of evolution (*The Island of Dr. Moreau*)? Does he condemn class divisions or simply the existence of a menacing lower class (*The Time Machine*)? Does he condemn imperialism (*The First Men in The Moon*) or only dislike being at the receiving end of it (*The War of the Worlds*)? In brief are his preoccupations with violence and alienation those of a diagnostician or of a fan? Both of these stances coexist in his works in a shifting and often unclear balance." (...) His satisfaction at the destruction of the false bourgeois idyll is matched by his horror at the alien forces destroying it.⁵⁸

His literary activity can be defined as the attempt to realistically describe the bestial nature of men while providing an alternative in education and artificial evolution as a solution to this conflict.

⁵⁷ H.G. Wells, "Human evolution, an artificial process", in *idem*, p. 217.

⁵⁸ Darko Suvin, "Wells as the Turning Point of the SF tradition", in John Huntington (ed.), *Critical essays* on H.G.Wells, G. K. Hall&Co, Boston MA, 1991, pp. 29-30.

The artificial factor in man is made and modified by two chief influences. The greatest of these is suggestion, and particularly the suggestion of example. With this tradition is inseparably interwoven. The second is his reasoned conclusions from additions to his individual knowledge, either through instruction or experience.⁵⁹

This is precisely the task Wells takes on, aiming at becoming a role-model and a prophet, and the purpose he assigns to his literary, scientific and history work is to provide such instruction and knowledge necessary for the (artificial) evolution of man. His view on biologic, natural evolution is therefore a pessimistic one, as its possible outcome can result in degeneration and even extinction. Therefore, his fantastic narratives that speculate on the possible future evolution can only be, from this point of view, anti-utopian. However, as far as artificial evolution is considered, Wells takes a more optimistic and less fatalistic stance, although he fails to give an efficient and exhaustive solution. Since he assigned a determinate purpose to his literature, his work was not meant to be beautiful or perfect, but to instruct and thus change the society. However, there are critics who claim that his style, his lack of artistry, compromises his ability to convey the intended message: "With a minimum of attention to the virtues of technique, Wells might still have not written a good novel; but he would at any rate have established a point of view and a tone which would have told us what he meant."⁶⁰

2.2. Writing science-fiction: narrative features of Wells's scientific romances

Before analyzing Wells's narrative style, a definition of the science fiction genre is required. As Robert Philmus points out, a defining feature of this genre is "the rhetorical strategy of employing a more or less scientific rationale to get the reader to suspend disbelief in a fantastic state of affairs"⁶¹. However, in Philmus's vision, science fiction also has a mythical dimension: "science fiction mythicizes not only the science that it appropriates, but elements of historical reality generally"⁶².

⁵⁹ Ibidem.

⁶⁰ Mark Schorer, "Technique as Discovery", in John Huntington ed., *Critical essays of H.G.Wells*, G.K. Hall&Co, Boston Ma, 1991, p. 35.

⁶¹ Robert Philmus, *Into the unknown. The evolution of science fiction from Francis Godwin to H.G.Wells*, University of California Press, 1983, p. vii.

⁶² *Idem*, p. 3.

In this sense, Wells's science fiction "invents" the future by speculating on the scientific and technological progress achieved during his times. While on the one hand his speculations are even more fantastic than Verne's, because he uses fictional science and technology in his narratives, on the other hand many elements of his fiction are drawn from his contemporary society, from the scientific, technologic and social progress already achieved. In addition, in order to persuade the reader to believe the fantastic scenario he proposes, Wells often frames his narratives as true experiences, sometimes even as historical events. However, as it will be discussed, the credibility of his narrators, despite their scientific and apparently frank and objective descriptions, is often questioned, not only by the critics, but inside the novels themselves. As Emily Alder explains, "Out of this combination of methods – narrative structure, real-world facts, matter-of-fact writing style and a compelling ambiguity – Wells forges a sophisticated authenticating strategy that prepares readers for the story ahead."⁶³

Referring to *The Island of Doctor Moreau*, but his views match with the other two novels as well, Glendening argues that Wells's novel has both elements of realism and fantasy:

Wells's resistance to scientific criticism of his novel, in contrast to his later, generally cavalier assessment, points to its situation somewhere between realism and satirical fantasy. It is realistic in the way science fiction is generally realistic: even though the science that underpins the story does not fully exist in the form depicted, it is presented as plausible because founded on principles and terminology taken from current scientific theory and practice known to many readers.⁶⁴

The scientific elements that Wells introduces in his novels are very diversified: the use of the fourth dimension in *The Time Machine*⁶⁵, the reference to vivisection and surgery in *The Island of Doctor Moreau*, and the hypothesized technological advancements in *The War of the Worlds* are just some of the examples of his ability to invent. Wells's first scientific romance, *The Time Machine: An Invention*, appeared as a serial publication in the *New Review* in 1894 and as a novel in 1895. Wells had experimented with the idea of time travel even earlier, in his 1888 short story, "The Chronic Argonauts", whose success encouraged its further elaboration and publication as a novel. *The Island of Doctor Moreau* instead, published in 1896, makes a clear reference to the rising ethical preoccupation of the British society, who was trying to regulate medical practices such

⁶³ Emily Alder, "Introduction", in *The Island of Doctor Moreau*, p. xi.

⁶⁴ Glendening, *op.cit*, pp. 51- 52.

⁶⁵ As Elizabeth Throesch points out, in his use of the fourth dimension Wells was inspired by Hinton's theory of a fourth spatial dimension. Throesch, "H. G. Wells's Four-Dimensional Literary Aesthetic" in *Before Einstein, The Fourth Dimension in Fin-de-Siècle Literature and Culture*, Anthem Press, 2017.

as vivisection in order to acknowledge and protect the rights of animals⁶⁶. However, one of the most important scientific elements in the early science fiction of Wells is the Darwinian influence, which is visible both on a stylistic level, when his narrators often assume a naturalist way of describing and analyzing, as well as on a content one, many of Wells's fundamental themes and motives being directly related to the evolutionary theory.

2.3. Darwinian (de)structuration of narrative

As far as his fictional narrative is concerned, Wells's Darwinian background transpires both on a content and on a formal level. In describing the evolutionary theory, Gillian Beer underlines its imaginative quality and its replacement of the cause-effect system with chance:

Evolutionary theory is first a form of imaginative history. It cannot be experimentally demonstrated sufficiently in any present moment. So it is closer to narrative than to drama. Indeed in the then current state of genetic knowledge many of the processes of inheritance were beyond explanation (...) Evolutionary ideas proved crucial to the novel during that century not only at the level of theme but at the level of organisation. At first evolutionism tended to offer a new authority to orderings of narrative which emphasised cause and effect, then, descent and kin. Later again, its eschewing of fore-ordained design (its dysteology) allowed chance to figure as the only sure determinant.⁶⁷

On the one hand, the knowledge of the world is limited because not everything can be investigated: as Darwin pointed out, even the geological records are partial, and therefore the scientific conclusions regarding the world and its history are drawn from a somewhat random and incomplete set of facts. On the other hand, the evolutionary process itself can only be observed *a posteriori*; since it does not follow a determinate, strictly causal design, it cannot be anticipated or fully understood. Chance, as evolutionary biology shows, has a crucial role in the destiny of species, and compromises knowledge because their progression is not necessarily linear.

⁶⁶ It was precisely during those years that more organizations had been founded in order to combat the widespread practice of animals' vivisection. A reference to the historical context is made in novel as follows: "It was in the silly season, and a prominent editor, a cousin of the temporary laboratory assistant, appealed to the conscience of the nation. It was not the first time that conscience has turned against the methods of research.", *The Island of Doctor Moreau*, cit., p. 29.

⁶⁷ Beer, *op. cit.*, p. 6.

Indeed, the post-Darwinian world often appeared ruled, not by social or moral order, but by chance factors unconcerned with the success of any individual or species; random events governed not only the individual variations necessary for natural selection to function, but also many of the environmental factors that influence when and how species arise and disappear.(...) The relativity, chance, contingency, and unpredictability encouraged by Darwinian theory meant that the erstwhile determinants of social order had become indeterminate. The universe necessarily took on a chaotic appearance, not simply because Darwin sometimes describes nature as such, but because evolutionary theory interacted with other social determinants to influence people to look at reality in that way.⁶⁸

Therefore, *The Time Machine, The War of the Worlds* and *The Island of Doctor Moreau* will be analyzed from this Darwinian perspective: the relevance of chance and luck; and the consequent epistemological failure, or the impossibility to fully comprehend a reality that is no longer governed by cause-effect processes. Be it through temporal, underground, cosmic or spatial exploration, Wells's protagonists are challenged to reconcile what they knew and thought to be the truth, with what they discover, and this takes a great physical and psychological toll on them. The elements of this confusing reality are, not coincidentally, often described as entangled, in the negative sense that their complex relationships are not always comprehendible to the protagonists, which perceive them as mysterious or even chaotic.

2.4. Reason, chance and fate

Wells builds his plot in a similar way to how Darwin structures his scientific speech. They both start with observation and then speculate the meaning of the reality under analysis, explore possible explanations and hypotheses in order to finally arrive to a rationally drawn conclusion, which is sometimes the suspension of judgment: it can only be assumed how the future will be shaped, the only certainty is the present, and not even that. It proves impossible to fully comprehend the present or the past, less alone predict how the world or the species will evolve. Moreover, chance plays an important role in the development of Wells's narrative, as it often saves his protagonists, which survive not thanks to their strength or fitness, but usually thanks to plain luck:

⁶⁸ Glendening, op. cit., p. 20.

All this had happened with such swiftness that I had stood motionless, dumbfounded and dazzled by the flashes of light. Had that death swept through a full circle, it must inevitably have slain me in my surprise. But it passed and spared me, and left the night about me suddenly dark and unfamiliar.⁶⁹

Repeatedly, the narrator of *The War of the Worlds* mentions the miracles that saved his life or his brother's ("My brother, very luckily for him as it chanced, preferred to push on.")⁷⁰

Had my foot stumbled, it would have been the end. I fell helplessly, in full sight of the Martians. (...) I expected nothing but death. I have a dim memory of the foot of a Martian coming down within a score of yards of my head (...) And then, very slowly, I realised that by a miracle I had escaped.⁷¹

The fact that chance is used not only as a narrative instrument meant to spare the protagonist but also affects the destiny of other men, renders it a decisive, universal principle: "But that crowd of people had a far narrower escape than mine. Only the fact that a hummock of heathery sand intercepted the lower part of the Heat Ray saved them. Had the elevation of the parabolic mirror been a few yards higher, none could have lived to tell the tale."⁷² Moreover, chance intervenes in other ways as well, for example when a cylinder happens to fall exactly on the house where the narrator and the curate were hiding, sparing their life but entrapping them in the ruins while giving them the opportunity to closely observe the Martians: "Our house had collapsed backward; the front portion, even on the ground floor, had been destroyed completely; by a chance the kitchen and scullery had escaped, and stood buried now under soil and ruins, closed in by tons of earth on every side save towards the cylinder."⁷³ It is with this occasion that the narrator describes the Martians and compares them to the terrestrial species, in one of the most scientific, Darwinian-like paragraphs, with a high attention to their biology and the evolutionary explanation of their characteristics:

A young Martian (...) was really born upon earth during the war, and it was found attached to its parent, partially budded off, just as a young lilybulbs bud off, or like the young animals in the fresh-water polyp. In man, in all the higher terrestrial animals, such a method of increase had disappeared; but even on this earth it was certainly the primitive method. Among the lower animals, up even to those first cousins of the vertebrated animals, the Tunicates, the two processes occur side by side, but finally the sexual method superseded its competitor altogether. On Mars, however, just the reverse has apparently been the case.⁷⁴

⁶⁹ The War of the Worlds, cit., p. 26.

⁷⁰ *Idem*, p. 116.

⁷¹ *Idem*, p. 71.

⁷² *Idem*, pp. 29- 30.

⁷³ *Idem*, p. 134.

⁷⁴ *Idem*, p. 138.
One of the most important elements of this analysis is the reference to the lack of microorganisms which might be due, the narrator speculates, to the Martian sanitary science: "A hundred diseases, all the fevers and contagions of human life, consumption, cancers, tumours and such morbidities, never enter the scheme of their life"⁷⁵. That which seems to be an evolutionary advantage, a fortunate trait, will later cause their extinction. This is very important because it proves that progress alone, or apparent evolution, is not key to success, but more important is fitness, the adaptability to a determinate environment and context. Survival does not depend strictly on a higher degree evolution, this example shows, but it has more to do with adaptability. Even if the artilleryman seems to suggest that his survival is due to luck: "Good luck, he said. We are lucky ones! Fancy you!"⁷⁶, the speech that follows is based on the strong belief that man must fight to survive and save the species, even if this means to give up civilization itself and to settle for an inferior, more animal like lifestyle.

Chance can also lead to less positive, atrocious events, or can be used to justify these by a guilty conscience, as this contradictory reflection suggests:

 \dots three things struggled for possession of my mind: the killing of the curate, the whereabouts of the Martians, and the possible fate of my wife. The former gave me no sensation of horror or remorse to recall; I saw it simply as a thing done, a memory infinitely disagreeable but quite without the quality of remorse. I saw myself then as I see myself now, driven step by step towards that hasty blow, the creature of a sequence of accidents leading inevitably to that. I felt no condemnation; yet the memory, static, unprogressive, haunted me. (...) We had been incapable of cooperation – grim chance had taken no heed of that.⁷⁷

The importance of luck is emphasized even more in *The Island of Doctor Moreau*, where Wells made various references to the role of chance and luck in human destiny. First of all, chance acquires here a providential dimension, as the protagonist is saved three times while drifting in the middle of the ocean: twice he is picked up by a boat whereas another time he is saved from cannibalism by the chanceful death of the other men on the boat:

I crawled along the boat to them, intending to help Helmar by grasping the sailor's leg; but the sailor stumbled with the swaying of the boat, and the two fell upon the gunwale and roller overboard together. They sank like stones. I remember laughing at that, and wondering why I laughed. The laugh caught me suddenly like a thing from without.⁷⁸

⁷⁵ *Idem*, p. 139.

⁷⁶ *Idem*, p. 165.

⁷⁷ *Idem*, p. 162.

⁷⁸ The Island of Doctor Moreau, cit., p. 8.

How absurd and tragic the situation is and yet how relieved the protagonist feels is evident from his reaction. Ipecacuanha, the first rescuing ship, was initially named "Red Luck" by Wells, which suggests the emphasis the writer wanted to put on chance and luck as a governing force in his narrative, while hinting at its dual nature: although luck usually has a positive connotation, its association with red alludes to blood and violence. Other characters are intent in pointing out the protagonist's luck, like Montgomery, who insists on the unpredictability of chance, that can save a man's life ("You were in luck, said he, to get picked up by a ship with a medical man aboard") but also ruin another's: "It's chance, I tell you, he interrupted, as everything is in a man's life. Only the asses won't see it. Why am I here now, an outcast from civilization, instead of being a happy man enjoying all the pleasures of London?"⁷⁹ Chance is therefore not to be trusted, since can assume the most different functions. As Glendening argues, luck is "subjective, relativistic, and contingent; it is open to different interpretations based on different standards and on its different consequences for different people, and it is changeable over time in light of later, unpredictable developments."80 The island initially presents itself as a refuge from death or exile, where people such as Prendick and Montgomery are lucky to arrive, but whether this is actually so, is later being questioned: "It was you, said I, that saved me again. - That depends. You'll find this island an infernally rum place, I promise you"⁸¹ and "I thought myself in luck at the time, when Moreau offered to get me off. It's queer..."⁸² As it turns out, what initially seems to be a fortunate event, often has an unpredictable, negative outcome.

2.5. Epistemological failure and the inability to name things

In a mostly negative relationship to chance, stands cognition, which is another important theme in Wells's novels:

Chance, which we call good or bad luck when the unlikely seems to impact our lives decidedly, is our explanation for occurrences that appear most unpredictable relative to evidently realistic expectations

⁷⁹ *Idem*, p. 18.

⁸⁰ Glendening, op. cit., p. 42.

⁸¹ The Island of Doctor Moreau, cit., p. 26.

⁸² *Idem*, p. 31.

and to limited understandings. (...) To say that chance rules the universe is therefore to say that contingency governs cognition; our knowing continuously struggles to make sense of an elusive and wayward reality.⁸³

His narrators often assume a naturalistic strategy in explaining the world and justifying their speculations. However, although they are quick to make assumptions, and they initially manage to be quite persuasive, these are often refuted. All his protagonists speculate on the meaning and explanation of the new reality they find themselves in, putting forward various hypothesis from which they choose one, although temporary, conclusion. This is also the strategy adopted in the *Time Machine*, by the protagonist and other characters, as Karoly Pinter explains:

During the rest of the story, the Time Traveller has apparently carried out his self-proclaimed mission successfully: on the basis of his experiences, he proposes a series of different hypotheses about the world of 802,701, and as soon as his new observations and inferences begin to undermine the validity of the previous hypothesis, he proceeds to create a new one or reassesses and modifies the previous version. The development and refinement of the successive hypotheses leads to the fourth (in other counts, the third) and final theory, which is widely known and has been abundantly discussed in the critical literature: the two humanoid races of the far future have both descended from the two largest classes of nineteenth-century British capitalist society—the ruling elite and wealthy middle class on the one hand, and the industrial working class on the other.⁸⁴

John Huntington argues that the challenge faced by the Time Traveler and the reader can be compared to the scientific task of an evolutionary biologist: "they try to understand the nature of the temporal contrast presented and then to discover connections ... they must first understand what distinguishes two species and then they must reconstruct the evolutionary sequence that links them"⁸⁵. But as Darwin himself was overwhelmed by the unpredictability and complexity of evolutionary biology and had to accept the limited and provisionary character of his scientific theory, so are Wells's protagonists and, together with them, the reader, faced with their ignorance.

Ignorance and constant incomprehension dominate the narrative of *The Time Machine*, where the protagonist repeatedly puts forward various hypotheses which prove to be wrong: "I dare say you will anticipate the shape of my theory; though, for myself, I very

⁸³ Glendening, op. cit., p. 43.

⁸⁴ Károly Pintér, "An Epistemological Journey: The Uncertainty of Construed Realities in *The Time Machine*", in E. Godfrey (ed.), *Utopias and Dystopias in the Fiction of H. G. Wells and William Morris. Landscape and Space*, Palgrave Macmillan, London, 2016, p. 158.

⁸⁵ John Huntington, *The Logic of Fantasy: H.G. Wells and Science Fiction*, New York: Columbia University Press, 1982, pp. 46–47.

soon felt that it fell far short of the truth."⁸⁶. He even tries to justify the lack of precision and detail of his description of the future world he discovered:

And here I must admit that I learned very little of drains and bells and modes of conveyance, and the like conveniences, during my time in this real future. In some of these visions of Utopias and coming times which I have read, there is a vast amount of detail about building and social arrangements, and so forth. But while such details are easy enough to obtain when the whole world is contained in one's imagination, they are altogether inaccessible to a real traveller amid such realities as I found here.⁸⁷

The narrative frame of *The Time Machine* highlights the skepticism encountered by the Time Traveler when he explains the theory of time as a fourth dimension and the discovery of the time machine to his guests: "I think that at the time none of us quite believed in *The Time Machine*. The fact is, the Time Traveller was one of those men who are too clever to be believed: you never felt that you saw all around him; you always suspected some subtle reserve, some ingenuity in ambush, behind his lucid frankness."⁸⁸ As Karoly Pinter argues in his article, the reader today is faced with the same problem as the time traveler's listeners, that is to decide whether he is to be trusted or not and, therefore, how highly can his story be valued in epistemological terms:

However, any interpretative approach to *The Time Machine* is compelled to take a stand in an ineluctable dilemma: the Time Traveller is the sole source of all the knowledge that readers possess about the alien world of 802,701, including both facts and their explanations. Therefore, the first decision every reader has to make is whether they believe the Time Traveller's story and his construal of the weird evolutionary degeneration of proud Victorian England. Such a decision, even if unconsciously made, determines the range of any further explications.⁸⁹

Despite claiming to have succeeded in his experiment and bringing the withered flowers from the future as evidence to his listeners, his journey seems a dream to himself: "This room and you and the atmosphere of every day is too much for my memory. Did I ever make a Time Machine, or a model of a Time Machine? Or is it all only a dream?" and a lie to his listeners: "He thought the tale a gaudy lie. For my own part I was unable to come to a conclusion. The story was so fantastic and incredible, the telling so credible and sober."⁹⁰ Even if the narrator concedes that the story might have been true, he still disagrees with the time traveler's conclusion and argues instead that the future remains unknown, as this is the condition for his optimism:

⁸⁶ The Time Machine, cit., p. 50.

⁸⁷ *Idem*, p. 42.

⁸⁸ *Idem*, cit., p. 11.

⁸⁹ Károly Pintér, op. cit., p. 158.

⁹⁰ The Time Machine, cit., p. 96.

 \dots for I, for my own part, cannot think that these latter days of weak experiment, fragmentary theory, and mutual discord are indeed man's culminating time! I say, for my own part. He, I know – for the question had been discussed among us long before the Time Machine was made – thought but cheerlessly of the Advancement of Mankind, and saw in the growing pile of civilization only a foolish heaping that must inevitably fall back upon and destroy its makers in the end. If that is so, it remains for us to live as though it were not so. But to me the future is still black and blank – is a vast ignorance, lit at a few casual places by the memory of his story.⁹¹

This open ending not only contradicts the story of the Time traveler but also suggests that both he and the narrator had and still have a series of preconceived opinions regarding the future, which not even the direct experience of the future, as it was recounted, manage to alter. On one hand, the time traveler uses his story in order to prove what he always believed regarding the fate of humanity. Not coincidentally he discovers something very similar to what he hypothesized from the beginning: "What might not have happened to men? What if cruelty had grown into a common passion? What if in this interval the race had lost its manliness and had developed into something inhuman, unsympathetic, and overwhelmingly powerful?"⁹² On the other hand, the narrator decides to simply dismiss the unpleasant details from the traveler's account and keep only the few elements that align with his own hopeful vision: "And I have by me, for my comfort, two strange white flowers – shriveled now, and brown and flat and brittle – to witness that even when mind and strength had gone, gratitude and a mutual tenderness still lived on in the heart of man."⁹³ The epistemological value of the story is thus annulled, as its function is closer to an aesthetic one: it has been a pretext for the characters to argue what they stated from the very beginning. Its performative, theatrical quality is underlined in the second chapter, when the Time Traveler expresses his desire, his need even, to tell his story but requires undivided attention and no interruptions as preparing the public for a performance, not a scientific debate:

I can't argue to-night. I don't mind telling you the story, but I can't argue. I will, he went on, tell you the story of what happened to me, if you like, but you must refrain from interruptions. I want to tell it. Badly. Most of it will sound like lying. So be it! It's true – every word of it, all the same.

The narrator declares his inability to render the captivating, vivid and persuasive speech of the traveler together with its meta-elements:

In writing it down I feel with only too much keenness the inadequacy of pen and ink – and, above all, my own inadequacy – to express its quality. You read, I will suppose, attentive enough; but you cannot

⁹¹ The Time Machine, cit., p. 99.

⁹² *Idem*, p. 21.

⁹³ *Idem*, cit., p. 100.

see the speaker's white, sincere face in the bright circle of the little lamp, nor hear the intonation of his voice. You cannot know how his expression followed the turns of his story! (...) After a time we ceased to do that and looked only at the Time Traveller's face⁹⁴.

Pinter argues that the entire narrative lacks a solid basis and cannot draw a complete image of the future as the narrator can acquire very limited knowledge. He manages to explore only a small portion of the new world and cannot establish a significant dialogue with its inhabitants. Therefore, each of his theories is highly speculative and affects his credibility:

In my view, the unreliability of the Time Traveller as narrator is merely a symptom of a central problem of his entire narrative: a fundamental epistemological uncertainty running through his account as an undercurrent and explicitly emerging to the surface from time to time. The Time Traveller has simply no appropriate means of establishing incontrovertible facts about the world of the 803rd century AD: restricted to walking, he can discover little more than a few square miles around his landing area, formerly a wealthy suburb west of London, which does not prevent him from making bold and unjustified extrapolations concerning the evolutionary history of the whole world; he speaks no common language with the inhabitants of the future and has found no written sources on their history, society or culture that would corroborate or refute his speculations; and his mind, far from being the detached observer idealised both by natural sciences and subsequently by modern anthropology, is full of preconceptions about what the future should look like or how it should have developed. The credibility gap of the Time Traveller is a crucial signal to readers to closely examine the factual basis of his assertions and interpretations, and inquire into the possible sources of his misreadings and blind spots.95

The limit of human knowledge is one of the main themes of *The War of the Worlds* as well, and this is obvious from the opening paragraph, which repeatedly refers to human ignorance, and other unknown yet superior species: "intelligences greater than man's (...) minds that are to our minds as ours are to those of the beasts that perish, intellects vast and cool and unsympathetic."⁹⁶ This comparison to other intelligences is meant not only to underline the inferiority of human knowledge, but also to ridicule the vastness of its vanity: "with infinite complacency men went to and fro over this globe about their little affairs, serene in their assurance of their empire over matter (...) yet so vain is man, and so blinded by his vanity"⁹⁷.

All through this novel human science, knowledge and observation are described as faulty, limited and inferior: "The Martians seem to have calculated their descent with amazing subtlety – their mathematical learning is evidently far in excess of ours (...) Had our instruments permitted it, we might have seen the gathering trouble far back in the

⁹⁴ *The Time Machine*, cit., p. 16.

⁹⁵ Pinter, *op. cit.*, pp. 161-162.

⁹⁶ The War of the Worlds, cit., p. 3.

⁹⁷ *Idem*, cit., pp. 3,4.

nineteenth century."⁹⁸ As it has been seen from *the Time Machine*, Wells's narrators are never omniscient and therefore the truth is revealed to the reader gradually, as it shapes itself in the mind of the characters themselves. They reason, often by trial and error, and speculate on the causes and consequences of what they observe or experience. These first hypotheses are always wrong and Wells hints at this with subtlety and irony, yet the strategy remains the same in all three novels, which are based on the protagonists' attempt to understand and interpret the world, only to arrive much later at an open conclusion. Each, although apparently reasonable, deduction and hypothesis of the characters is to be refuted later by the progression of the events, which unveils their inability to correctly interpret the present and anticipate the future, as is clear from this passage from *The War of the Worlds*:

The criticism of human knowledge culminates in the artilleryman's speech, who argues that civilized men are ignorant and thus helpless in front of the Martians and they must retreat to observe and learn if they want to survive: "I've thought it out. We men are beat. We don't know enough. We've got to learn before we've got a chance. And we've got to live and keep independent while we learn. See! That's what it has to be done."¹⁰⁰ Intelligence proves itself in this context to be different from abstract, philosophical speculations: "in the days before the invasion no one would have questioned my intellectual superiority to his – I, a professed and recognized writer on philosophical themes, and he, a common soldier; and yet he had already formulated a situation that I had scarcely realised."¹⁰¹ However, knowledge, intended as science and not culture in general, remains valuable in the preservation of the species as civilization:

He was full of speculation that night about the condition of Mars, and scoffed at the vulgar idea of its having inhabitants who were signaling us. His idea was that meteorites might be falling in a heavy shower upon the planet, or that a huge volcanic explosion was in progress. He pointed out to me how unlikely it was that organic evolution had taken the same direction in the two adjacent planets.⁹⁹

But saving race is nothing in itself. As I say, that's only being rats. It's saving our knowledge and adding to it is the thing. There men like you come in. There's books, there's models. We must make great safe places down deep, and get all the books we can. (...) Especially we must keep up our science – learn more. We must watch these Martians. Some of us must go as spies.¹⁰²

⁹⁸ *Idem*, p. 5.

⁹⁹ The War of the Worlds, cit., p. 8.

¹⁰⁰ *Idem*, p. 168.

¹⁰¹ *Idem*, cit., p. 170.

¹⁰² *Idem*, cit., p. 172.

Another important issue is the credibility of the narrator, which is often doubted. There are passages in Wells's scientific novels suggesting that the narrative might not be completely true, either because the narrators do not have access to knowledge, or they are unable to understand or correctly perceive the reality.

Ignorance is sometimes due to the objective, real difficulties and obstacles that the protagonist must face in order to conquer knowledge as he penetrates a new territory, such as limited movement, darkness or language barrier: "So much I saw then, all vaguely for the flickering of the lightning, in blinding highlights and dense black shadows."¹⁰³ Other times though, it is the mere result of chance, as the following bitter reflection of the narrator from *The War of the Worlds* suggests. Despite all favorable conditions, he simply failed to observe one of the most important events of his times, the arrival of the Martians on Earth:

I was at home at that hour and writing in my study; and although my French windows face towards the Ottershaw and the blind was up (for I loved in those days to look up at the night sky), I saw nothing of it. Yet this strangest of all things that ever came to earth from outer space must have fallen while I was sitting there, visible to me had I only looked up as it passed.¹⁰⁴

In other cases, Wells's narrators are either too confident or too insecure, and their capacity to reason is affected by external, trivial factors such as hunger or its satisfaction, and thus they are proven not reliable: "But I did not consider these points at the time, and so my reasoning was dead against the chances of the invaders. With wine and food, the confidence of my own table, and the necessity of reassuring my wife, I grew by insensible degrees courageous and secure."¹⁰⁵

or

As I lay in bed I found myself thinking consecutively – a thing I do not remember to have done since my last argument with the curate. During all the intervening time my mental condition had been a hurrying succession of vague emotional states or a sort of stupid receptivity. But in the night my brain, reinforced, I suppose, by the food I had eaten, grew clear again, and I thought.¹⁰⁶

Although very different among themselves, the events the protagonists go through are all extreme and thus put a strain on the physical and mental sanity of Wells's characters, affecting their ability to narrate their experiences. For example, the Time Traveler feels

¹⁰³ The War of the Worlds, cit., p. 51.

¹⁰⁴ The Time Machine, cit., p. 10.

¹⁰⁵ The War of the Worlds, cit., p. 34.

¹⁰⁶ *Idem*, p. 161.

overwhelmed by his travel from the very beginning "the fact is that, insensibly, the absolute strangeness of everything, the sickly jarring and swaying of the machine, above all, the feeling of prolonged falling, had absolutely upset my nerve."¹⁰⁷ He then goes on to describing his state of mind in terms of "hysterical exhilaration"¹⁰⁸. Usually though the tension is built gradually in the novels, arriving at a culminating point when the protagonists lose their reason, become aggressive or profoundly confused, only to later recover, at least partially, their sanity: "from certain vague memories I am inclined to think my own mind wandered at times. I had strange and hideous dreams whenever I slept. It sounds paradoxical, but I am inclined to think that the weakness and insanity of the curate warned me, braced me, and kept me a sane man."¹⁰⁹

The *Island of Doctor Moreau* distinguishes itself from the other two novels by its predominant sense of confusion and Prendick's, the protagonist, inability and, at times, unwillingness, to overcome his childish, vulnerable nature that is reluctant to admit the truth: "I turned, and stood facing the dark trees. I could see nothing – or else I could see too much. Every dark form in the dimness had its ominous quality, its peculiar suggestion of alert watchfulness." ¹¹⁰ The account of the protagonist's experience on this island is less rational and marked by physical sensations and emotions: "Then suddenly my tense excitement gave way; I broke into a profuse perspiration and fell a-trembling, with my adversary routed and this weapon in my hand."¹¹¹ His discourse is not dominated by scientific explanations but by his own feelings, struggles and fears at the sight of the disturbing reality surrounding him:

I picked myself up and stood trembling, my mind a chaos of the most horrible misgivings. Could it be possible, I thought, that such a thing as vivisection of men was carried on here? The question shot like lightning across a tumultuous sky; and suddenly the clouded horror of my mind condensed into a vivid realization of my own danger.¹¹²

Here the lack of moral and narrative credibility of the narrator is so profound that critics have questioned whether his account should be interpreted as an authentic one:

Perhaps there never was a Moreau or Montgomery on the island; perhaps they, the Beast Folk Moreau creates, and Prendick's adventures among them are all delusions of a mind seriously disturbed by

¹⁰⁷ The Time Machine, cit., p. 20.

¹⁰⁸ *Idem*, p. 19.

¹⁰⁹ The War of the Worlds, cit., p. 150.

¹¹⁰ The Island of Doctor Moreau, cit., p. 39.

¹¹¹ *Idem*, p. 40.

¹¹² *Idem*, p. 43.

the trauma of a ship-wreck, by extreme physical distress, by solitude, and by near-participation—or actual participation, for all we know—in cannibalism.¹¹³

In opposition to the weak and emotional Prendick stands the figure of the always calm and composed scientist, Doctor Moreau, who is not afraid to explain his activity on the island not only in terms of evolution, but also in connection to vivisection, plasticity and biology: "But I will conquer yet! Each time I dip a living creature into the bath of burning pain, I say, "This time I will burn out all the animal; this time I will make a rational creature of my own!" After all, what is ten years? Men have been a hundred thousands in the making."¹¹⁴ The character of Doctor Moreau is an unforgettable one, thanks to his cold, pitiless even, rationality which he uses to justify the excruciating torture suffered by his subjects. However, despite his unmeasured ambition and tireless efforts, he does not fully succeed in his attempt, therefore this novel, as well as the others, tells the story of a failure. His exacerbated, at times desperate but futile attempts to recreate, control and direct evolution, prove that Nature, manifested as natural evolution, bestial instincts and primitive urges, is incontrollable and thus man himself must bend to its wish or risks to be crushed under it:

Throughout *The Island of Doctor Moreau* chance and uncertainty undermine order and knowledge. The novel signifies indeterminacy as the ruling element in the universe and in the human condition, even subverting its own textual authority for telling the truth. Chance, contingency, unpredictability, indeterminacy: these elements, inherent in Darwinism, reflect the novel's involvement with evolutionary theory.¹¹⁵

Another strategy to immerse the reader in the confusion felt by his protagonists is Wells's use of indeterminate articles and vague descriptions of objects and creatures. On one hand, this is often a means of dissimulating the writer's inability to fully describe them, because the necessary information is lacking, while maintaining a scientific pretense of objectivity and completeness. Wells tries to make these narratives as scientific as possible and provide a convincing description of the scientific and technological elements he inserts, but since he mostly invents them and thus cannot base his descriptions on real, known elements, he remains ambiguous although tries to seem thorough.

On the other hand, the names used in these novels, and often marked with a capital letter, create a sensation of mystery, tension and incomprehensibility specific to the science-

¹¹³ Glendening, op. cit., p. 45.

¹¹⁴ The Island of Doctor Moreau, cit., p. 64.

¹¹⁵ Glendening, op. cit., p. 40.

fiction genre. The object in which the Martians arrive on Earth is metaphorically referred to as "the falling star" but then, in order to highlight its estranged and artificial nature, it is named "The Thing". Although these spaceships seem to be described in detail, they are actually quite ambiguous: "the mass", "its strange appearance", "its unusual shape and colour", "a cylinder", "it", "the object", "confounded thing". Similarly, the Martians are named, as they start to make an appearance in the novel, firstly "creature", "something", "the man or men", "bulk", "the mass", "the thing", finally, "the monster". It is not until the fifth chapter that they receive the name "the Martians". Another example of an apparently detailed, scientific description but actually very ambiguous and speculative is the presentation of the heat ray:

The same strategy is used in *The Time Machine*, where the machine built by the protagonist is described apparently thoroughly yet its details and its mechanism remain unknown:

The thing the Time Traveller held in his hand was a glittering metallic framework, scarcely larger than a small clock, and very delicately made. There was ivory in it, and some transparent crystalline substance. (...) Now I want you to clearly understand that this lever, being pressed over, sends the machine gliding into the future, and this other reverses the motion."¹¹⁷ "Parts were of nickel, parts of ivory, parts had certainly been filed or sawn out of rock crystal. The thing was generally complete, but the twisted crystalline bars lay unfinished (...) Quartz it seemed to be.¹¹⁸

Also, the creatures that will later be identified as the Eloi, are initially described as "men" but also "creature" and "thing from the future", while their fingers are "soft little tentacles" while throughout the *Island of Doctor Moreau*, the islanders are described as "individual", "strange brutish looking fellows", "black-faced cripple", "brown men", "strange beings", "crippled and distorted men", "creature", "ugly brute", even "misshapen monster", "Something" or "the Thing".

Many think that in some way they are able to generate an intense heat in a chamber of practically absolutely non-conductivity. This intense heat they project in a parallel beam against any object they choose, by means of a polished parabolic mirror of unknown composition (...) But no one has absolutely proved these details. However it is done, it is certain that a beam of heat is the essence of the matter.¹¹⁶

¹¹⁶ The War of the Worlds, cit., p. 28.

¹¹⁷ The Time Machine, cit., pp. 6-7.

¹¹⁸ *Idem*, p. 10.

2.6. Spatial exploration as a means of acquiring knowledge

In order to overcome confusion and lack of knowledge, these protagonists resort to spatial exploration, which acquires very original traits in Wells's early science fiction. One example of the innovative use of space is *The Time Machine*, published in 1895, where Wells introduces the theme of the subterranean, which had become an ever more important reality at the time when Wells wrote this novel. The 1860s saw the construction of numerous underground systems that offered, on one hand, the possibility to decongestion the crowded city while developing the industry, but on the other hand they forced the working class to endure harsh, dangerous conditions:

However, as technology advanced, the lower working class started to enjoy the benefits arising from the subterranean system, that is more comfort and freedom of movement:

Having once marked the suffering and oppression of the working class, subterranean spaces were now beginning to empower the people of the abyss. The change in use of underground spaces during this period was accompanied by a shifting perception of the subterranean, as the dark, decaying and diseased underground realms of the past came to house technologically cutting- edge utilities with healthful and modern connotations.¹²⁰

They became empowered and it is precisely this change that Wells speculates upon and takes to its extreme consequences in *The Time Machine*. Starting from a reference to real, contemporary London and its innovative exploitation of the underground, Wells makes the following social critique:

... the gradual widening of the present merely temporary and social difference between the Capitalist and the Labourer, was the key to the whole position. (...) There is a tendency to utilize underground space for the less ornamental purposes of civilization; there is the Metropolitan Railway in London, for instance, there are new electric railways, there are subways, there are underground workrooms and restaurants, and they increase and multiply. (...) Even now, does not an East-end worker live in such artificial conditions as practically to be cut off from the natural surface of the earth?¹²¹

Social commentators and writers at this time repeatedly associated the poor with underground spaces, for not only did such people live and labour in basements and underground workrooms, but the cramped, dirty and unhealthy conditions that they endured were also qualities commonly associated with the subterranean.¹¹⁹

¹¹⁹ Catherine Redford, "Great Safe Places Down Deep': Subterranean Spaces in the Early Novels of H. G. Wells", in Emelyne Godfrey ed., *Utopias and Dystopias in the Fiction of H. G. Wells and William Morris*, Palgrave Macmillan, London, 2016, p. 125.

¹²⁰ *Ibidem*.

¹²¹ The Time Machine, cit., p. 50.

In his novel, the subterranean acquires, as many other elements, a dual significance. On one hand, it is a dark, oppressive space, in opposition to the beautiful Eden of the Eloi. On the other hand though, it provides the conditions which enable the Morlocks to evolve, in Darwinian terms: "So, in the end, above ground you must have the Haves, pursuing pleasure and comfort and beauty, and below ground the Have-nots, the Workers getting continually adapted to the conditions of their labour".¹²² Their struggle for life keeps them sharp while the Eloi, in their ignorant bliss, become defenseless: "The too-perfect security of the Upper-worlders had led them to a slow movement of degeneration, to a general dwindling in size, strength and intelligence."¹²³. The subterranean conditions of life act as a means of natural selection which guarantee a superior strength for the species that survives, although it sacrifices, in the case of the Morlocks for example, aesthetic and moral qualities such as beauty and compassion or respect for human life. The lack thereof makes them hideous in the eyes of the Eloi and of the narrator himself:

While the subterranean race has overcome its vulnerability by gaining power over those who once oppressed it, the Time Traveller nevertheless perceives the Morlocks as behaving in a criminal, immoral and parasitic manner reminiscent of their Victorian ancestors due to the fact that they use the Eloi as a food source.¹²⁴

The same use, although hypothetical, of the underground space is made in *The War of the Worlds*, where it is proposed as a solution, as a refuge in front of the Martian invasion:

You see, how I mean to live is underground. I've been thinking about the drains. Of course, those who don't know drains think horrible things; but under this London are miles and miles—hundreds of miles—and a few days' rain and London empty will leave them sweet and clean. The main drains are big enough and airy enough for anyone. Then there's cellars, vaults, stores, from which bolting passages may be made to the drains. And the railway tunnels and subways.¹²⁵

In the absence of natural selection, in this modern, man-made space, the artilleryman is favourable to an artificial selection of the population, in order to guarantee its mental and physical quality. With its reference to eugenics, his discourse creates a utopian scenario in which the working class remains the advantaged one, as more adaptable to the harsh conditions. Although initially in a weak position, vulnerable in front of the Martians, they will be able, in the artilleryman's vision, to create a space for themselves as good as on

¹²² *Idem*, p. 51.

¹²³ Ibidem.

¹²⁴ Redford, *op. cit.*, p. 133.

¹²⁵ The War of the Worlds, cit., p. 170.

the surface. They will thus ensure not only the survival of the species, but even its improvement, with an eventual win against the Martians:

Throughout his novels, then, Wells embraces both the old associations and the new possibilities of the underground, employing the subterranean as a multi-faceted space in which to pick apart and expand upon contemporary discussions, particularly those regarding class. Wells's underground worlds are always either multi-levelled or labyrinthine— sometimes both—and thus act as a metaphor for the way in which his thought experiments work, facilitating the pursuit of different avenues and the opening out of ideas. While it is tempting to read his contrasting lower and upper worlds in terms of strict dichotomy, the movement of groups and species between these spaces prompts a transferral of power whereby those who were forced underground come to gain an advantage over those who inhabit the surface.¹²⁶

Both the Morlocks and the men from the artilleryman's vision are described as human rats, are associated with dirt and impurity, but also power. In both cases their flaws and apparent disadvantages become qualities in the struggle for life.

The Morlocks' biological regression, then, is also conversely a form of social progression, and it is therefore of no consequence if they are no longer able to see in daylight, because their subterranean world of darkness has become the dominant space of progress and industry, while the overworld represents merely weakness and deterioration.¹²⁷

As the narrator of *The Time Machine* explains, evolution can also lead to a lack of need and competition and thus to a loss of strength:

For the first time I began to realize an odd consequence of the social effort in which we are at present engaged. And yet, come to think, it is a logical consequence enough. Strength is the outcome of need; security sets a premium on feebleness. The work of ameliorating the conditions of life – the true civilizing process that makes life more and more secure – had gone steadily on to a climax. One triumph of a united humanity over Nature had followed another.¹²⁸

And yet the consequence of this progress is a regression observable in the individuals, who "evolve" into careless, shallow and feeble children like creatures while the world itself becomes a beautiful yet decadent and ruinous garden:

I thought of the physical slightness of people, their lack of intelligence, and those big abundant ruins, and it strengthened my belief in a perfect conquest of Nature. For after the Battle comes Quiet. Humanity had been strong, energetic, and intelligent, and had used all its abundant vitality to alter the conditions under which it lived. And now came the reaction of the altered conditions. (...) This has ever been the fate of energy in security; it takes to art and to eroticism, and then come languor and decay.¹²⁹

This passage thoroughly expresses Wells's paradoxical vision: his belief that progress and complete conquest over Nature and necessity is possible in the future is not simply

¹²⁶ Redford, *op. cit.*, p. 136.

¹²⁷ *Idem*, p. 133.

¹²⁸ The Time Machine, cit., p. 31.

¹²⁹ *Idem*, pp. 32-33.

utopian but also pessimistic. He is convinced, consistently with the Darwinian paradigm, that such a peaceful and (too) harmonious world would only lead to regression and decay, as there would be no room and no desire left for improvement and the energy and potential of the human power and intellect would have to wither. It is this the anti-utopian consequence of the "too perfect triumph of man".

Consequently, the discovery of the Morlocks, who transform this paradisiac and peaceful landscape into a dark nightmare, apparently refutes his theory but in fact it is their presence, as a challenging, dynamic element, that makes the utopia possible.

As Rhys Williams points out, if a utopia is not imperfect it loses its creative and disruptive potential. In this sense, she argues that, while The Island of Doctor Moreau is not a utopian story, the aim of the scientist is utopian as he strives, unsuccessfully, to achieve perfect order. In this definition, utopia represents the desire to disrupt the status quo which is a source of frustration and injustice. But in the same time there is another type of desire, the one within the imaginary utopia itself: in aiming at perfection, utopia aims at the annulment of the desire itself, as otherwise there would no longer be any need or room for improvement. However, as a human product, utopia is imperfect and therefore its gaps and faults leave room for further improvement and change. It is in this aspect of an imperfect utopia, that leaves room for improvement and therefore continuous desire as an engine to change, that Moreau comes in. Referring to Mary Douglas's concepts of purity and impurity and connecting them with the utopian impulse, Williams claims that "from the perspective of the status quo, understanding itself in terms of order and harmony, a disruptive utopian impulse will be marked aesthetically as impure and dangerous."¹³⁰ While the utopic impulse is disruptive and therefore associated to disorder and impurity as opposed to the order, purity and stability of the status quo, it is also powerful in its potential for change and growth¹³¹. Starting from this premise, Williams claims that

In Moreau, the purity/impurity binary plays out primarily through the central dichotomy of the text: that of Human on one side and Inhuman, or Beast, on the other. (...) this dichotomy is better understood as a figure through which Wells is thinking through the reproduction of the social and political

¹³⁰ Rhys Williams, "Utopia's the Thing: An Analysis of Utopian Programme and Impulse in H.G. Wells's *The Island of Doctor Moreau*" in Emelyne Godfrey ed., *Utopias and Dystopias in the Fiction of H. G. Wells and William Morris*, Palgrave Macmillan, London, 2016, p. 110.

¹³¹ This criterion of utopia as disruptive, chaotic and impure element yet potential of change and growth can also be applied, as it has been seen, to *The War of the Worlds* and *The Time Machine*. Both present the underground populations of the Morlocks and the working class as impure but powerful and thus able to disrupt the status quo, to rebel against the domination of the Eloi and the Martians.

order, and the potentials, dangers and mechanisms of changing that order; to put it simply, Wells is thinking through utopianism.¹³²

Here the human stands for absolute rationality while the beast is defined by bodily instinct and desire. While Moreau is profoundly committed to antiseptic purity and to an abstract, ordered and ideal universe, the Beast Folk are associated with the jungle, that is to disorder, chaos and luxuriance, to life and decay.

Moreau seeks to tame a reality and a natural world defined by growth, transformation, death and decay, and his 'House of Pain' is as such a built environment organised to reflect the values of abstraction; a place of purification in much the way as any hospital operating room strives to be. (...) . Crucially, it is thus marked as a place where the power of abstraction is wielded over messy reality and is pressed upon the flesh of the beast-folk, attempting to twist them towards a static and unattainable ideal of humanity. (...) This is the crux of Moreau's mistake. He does not see the world as it is, but sees abstractions, and forces the world to match those abstractions. This is a Popperian caricature of utopianism, but one that exposes the violence elided in the Enlightenment ideals of ever-progressive rationality and the paradigmatic epigraph, above, from More's Utopia. Moreau's method is revealing of the horror that accompanies such an effort to manipulate reality to fit abstractions.¹³³

The utopian ambitions of Moreau become a nightmare when they are put into practice by methods that are far from rational: torture, cruelty and fear. Although he is the originator of the utopian impulse, Moreau is at the same time the authority, the embodiment of the status quo on the island, bringing with him the limitations of the society from which he was exiled:

Moreau remains fundamentally bound by the ideological limitations of the society that hounded him out for his experiments. This can be judged from the fact that he plays god, but appears incapable of producing anything truly new. Rather, with all his power to transform and manipulate, he appears to aim for empty repetitions of the same. (...) Though he appears to be pushing the boundaries of bourgeois science and decency, he is in fact striving to reinforce it, churning out iteration after iteration of humanity. Where is his allegedly radical imagination, his lawless creativity? In the face of chaos, Moreau seeks to escape it through a strict homogenisation, and the imposition of a clear and static order and hierarchy of values. Though he strives and strives to achieve his goal, the goal itself is a mark of his truncated horizons.¹³⁴

Surprisingly, the source of change on the island are the Beast-Folk, with their new humanity and mode of organization. As Williams claims, the law might be their own creation, arisen from their need for society, and they are the ones that represent the utopia when, finally free from the oppression of Doctor Moreau, they are willing to maintain and respect the Law. While Moreau's utopic project fails, because of its rigid abstract and

¹³² Williams, *op. cit.*, p. 112.

¹³³ *Idem*, pp. 114- 115.

¹³⁴ *Idem*, p.116.

rational limitations, a new one can come to life, organically and spontaneously, among the Beast-Folk.

While Moreau performs the perversion and violence of a top-down utopian programme (that of an Utopos or a Stalin), it opens up, off-stage, another possibility—one that, remarkably, bears the pre-figurative hallmarks of today's more anarchist-inflected radical politics, one that strives against hierarchy and for horizontality, one that rejects homogenous organisations like the Party, and pushes for autonomy and individuality, one that struggles against purity and embraces the position of the impure.¹³⁵

However, in the end both utopia fail as Moreau dies in his futile attempt to create a superior form of life, and the Beast-Folk revert to their natural, primitive and disorganized animal shape. The only "reality" of the novel remains the cruel torture and the physical and moral oppression inflicted by Moreau in the name of an abstract ideal, scenario which makes for a fully functional dystopia.

In all three novels the initially oppressed species revolt, aided by natural forces, against their oppressor. In *The War of the Worlds*, humans survive and the Martians are extinct, thanks to the earthly microorganism. Although this might seem a result of chance, or at most a vengeance of Nature itself on its aggressors, the narrator points out that men have gained their right to dominate the Earth by years of struggle and evolution. In *The Time Machine*, the Morlocks are the ones oppressed, at least in the hypothetical scenario of the time traveler, which bases his assumption in the analysis of British society. In time though, they transform their hostile conditions of life into an evolutionary advantage and manage to completely reverse the power balance:

However, Nature often seems to fulfil another purpose as it puts various obstacles in the characters' quests. The main purpose of exploration is acquiring more knowledge, and this is a central theme of "The Time Machine", where time and space are both two dimensions on which man can travel in order to discover another world and thus enrich his knowledge. When his expedition apparently fails to achieve its aim, because the Time

The Upper-world people might once have been the favoured aristocracy, and the Morlocks their mechanical servants: but that had long since passed away. The two species that had resulted from the evolution of man were sliding down towards, or had already arrived at, an altogether new relationship. The Eloi, like the Carolingian kings, had decayed to a mere beautiful futility. (...) The Nemesis of the delicate ones was creeping on apace. Ages ago, thousands of generations ago, man had thrust his brother man out of the ease and the sunshine. And now that brother was coming back changed!¹³⁶

¹³⁵ *Idem*, p.118.

¹³⁶ The Time Machine, cit., p. 61.

Traveller encounters not a more advanced civilization from which he can learn something, he expresses his disappointment as follows:

were these creatures fools? You may hardly understand how it took me. You see I had always anticipated that the people of the year Eight Hundred and Two Thousand odd would be incredibly in front of us in knowledge, art, everything. Then one of them suddenly asked me a question that showed him to be on the intellectual level of one of our five-year-old children (...) A flow of disappointment rushed across my mind. For a moment I felt that I had built the Time Machine in vain.¹³⁷

His attempted dialogues with the Eloi continue to frustrate him on a cognitive level, while appeal to him more on an aesthetic and emotional one. Because of a language barrier but also, as he calls it, a different intellectual level, the time traveler is unable to extract from his interlocutors the information he needs regarding their time and civilization:

However, I felt like a schoolmaster amidst children, and persisted (...) But it was slow work, and the little people soon tired and wanted to get away from my interrogations, so I determined, rather of necessity, to let them give their lessons in little doses when they felt inclined. And very little doses I found they were before long, for I never met people more indolent or more easily fatigued.¹³⁸

However, this doesn't hinder him from drawing his own conclusions, mostly from observations and independent exploration of the space surrounding him, which replaces the human contact and exchange of information:

It is odd, too, how speedily I came to disregard these little people. I went out through the portal into the sunlit world again as soon as my hunger was satisfied. I was continually meeting more of these men of the future, who would follow me a little distance, chatter and laugh about me, and, having smiled and gesticulated in a friendly way, leave me again to my own devices.¹³⁹

It is precisely, and exclusively, through these explorations of the surroundings that the traveler manages to discover a new, hidden space, and with it the truth: "In the evening, he climbs to the top of a nearby hill to survey the area, where he reaches not just a physical but also an emotional and epistemological peak."¹⁴⁰

He is aware that only by adventuring himself in the underground he can discover what he is searching, but in order to regain his machine he must conquer his fears and weaknesses: "I set upon the edge of the well telling myself that, at any rate, there was nothing to fear, and that there I must descend for the solution of my difficulties."¹⁴¹ It is also suggestive that here Wells decides to reverse the up and down, usually one needing to ascend in order

¹³⁷ *Idem*, p. 24.

¹³⁸ *Idem*, p. 27.

¹³⁹ *idem*, cit., p. 28.

¹⁴⁰ Pinter, *op. cit.*, p.163.

¹⁴¹ The Time Machine, cit., p. 49.

to find a solution or at least to appeal to a higher power. In this case, as well as in other of his novels, the solution, if it is to be found, is in the most surprising place.

Another, more metaphorical means of suggesting the difficulties posed by this evolving universe to knowledge and reasoning is the use of space in his narratives. The spatial architecture, often very intricated, alternating ruins with utopic landscapes, is connected to the way Wells builds up meaning. As Redford claims,

... the very structure of underground spaces in the work of Wells functions as a metaphor for the pursuit of such thought experiments, with Wells's narrators, characters and readers thinking through possibilities, coming to dead ends, modifying ideas and drawing conclusions as they move through the labyrinthine passages of underground spaces. It is only by entering the subterranean world of the Morlocks that the Time Traveller can gain a fuller understanding of the hierarchy of the society that he has entered, and this idea is explored repeatedly in the labyrinthine and multi-level underworlds of Wells's early novels.¹⁴²

Spatial confusion is often overlapped to cognitive one and viceversa. As this passage from *The Time Machine* suggests, a ruinous and chaotic space, a labyrinth, is associated to mental confusion, to lack of understanding, and must be overcome, as in the mythical challenge, in order to achieve knowledge. Not coincidentally, it is in this space that the protagonist will make a great discovery, to which he refers with emphasis:

As I walked I was watching for every impression that could possibly help to explain the condition of ruinous splendor in which I found the world – for ruinous it was. A little way up the hill, for instance, was a great heap of granite, bound together by masses of aluminium, a vast labyrinth of precipitous walls and crumpled heaps (...) it was evidently the derelict remains of some vast structure, to what end built I could not determine. It was here that I was destined, at a later date, to have a very strange experience – the first intimation of a still stranger discovery – but of that I will speak in its proper place.¹⁴³

According to Greek mythology, when Theseus decided to confront and kill the Minotaur, he was faced with the problem of finding a way out of the labyrinth which held the Minotaur. With no knowledge of the paths within the labyrinth, his quest was a hopeless one. The solution to Theseus' problem was provided by Ariadne, daughter of King Minos, who fell in love with him. She helped him find a way out of the labyrinth with a thread which was to be tied to the entrance and let unroll, using it as a guide to find his way out. Theseus followed her advice and escaped but did not fulfill his promise to marry her and take her away from Crete. Intended or not by Wells, a parallel can be drawn between the time traveler and Theseus, as both are faced with a labyrinth where they will find an enemy to fight, after which will have to find a way back to where they came from. The

¹⁴² Redford, *op.cit.*, p. 135.

¹⁴³ The Time Machine, cit., p. 29.

time traveler has to face the Morlocks, in their underground labyrinth, to recover his machine and thus return home, and he also abandons his friend, although unwillingly. This is a rite a passage which comports the maturation of the protagonist, whereas the Eloi, which avoid any direct confrontation with the Morlocks, remain inferior, childish and vulnerable.

The psychological toll this maze has over the protagonist and therefore its initiating nature becomes evident when the traveler loses his time machine and tries desperately to discover where it is and how he can get it back, but he understands that his only salvation is to maintain his calm and reason:

To sit among all those unknown things before a puzzle like that is hopeless. That way lies monomania. Face this world. Learn its ways, watch it, be careful of too hasty guesses at its meaning. In the end you will find clues to it all (...) I had made myself the most complicated and the most hopeless trap that ever a man devised. Although it was at my own expense, I could not help myself. I laughed aloud.¹⁴⁴

A similar exploration of space paralleled by a thought process, the attempt to decipher a new, incomprehensible reality, is observable in the Island of Doctor Moreau. After arriving on the island Prendick, the protagonist, struggles to discover more of the space surrounding him and he adventures himself deep into the jungle, while also trying to make sense of the creatures he encounters in his exploration. After one of these disturbing encounters, the space surrounding him becomes claustrophobic as his imagination is excited and his own ideas are more confused than ever:

The vague dread that had been in my mind since I had seen the inhuman face of the man at the stream grew distincter as I stood there. (...) Every shadow became something more than a shadow – became an ambush; every rustle became a threat. (...) I resolved to go back to the enclosure on the beach. I suddenly turned away and thrust myself violently, possibly even frantically, through the bushes, anxious to get a clear space about me again.¹⁴⁵

The tangled jungle, the "green confusion"¹⁴⁶ or the "mysterious forest"¹⁴⁷ is a metaphor of his own confusion regarding the mixed nature of the Beast Folk; therefore, only after he goes deep into this labyrinth, he understands more:

I stopped just in time to prevent myself emerging upon an open space. It was a kind of glade in the forest, made by a fall; seedlings were already starting up to struggle for the vacant space; and beyond, the dense growth of stems and twining vines and splashes of fungus and flowers closed in again. Before me, squatting together upon the fungoid ruins of a huge fallen tree and still unaware of my approach, were

¹⁴⁴ *Idem*, p. 40.

¹⁴⁵ The Island of Doctor Moreau, cit., p. 35.

¹⁴⁶ *Idem.*, p. 37.

¹⁴⁷ *Idem*, p. 38.

three grotesque human figures (...) Suddenly, as I watched their grotesque and unaccountable gestures, I perceived clearly for the first time what it was that had offended me, what had given me the two inconsistent and conflicting impressions of utter strangeness and yet of the strangest familiarity. The three creatures engaged in this mysterious rite were human in shape, and yet human beings with the strangest air about them of some familiar animal.¹⁴⁸

The capacity of space to both cover and uncover secrets is revealed best in the passage where Prendick discovers the Leopard-man who was running from Moreau and Montgomery. The jungle surrounding the beast hides him from those trying to capture and punish him, except for Prendick, who, against all odds, catches a glimpse of him through an opening in the vegetation: "Then suddenly, through a polygon of green, in the half darkness under the luxuriant growth, I saw the creature we were hunting. I halted. He was crouched together into the smallest possible compass, his luminous green eyes turned over his shoulder regarding me."¹⁴⁹ John Glendening argues that the surprising use of the geometric term "polygon" is related not only to spatial limitations, but to the plasticity of living creatures which is limited by natural selection. In other words, there are many varieties in which a creature can evolve, but they are not infinite and that is one of the reasons for which Moreau's experiments fail. The polygon limits the creatures but also the scientist himself:

Thus the leopard-man's enclosure within a polygon hints at the plasticity Moreau employs in his "breeding" of the creature but also the natural limitations on Moreau's activities, constrained by inherent predisposition. That the leopardman has reverted underscores these limitations. For Wells, possibilities are always entangled with constraints, and progress necessitates a realistic assessment of both.¹⁵⁰

Another Darwinian concept used extensively by Wells in this novel is "entanglement", with a less positive and more chaotic and disorganized connotation that the one from *The Origin of Species:*

The Island of Doctor Moreau picks up on the negative implications of natural selection that the entangled bank disguises. In Wells's text entanglement means chaos, not order or harmony: it entails the commingling of objects, processes, and qualities that strike the human mind as incompatible or antagonistic because they upset boundaries and categories; and it points to the limits of knowledge, since the mind, caught in the very processes it tries to understand, is continually confounded by contingencies, like those governing the course of Darwinian evolution, too complex to be anticipated or fully comprehended.¹⁵¹

The island presents itself as an entangled space which makes all its inhabitants victims, prisoners of its web: Moreau and Montgomery are both exiled and they both fail in their

¹⁴⁸ *Idem*, p. 36.

¹⁴⁹ *Idem*, p. 77.

¹⁵⁰ Glendening, *op. cit.*, p. 60.

¹⁵¹ *Idem*, p. 40.

attempt to lead a meaningful, rewarding life there. Moreau is not able to discover the scientific method that can overcome his subjects' tendency to regress, and Montgomery feels trapped and lost on the island and looks for refuge in alcohol. Prendick is faced with his own moral weaknesses, primitive fears and urges and, cowardly, accepts regression in order to survive among the Beast Folk. They are also trapped in a web of rules they do not understand and that profoundly contradict their nature.

In *The War of the Worlds*, a contraposition is built between the familiar space of the home, which seems to cloud judgment and reason, and the ruined space, rendered unfamiliar and estranged by the arrival of the Martians. After the first attack of the Martians on the people surrounding the common, the protagonist panics and runs towards his house. It is only when he arrives at a bridge that his terror is replaced with exhaustion and calmness:

As he furthers himself from the common, the scene of the terrible events, and goes towards his home, the safe, familiar space of every day, his reason becomes more clouded and vain: "So some respectable dodo in the Mauritius might have lorded in his nest, and discussed the arrival of that shipful of pitiless sailors in want of animal food. "We will peck them to death tomorrow, my dear.""¹⁵³

This just one example of the irony with which these novels, respectively *The Time Machine*, *The War of the Worlds* and *The Island of Dr. Moreau*, question, following a Darwinian paradigm, the supremacy of humans over other species, present or future. Secondly, they doubt that future evolution will undergo an upward, positive direction. Wells often focuses in his romances on the most obscure and dark qualities of man and warns that the outcome of their moral and social organization may be negative and unexpected and thus, with their gloomy and futuristic characteristics, his novels present themselves as anti-utopias, or dystopias. For Wells, evolution always involves a struggle, either among different species or in the species itself, in its inability to determinate itself,

My terror had fallen from me like a garment. My hat had gone, and my collar had burst away from its fastener. A few minutes before, there had only been three real things before me – the immensity of the night and space and nature, my own feebleness and anguish, and the near approach of death. Now it was as if something turned over, and the point of view altered abruptly. There was no sensible transition from one state of mind to the other. I was immediately the self of every day again – a decent, ordinary citizen. The silent common, the impulse of my flight, the starting flames, were as if they had been in a dream. I asked myself had these latter things indeed happened. I could not credit it.¹⁵²

¹⁵² The War of the Worlds, cit., pp. 31-32.

¹⁵³ *Idem*, p. 35.

to evolve voluntarily. The *Island of Dr.Moreau* is the story of an obvious failure but actually all the novels present a failure of evolution: there is no achievement of progress or perfection, only transformation and loss. In *The War of the Worlds* and *The Time Machine*, the observer is part of the present but observes the future thus challenging this vision of unidirectional progress. While the Morlocks and the Eloi are indeed the direct, future descendants of men, the Martians can also be considered "people" from the future, as they arrive from a more evolved planet than Earth, but similar to it. Indeed, the narrator seems to be primitive but, in the end, he asserts his superiority one way or another: he is more intelligent and stronger in *The Time Machine*, and fitter in *The War of the Worlds*. Also, a fundamental manifestation of culture, language, is lacking from these future worlds, it is reduced to mere sounds that lack real substance, reason and creativity: the Eloi use it abstractly but they cannot understand the concepts, they just repeat the "big thinks".

In conclusion, Wells's main attempt was not to write convincing science-fiction scenarios, he did not want to "fool" the reader but to warn him. Glendening argues that "both *The Island of Doctor Moreau* and *The Time Machine* gesture toward themselves as fictions rather than realities by allowing the possibility—the matter is left indeterminate—that the first-person narrators have made up their narrations."¹⁵⁴

However, the credibility of the narratives themselves is irrelevant, as the narrator of *The War of the Worlds* suggests:

... at any rate, whether we expect another invasion or not, our views of the human future must be greatly modified by these events. We have learned now that we cannot regard this planet as being fenced in and a secure abiding place for Man; we can never anticipate the unseen good or evil that may come upon as suddenly out of space. It may be that in the larger design of the universe this invasion from Mars is not without its ultimate benefit for men; it has robbed us of that serene confidence in the future which is the most fruitful source of decadence, the gifts to human science it has brought are enormous, and it has done much to promote the conception of the commonweal of mankind. ¹⁵⁵

What is important instead is to create the space for reflection on not so much the future itself, but on the human nature and social organization from which this future will arise:

No. I cannot expect you to believe it. take it as a lie - or a prophecy. Say I dreamed it in the workshop. Consider I had been speculating upon the destinies of our race until I have hatched this fiction.

¹⁵⁴ Glendening, op. cit., p. 195.

¹⁵⁵ The War of the Worlds, cit., p. 194.

Treat my assertion of its truth as a mere stroke of art to enhance its interest. And taking it as a story, what do you think of it?¹⁵⁶.

The fact that Wells saw many faults in these is evident from his novels' endings, in which his protagonists are offered no other consolation except for the stars. It is as though he was so resigned to the metaphysical ignorance and accepted the impossibility to understand the universe, that he found comfort in its absolute vastness:

Above me shone the stars, for the night was very clear. I felt a certain sense of friendly comfort in their twinkling. Looking at these stars suddenly dwarfed my own troubles and all the gravities of terrestrial life. I thought of their unfathomable distance, and the slow inevitable drift of their movements out of the unknown past into the unknown future.¹⁵⁷

However, his pessimism is not to be mistaken for passivity or real resignation. On the contrary, after concluding that one cannot rely on natural selection or artificial selection if a positive outcome for humanity is desired, Wells took on the difficult challenge to contribute to its improvement by means of education:

Following Doctor Moreau and his rejection of Lamarckism, with the hope it held out, he would dismiss evolution as a major fictional theme—although he continued to accept Darwinism and the idea of the indeterminate universe it fosters. Henceforth he would focus on education. Because contingency renders the future unknowable, education becomes imperative in a universe where nothing is assured but little is precluded. Individuals are subject to limitations dangerous not to acknowledge, but humanity as a whole is potentially less limited than individuals; Wells believed that collectively people can accomplish much when they honestly assess their constraints and possibilities.¹⁵⁸

¹⁵⁶ The Time Machine, cit., p. 94.

¹⁵⁷ *Idem*, p. 64.

¹⁵⁸ Glendening, op. cit., p. 51.

Chapter 3. Humans among Morlocks, Martians and Beasts

As anticipated, Wells's early narrative is concerned with depicting the less optimistic implications of Evolution, in a critique on anthropocentrism. This literary attack is articulated on three levels: biological, moral and social, dimensions that are profoundly interdependent. From an intricate web of fantastic creatures and challenging situations that compose the substance of his novels, the human figure arises shattered, confused, and confusing. As previously mentioned, this work focuses not so much on the fantastic scenarios drafted by Wells but on the reflection on human nature that they instill: "What is at issue here is not only the man-animal distinction but the variety of ways in which we react to animals, from fear and loathing on the one hand to sympathy and anthropomorphic projection on the other."¹⁵⁹ According to Glendening, when meeting the Fuegians, a primitive and savage tribe, Darwin realized his relationship with them but could not admit it:

Fascinated, Darwin's language circles about but never confronts his essential connection with the natives; at most they reflect his distant ancestors. Recognizing self in other can be exciting, even alluring in its potential for self-liberation, but for Darwin it is too unsettling and ultimately unacceptable.¹⁶⁰

This is the step forward fulfilled by Wells in his novels, where the author manages to express the feeling that Darwin must have had in front of the savages. Moreover, not only does he boldly point out the savages' humanity, but in doing so he also highlights men's bestiality. Instead of avoiding the connection between these apparently distant species, Wells makes it a main theme of his science-fiction. In *The Island of Doctor Moreau*, the writer

recognizes that, in Darwinian and other guises, evolutionary theory created a muddle in its implications for humanity. The novel enacts this situation by consistently disrupting the dualistic categories of progress/degeneration, human/ animal, nature/culture, and, incorporating the others, order/chaos. The novel dramatizes the experience of one caught in the web of indeterminacy constituted by these evolution-based confusions, and it does so especially through its recreation of Darwin's entangled bank.¹⁶¹

¹⁵⁹ Patrick Parrinder, "From Human to Animal: Wells and Kafka", in *Utopian Literature and Science. From the Scientific Revolution to Brave New World and Beyond*, Palgrave Macmillan, London, 2015, pp. 113-125, p. 117.

¹⁶⁰ Glendening, op. cit., p. 5.

¹⁶¹ *Idem*, p. 39.

To challenge the common definition of man and, in general, all these fundamental categories, is the task of the other two novels as well. By constantly facing the human protagonist with the Other, be it from the future or from another planet, a confrontational encounter that cannot leave man indifferent or unscarred, the novel forces him to change and to reflect on his psychology, behaviour, and beliefs.

3.1. "Burning out the animal"

From a biological point of view, as evolutionary theory stated, men are, fundamentally, animals: a more evolved, yet still just a variety of mammals. Generally, animality, particularly in a pejorative sense, is associated to unrestrained sexuality and violence. While the former is an important aspect in Wells's personal life and his more theoretical works, where he often criticizes monogamy, in the narratives analyzed here sexuality is only alluded at, especially in *The Island of Doctor Moreau*¹⁶². Instead, violence and a bestial thirst for blood, often rendered as cannibalism, are a major preoccupation in all the novels. It is by means of vivid references to meat and, connected to it, blood and cannibalism, that the author alludes at the bestial nature of humans. Therefore, these elements are not just narrative motifs employed in creating a gothic tension in the novels but are also instrumental in defining humanity as bestial.

In his article addressing the importance of meat in Wells's novels, Lee points out that Darwin's theory brought animals much closer to humans on the biological scale and therefore questioned the morality of a meat-based diet:

With the rise of Darwinism, cannibalism could no longer be strictly consigned to the "outside" realm of the savage other. Now Victorian culture faced the idea that the line between humans and animals

¹⁶² Except for an easily overlooked passage from the novel, where the narrator mentions, among other degrading behaviors, a sexual promiscuity on behalf of the Beast-Folk females after regressing to their original, animal state; the most important sexual allusion in the novel is the initial reference to the Oscar Wilde trial. The homosexuality innuendo can be interpreted, as Neville Hoad does, as a historical reference to criminalized acts, among which vivisection and homosexuality are prohibited "intimacies with the bodies". From this perspective, the association is between Moreau and Wilde, as both violate the social restrictions of the epoch. However, the Beast-Folk can also be linked to Wilde: "Wilde is a beast-folk tormented by his sexual instincts, and destroyed by the injunctions against his sexual instincts." (Hoad, "Cosmetic Surgeons of the Social. Darwin, Freud, and Wells and the Limits of Sympathy on *The Island of Dr. Moreau*" in Lauren Berlant (ed), *Compassion. The Culture and Politics of an Emotion*, Routledge, New York, 2004, p. 192.)

might not be one of division but of lineage. For many, this idea triggered the possibility that those animals consumed as meat were not essentially different from the "we" who ate them.¹⁶³

Wells himself suggests in his novels that there is a stronger connection between humans and animals than what is commonly accepted and that, from this new perspective, the so-called civilized habits should be reconsidered. Firstly, in *The Time Machine*, meat has a dual, contradictory connotation and thus acquires a symbolic relevance: it is an important element of the dinner that frames the narrative, where it could be overlooked as a regular part of the quotidian life; but it also reappears in the narrative itself, with a much less innocent connotation. More precisely, the protagonist is famished and makes it clear that his eagerness to consume meat is so strong that it prevents him from starting his story. However, it will also be very soon revealed from his account of the events that he has just been shocked by the Morlocks' consumption of meat, which is interpreted as cannibalism. On the one hand, the association with the degradation and bestiality of the Morlocks renders meat abhorrent. On the other hand, its lack causes another kind of degradation: the physical and mental weakness of the Eloi.

The protagonist's need to consume meat after his disturbing experience highlights its importance for one's strength but also suggests his inconsistency as he criticizes the Morlocks' behaviour, while adopting a similar one. It could be argued that, since the Morlocks are eating human descendants, they are cannibals, whereas the protagonist is eating mutton, therefore their behaviour cannot be compared. However, Wells makes it explicit in his novels that consuming meat can be associated to cannibalism or at least can be considered repulsive if only the perspective is changed, as this passage from *The War of the Worlds* shows:

But, squeamish as I may seem, I cannot bring myself to describe what I could not endure even to continue watching. Let it suffice to say, blood obtained from a still living animal, in most cases from a human being, was run directly by means of a little pipette into the recipient canal. . . The bare idea of this

Their exclusively fruit diet (horses, cattle, sheep, and dogs are extinct) is also a sign of a loss of vigour; meat often being associated in Wells's time (and not only then) with manliness, though the association was not made uncritically: adherents of vegetarianism denounced meat-eating as degenerate and traced a line from it to cannibalism.¹⁶⁴

¹⁶³ Michael Parrish Lee, "Reading Meat in H. G. Wells", *Studies in the Novel*, vol. 42-3, 2010, p. 251. ¹⁶⁴ Tim Youngs, "Morlocks, Martians, and Beast-People", in *Beastly Journeys. Travel and Transformation at the fin de siècle*, Liverpool University Press, Liverpool, 2013, p. 111.

is no doubt horribly repulsive to us, but at the same time I think that we should remember how repulsive our carnivorous habits would seem to an intelligent rabbit.¹⁶⁵

Similarly, the protagonist of the *Time Machine* tries to relativize the repulsiveness of the Morlocks' behavior and to look at it objectively:

even now man is far less discriminating and exclusive in his food than he was – far less than any monkey. And so these inhuman sons of men - ! I tried to look at the thing in a scientific spirit. After all, they were less human and more remote than our cannibal ancestors of three or four thousand years ago. And the intelligence that would have made this state of things a torment had gone. Why should I trouble myself? These Eloi were mere fatted cattle, which the ant-like Morlocks preserved and prayed upon – probably saw to the breeding of.¹⁶⁶

The importance of this passage is evident from the fact that Wells will reuse this idea, the theme of breeding humans to be consumed reappearing in the *War of the Worlds*. Striking in the protagonist's speech is his irony directed towards himself but also towards men in general. He criticizes not only humanity's vanity and unwillingness to admit its weakness and vulnerability, as the *War of the Worlds* underlines, but that humans themselves can inflict this torture on others. By expressing not only the repulsive, cannibal nature of the Morlocks but also his own craving for meat, the protagonist of the *Time Machine* unwillingly associates himself to them. He does not only repeatedly express his desire, which is a pleasure but also a very carnal need, but does so with an insistence that cannot but draw the attention of the reader: "Save me some of that mutton. I'm starving for a bit of meat. (...) 'where's my mutton?' he said. 'What a treat it is to stick a fork into meat again!' (...) 'Story be damned!' said the Time Traveller. "I want something to eat. I won't say a word until I get some peptone into my arteries."¹⁶⁷

Finally, this ambiguous relationship between 'civilized' meat consumption, as a gentleman's desire for mutton or rabbit, on one side, and prohibited meat consumption or canibalism on the other side, is taken to its extreme in *The Island of Doctor Moreau*. In this novel, Moreau, who is aware of strong the connection between meat consumption and bestiality, imposes a law that denies the Beast Folk their right to "eat flesh" in an attempt to control and ultimately eliminate their craving for meat. However, this instinct proves too strong to be repressed, and therefore the law is doomed to be violated, marking the beginning of the regression of the Beast Folk. Similarly, the degeneration of Prendick

¹⁶⁵ The War of the Worlds, cit., p. 137.

¹⁶⁶ The Time Machine, cit., p. 66.

¹⁶⁷ The Time Machine, cit., pp. 13, 15.

himself starts, even before arriving to the island, with a reference to cannibalism and with the consumption of something reminding strongly of blood: "gave me a dose of some scarlet stuff, iced. It tasted like blood, and made me feel stronger."¹⁶⁸. Later, hunger is again associated with degeneration, as it puts him on "his fours": "Then I turned my head, and saw a meal prepared for me on the table. I perceived that I was hungry, and prepared to clamber out of the hammock, which, very politely anticipating my intention, twisted round and deposited me upon all-fours on the floor."¹⁶⁹ It also makes him vulnerable, constantly reminds him of his animal nature and therefore pushes him more than once towards the Beast Folk and determines him to become part of their community:

All these instances prove that, in the mind-body battle, usually is the body, with its hunger and violent instincts, to win. The supremacy of meat is evident when doctor Moreau, the man who continuously tried to impose the supremacy of reason over flesh, is killed by his own victim, the carnivorous beast and then, as corpse, is reduced to mere meat, together with the bodies of his victims: "Moreau lay beside his latest victims – the staghounds and the llama and some other wretched brutes. (...) the pile of wood and faggots on which Moreau and his mutilated victims lay, one over another. They seemed to be gripping one another in one last revengeful grapple."¹⁷¹ It is the final image of a generalized and lethal triumph of meat, of instinct and carnality over rational, prohibitive and artificial civilization.

3.2. "Are we not men?"

By emphasizing the role played by flesh and instincts, despite the artificial restrictions imposed on them, in determining human behaviour and destiny, Wells suggests that the

So I lay still there, until I began to think of food and drink; and at that thought the real hopelessness of my position came home to me. I knew no way of getting anything to eat (...) At last in the desperation of my position, my mind turned to the animal men I had encountered. I tried to find some hope in what I remembered of them. In turn I recalled each one I had seen, and tried to draw some augury of assistance from my memory.¹⁷⁰

¹⁶⁸ The Island of Doctor Moreau, cit., p. 10.

¹⁶⁹ *Idem*, p. 42.

¹⁷⁰ *Idem*, cit., p. 45.

¹⁷¹ *Idem*, pp. 89-90.

connection between beast or savage and civilized man is very strong. There is even a kind of identity mirroring established, as made explicit by Wells in *The War of the Worlds*. Here the dialogue between the protagonist and the Curate takes an abrupt and meaningful turn when the interrogation regarding the aliens becomes one regarding men: "what are these Martians?" 'What are we?' I answered, clearing my throat."¹⁷² Consequently, one of the fundamental interrogations posed in his novels regards humanity. It is especially through the confrontation with the Other that identity is (de)constructed and one such instance is Prendick's evolution. His moral values are questioned from the very beginning as he would resort to cannibalism to survive¹⁷³. Throughout the novel he is being constantly challenged, and his humanity is gradually corroded as a result of his confrontation with, but also closeness to, the Beast-Folk. While he initially thinks that the Beast-Folk are degenerate humans and fears the same will happen to him, he later finds out that, instead, they are improved, humanity, sinking deeper into confusion:

The following passage illustrates a significant moment, when he meets one of Moreau's creatures and asks himself to what species it belongs. However, the strong connection between their movements and gazes that mirror each other establishes a sort of parallelism that can revert this existential interrogation. By asking what the Other is, Prendick's identity is also interrogated:

"Then suddenly traversing a little glade, I saw with an unpleasant start two clumsy legs among the trees, walking with noiseless footsteps parallel with my course, and perhaps thirty yards away from me. The head and upper part of the body were hidden by a tangle of creeper. I stopped abruptly, hoping the creature did not see me. The feet stopped as I did. (...) What on earth was he – man or beast? (...) I pushed through a tangle of tall white-flowered bushes, and saw him twenty paces beyond, looking over his shoulder at me and hesitating. I advanced a step or two, looking steadfastily into his eyes. 'Who are you?'said I."¹⁷⁵

Glendening argues that the relationship that is gradually established between Prendick and the leopard-man is significative on a more general level, suggesting not only

It may seem a strange contradiction in me – I cannot explain the fact – but now, seeing the creature there in a perfectly animal attitude, with the light gleaming in its eyes and its imperfectly human face distorted with terror, I realised again the fact of its humanity¹⁷⁴.

¹⁷² The War of the Worlds, cit., p. 75.

¹⁷³ "we were already thinking strange things and saying them with our eyes; but it was, I think, the sixth before Helmar gave voice to the thing we had all been thinking (...) in the morning I agreed with Helmar's proposal" (*The Island of Doctor Moreau*, cit., p.8)

¹⁷⁴ *The Island of Doctor Moreau*, cit., p. 77.

¹⁷⁵ *Idem*, p. 37.

that the distinction between man and animal is blurred but that also culture and nature are interconnected:

Symbolically, Prendick is stalked by an animal nature that he does not wish to acknowledge as his own. And yet, significantly, later in the novel Prendick proprietarily refers to this nemesis as "my Leopard-man" (..) The leopard-man unsettles not only the distinction between man and animal, but more generally that between culture and nature. Is it primarily the product of culture or nature? Are humans primarily the product of culture or nature? What, in fact, is nature apart from cultural interpretations of it?¹⁷⁶

Prendick is, throughout the novel, dominated by his physiological reactions and needs; his self-control is constantly undermined by a fear that becomes stronger and stronger: "I completely lost my head with fear, and began running along the sand (...) So long as I live, I shall remember the terror of that chase"¹⁷⁷. As one of the chapters' titles suggests, "The hunting of the man", he becomes a prey as he is chased by the Beast Folk but also by Moreau and Montgomery. However, what is interesting is that it is his paranoid scenario, his exacerbated imagination that brings him in this position: "I was convinced now, absolutely assured, that Moreau had been vivisecting a human being (...) These sickening scoundrels had merely intended to keep me back, to fool me with their display of confidence, and presently to fall upon me with a fate more horrible than death"¹⁷⁸. Without any significant evidence, he convinces himself that he is in danger and again loses any self-control and the ability to think rationally: "running blindly (...) I ran furiously (...) my chest straining, my heart beating in my ears (...) There I remained for a long time, too fearful to move, and indeed too fearful even to plan a course of action."¹⁷⁹

His unfounded and paralyzing fear is only surpassed by his hunger, which motivates him to act and even to look for help among those who previously disgusted him: "So I lay still there, until I began to think of food and drink"¹⁸⁰. By admitting that he needs the Beast-folk's help and accepting their company, Prendick loses his authority and becomes one of them: "As it was I lost the opportunity, and sank to the position of a mere leader among my fellows. (...) The imperious voices of hunger and thirst prevailed over my dread (...) I felt too faint and weary to insist, and I let the moment pass. 'I want food,' said I, almost apologetically, and drawing near". ¹⁸¹ Thus, he tacitly confirms the

¹⁷⁶ Glendening, op. cit., p. 55.

¹⁷⁷ The Island of Doctor Moreau, cit., p. 40.

¹⁷⁸ *Idem*, p. 44.

¹⁷⁹ *Idem*, pp. 44-45.

¹⁸⁰ *Idem*, p. 45.

¹⁸¹ *Idem*, p. 96.

Beast Folk's suspicion, which have been already doubting his superiority, his humanity and even mocking his weaknesses and lack of independence:

'Was he not made?' said the Ape-man.' he said – he said he was made' (...) 'Yesterday he bled and wept' said the Satyr. 'You never bleed nor weep. The Master does not bleed or weep' (...) 'He has five fingers, he is a five-man like me', said the Ape-man. (...) 'He says nothing,' said the Satyr. 'Men have voices.' –'Yesterday he asked me of things to eat,'said the Ape-man. 'He did not know'.¹⁸²

The plasticity of living creatures therefore is at work here as well, as the protagonist changes his aesthetical and moral values just as the Beast Folk change their shape under the influence of Moreau:

I say I became habituated to the Beast people, that a thousand things which had seemed unnatural and repulsive speedily became natural and ordinary to me. I suppose everything in existence takes its colour from the average hue of our surroundings. Montgomery and Moreau were too peculiar and individual to keep my general impressions of humanity well defined.¹⁸³

The extraordinary and brutal nature of the events is often too unbearable to be directly experienced and therefore must be witnessed from a safe distance, which is a privilege the protagonists do not always have. Instead, they often find themselves in situations that constantly challenge their limits and force them to reflect upon their identity and the nature of what is surrounding them. However, the novels do not provide a solution to this existential inner conflict:

In *The Island of Doctor Moreau* Prendick experiences the unraveling of self as repeated traumas, involving especially the evolutionary relationship of people and animals, dissolve previous assumptions about human and biological nature and hence about his own; he ends up, fearful and isolated, seeking order and permanence through the observation of stars.¹⁸⁴

More than once, the effect of the harsh, violent reality on the protagonist is an "unmanning" one, as Glendening states: "Direct confrontation with the Martians has a castrating effect, while witnessing it framed by the domestic environment contains the horror enough to render it a quasi-experience."¹⁸⁵ The impact is so strong that in *The War of the Worlds* the protagonist often reverts to being a child: "The fear I felt was ... a panic, terror not only of the Martians but of the dusk and stillness all about me. Such an extraordinary effect in unmanning me it had that I ran weeping silently as a child might

¹⁸² *Idem*, p. 71.

¹⁸³ *Idem*, p. 69.

¹⁸⁴ Glendening, op. cit., p. 196.

¹⁸⁵ Vera Benczik, "The Urban Wasteland in H.G. Wells's The War of the Worlds" in E. Godfrey (ed.), *Utopias and Dystopias in the Fiction of H. G. Wells and William Morris*, cit., p. 149.

do"¹⁸⁶. This is also the reaction of the Time Traveler, when his Time Machine is taken away: "Where is my Time Machine?' I began, bawling like an angry child".¹⁸⁷A similar, although deeper desperation, manifests itself in *The Island of Doctor Moreau*:

I was empty and very faint, or I should have had more heart. But as it was I suddenly began to sob and weep, as I had never done since I was a little child. The tears ran down my face. In a passion of despair I struck with my fists at the water in the bottom of the boat, and kicked savagely at the gunwale. I prayed aloud for God to let me die.¹⁸⁸

Regression can thus take the form of an individual return to childhood, but in the *Time Machine* the protagonist seems to face not only his own regression but a general atavism, a not yet civilized humanity. Paradoxically, the protagonist's travel to the future becomes a confrontation with the collective past, with its most primitive fears and powers: "But, as it was, I stood there with only the weapons and the powers that Nature had endowed me with – hands, feet and teeth"¹⁸⁹.

Therefore, the development of events imposes a regression in all spheres of human activity, visible on both an individual and a collective level, by references on unmanliness, childhood or ruins. The deep effect these confrontations have on the protagonist's psychology is due not only to their extreme nature, but also to the fact that they touch a deep, hidden thread of their subconscious. An intricate, psychoanalytical interpretation comes from Neville Hoad, who analyzes the Island of Doctor Moreau from the perspective of the Freudian theory according to which social order descended from a homosexual bond that gave the brothers enough strength to kill their father: "The precursor to the founding moment of human society – the beginning of the incest taboo, which is what separates us from the animals for Freud – may be speculatively predicated on the movement from the homosexual to (...) the "homosocial" "¹⁹⁰. The critic argues that the novel alludes to homosexuality in various ways. Firstly, the confrontations and competition on the island are, with one exception, exclusively masculine. Secondly, the law that prohibits chasing men becomes redundant if interpreted as synonymous to the "do not eat flesh" law. Therefore, Hoad argues, the law must allude instead at a sexual desire towards men. Consequently, the killing of "the father", Moreau, committed not by

¹⁸⁶ The War of the Worlds, cit., p. 27.

¹⁸⁷ The Time Machine, cit., p. 37.

¹⁸⁸ The Island of Doctor Moreau, cit., p. 22.

¹⁸⁹ The Time Machine, cit., p. 57.

¹⁹⁰ Hoad, op. cit., p. 195.

his sons but by the only feminine figure of the novel, the puma, only confirms his theory: the feminine act, as a breach to the Freudian scenario, does not lead to social order but to its complete destruction.

Therefore, after trying to escape the disturbing cries of the puma, Prendick stumbles upon the Leopard-man, and this encounter produces such a terrifying effect on him, as to overshadow the initial terror that made him flee. The explanation provided by Hoad is that the confrontation with the Leopard-man is a more dangerous one on a subconscious level, as it brings Prendick closer to his own primitivism and thus homosexuality. It is a degrading encounter whereas the cries of the puma are the external manifestation of a humanizing and thus evolutionary process. Therefore, Prendick would rather witness the torture inflicted on the puma, than face the leopard-man alone:

However, his returning to the House of Pain proves, according to Neville Hoad, that Prendick's compassion is very limited as he does not act to help the beast-folk and is not willing to sacrifice himself for their benefit:

Sympathy as a human attribute also seems caught, like Prendick, in the space between doing and watching. (...) He never experiences sympathy as a way of putting himself at risk, as a way of redefining himself, as an invitation to an action that may involve some self-sacrifice in the interest of a collective rather than individual good¹⁹²

Not only that, but his sympathy is limited to those in which he can project himself, those recognizable as humans, as similar to him:

The pain of the alien, the animal, the world in the abstract, the clearly not-me can be escaped. The pain of the near-me, the perhaps-me, must be attended to. It is only projective recognition that produces the imperative to act. As long as Prendick can hear the voice as the voice of a brute or as world-pain in the abstract, the call of the other produces the escape imperative.¹⁹³

In a turnabout that almost defies understanding, after this ordeal in the face of the cannibalistic/homosexual panic, Prendick attributes radically different affect to the cries of the puma (...) What had driven him away by its sheer awfulness brings him back, saves him. The screams of the puma-woman are less terrifying, they may even promise relief in comparison to an encounter with the heaved up lump of the leopard-man. Reading this as phylogenetic allegory, an encounter with the leopard-man would represent the return to primitivism or homosexuality, the connected precursors to the entry into human subjectivity that the tale of the primal horde, as phylogenetic bolster to the Oedipus complex, describes. (...) The desublimation, the fall back into the homosexual and primitive position represented by the leopard-man's interest in Prendick, is somehow worse than overhearing the pain of the puma becoming human.¹⁹¹

¹⁹¹ Hoad, op. cit., p. 198.

¹⁹² *Idem*, p. 191.

¹⁹³ *Idem*, p. 199.

Therefore, the opportunity to save the puma is a moral challenge, which, according to Hoad, he fails to fulfil:

Does the moment of becoming human belong to the puma or does the ability to respond to the call of the other mark the moment in which Prendick, near-cannibal, uninvited guest, potential meal, almost laboratory rat, fleetingly becomes human? (...) Sympathy is thus constructed as the scene of identification with oneself and begins to look indistinguishable from its negation – self-absorption, indifference to the suffering of others. Shared species-being appears essential for sympathy, and even then, the risk that sympathy may require action makes Prendick's experience of sympathy fleeting.¹⁹⁴

Such interpretation may prove too harsh if confronted with some narrative elements. Firstly, the lack of more impressive gestures, although imputable, can be explained as deriving from his characteristic passivity, which is directed not only towards others. More than once he cowardly abandons himself to chance, in despaired sobs. He does not selfishly save his resources and energies for himself, but rather these seem to be lacking in general, even when his own life and destiny are at stake. Secondly, although seldom, Prendick does manage to show his compassion and ability to act on it, firstly by inciting the Beast-Folk to rebel against Doctor Moreau and later, by killing the Leopardman in order to spare him the torture and punishment that Moreau would have inflicted on him. Although these are not necessarily self-sacrificing and not even highly risky actions, they do prove his sympathy. However, it is true that they are fueled by self-interest or at least by empathy, they depend on Prendick's recognition of the humanity in the other. Thus, his moral limitations are as blurred as the distinction between man and animal. As Huntington points out, the moral confusion arises from the ontological one:

A similar "discrimination" can be imputed to the protagonist of the *Time Machine* as well, who cannot assume an impartial position in front of the creatures he encounters in the future but starts from the assumption that only one of the species is human, or at least sub-human, whereas the other bestial. Although he is able to assess the Morlocks' strength and intelligence in comparison to the physical and intellectual feebleness of the Eloi, he nonetheless sympathizes more with the latter, because of their

While the nature of the biological link occupies much of Prendick's and our attention, and while from a Wilberforcean point of view it should make a major difference whether the beast men are degenerate humans or superior animals, the issue is ultimately irrelevant in determining the obligations that exist between humans and beast men.¹⁹⁵

¹⁹⁴ *Idem*, pp. 200-201.

¹⁹⁵ Huntington, op. cit., p. 63.

pleasant appearance and flattering vulnerability. The Eloi are beautiful and harmless whereas the Morlocks are repulsive and menacing. However, although the Eloi are perceived as his descendants and therefore readily accepted as his (only) children, he is also forced to reluctantly admit that the Morlocks are also man's descendants:

that Man had not remained one species, but had differentiated into two distinct animals: that my graceful children of the Upper-world were not the sole descendants of our generation, but that this bleached, obscene, nocturnal Thing, which had flashed before me, was also heir to all the ages.¹⁹⁶

Moreover, taking into consideration the opinion presented in the artilleryman's speech from *The War of the Worlds*, the desirable descendants of men are the fit and adaptable Morlocks, and not the Eloi, which are instead the descendants of the weak men that allow themselves to be caught and used by the superior, dominant species. This is the unpleasant conclusion drawn by the Time Traveler as well, forced to admit that the beautiful Eloi are as degenerate and as far from humanity as the cattle are:

I understood now what all the beauty of the over-world people covered. Very pleasant was their day, as pleasant as the day of the cattle in the field. Like the cattle, they knew of no enemies and provided against no needs. And their end was the same. I grieved to think how brief the dream of the human intellect had been. It had committed suicide. It had set itself steadfastly towards comfort and ease, a balanced society with security and permanency as its watchword, it had attained its hopes – to come to this at last.¹⁹⁷

The fact that the Morlocks are set on an inferior evolutionary scale, as suggested by the comparison to man's predecessors, the apes ("Twice I thought I saw a solitary white, apelike creature"¹⁹⁸) while the Eloi are clearly advanced on the timescale, although decayed ("This fragile thing out of the futurity"¹⁹⁹), places the protagonist, as a representative of the rational and civilized human, between, or even above, these two species. Although both the Morlocks and the Eloi should be more evolved, the protagonist repeatedly proves his intellectual and physical superiority:

we might specify that the apex of human evolution is located in the figure of the Traveller himself. He alone is able to fully understand, and indeed master, both the worlds represented in the novel. The protagonist not only has the knowledge of Time Travel which places him in an exclusive position among his contemporaries (whose objections he is able to meet with astounding ease), but also retains the

¹⁹⁶ *The Time Machine*, cit., p. 48.

¹⁹⁷ *Idem*, p. 83

¹⁹⁸ *Idem*, p. 46.

¹⁹⁹ *Idem*, p. 23.
privileged position in the future age by being able to adapt to the diametrically opposed environment in which the Eloi and Morlocks exist.²⁰⁰

However, his superiority does not grant him invulnerability to degeneration and it seems that especially the confrontation with the Morlocks determines a regression of the Time Traveller. The realization that man might evolve into two different species is the prerequisite step to admitting that these dimensions already coexist in man, that they both represent his potentialities. This can explain the disturbing effects that the confrontation with the Morlocks has on the protagonist. The two extremes, the Morlocks and the Eloi, might symbolize two sides of man's conscience and personality, the two opposing elements of his inner battle between his bestial nature, dictated by instinct and necessity, and his aesthetic, civilized and even decadent dimension. Just as Prendick borrows some of the Beast Folk characteristics, so does the Time Traveller, in whom both the childish vulnerability of the Eloi as well as the Morlocks' violent nature can be recognized. Curiously enough, just after describing the Morlocks as inhuman and repulsive, the narrator compares himself to a beast. Thus, involuntarily, he brings himself closer to them, who are now perceived as enemies and thus as equals:

there was an altogether new element in the sickening quality of the Morlocks – a something inhuman and malign. Instinctively I loathed them. Before, I had felt as a man might feel who had fallen into a pit: my concern was with the pit and how to get out of it. Now I felt like a beast in a trap, whose enemy would come upon him soon.²⁰¹

As has been repeatedly argued, blood thirst and meat craving play a crucial role in defining the protagonist, whose Morlock-like behaviour contradicts his declared sympathies: "I struggled, shaking the human rats from me, and, holding the bar short, I thrust where I judged their faces might be. I could feel the succulent giving of flesh and bone under my blows, and for a moment I was free"²⁰². In this passage he not only proves his violent nature, which could still be justified as deriving from his survival instinct, but he describes the battle with the Morlocks in cannibalistic and sadistic terms such as "succulent" or "longing": "And I longed very much to kill a Morlock or so. Very inhuman, you may think, to want to go killing one's own descendants! But it was

²⁰⁰ Steven McLean, *The Early Fiction of H. G. Wells. Fantasies of Science*, Palgrave Macmillan, London, 2009, p. 33.

²⁰¹ The Time Machine, cit., p. 60.

²⁰² *Idem*, p. 79.

impossible, somehow, to feel any humanity in the things."²⁰³ It is only later, once he realizes that they are helpless, that he starts to show compassion towards them:

At first I did not realize their blindness, and struck furiously at them with my bar, in a frenzy of fear, as they approached me, killing one and crippling several more. But when I had watched the gestures of one of them groping under the hawthorn against the red sky, and heard their moans, I was assured of their absolute helplessness and misery in the glare, and I struck no more of them.²⁰⁴

Other characteristics of the Morlocks that the protagonist seems to acquire are, McLean argues, the adaptability to dark and its consequent sensibility towards light, as well as their unusual sleep pattern and ghostly appearance:

The protagonist does not function as an unchanging observer who merely reports on events in the future. Rather, in the course of the journey in which he discovers the eventual fate of humanity, the Time Traveller is himself subjected to retrogression. This is immediately apparent as, having discovered the disappearance of his Machine, the Time Traveller himself regresses to the same child-like characteristics as his hosts (...) His violent conduct towards the Morlocks emphasises his latent savagery underlying the Time Traveller's own apparently civilised being.²⁰⁵

No one is thus protected from degeneration and cannot take his superiority, self-control and civilized nature for granted. This is the case for individuals, but also for society as a whole. The degenerative violence and cruelty described in the *War of the Worlds* is a proof that social order fails to adequately respond to the threat brought by the Martians. Desperately attempting to escape from the invasion, the Londoners become greedy, they lose their identity and blend into a chaotic flow of scared figures: "this was a whole population in movement. It is hard to imagine that host. It had no character of its own. (...) With many of these came men, sometimes helpful, sometimes lowering and savage."²⁰⁶ The conclusion drawn by the narrator is deeply pessimistic as he anticipates the apocalyptical impact of the invasion:

This was no disciplined march; it was a stampede - a stampede gigantic and terrible - without order and without a goal, six million people unarmed and unprovisioned, driving headlong. It was the beginning of the rout of civilisation, of the massacre of mankind.²⁰⁷

The population is therefore involved in a generalized battle for survival, with little space for solidarity, as desperation replaces mercy: "the sailors and lightermen had to fight

²⁰³ *Idem*, p. 72.

²⁰⁴ *Idem*, p. 80.

²⁰⁵ McLean, *cit.*, p. 36.

²⁰⁶ The War of the Worlds, cit., pp. 106, 107.

²⁰⁷ *Idem*, pp. 113- 114.

savagely against the people who swarmed upon them from the riverfront."²⁰⁸ Even the protagonist is guilty of causing the death of two other men in order to increase his chances of survival, and this takes a toll on his conscience. His mind becomes ever more disturbed, and although he does not admit his guilt, the memory of the event tortures him:

In this self-judged trial, he uses chance to justify his behavior: "I saw myself then as I see myself now, driven step by step towards that hasty blow, the creature of a sequence of accidents leading inevitably to that. (...) We had been incapable of cooperation – grim chance had taken no heed of that."²¹⁰ Chance has already been thoroughly analyzed in the previous chapter; what is more interesting here is the reference to cooperation. This concept reappears, in different forms, in the three novels, where loneliness and companionship are frequently mentioned. Be it war, time traveling or shipwreck, the circumstances often isolate the protagonist, who finds himself in a desperate need of a companion but also fails to establish a relationship or even a dialogue with those surrounding him. The feeling of loneliness is exacerbated as the protagonists are not only deprived of family, friends, but even fellowmen as they find themselves among a strange, unknown, even antagonistic species: "I felt hopelessly cut off from my own kind - a strange animal in an unknown world."²¹¹ Thus, the social nature of men is so strong that in The Island, and well as in The War of the Worlds, the protagonists are tempted to become part of a community which, despite its biological and intellectual inferiority, offers them comfort and satisfies their social need of belonging:

I felt a peculiar shrinking from those pallid bodies (...) Probably my shrinking was largely due to the sympathetic influence of the Eloi, whose disgust of the Morlocks I now began to appreciate. (...) I remember creeping noiselessly into the great hall where the little people were sleeping in the moonlight – that night Weena was among them – and feeling reassured by their presence.²¹²

The time traveler does not necessarily look for safety in the company of the Eloi, as they are not even able to defend themselves from the Morlocks, but rather for a

Three things struggled for possession of my mind: the killing of the curate, the whereabouts of the Martians, and the possible fate of my wife. The former gave me no sensation of horror or remorse to recall; I saw it simply as a thing done, a memory infinitely disagreeable but quite without the quality of remorse. (...) I felt no condemnation; yet the memory, static, unprogressive, haunted me.²⁰⁹

²⁰⁸ *Idem*, p. 115.

²⁰⁹ *Idem*, p. 162.

²¹⁰ Ibidem.

²¹¹ The Time Machine, cit., p. 37.

²¹² *Idem*, cit., p. 53.

psychological, even emotional comfort. After rescuing Weena, although he initially claims that the Eloi are children-like and not gender-differentiated, something similar to a romantic relationship is established between them. He describes her in patriarchal terms, as "my little woman", "the little doll of a creature", and repeatedly compares her to a child. While he provides her with his masculine, patronizing protection, she offers him affection and a human bond that he is longing for, to the point that he decides to take her back with him. He once again proves his superiority by imposing a very traditional relationship and what he appreciates in her is from this rather anachronistic perspective: "She always seemed to me, I fancy, more human than she was, perhaps because her affection was so human"²¹³. However, his sympathy is limited and his feelings are contradictory, are he is flattered by her affection and attention but also annoyed with her: "She wanted to be with me always. She tried to follow me everywhere (...) I think, altogether, I had as much trouble as comfort from her devotion"²¹⁴. What prevails, McLean argues, is the protagonist's rational individualism:

However, the protagonist's tale also suggests self-irony "But the problems of the world had to be mastered. I had not, I said to myself, come into the future to carry on a miniature flirtation"²¹⁶ and even a deeper regret, which might imply that the right choice is not so straight-forward:

Nevertheless she was, somehow, a very great comfort. I thought it was mere childish affection that made her cling to me. Until it was too late, I did not clearly know what I had inflicted upon her when I left her. Nor until it was too late did I clearly understand what she was to me.²¹⁷

Youngs argues that Weena, as a female, is dominated and disregarded by the male protagonist: "The female presence introduces an emotional quality which, though sought after by the narrator as a sign of humanity, is nonetheless dismissed at will as a disruption to rationality and purpose."²¹⁸, but this is only an element of a much wider

Though Weena serves an important function in affiliating his sympathies to the Eloi, she also serves to illustrate that no emotional interest will distract the Traveller from his desire to recover the Time Machine (...) This purpose means that the almost callous attitude of the Traveller towards Weena underlines 'the male individualism and the rational commitment of a scientist'.²¹⁵

²¹³ *Idem*, p. 68.

²¹⁴ The Time Machine, cit., p. 44.

²¹⁵ McLean, *op. cit.*, p. 20.

²¹⁶ The Time Machine, cit., p. 44.

²¹⁷ *Idem*, p. 45.

²¹⁸ Youngs, op. cit., p. 116.

picture of gender discrepancy. Throughout the novel, 'manliness' is associated with vigour and rationality, and proposed as the vital quality of humankind. Further evidence of this comes with the appearance of the Eloi, that are described as effeminate and weak, as beautiful, delicate but also feeble and unintelligent: "while assumptions of racial hierarchies are unsettled, gender values are not. (...) The Elois' prettiness is soon equated with a lack of physical and mental strength – a connotation that preserves gender inequalities."²¹⁹ A parallel can also be drawn with the War of the worlds. Although here the female characters are more numerous and diversified, they are generally weak and in need of male protection, counsel and guidance. The protagonist's wife is very similar to Weena, as she is practically abandoned, taken out of the picture in order to give the man enough space and freedom for his explorations: she has no significant presence during the most of the narrative. Moreover, the protagonist does not show a strong emotional and affective response, neither to the scenario of her death, neither on the occasion of their miraculous final encounter, when he confesses to have given her up: "And strangest of all is it to hold my wife's hand again, and to think that I have counter her, and that she had counter me, among the dead"²²⁰.

In the *Island of Doctor Moreau*, instead, the few female characters are also in a very weak position, as part of the Beast Folk they also suffer the male domination: "The females were less numerous than the males, and liable to much furtive persecution in spite of the monogamy the Law enjoined"²²¹. Moreover, they are associated with degeneration and sexual promiscuity: "Some of them – the pioneers in this, I noticed with some surprise, were all females – began to disregard the injunction of decency, deliberately for the most part. Others even attempted public outrages upon the institution of monogamy".²²²

3.3. "What are they?"

The connection between men and other creatures, be it overt or covert, not only questions the assumptions regarding humanity but also those regarding bestiality and evolution. It

²¹⁹ *Idem*, pp. 110-111.

²²⁰ The War of the Worlds, cit., p. 196.

²²¹ The Island of Doctor Moreau, cit., p. 67.

²²² *Idem*, p. 101.

is difficult to define the nature of man's antagonists, as their descriptions are rich in subtle and contradictory allusions. This has opened the possibility for many interpretations, and reviews mention the role these characters played in shaping the science-fiction genre and associate them with demons, cyborgs, vampires, or socio-political critique: "The Morlocks have a complex symbolic function, for they not only represent an exaggerated fear of the nineteenth century proletariat, but also embody many of the traditional mythical images of a demonic world"²²³. From a social critique perspective, they are associated to the poor²²⁴. As seen in the previous chapter, their underground system and organization is a reference to the working and life conditions of the English working men. By picturing them as an oppressed social class which managed to turn against its masters and reverse the power balance, Wells warns against the dangers of an uneven and unfair social organization: "Wells's own particular dark heart warns that – unless radical social reform is immediately implemented – the future will become the site of a disturbing retrogression"²²⁵ However, they can also be interpreted from a deeper, psychoanalytical perspective, as an atavistic element:

It is tempting to read the relationship between the classes psychoanalytically: the Morlocks as the id, living underground and adapted to darkness, the obscene nocturnal creatures; the Eloi afraid of the dark and subject to attack from the subterranean dwellers. Thus the appearance of the Morlocks above ground may be read as the return of the repressed.²²⁶

Their existence is thus only alluded to, while the strongest impression is that they are a creation of the imagination, as they are described in terms of deep darkness, mystery and ambiguity. For example, the first suggestions regarding the Morlocks are connected to ghosts or dream and seem to arise from an altered state of conscience:

I had been restless, dreaming most disagreeably that I was drowned, and that sea anemones were feeling over my face with their soft palps. I woke with a start, and with an odd fancy that some greyish animal had just rushed out of the chamber. (...) It was that dim grey hour when things are just creeping out of darkness, when everything is colourless and clear cut, yet unreal.²²⁷

²²³ Bernard Bergonzi, *The Early H.G.Wells. A Study of the Scientific Romances*, Manchester University Press, Manchester, 1961, p. 53.

²²⁴ The Beast people have also been interpreted as a reference to the degenerate sections of the society and to the poor: "Though more implicitly than the Time Machine, the text is engaged with contemporary concerns regarding the living conditions endured by the poorest sections of the community. Particularly, there was a fear that the conditions in which the poor were housed were creating animals out of them." (McLean, *op. cit.*, p. 53).

²²⁵ McLean, op. cit., p. 22

²²⁶ The Time Machine, cit., p. 120.

²²⁷ *Idem*, p. 46.

As John Huntington argues, the main problem posed in The Time Machine, as suggested by the central presence of the Sphinx, which works not only as a spatial landmark but as a conceptual one as well, is "the riddle of man who appears in different forms"²²⁸. The solution provided by the novel is "a symmetrical illusion: the Eloi, because of their appearance, seem more human than they are; the Morlocks, again because of appearance, seem less"²²⁹. However, the distinction is not just a superficial one, the repulsion the Morlocks provoke is much deeper than a simple aesthetical distaste, and this is evident from the protagonist's different reaction to the touches of the Eloi and the Morlocks. Although the physical sensations are very similar, the Morlocks trigger a very deep, primitive fear of the protagonist: "The old instinctive dread of wild beasts came upon me. I clenched my hands and steadfastly looked into the glaring eyeballs" ²³⁰ Similar encounters of enemies that gaze into each other eyes until they reciprocally recognize their humanity and similarity happen in The Island of Dr. Moreau. Even the description of the Morlocks is very similar to that of the beast folk: "My impression of it is, of course, imperfect; but I know it was a dull white, and had strange greyish-red eyes; also that there was flaxen hair on its head and down its back. I cannot even say whether it ran on all fours only with its forearms held very low."²³¹ In order to confront them, the protagonist needs to descend underground, an experience that is described as something much more complex than a simple spatial journey, which produces a very visceral, nauseating effect.

The Beast Folk are also described gradually, their description building upon vague details and impressions. Firstly, the narrator is making repeated references to the appearance of the strange creatures. Before understanding their animalistic nature, the protagonist is surprised by their gestures more than their looks, which are described as "grotesque", "singularly awkward", "the clumsiest movements", "curious". The first intuition of their unhuman nature arrives very early: "not stiff they were, but distorted in some odd way, almost as if they were jointed in the wrong place."²³² The islanders are described with very strong words, which allude either to a primitive, almost superstitious or mystic antagonism "He's unnatural, I said, there is something about him (...) it gives me a nasty little sensation, a tightening of my muscles, when he comes near me. It's a

²²⁸ Huntington, *op. cit.*, p. 45.

²²⁹ Huntington, op. cit., p. 44.

²³⁰ *Idem*, p. 47.

²³¹ The Time Machine, cit., p. 48.

²³² The Island of Doctor Moreau, cit., p. 25.

touch – of the diabolical in fact."²³³ or to the racial discourse which is also openly put forward: "Your men on the beach, said I, what race are they?"²³⁴ As Hoad points out, the description of the Beast Folk often represents them as a race that, in the Darwinian evolutionary scale, stands between - or more precisely connects-, animals and men. But while the members of a different species generally are, for men at least, hardly distinguishable one from another, the Beast Folk surprise with their highly individualized characters. Each creature is different from the other, being differentiated by its Moreau's intervention, which is creative and unique in each case, by its personality but mostly by its original animal traits:

Not coincidentally, they are created after the model of the human being and they seem well-defined individuals, each with his own physical and behavioural characteristics, failing to function in a community and respect a common law. By expressing their personality and will, they are also unleashing their most primitive and violent instincts, which leads to the disintegration of the community but also of their humanity. In comparison, both the Eloi and the Morlocks, as well as the Martians, are described as indistinguishable elements of a larger community. They do not seem to have an individual will and neither identity, except for Weena, who nonetheless remains in the background. As Michael Starr points out, the Martians "are indistinguishable from one another, being wholly uniform in appearance. (...) a single Martian appears to have no sense of individual personhood, and hence cannot be thought of apart from any other Martian, or indeed the machines which they inhabit."²³⁶ The same can be said about the Eloi and the Morlocks, who depend on the group in order to survive and therefore adopt a common life style.

All these creatures have in common, excepting the Eloi, is that they incite a strong, physiological reaction of fear and disgust in the protagonists that confront them.

 $[\]dots$ 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.²³⁵

²³³ *Idem*, p. 32.

²³⁴ Ibidem.

²³⁵ The Island of Doctor Moreau, cit., p. 36.

²³⁶ Michael Starr, *Wells Meets Deleuze. The Scientific Romances Reconsidered*, McFarland&Company, North Carolina, 2017, p. 98.

This is evident from the strong, pejorative terms and comparisons used to characterize them, which are repeated across the novels, with subtle peculiarities for each of them.

In the description of the beast folk an element of graceless animality prevails: "horror of the brutes", "a misshapen man, short, broad and clumsy, with a crooked back, hairy neck and a head sunk between his shoulders (...) peculiarly thick, coarse, black hair (...)", "the black-faced man", "brutish-looking fellows (...) there was something in their faces – I knew not what – that gave me a queer spasm of disgust", "an amazingly ugly gang", "grotesque ugliness", "grotesque, half-bestial creature", "inhuman face of the man", "fat, heavy, chinless faces, retreating foreheads"²³⁷. Moreover, almost each encounter with one of Moreau's creatures gives Prendick a feeling of uncanniness, of familiarity and strangeness in the same time. He thinks he knows them already, without understanding where from:

I had never beheld such a repulsive and extraordinary face before and yet – if the contradiction is credible – I experiences at the same time an odd feeling that in some way I had already encountered exactly the features and gestures that now amazed me (...) my suspicion of a previous acquaintance.²³⁸

Since a previous encounter is clearly impossible, one of the possible explanations for his reaction is that Prendick recognized himself in the creatures. However, the explanation that prevails in the narrative is that he catches a glimpse of their animality:

I perceived clearly for the first time what it was that had offended me, what had given me the two inconsistent and conflicting impressions of utter strangeness and yet of the strangest familiarity. The three creatures engaged in this mysterious rite were human in shape, and yet human beings with the strangest air about them of some familiar animal.²³⁹

Their nature therefore, is not morally condemnable: they are not guilty of anything, not even the violation of the law can be imputable to them, as its requirements were overwhelming for their reason as well as instincts. Moreover, the fact that those who impose it disregard it nonchalantly reveals its absurd nature and inability to distinguish beast from human and vice versa:

The ironies of this attempt to cross a biological boundary by means of ethical self-definition are multiples. First, there is an inherent paradox in the law itself: only a nonhuman would need such a rule to be human. (...) Clearly, what defines the human is something other than what these monstrosities assert; they draq a line, but it is a trivial one. And finally, despite its precision, the line marks nothing, for in the

²³⁷ The Island of Doctor Moreau, cit., pp. 13, 23, 35.

²³⁸ *Idem*, pp. 13-14.

²³⁹ *Idem*, p. 36.

course of novel we see real humans repeatedly trespass across the boundary the law establishes. (...) Humans can act bestial, and perhaps, though it is a rarer event, beasts can act humanely.²⁴⁰

The narrative voice suggests that the Beast people are actually the naïve victims of Moreau's diabolical and cruel plan, pursued afterwards by Prendick himself, as he admits that his only advantage he has over them is his ability to lie: "An animal may be ferocious and cunning enough, but it takes a real man to tell a lie"²⁴¹. The Beastfolk's limited intelligence prevents them from reasoning and speaking abstractly, and thus they cannot think or pronounce falsehoods. This puts them in a higher, although naive moral position in comparison to men, who use their advanced intelligence, as the novel proves, selfishly and even cruelly²⁴².

The Morlocks instead do seem to have not only a disgusting nature, but a diabolical one: "the sickening quality of the Morlocks – inhuman and malign", "the human rats", "bleached, obscene, nocturnal Thing", "how nauseatingly inhuman they looked - those pale, chinless faces and great, lidless, pinkish-grey eyes", "ant-like", "foul creatures", "blind things", "little brutes". Their hellish nature makes it impossible for the protagonist to feel any sympathy or remorse towards them or to embrace the biological and social connection the novel suggests they have. The prevailing feeling is one of terror and hate, "loathing" even, and, from the protagonist's perspective, their cannibalistic habits are morally unacceptable. However, the social critique that acts both as an explanation for the Eloi-Morlocks divide and competition, as well as a warning regarding the future of mankind, relativizes the issue. Since the cannibalistic nature of the Morlocks is just the outcome of the oppressive conditions imposed by the Eloi, it is difficult to establish whether the victims are the Morlocks or the Eloi, or, from a Darwinian perspective, there are any victims at all. The narrator is ultimately unable to provide the reader with a definitive explanation regarding the relationship between the Eloi and the Morlocks and their anthropological status:

²⁴⁰ Huntington, op. cit., pp. 64-65.

²⁴¹ The Island of Doctor Moreau, cit., p. 98.

²⁴² "Poor brute! 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 hands (...) 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 agony, was one long internal struggle, one long dread of Moreau – and for what?" (*The Island of Doctor Moreau*, cit., p. 78)

What causes the Time Traveller to resort to moral comfort rather than scientific explanation is also clear, however: the visceral repulsion inspired in him by the Morlocks, whom he compares to sloths, spiders, ants and rats. The same disgust causes him, some commentators think, to underestimate the intelligence of the Morlocks and to misinterpret as cannibalism what is in fact a symbiotic relation between two separate species.²⁴³

His failure can be justified, as the protagonist himself does, in terms of limited access to knowledge, or can instead be explained as a reluctance to admit a deeper, unpleasant truth that would reflect upon his self-image:

If the Time Traveller's loathing for the Morlocks has in it some element of disavowed self-recognition, the way it disrupts his scientific discipline suggests further that, in addition to the interpretive difficulties he suffers because of insufficient evidence, he is also running up against ideological limitations that have to do with his sense of identity.²⁴⁴

As far as the Martians are concerned, their Gorgon-like appearance is terrifying and disgusting on a mythical scale:

ungovernable terror gripped me. I stood petrified and staring. (...) Those who have never seen a living Martian can scarcely imagine the strange horror of their appearance (...) culminated in an effect akin to nausea. There was something fungoid in the clumsy deliberation of the tedious movements unspeakably terrible. Even at this first encounter, this first glimpse, I was overcome with disgust and dread²⁴⁵.

As anticipated, this impression will only worsen as the protagonist discovers the use they make of humans, whose blood they drink. However, the narrator warns against condemning their invasion and repeatedly suggests, in an imperialism critique, that they can hardly be blamed, as humans have been doing the same:

And before we judge of them too harshly, we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanished bison and the dodo, but upon its inferior races. The Tasmanians, in spite of their human linkeness, were entirely swept our of existence in a war of extermination waged by European immigrants, in the space of fifty years. Are we such apostles of mercy as to complain if the Martians warred in the same spirit?²⁴⁶

The narratives are built upon the attempt to counteract the initial feeling of repulsion and to force a re-evaluation of the relationship between men and the Other. One such element that plays an important role in defining while also blurring the distinction between the human and non-human, is language. McLean argues that Wells was aware of the debate regarding the exclusive nature of language, a thesis sustained by Morgan and contradicted

²⁴³ John Rieder, *Colonialism and the EMERGENCE of Science Fiction*, Wesleyan University Press, Connecticut, 2008, p. 85.

²⁴⁴ *Idem*, p. 86.

²⁴⁵ The War of the Worlds, cit., p. 21.

²⁴⁶ *Idem*, p. 5.

by Garner. Wells's position, as in other spinous issues, is ambiguous: "The narrator of *The Island of Doctor Moreau* appears to follow Morgan in identifying language as the distinguishing feature of humanity. (...) Yet, Moreau's imposition of a 'humanising process' on the Beastfolk seems to confirm Garner's conception of an unbroken chain of expression."²⁴⁷ Prendick starts with the assumption that only humans can speak and therefore presupposes that the brutes he sees must be men because they have a language, although often rudimentary or even incomprehensible:

"The creature was little better than an idiot. I tried to make out what he meant by that, and it seems I bored him. (...) I tried him with some other questions, but his chattering, prompt responses were as often as not quite at cross purposes with my question. Some few were appropriate, others quite parrot-like."²⁴⁸

However, as Prendick observes other physical and behavioral characteristics, he understands that their language is limited and imitative, as are their mental abilities as well: they do not understand the meaning of the laws they frantically chant, which is an "incomprehensible gibberish", a "strange litany", "jabbering". It is significant that language, which should mark the apex of evolution, reason and thus freedom, is actually the tool to further torture and imprison these creatures. Therefore, the conclusion that can be drawn from the Beastfolk's example is that language can be acquired even by lessthan-humans but will never reach the level of sophistication that is specific to the civilized men, as becomes evident from the Ape-Man's ridiculous attempt to speak in an abstract fashion²⁴⁹: "He had an idea, I believe, that to gabble about names that meant nothing was the proper use of speech. He called it 'Big Thinks' to distinguish it from 'Little Thinks', the sane everyday interests of life. If ever I made a remark he did not understand, he would praise it very much"²⁵⁰. Moreover, the two other novels depict the converse scenario, in which language may be oversimplified as a result of evolution. The Morlocks, Eloi and Martians, all in some way human descendants, also lack the ability to communicate:

²⁴⁷ McLean, *op. cit.*, p. 48.

²⁴⁸ The Island of Doctor Moreau, cit., p. 47.

²⁴⁹ The ridiculing depiction of the Beast Folk's attempt to perform religious rituals or to access a higher, metaphysical knowledge can also convey Wells's sarcasm regarding Christianity and philosophy in general: "In this hybrid world of 'humanised animals' and 'animalised humans', the Beastfolk's recital of the Law functions as a comment on the status of those philosophical and religious activities considered to constitute the most advanced form of human reasoning." (McLean, *op. cit.*, p. 49).

²⁵⁰ The Island of Doctor Moreau, cit., p. 100.

However, I felt like a schoolmaster amidst children, and persisted (...) but it was slow work, and the little people soon tired and wanted to get away from my interrogations, so I determined, rather of necessity, to let them give their lessons in little doses when they felt inclined. And very little doses I found they were before long, for I never met people more indolent or more easily fatigued.²⁵¹

Both Prendick and the time traveler fail in their attempt to construct a more significant and elevated relationship with the Beastfolk, respectively the Eloi, as they cannot establish a meaningful dialogue with their new companions and thus cannot overcome their feeling of loneliness. All three novels employ the motif of the companion, or, more precisely, the lack thereof: "If only I had a companion it would have been different. But I was so horribly alone"²⁵².

The War of the Worlds is also dominated by the lack of cooperation, whose devastating effects are visible on the level of society but also the individual. As far as the Martians are concerned, they also seem selfish, cruel and unsympathetic, given that they show no interest or mercy towards the humans, who are just to be destroyed or consumed. The novel suggests that it might be the lack of organs to account for their lack of emotion and sympathy, thus implying that the body might have a significant role in the harmonious functioning of the human being as a whole: "This is because the animal side of the human organism possesses the emotions that ensure the capacity for sympathy and co-operation among humankind."²⁵³ However, this does not mean that the Martians are indeed unsympathetic or unable to cooperate. While no dialogue or form of communication is established between humans and Martians and therefore one can only speculate on their nature, feelings - or lack thereof - and social organization, the Martians do seem to be communicating among themselves by means of telepathy. Moreover, the narrator often observes that they do cooperate and act in solidarity one towards the other and this reciprocal help makes them more resistant to the men's offensive, proving itself a great advantage in the competitive struggle for survival. It is precisely their strictly rational but effective cooperation, that renders the Martians superior to men, which absurdly and savagely turn against each other: "The increased level of co-operation discernable in their conduct towards one another symbolises a positive aspect of the Martian's status as a potential evolutionary future for humanity."²⁵⁴ However, the species are not so different

²⁵¹ *The Time Machine*, cit., p. 27.

²⁵² *Idem*, p. 54.

²⁵³ McLean, *op. cit.*, p. 103.

²⁵⁴ McLean, op. cit., p. 104.

on an ontological level as they are on a temporal one. By coming from Mars, which is essentially a more advanced "Earth", the Martians are practically embarking on a journey backwards in time, meeting their ancestors, just as the time traveler travels in time to meet his future descendants:

Wells's Martians invading England are like Europeans in Tasmania not just because they are arrogant colonialist invading a technologically inferior civilization, but also because, with their hypertrophied brains and prosthetic machines, they are a version of the human race's own future. The confrontation of humans and Martians is thus a kind of anachronism, an incongruous co-habitation of the same moment by people and artifacts from different times.²⁵⁵

Their narrative function is to challenge men's vane belief in their superiority and right to supremacy: "For that moment I touched an emotion beyond the common range of men, yet one that the poor brutes we dominate know only too well. I felt as a rabbit (...) a sense of dethronement, a persuasion that I was no longer a master, but an animal among the animals, under the Martian heel."²⁵⁶ As soon as this task is fulfilled, they can be dismissed with and the novel sacrifices them on the Darwinian shrine of natural selection as no other outcome would have been possible without implying mankind's supremacy. In this way, the Martians are both victims and oppressors, just as the humans are:

The failure of the British military to defeat the invaders perfectly concurs with the novel's castigation of imperial pride. Yet the fact the invaders are defeated by the one factor they had failed to include in their supposedly meticulous preparations reveals how the Martians are characterised by the same blindness as the imperial subject (...) This plot device not only provides Wells with an ingenious means of ending the novel, it also reveals his support for Huxley's contention that it is the survival of the most fitted – rather than the survival of the fittest – that determines the evolutionary success of a species.²⁵⁷

Nowhere else is the moral lesson more explicit than in this novel: "Surely, if we have learned nothing else, this has taught us pity – pity for those witless souls that suffer our dominion."²⁵⁸

As Michael Starr summarizes, the Martians are humans and men are Martians:

though initially the war between Earth and Mars appears to be about two competing species with differing levels of technology, it ironically becomes apparent that the two are bound by the same cosmic law, that of evolution (...) Hence the struggle between the human and Martian forces is in effect humanity fighting against a speculative future version of itself. Thus, in much the same way as *The Time Machine, The War of the Worlds* functions as a prophetic warning as to the future of humanity: evolution becomes

²⁵⁵ Rieder, *op. cit.*, p. 5.

²⁵⁶ The War of the World, cit., p. 157.

²⁵⁷ McLean, *op. cit.*, p. 108.

²⁵⁸ The War of the Worlds, cit., p. 163.

the "machine" of history through which we are destined to become the Martians. And, by extension, we are destined to be enslaved to the very technology on which they are dependent.²⁵⁹

The indeterminacy and ambiguity of what it means to be human has a dual nature as it may be considered an imperfection but also a space for potentiality. Starr analyzed Wells's novels from a Deleuzian perspective to argue how the philosopher's concepts of "becoming" and "body without organs"²⁶⁰ highlight the possibilities open to humans:

With this state of constant transformation, we are removed from the rigid notion of being; the self as becoming is full of possibilities whereas the self as "being" is complete and has no further potential. Becoming is a process that never ends and, because of this, fixed categories are always at risk of being undermined.²⁶¹

On the one hand, there are no categoric and permanent ontological distinctions and, on the other hand, the interaction or clashing of these dynamic forces contribute to the process of transformation:

Deleuzian theory assumes no essential division in the natural world, with no absolute differences between humans and animals. Instead, the material world is seen as a vast field of virtual forces and intensities that become actualized through interactions with the things and/or bodies with which we are familiar. These bodies are not stable entities, instead being assemblages of forces, undergoing constant change dependent on the encounters they have with other entities with which they enter into relationships. In other words, bodies are not beings, but becomings.²⁶²

Moreau's experiments and Prendick's and Montgomery's living on the island together with the Beast-Folk do not determine a passage from one category to another. The beasts do not become men in order to later revert back and neither the men become beasts. Instead, all these characters seem to be dragged by exterior forces onwards and backwards on a continuum of life, getting closer to one unattainable, not fully accessible form or another:

Instead of a successful transformation, certain properties or potentials of both human and animal combine in new and monstrous amalgamations. Moreau's House of Pain itself therefore produces a new body or territory; but as previously explored, such becomings never complete, so the only choice is for the becoming to perpetuate until the process either makes a breakthrough or exhausts its potential, and the animal/human hybrid dies.²⁶³

²⁵⁹ Starr, *op. cit.*, p. 86.

²⁶⁰ "The body without organs is not a metaphor, Deleuze and Guattari insist, but actual matter, a sort of virtual space that the actual body presupposes as a zone of potentialities across which flows are directed", Starr, *op. cit.*, p. 33.

²⁶¹ *Idem*, p. 30.

²⁶² Ibidem.

²⁶³ Starr, *op. cit.*, p. 65.

What Starr challenges within this Deleuzian framework, is the interpretation of Wells's narratives in terms of progress or degeneration, replacing these sentencing concepts with "transformation", intended not as a transition process from a state to another, but as a reality in itself:

The most exigent element of becoming-animal, and that most difficult to grasp, is Deleuze's claim that it is a real process and not one of resemblance, identification, imitation, nor is it an act of imagination, a dream or fantasy. (...) the act of becoming-animal is not one of imitation, as it involves animal capacities and powers. If the human is to become animal, physical and emotional learning and behavior must be unlearned and new ones adopted, resulting in an enlargement of one's relationship and responses to the world. Becoming animal does not however mean imitation and should not be thought of as mere identification with an animal; it is not a psychoanalytic regression or an evolutionary progression, as all these ways of relating to the animal attribute to it a fixed identity that lies beyond becoming and change. On the contrary, for Deleuze and Guattari, animals serve to rupture notions of identity and sameness.²⁶⁴

This interpretation of Deleuze's theory is highly compatible with the *Island of* Doctor Moreau, a narrative constructed upon a continuum of biological, psychological and social transformations. These affect not only the Beast-Folk, who are transformed into humans and then become animals again, but also Moreau, Montgomery and Prendick: they also evade the stable borders of humanity and move into a more bestial, primitive and animalistic direction. Prendick himself alludes to his own transformation: "I too must have undergone strange changes. (...) I am told that even now my eyes have a strange brightness, a swift alert of movement"²⁶⁵. While these changes could be attributed to the long-lasting cohabitation with the Beast-Folk and explained as a form of subconscious imitation or adaptation, the fact that Prendick not only maintains but also sees the same characteristics in the other men, when he returns to England, suggests that it is not a transformation caused by exceptional circumstances, but a potentiality of the human being, or, in Deleuzian terms, just one of the virtualities of the body without organs. Not animal enough to live on the island among the Beast People, Prendick is also not human enough to be accepted as a member of society: "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."266 He no longer fits in, but apparently neither do his fellowmen: "Then I look about me at my fellow men and I go

²⁶⁴ Starr, *op. cit.*, p. 52.

²⁶⁵ The Island of Doctor Moreau, cit., p. 102.

²⁶⁶ *Idem*, cit., p. 107.

in fear. (...) 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."²⁶⁷

Wells's constant inability or unwillingness to draw a line on the evolutionary scale, separating beast and man, savage and civilized, past and future suggests that these relationships should indeed be conceived of as an ontological continuum with immense potentialities, both in good as well as in bad. The distinctions have an instrumental value in undermining the smug anthropocentric mentality. If natural, biological evolution is not a guarantee for future improvement and progress of humankind, the question remains whether salvation can come from education, science and technology.

²⁶⁷ Ibidem.

Chapter 4. The Mad Scientist and the Failure of Reason

As anticipated in the previous chapters, Wells suggests that natural evolution alone does not guarantee improvement or progress of mankind. It would appear, therefore, that nature must be controlled or even opposed, and this can only happen by means of civilization. However, as with all things wellsian, the opposition is not between bad and good but between dimensions that should be balanced. Therefore, the idea that science and technology, as products of reason and civilization, are inherently good, needs to be reconsidered:

Nature can represent immoral regression from the high ethical attainments of civilization, but it can also represent energetic wholeness against civilization's decadent hypocrisy and formality. Or, while civilization may express an ideal of efficiently ordered distribution against nature's chaos and waste, nature can represent a welcome animal joy against civilization's stultification and ennui.²⁶⁸

The Time Machine, The Island of Doctor Moreau and The War of the Worlds are all novels that explore the implications of the Darwinian evolution theory, mostly blurring the distinction between species. In order to counteract anthropocentrism in general and imperialist smugness in particular, Wells emphasizes in his early narrative the bestial nature of man, his lack of self-control and tendency to degenerate. However, in opposition to the protagonists that illustrate this point, stand other characters such as Doctor Moreau, the Time Traveller, the Martians and even the Morlocks, who, at least for most of the narratives, enjoy a position of power not only on other people or creatures, but also on nature itself. They are characterized by self-control and cold rationality, and they manage to impose their will through technology and science. Therefore, from this perspective, they seem to oppose natural evolution as they try to surpass instincts and bestiality and they promote reason as the only path towards progress. Yet, from a different perspective, they are also a product of natural evolution, a degenerate one, as the technology they develop also proves to be a vulnerability and the developed mental abilities lead to the atrophy of other human traits, such as emotion. Therefore, the fundamental question is once again what defines humanity and what role do reason, science and technology play in altering the human being.

²⁶⁸ Huntington, *cit.*, p. 17.

4.1. The Mad Scientist: Doctor Moreau and the Time Traveller

In the nineteenth century, men of genius were often considered degenerates and mentally ill and this is reflected in Wells's narrative. At the time, authors like Nordau and Galton argued that "mankind had developed larger brains at the expense of muscular strength, reproductive capacity and moral sensibility"²⁶⁹. Consequently, any ulterior development of intelligence would compromise even more the other functions of the human body, and thus genius, as a deviation from normality, was linked to insanity and was in the same category as idiocy. One of its manifestations is monomania: a fixed idea, a pathological preoccupation that could prompt overweening ambition. It is this obsession that takes control over a sound mind that characterizes both Doctor Moreau and the Time Traveller:

Doctor Moreau is a memorable character, that profoundly disturbed contemporary readers and continues to leave a strong impression on readers and critics. Often compared to other well-known literary figures such as Dr. Frankenstein or Dr. Jekyll, and described as a "mad scientist villain", "ruthlessly intellectual", he can also be seen as a gothic character who receives somewhat of a divine punishment for his violation of fundamental moral and religious laws. The satirical religious nature of his laws and his desire to create humans shape Moreau as a God-like figure, while other critics see in him a metaphor of natural evolution. The fact that he creates his first human out of a gorilla, thus following the order of natural evolution, seems to support this interpretation: "Then I took a gorilla I had; and upon that, working with infinite care and mastering difficulty after difficulty, I made my first man. (...) I thought him a fair specimen of the negroid type when I had finished him"²⁷¹. Finally, in a more laic and historical perspective, his racist assumptions and ambition to civilize the savages connects him to colonialism.

Moreau is the only human invulnerable to the general regression and degeneration happening on the island, as his character remains immutable throughout the novel and his

Wells wrote his early scientific romances during the decade when interest in mad geniuses peaked in the popular press. His fictions faithfully adhere to neo-Lamarckian evolutionary theory (...) but add a fascinating new twists by morphing the mad scientists of *The Time Machine* and *The Island of Doctor Moreau* into the top-heavy extraterrestrials of *The War of the Worlds*.²⁷⁰

²⁶⁹ Anne Stiles, "Literature in Mind: H. G. Wells and the Evolution of the Mad Scientist", *Journal of the History of Ideas*, volume 70, 2, 2009, pp. 317-339, p. 319.
²⁷⁰ Idem, p. 331.

²⁷¹ The Island of Doctor Moreau, cit., p. 62.

ambition does not falter. Although he seems untouchable, he is the primordial cause of the degenerative nightmare that he is trying to combat, but repeatedly fails. He is a genius indeed, but a rather tormented one, as he lets himself consumed by an obsession that ends by destroying him and all those surrounding him. His tragedy comes from his unmeasured ambition, from his desire to control, transform and even improve nature according to his imagination. According to Glendening, "Moreau tries to free humanity, and himself first of all, from the evolutionary traces of its animal ancestors and thereby create a wholly rational creature, but his character is too enmeshed in the novel's evolutionary confusions to allow him this release."²⁷² He "consciously, not by chance, strives to create the more-than-human by first of all moving animals toward humanity; he attempts to encompass an entire evolutionary process, from animal to man and from man to superman."²⁷³ Yet what he accomplishes is rather a painful and grotesque transformation of animals and men alike, into subhuman creatures.

As previously mentioned, when *The Island of Doctor Moreau* was written, the British society was concerned with surgical practices such as vivisection, which rose the question of animal rights. By vividly describing the pain inflicted by Moreau in the chapter "The crying of the puma"²⁷⁴, Wells introduces the topic of torture and moral limitations of scientific experiments and such objections are voiced, in the novel, by Prendick: "Where is your justification for inflicting all this pain? The only things that could excuse vivisection to me would be some application"²⁷⁵. Moreau tries to justify his actions by invoking the plasticity of living things²⁷⁶ and minimizing the relevance of pain,

²⁷² Glendening, *cit.*, p. 52.

²⁷³ *Idem*, p. 58.

²⁷⁴ "The emotional appeal of those yells grew upon me steadily, grew at last to such an exquisite expression of suffering that I could stand it in that confined room no longer. (...) It was as if all the pain in the world had found a voice" (*The Island of Dr. Moreau*, cit., pp. 32-33).

²⁷⁵ *Idem*, p. 60.

²⁷⁶ "These creatures you have seen are animals carven and wrought into new shapes. To that, to the study of the plasticity of living forms, my life has been devoted. I have studied for years, gaining in knowledge as I go. (...) It all lay in the surface of practical anatomy years ago, but no one had the temerity to touch it. It is not simply the outward form of an animal which I can change. (...) A pig may be educated." (*Idem*, pp. 59-60).

which is only a sign of 277 . What he implies is that since it is possible to modify living things and to improve them until such a progress is achieved as to render pain superfluous, his project is fully justifiable, from a scientific as well as a moral point of view. He even suggests that his appreciation of the immense potential of these creatures is an active religious attitude: "Then I am a religious man, Prendick, as every sane man must be. It may be, I fancy, that I have seen more of the ways of this world's Maker than you – for I have sought his laws, in *my* way, all my life"²⁷⁸. However, the question regarding his motivation and the choice of the human form remains unanswered, as Moreau's explanation is vague and contradictory:

This passage alludes not only to religious satire but also to the degenerate artist, another important preoccupation of the epoch. Indeed, Moreau describes his activity as very similar to the degenerate 'art for art's sake', guided by curiosity and "the artistic turn of mind"²⁸⁰ : "I went on with this research just the way it led me. That is the only way I ever heard of true research going. I asked a question, devised some method of obtaining an answer, and got a fresh question."²⁸¹ But his stubborn persistency in trying to "burn out the animal" in spite of repeated failures proves that the human form was not chosen randomly but maybe its insurmountable difficulty motivates the scientist. Gradually, as his speech becomes more and more passionate, the true nature of his obsessive and cruel enterprise is revealed:

"Was this possible or that possible? 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. I wanted – it was

[&]quot;I asked him why he had taken the human form as a model. There seemed to me then, and there still seems to me now, a strange wickedness in that choice. He confessed that he had chosen that form by chance. (...) 'I suppose there is something in the human form that appeals to the artistic turn of mind more powerfully than any animal shape can."²⁷⁹

²⁷⁷ "A mind truly opened to what science has to teach must see that it is a little thing. It may be that save in this little planet, this speck of cosmic dust, invisible long before the nearest star could be attained – it may be, I say, that nowhere else does this thing called pain occur. (...) Pain is simply our intrinsic medical adviser to warn us and stimulate us. (...) Then with men, the more intelligent they become, the more intelligently they will see after their own welfare, and the less they will need the goad to keep them out of danger. I never yet heard of a useless thing that was not ground out of existence by evolution sooner or later. Did you? And pain gets needless." (*The Island of Doctor Moreau*, cit., p. 61).

²⁷⁸ Ibidem.

²⁷⁹ *Idem*, p. 60.

²⁸⁰ Ibidem.

²⁸¹ *Idem*, p. 62.

the one thing I wanted – to find out the extreme limit of plasticity in a living shape (...) To this day I have never troubled about the ethics of the matter' he continued 'The study of Nature makes a man at last as remorseless as Nature'²⁸².

He confesses that, in order to complete his experiments, he had to relinquish any trace of sympathy towards his subjects. Yet, in spite of the relentless work of twenty years, all his conquests are temporary. He claims that in the way of progress stand emotions, instincts and other desires, to which he opposes intelligence:

The human shape I can get now, almost with ease (...) But it is in the subtle grafting and reshaping one must need do to the brain that my trouble lies. The intelligence is often oddly low, with unaccountable blank ends, unexpected gaps. And least satisfactory of all is something that I cannot touch, somewhere – I cannot determine where – in the seat of the emotions. Cravings, instincts, desires that harm humanity, a strange hidden reservoir liable to burst forth suddenly and inundate the whole being of the creature with anger, hate or fear.²⁸³

Thus, Moreau's is a story of genius and unweaning ambition but also of failure in front of ontological obstacles. He manages to bend nature to his will, but only temporarily and it is not clear whether his death is an accident that interrupted a fruitful scientific enterprise, or the necessary outcome of a blasphemous attempt. Prendick's portrayal of Moreau alludes to something disturbing and frightening hiding underneath the apparent calmness and resoluteness:

I looked at him, and saw but a white-faced, white-haired man, with calm eyes. Save for his serenity, the touch almost of beauty that resulted from his set tranquility and his magnificent build, he might have passed muster among a hundred other comfortable old gentlemen. Then I shivered.²⁸⁴

His physiognomy may not display the typical traits of the degenerate man, but Moreau's "almost beauty" makes Prendick shiver because it is inhumanly cold and calm, lacking in emotion what it surpluses in genius and therefore he cannot picture him in the company of other men. Not coincidentally, Moreau is exiled and had to create his own society, a "caricatural" one, where he still dreams about obtaining the admiration and recognition of the English fellowmen²⁸⁵. From this perspective, Huntington highlights that, isolated and unhuman, Moreau covertly corresponds to the Martians:

If biology poses a clear distinction between human and nonhuman which is then overcome, intellect may offer no less problematic criterion for discrimination. (...) Moreau's genius is thwarted by society, and so he prays on society. As an intellect with no ethical sensibilities, Moreau is like the Martians,

²⁸² The Island of Doctor Moreau, cit., p. 62.

²⁸³ *Idem*, cit., p. 64.

²⁸⁴ *Idem*, cit., p. 65.

²⁸⁵ "was in a mind to write an account of the whole affair to wake up English physiology (...) came home resolved to do better before I took my work back to England", *idem*, cit., p. 63.

but without the physiological difference that enforces separation in the War of the Worlds. It is his action, not his appearance, that has driven Moreau apart. (...) now the imaginative achievement is to get past an urge to admire Moreau as an exceptional human and to see how inhumane he is.²⁸⁶

While Huntington describes him as "the most complex alien, the isolated scientist, the exceptional human"²⁸⁷, Stiles also compares Moreau to the Martians but highlights the role played by the contemporary concern regarding genius and insanity. She argues that Wells used Nordau's and Galton's theory, according to which larger brains compromised muscular strength, reproductive capacity and moral sensibility, in shaping the character of Moreau and the Martians:

Beginning with the eponymous mad scientist villain of *The Island of Doctor Moreau* and continuing with alien invasion narratives like *The War of the Worlds (...)* Wells depicts brains becoming steadily larger and more powerful as bodies grow smaller and more useless, emotions increasingly muted, and conscience all but silenced. Wells's nightmarish vision of the massively over-evolved brain unites these three works, as the ruthlessly intellectual biologist Moreau morphs into the amoral, top-heavy Martians and lunar inhabitants.²⁸⁸

Moreau's obsessive preoccupation or monomania, his degenerate moral sense, lack of family life and social isolation, are all traits of the nineteenth century genius, a such a mad and degenerate genius that determines Stiles to state that "Dr. Moreau's overdeveloped rationality is the monstrous presence on the island, not the grafted hybrids he creates"²⁸⁹.

A different interpretation comes from Starr, who argues that Moreau is the figure that fuels the Deleuzian transformations and rhizomatic connections between Wells's narrative and Darwinian theory:

However, regardless of whether he is a God in the conventional understanding of the term, or a metaphor for Darwinian theory, in either sense Moreau functions as an agent of deterritorialization, in that his experiments create lines of flight from the dominant modes of life.²⁹⁰

In order to establish Moreau's moral status, Starr adopts a relativistic frame, according to which his actions are not inherently bad. Their moral quality and their success depend instead on the effects achieved:

^{...} transcendent categories of good and evil are abandoned, and instead a "good" individual seeks to make connections that increase their power to act, while at the same time not diminishing similar powers in others. The "bad" individual does not organize their encounters in this way and either "falls back into

²⁸⁶ Huntington, *op. cit.*, p. 69.

²⁸⁷ *Idem*, p. 70.

²⁸⁸ Stiles, *op. cit.*, p. 319.

²⁸⁹ *Idem*, p. 333.

²⁹⁰ Starr, *op. cit.*, p. 63.

guilt and resentment, or relies on guile and violence". Moreau would appear to be applicable in either category; he believes that he is increasing the potentiality of his animal subjects (albeit for his own purposes of scientific curiosity), but is reliant on violence (in the form of his gruesome surgical operations) in order to achieve this.²⁹¹

His continuous experimentation on the animal body, the extreme exploitation of its potentialities and limits are perfectly coherent with the Deleuzian concept of 'becoming'. Yet, he is unsuccessful and his failure is related to the oppressive nature of the transformation he imposes: "However, rather than enabling new becomings (as would appear to actually be his ambition), Moreau's actions are actually reducing bodily potentials".²⁹² Since their becoming was imposed on the Beast Folk and was not the result of a consensual transformation, it can only fail: "the animal subjects have had their becomings forced upon them regardless of their own desires, hence Moreau's efforts to come to know "what a body can do" are nullified by the very act of his enforcing the assemblages of the self same bodies".²⁹³ As Prendick observes, Moreau's intervention through surgery and law upon the Beast Folk does not free them and does not enhance their potential, but on the contrary, limits them, suffocates their desires and instincts without providing an alternative. The beast folk's development is limited as they must abide by strict rules imposed by Moreau and thus are forced to live in a labyrinth of unjustified and incomprehensible norms, which can only be violated. Consequently, they revert to something similar to what they originally were, unable to regain their original, primitive innocence or to become the supreme civilized beings Moreau envisioned: "instead of a successful transformation, certain proprieties or potentials of both human and animal combine in new and monstrous amalgamations."²⁹⁴

Another exiled and tormented character is The Time Traveller, certainly a genius, whose extraordinary discovery of the fourth dimension challenges the most basic assumptions regarding reality, and allows him to bend what seemed an unsurpassable law of nature and travel through time. However, he is also close to the mad scientist trope: isolated from his fellowmen²⁹⁵, rational to the point that this affects his ability to be compassionate, and consumed by his monomania – his lifelong research. As addressed in

²⁹¹ Starr, *op. cit.*, p. 69.

²⁹² *Idem*, p. 70.

²⁹³ *Idem*, pp. 70-71.

²⁹⁴ *Idem*, p. 65.

²⁹⁵ His social attitude is very contradictory as he willingly exiles himself by travelling in the future, then he is profoundly anguished at the thought of never returning to his time; yet, in the end, he decides to leave again.

the previous chapter, his discovery, the Time Machine, remains a priority in spite of anything else, and he practically sacrifices the closest human being to him, Weena, for it. The narrative, and presumably his life as well, is dominated by the process of building the machine, then by its search: "that way lies monomania (...) the thought of the years I had spent in study and toil to get into the future age, and now my passion of anxiety to get out of it. I had made myself the most complicated and the most hopeless trap that ever man devised."²⁹⁶ McLean argues that the Time machine is a central element, if not the purpose, of the traveller's life, as this invention "had consumed all his energy"²⁹⁷. Indeed, the Time Traveller reacts passionately to the events involving his machine as he is unable to spare his mental energies and resources but instead allows himself to be consumed by impatience, excitement, fear and desperation: "weeping with absolute wretchedness. I had nothing left but misery"²⁹⁸. Just as the overdeveloped intelligence takes over other functions, so his interest towards the Time Machine is not strictly rational and scientific, but seems to acquire an emotional and affective dimension:

This interpretation reveals, on the one hand, how all-consuming his scientific endeavor is, proving that it can be considered a monomaniac behavior typical of the genius man. On the other hand, it also suggests that while technology is generally considered an instrument through which one imposes his will and power, it can also be something that consumes power and will and that renders its owner vulnerable. These are only two aspects of a multi-faceted concept of technology developed in Wells's early narrative.

First of all, the time machine itself, once stolen, becomes the instrument through which the Morlocks dominate the Traveller. The same technology that enabled him the absolute freedom, the travel through time, once removed out of his possession entraps him in a determinate space and time. The limitations are not only physical but psychological as well, since it affects his ability to reason: "It was a foolish impulse, but the devil begotten of fear and blind anger was ill curbed and still eager to take advantage

Thus in the scientific romance, the technological creation replaces the woman as the object of emotional gratification. This is revealed explicitly in the moment when the Traveller finally regains his Machine, where he finds 'a pleasure in the mere touch of the contrivance'. The narrator of the novel captures the almost irresistible fascination which machines hold for men.²⁹⁹

²⁹⁶ The Time Machine, cit., p. 40.

²⁹⁷ McLean, *op. cit.*, p. 19.

²⁹⁸ The Time Machine, cit., p. 38.

²⁹⁹ McLean, *op. cit.*, p. 21.

of my perplexity³⁰⁰. It is because of the Time Machine's loss, which consumes all his energies that the Time Traveller does not benefits from his travel, he fails to gain any significant knowledge. Its recovery becomes the main and only objective and the Morlocks are aware of that as they try to lure and capture him. The only enemies of the Time Traveller are, not coincidentally, the technological men of the future, the Morlocks, who antagonize him by stealing the machine and attacking the Eloi. Technology therefore not only arises from intelligence, but also has a role in preventing intelligence from disappearing, as was the Eloi's case: "the under-world being in contact with machinery, which, however perfect, still needs some little thought outside habit, had probably retained perforce rather more initiative, if less of every other human character, than the Upper."³⁰¹

Secondly, this conflict reveals that technology is a weapon and therefore it can become an advantage as well as a weakness, depending on whose hands it is in: "The thrill of the technological breakthrough is not that it benefits everyone but that it produces a singular, drastic difference between those who possess the new invention or power source and those who do not."³⁰² Thus, technology can be transformed in power over other individuals or entire populations, as is the case of colonial exploitation. Both the Morlocks and the Time traveler dispose of such tools that makes them superior in comparison to the Eloi. This is the element that connects them but also establishes a competitive and belligerent relationship. The Morlocks are introduced in the narrative as obscure creatures, whose hidden, dark and ugly nature suggests inferiority and primitivity. These traits make the Time Traveller hate and underestimate them, but soon their intelligence astounds him: "This is what dismayed him: the sense of some hitherto unsuspected power, through whose intervention my invention had vanished".³⁰³ As it will be revealed, the Morlocks owe their power to the use of technology and their repulsive underground world is much more civilized than the ruinous palaces of the Eloi:

Though the Morlocks are hairy, have an apelike posture, cannot bear light and live in burrows of a sort, any simple equation of them with the lower animals won't do. They live amidst thudding machines, and their habitat is artificially ventilated. (...) Thus, though their specific intellectual and emotional

³⁰⁰ *The Time Machine*, cit., p. 39.

³⁰¹ *Idem*, p. 84.

³⁰² Rieder, *op. cit.*, p. 32.

³⁰³ The Time Machine, cit., p. 36.

capacities remain largely unknown, symbolically they subsume one aspect of what we admire in civilization: organized technological mastery.³⁰⁴

Such a conflict cannot be resolved peacefully and by other means than technology, which is also used by the Time traveler as a weapon. Excepting his now lost machine, he arrives in this future world completely unprepared, without any tools or weapons, and therefore is forced to recur to the oldest, most primitive form of technology, fire: "For the Time Traveller to be a master of fire is for him to have an intellectual dominance, and the safety match becomes a symbol of present-day technology."³⁰⁵ The match is a complex instrument that, Huntington observes, the Time Traveller employs to various purposes. Firstly, it is used to see in the dark and observe the Morlocks in their obscure habitat, therefore it can be said to provide access to knowledge; secondly, it is also used as a weapon or, alternatively, as a means of entertainment. During his interrogations of Weena and other Eloi regarding the Morlocks, the protagonist fails to obtain any helpful information and only manages to frighten them profoundly. In front of such a reaction, he recurs to matches to entertain the Eloi and compensate the distress he has caused, but thus renounces the opportunity to learn more: "the match is used for entertainment at the expense of further knowledge to sustain a complacent happiness which is, in fact, an illusion"³⁰⁶. He will later regret such a careless and shallow behavior, which costs him a precious tool in the confrontation with the Morlocks, in front of whom the only advantage and weapon are fire and light: "It had never occurred to me until that moment that there was any need to economize them, and I had wasted almost half of the box in astonishing the Upper-worlders, to whom fire was a novelty"³⁰⁷. In comparison, the Morlocks' attitude towards technology is more prudent and careful than the Traveler's because they steal the machine and take care of it. Although they probably do not understand how it functions, their behaviour suggests that they can intuit its importance and potential: "I was surprised to find it had been carefully oiled and cleaned. I have suspected that since the Morlocks had even partially taken it to pieces while trying in their dim way to grasp its purpose"³⁰⁸. Moreover, in its weapon function, technology can be abused and can

³⁰⁴ Huntington, op. cit., p. 46.

³⁰⁵ *Idem*, p. 49.

³⁰⁶ Ibidem.

³⁰⁷ The Time Machine, cit., p. 57.

³⁰⁸ *Idem*, p. 85.

encourage violence, as it happens with the protagonist, who becomes cruel and sadistic in his battle with the Morlocks as soon as he feels empowered by the use of a tool:

I was overpowered, and went down. I felt little teeth nipping at my neck. I rolled over, and as I did so my hand came against my iron lever. It gave me strength. I struggled up, shaking the human rats from me, and holding the bar short, I thrust where I judged their faces might be. I could feel the succulent giving of flesh and bone under my blows (...) I knew that both I and Weena were lost, but I determined to make the Morlocks pay for their meat. I stood with my back to a tree, swinging the iron bar in front of me.³⁰⁹

Thirdly, technology proves insufficient or not reliable enough and, therefore, those who depend on it completely are in fact vulnerable. As the time traveler suggests, there are situations when one must be endowed with natural weapons, capacities and abilities. The narrative shows that technology can often turn against its owner. First of all, the disappearance of the Time Traveller puts him in an extreme, almost insurmountable difficulty. Secondly, the camphor he plans to use against the Morlocks makes him fall asleep instead, and thus he loses control over the fire: "Now, the smoke of the fire beat over towards me, and it must have made me heavy of a sudden. Moreover, the vapour of camphor was in the air"³¹⁰. Finally, more than once he plans to use his matches against the Morlocks but they are either lost or unusable: "Simple as matches seem as a tool, they express the paradox of technological sophistication that is at once the mark of civilized achievement and control and at the same time an alienation from the natural instincts and powers of animal humanity"³¹¹.

All these examples concur to build another of Wells's oppositions: technology is a product of civilization and evolution, but it can also determine regression by being misused, abused or underestimated:

The ability to make a tool is a mark of humanity's evolutionary success; a dependency on tools already made is a mark of civilization's weakness. Yet in Wells's work frequently the act of making a tool entails violence and a reversion to a state of nature precedent to civilization; is an act both of a human capable of civilization and of an efficient aggressive animal. Tools, therefore, offer intricate possibilities for mediation between the states of civilization and nature.³¹²

³⁰⁹ *Idem*, p. 79.

³¹⁰ *Idem*, p. 78.

³¹¹ Huntington, *op. cit.*, p. 77.

³¹² *Idem*, p. 76.

4.2. The Martians or the failure of reason

It is precisely the empowering-debilitating dynamic of technology that defines the Martians. As they arrive on Earth, it is evident that they are not fit for this environment and they seem helpless and harmless:

 \dots rising slowly and painfully (\dots) the tumultuous breathing of the lungs in a strange atmosphere, the evident heaviness and painfulness of movement due to the greater gravitational energy of the earth (\dots) it had fallen into the pit, with a thud like the fall of a great mass of leather. I heard it give a peculiar thick cry.³¹³

However, it is their intellect, manifested by technological means such as the Tripods, the Heat Ray and the Black Smoke³¹⁴, that compensates for the physical insufficiencies ("we all overlooked the fact that such mechanical intelligence as the Martian possessed was quite able to dispense with muscular exertion at a pinch"³¹⁵), and does so to such a high degree that the Martians manage to impose their dominion and threaten the survival of mankind itself:

Then it was, and then only, that he realised something of the full power and terror of these monsters. He learned that they were not merely a handful of small sluggish creatures, but that they were minds swaying vast mechanical bodies; and that they could move swiftly and smite with such power that even the mightiest guns could not stand against them.³¹⁶

The repulsive and clumsy bodies are mechanically enhanced into a menacing, fast and gracious hybrid creature: "the Thing was incredibly strange, for it was no mere insensate machine driving on its way. Machine it was, with a ringing metallic pace, and long, flexible, glittering tentacles swinging and rattling about its strange body"³¹⁷. Their nature is initially indeterminate, as the narrator wonders what "relationship between these mechanical colossi and the sluggish lumps"³¹⁸ there is, but the fact of their technological superiority is undoubtable: "It's bows and arrows against the lightning, anyhow"³¹⁹.

³¹³ The War of the Worlds, cit., p. 21.

³¹⁴ By imagining these future weapons of the Martians, Wells in fact anticipates the terrible events that marked world's history: "an enormous volume of heavy, inky vapour, coiling and pouring upward in a huge and ebony cumulus cloud, a gaseous hill that sank and spread itself slowly over the surrounding country. And the touch of that vapour, the inhaling of its pungent wisps, was death to all that breathes" (*The War of the Worlds*, cit., p. 95).

³¹⁵ *Idem*, p. 34.

³¹⁶ The War of the Worlds, cit., p. 83.

³¹⁷ *Idem*, p. 50.

³¹⁸ *Idem*, p. 55.

³¹⁹ *Idem*, p. 64.

However, as soon as the first 'Thing' is destroyed, the symbiotic relationship between the machine and the Martian is revealed: "The living intelligence, the Martian within the hood, was slain and splashed to the four winds of heaven, and the Thing was now but a mere intricate device of metal whirling to destruction. It drove along in a straight line, incapable of guidance."³²⁰ In its "death", the machine behaves as a body and the description is intentionally anthropomorphic and confusing:

The tentacles swayed and struck like living arms, and, save for the helpless purposelessness of these movements, it was as if some wounded thing were struggling for its life amid the waves. Enormous quantities of a ruddy-brown fluid were spurting up in noisy jets out of the machine³²¹.

What makes these characters stand out is, as Lem observes, the perfect harmony established between the physical, vulnerable component and their mechanical, highly effective frame:

... as for me, I confess that there is nothing more weird in the Martians' depiction than the incredible contrast between their individual, physiologically ponderous helplessness, and the agility of their colossal Fighting Machines, those tripods resembling nothing on earth. A modern expert will see in these machines the incorporation of the most advanced concepts, above all in bionics – artificial imitation of and improvement upon such solutions as have been created by the process of the evolution of life.³²²

The impossibility to distinguish between flesh and machine³²³ creates the suggestion of a hybrid creature and critics such as Rieder refer to them as the first prototype of cyborgs:

I propose that one of the most striking ways early science fiction handles the discourse of race is in these two repetitive, complementary figures of anatomical distortion, the hybrid and the cyborg.(...) Wells's Martians are the prototypal cyborgs of early science-fiction. Their combination of prosthetic supplementation and organic atrophy is one of the most influential, widely imitated inventions in the field.³²⁴

The technological nature of the Martians raises the problems already mentioned, such as the idea of technology as a weapon, used to impose one's supremacy over others, in particular in imperialist context; and the vulnerability that such a dependence involves.

³²⁰ *Idem*, p. 68.

³²¹ *Idem*, p. 69.

³²² Stansislaw Lem, "H. G. Wells's *The War of the Worlds*", in Garnett R., Ellis R.J. (eds), *Science Fiction Roots and Branches. Insights*. Palgrave Macmillan, London, 1990, pp. 18-29, p. 21.

³²³ "Its motion was so swift, complex, and perfect that at first I did not see it as a machine, in spite of its metallic glitter. (...) At first, I say, the handling machine did not impress me as a machine, but as a crablike creature with a glittering integument, the controlling Martian whose delicate tentacles actuated its movements seeming to be simply the equivalent of the crab's cerebral portion." (*The War of the Worlds*, cit., p. 135).

³²⁴ Rieder, *op. cit.*, p. 111.

Moreover, technology can also be interpreted as degeneration, because these prosthetic machines arise from and determine the mutilation of the body:

The cyborgs stand for the dominant half of a number of hierarchical binary oppositions: the future as against the past, the mind as against the body, civilization against savagery, the human as against the animal, the master as against the slave. But they also destabilize these hierarchies, because the anatomical enhancement of their brains and prosthetic supplementation of their senses that gives them their power is simultaneously a mutilation of their bodies. (...) [they] represent a horrific divorce of culture from nature.³²⁵

Starr shares the idea that the Martians "are literary forerunners of the concept of the cyborg"³²⁶ and further argues that technology is crucial in the confrontation between civilizations, due to its destructive potential:

... the novel posits technological advance as the very thing that allows and facilitates the invasion and destruction of one culture by another. Conversely however, this also implies the necessity of science for the maintenance and propagation of a culture; Wells implies that technology should not be the main focus of a society, but also suggests that unless a country keeps up with the technology of the world, that country will eventually be destroyed by that same technology.³²⁷

In describing the Martians' invasion, Wells repeatedly compares its merciless nature and destructive consequences to the British Empire's attitude towards the dominated populations. If cultural superiority "justifies" expansion and technological supremacy is used as a weapon on Earth, the consequence is that the Martians are exonerated from any guilt if they use their advantages in the same way.

Besides their innovative use of technology, the Martians are also remembered for their unusual appearance. Developing the idea anticipated in his article "The man of the year million" (1893), where he hypothesized that in the course of their future evolution, men will lose more and more of their ape-like traits, have a bigger brain and a smaller body, Wells describes the Martians as mere heads, with a developed brain and no internal organs with the exception of heart and lungs:

^{...} huge round bodies – or rather, heads – about four feet in diameter, each body having in front of it a face. This face had no nostrils – indeed, the Martians do not see to have any sense of smell (...) In a group round the mouth were sixteen slender, almost whip like tentacles, arranged in two bunches of eight each (...) the *hands*. Even as I saw these Martians for the first time they seemed to be endeavouring to raise themselves on these hands (...) The internal anatomy (...) was equally simple. The greater part of the structure was the brain, sending enormous nerves to the eyes, ear, and tactile tentacles.³²⁸

³²⁵ *Idem*, p. 115.

³²⁶ Starr, *op. cit.*, p. 85.

³²⁷ Ibidem.

³²⁸ The War of the Worlds, cit., p. 136.

This is suggestive of their highly evolved nature, whose consequence is a presupposed massive intellectual capacity at the expense of an evident lack of other bodily functions, such as sleep and digestion, which makes them even more effective and free from human weaknesses:

Strange as it may seem to a human being, all the complex apparatus of digestion, which makes up the bulk of our bodies, did not exist in the Martians. They were heads – merely heads. Entrails they had none. They did not eat, much less digest. (...) Men go happy or miserable as they have healthy or unhealthy livers, or sound gastric glands. But the Martians were lifted above all these organic fluctuations of mood and emotion. ³²⁹

Moreover, they have also evolved beyond sexual reproduction, which again deprives them of - or frees them from - the "tumultuous emotions that arise from that difference among men"³³⁰. On the one hand, in coherence with the neo-Lamarckian theory, the evolution of their intellect compromises the development of their body, which is ridiculously fragile and will indeed be defeated, in a Darwinian twist, by the smallest organisms on Earth. On the other hand, though, they are highly intelligent, machine-like creatures, free from any instinct and emotion that might compromise their rationality: the accomplishment of Moreau's dream, performed by the hands of Natural Evolution:

Here in the Martians we have beyond dispute the actual accomplishment of such a suppression of the animal side of the organism by the intelligence. To me it is quite credible that the Martians may be descended from beings not unlike ourselves, by a gradual development of brain ... at the expense of the rest of the body. Without the body the brain would, of course, become a mere selfish intelligence, without any of the emotional substratum of the human being.³³¹

Rieder also associates the Martians with Moreau, whose complete lack of empathy and consideration towards humans (or almost humans) renders him as alien and mechanical as them:

In *The Island of Dr. Moreau*, Moreau's arrogance and his lack of any sense of moral responsibility for the results of him experiments anticipate the soulless calculation with which the Martians destroy human lives. Moreau is no cyborg – his only prostheses are the scalpel and the whip – but his alienation of intellect from emotion and his instrumentalization of bodies earns him a place in the cyborg's genealogy.³³²

In all these novels reason fails because the protagonists depending on it are ultimately unable to anticipate and overcome the difficulties they face, such as the scenario of a dystopic future, the loss of the Time Machine and the tragic battle with the Morlocks for

³²⁹ *Idem*, p. 137.

³³⁰ *Idem*, p. 138.

³³¹ The War of the Worlds, cit., p. 139.

³³² Rieder, *op. cit.*, p. 112.

the Time Traveller, the regression of the Beast-Folk in the case of Dr. Moreau and, finally, biological unfitness to the Earth's environment for the Martians. Their superior intelligence and scientific or technological advantages prove insufficient and the most notable lack is that of compassion, solidarity and moral sense. Thus, Moreau, the Martians and the Morlocks present the problem of human evolution and its enhancement through scientific and technological means. Related to this, another issue is that of the exploitation of a species or race, ensuing from evolutionary and technological superiority or in order to achieve such progress. Taking into consideration that higher intellect, resulting in superior power, seems to be accompanied by an atrophy of emotion and empathy towards the Other, as illustrated by the novels, the selfishness and merciless of such domination would be uncontrollable. The problem is relevant not only in the context of a dystopic scenario, but can also be connected to contemporary concerns regarding the technological and scientific progress, whose outcome is hard to predict. The essence of Moreau's practices can be recognized in genetic engineering and xenotransplantation, which violates the border between human and non-human organisms and gives birth to chimeras of its own. Therefore, Wells's early narrative and current scientific developments raise similar moral interrogations. A comparative analysis could be fruitful both in proving the pertinency and intuitive power of Wells's novels after more than a century from their publication, and in providing an imaginative appeal to the contemporary ethical debates:

Multidisciplinary research, such as combining findings from biotechnology with critical readings of literary works, can open up new questions and debates that are of high importance regarding human and other animal life, and especially regarding future scenarios of how all beings can live together in greater harmony without destroying other species, or the environment.³³³

³³³ Anne Franciska Pusch, "Splices: When Science Catches Up with Science Fiction", *Nanoethics*, 9, pp. 55–73, 2015, p. 72.

Chapter V. Biotechnological enhancement of the human being and the role of science-fiction in establishing its moral limitations

Emerging technologies aiming at modifying or improving living creatures have been the subject of significant bioethical debate, with significant interdisciplinary contributions. They affect not only the human realm but also the non-human one, the latter being often the one on whom these technologies are firstly tested. However, the topic of animal studies cannot be exhausted here, nor can that of genetic engineering. The aim of the chapter, instead, is to show how Wells's early narrative can be interpreted from the perspective of these contemporary debates and to speculate upon Wells's position on such issues which raise the same fundamental interrogation posed by his narrative, such as defining humanity in the context of evolution and continuous pursuit of perfection:

These possibilities simultaneously inspire excitement and, for some perhaps, dread at the prospect of an enhanced future for the human race, and thereby raise ethical and philosophical questions about the use of enhancements and the very nature of humanity itself³³⁴.

In particular, the Island of Doctor Moreau can be associated to the debates regarding the dignity of humans and non-human animals and the need of moral limitations on scientific practices and experimentation performed on animals. As critics have repeatedly observed, it can be said that, in describing Moreau's enhancement of non-human animals, Wells alludes at the moral problems that are also raised today by biotechnology:

However, other novels such as *The War of the Worlds and The Time Machine* also explore the dynamic between human and non-human, with a particular focus on selective breeding and exploitation, as well as reproductive practices and negative outcomes of evolution and enhancement. The problems raised by biotechnology, that will be addressed in this chapter, regard the dignity of humans but also of non-human animals, the morality of

a mad scientist who alters animals in order to make them more human; and in our present-day world of genetic engineering and xenotransplantation, as well as advocacy of animal legal and civil rights, its subject matter has never seemed more pertinent.³³⁵

 ³³⁴ Sarah Chan, "Should we enhance animals", *Journal of Medical Ethics*, 35, 2009, pp. 678-683, p. 678.
 ³³⁵ Sherryl Vint, "Animals and Animality from the Island of Moreau to the Uplift Universe",

The Yearbook of English Studies, Science Fiction, Vol. 37, No. 2, 2007, pp. 85-102, p. 85.

genetic engineering, xenotransplantation, creation of chimeras and human enhancement. Finally, the role of science fiction in the public debate will be analyzed, as it has been observed that the media often rely on literary references to positively or negatively frame their account on biotechnology.

5.1. Enhancing evolution: from domestication and selective breeding to genetic engineering

The human intervention in natural evolution dates to the Agricultural Revolution, when humans have begun to domesticate plants and animals and to practice selective breeding. This generated an extraordinary progress of the human societies, which led to the modern world. However, selective breeding has limited effects whereas

modern genetic engineering constitutes a qualitative break from these ancient efforts. (...) Rather than altering genes indirectly through the manipulation of breeding behavior (or artificial insemination/IVF), genetic engineering directly modifies the genomes of gamets or early embryos in order to produce a desired phenotype that will be transmitted to the next generation through ordinary reproduction.336

Transgenesis, the transfer of genes across isolated, not related lineages, is one of the controversial practices aiming at enhancing plants and animals³³⁷. Even if pragmatic worries can be dismissed with, a reluctance towards the immoral nature of such a practice remains: "The prospect of transferring genes or living tissues between species that have been on distinct evolutionary paths for tens or hundreds of millions of years, strikes many people as hubristic and disrespectful, constituting a moral affront to nature itself."³³⁸ The fundamental issue therefore is whether the outcome of natural evolution should be respected at such or it may be intervened upon. Those who oppose human enhancement argue that "natural selection will gradually improve organismic function over long spans of evolutionary time, resulting in biological design that is optimally suited for its place in

³³⁶ Russel Powell et al., "Evolution, Genetic Engineering, and Human Enhancement." Philosophy & Technology 25(4), 2012, pp. 439-458, pp. 441-442.

³³⁷ Its sustainers argue that this practice is not against nature since, in fact, much of the genome of animals, including that of humans, already contains such foreign genes, often introduced by viruses which "subvert host immune systems, infect germ line cells, and integrate novel genetic elements into the host genome that may be transmitted down to generations.", Powell et al., cit., p. 448.

³³⁸ *Idem*, p. 447.
the stable economy of nature"³³⁹. Not only it is "unlikely to be improved upon by human genetic engineers but many fear the unintended and unforeseen consequences that might ensue from such "deep" interventions"³⁴⁰ However, it has been pointed out that natural selection does not act towards the wellbeing of the species, but towards their fitness. Since in the case of the human species at least, wellbeing is distinct from reproductive fitness, it cannot rely on natural selection alone but, moreover, it has

a moral obligation to use neuroenhancements to maintain and reinforce human pair bonds (...) the same brain regions and biochemical pathways that underwrite monogamy in certain non-human mammalian species could be tweaked or coopted to achieve similar results in humans, bringing human behavior in better alignment with human moral values³⁴¹.

The use of nonhuman animals in current scientific research proliferates and goes further than genetic engineering. Whereas transgenesis has mainly been used in agriculture as a means to increase production and profitability, there are also other applications, even more controversial. With great demand worldwide, organ transplantation is a critical, and potentially growing, field of interest in bioethics and, since the problem seems unlikely be solved with human donors alone, viable alternatives are needed. to Xenotransplantation is such a solution, where transplantation of organs or tissue is performed between different species. The risk of this procedure lies in the different genetic make-up of species. It can be said the closer the species, the less likely it is the transplanted organ will be rejected. However, ethical concerns regarding the use of primates, who are genetically closer to humans, play a role, as well. Therefore, the choice often falls on the pig, which is close enough to humans, especially in size, but also raises minor ethical issues, since it is already used for human food production and bred in large numbers. In addition, humans in general do not regard themselves as very close to pigs and many do not oppose using them as a food source. The use of primates would pose different ethical concerns, as they are so closely related to humans, and the public opinion has an increased understanding of animal welfare, or even animal rights, when it comes to primates. While this specific problem is not explicitly raised in The Island of Doctor Moreau, where species are used indistinctly, the issue of the connection between experimentation on humans and or animal is made explicit by Prendick's confusion and

³³⁹ Powell et al., *op. cit.*, p. 449.

³⁴⁰ *Idem*, p. 449.

³⁴¹ *Idem*, p. 451.

objections. Consequently, Vint argues that Wells's approach of the human/animal boundary can be read as a critique of science:

The scientist has been constructed on the basis of a myth of objectivity, distance, disembodiment, and separation from the world of nature. The rest of nature – including those reduced to the body, such as women, the lower classes, and non-whites – can be used and exploited as raw material, their agency erased from the official discourse of science. (...) Animals, in contrast, despite many connections to humans (...) are traditionally viewed as occupying a sufficiently separate category that our many uses of them as resource are not considered abuses or morally significant. Particularly when it comes to the boundary of science, however, the degree to which animals as well are problematic figures becomes apparent. They must be sufficiently different from humans for it to be morally defensible to torment them for research and kill them when that research is complete. At the same time, however, they must be sufficiently similar to humans for the research results to be deemed pertinent to human health.³⁴²

Moreau tries to dismiss Prendick's objections regarding the cruel nature of his experimentation and justifies himself by arguing that he can inflict torture on animals because they are inferior, less evolved. However, this idea is self-contradictory because their animality must be potentially human for his experiment to make sense. Moreover, the novel repeatedly suggests that the line between human and animal is very thin and blurred, therefore it is not clear how one can morally distinguish between torture inflicted on men versus animals, as Prendick's confusion regarding the nature of Moreau's victims suggests. In addition, the novels insistently contradict the idea that humanity is pure rationality, and demonstrate that "being embodied, experiencing pain, having instincts and fears – these qualities mark one's humanity as profoundly as any other qualities."³⁴³ Where these traits are absent, the creatures are perceived as non-humans, as is the case of the Martians, and even of Moreau. Instead, when these qualities surface, as they do in The Time Machine, they render the Eloi recognizable as human descendants. Whether emotions should play a role in moral decisions is debatable, since they can be misplaced or obscure ethical reasoning. However, Wells's message is that without emotions, man will behave cruelly and selfishly. Only with empathy, that is recognizing oneself in others, can one respect others and their bodies, as Prendick proves. Perhaps one of the least rational human characters of the novel and with a questionable morality as well, he does show compassion and mercy towards the Beast Folk. The fact that their regression is initiated by Montgomery's violation of vegetarianism is significant of the double standard on the island. On the one hand, animals are considered "almost humans" but, on the other

³⁴² Vint, *op. cit.*, p. 91.

³⁴³ Rohman, *op. cit.*, p. 131.

hand, they are also treated as mere meat, cruelly dismissed with, abandoned or even murdered. It is men's violation of the boundary and their inconsistency in treating the Other that initiates the degeneration:

the status of 'human' is something that many homosapiens risk losing in specific configurations, which is why the question of the human/animal boundary is of ethical import not merely for the sake of the welfare of animals and not only in the context of animal experimentation and human/animal chimeras. Rather, this boundary is foundational for ethics in total.³⁴⁴

Such inconsistency has been noticed in moral theory as well. As Evelyn Pluhar explains, we assume that

our status as "higher" beings, as moral agents with richly complex, autonomous lives, warrants the exploitation of those with "lesser" abilities. Most of us, however, have no wish to experiment upon or "harvest" mentally deficient humans for their meat, skins or organs. Yet, some humans have even lesser mental abilities than the nonhumans "stocked" laboratories and farms.³⁴⁵

Such a differential treatment cannot be justified, she continues, and therefore, if such rights are granted to human beings who are not autonomous, "the sphere of moral considerability and basic moral rights must include many nonhumans"346, they should also be granted to animals³⁴⁷. Moreau instead dismisses the creatures that lose, under his treatment, not only moral rights but even the status of living beings as they are perceived and used as objects:

When looking at Moreau as an artist, one must also interrogate the materials with which he creates his art. That animals are presented as the raw material of Moreau's artistic labour illuminates his propensity to view animal bodies as energy or fuel, a resource available for human consumption.³⁴⁸

Most of the human population today encounters nonhuman animals on a daily basis as food items and considers breeding and consuming animals a morally acceptable practice. However, this position is not unanimously accepted and some express this concern in ethical debates as well as in literature. Wells also addressed this issue, either as the consumption of animals or under the metaphor of cannibalism, in *The Island* as well as in the two other novels. The artilleryman's speech from The War of the Worlds as well as

³⁴⁴ Vint, *op. cit.*, p. 99.

³⁴⁵ Evelyn Pluhar, "Is there a Morally Relevant Difference Between Human and Animal Nonpersons?", Journal of Agricultural Ethics, Volume 1, 1988, pp. 59-68, p. 59. ³⁴⁶ Ibidem.

³⁴⁷ The opponents of this idea sustain instead that while there is no difference between these marginal humans and animals, the exploitation of the latter is not justifiable either because it would produce unacceptable side-effects by distressing relatives and other humans.

³⁴⁸ Sarah Faulkner, "Dark Artistry in *The Island of Doctor Moreau*", in Godfrey, op. cit., pp. 175-187, p. 183.

its imaginative realization in *The Time Machine* both raise the issue of breeding and consuming creatures. By reverting the roles and putting humans in the position of the consumed and no longer the consumer, Wells emphasizes that the difference between carnivorous and cannibalistic behaviour is relative and that a widely accepted behaviour can, under close scrutiny, prove to be less problematic and morally acceptable.

Moreau's experiments can be interpreted not only as violating the animals' dignity but also as threatening the status of the human beings. Since the men from the island, such as Prendick and Montgomery, regress and lack the same qualities that Moreau wants his creatures to achieve, they seem to lose their superiority. Therefore, if superhumans were to be achieved by means of genetic engineering and xenotransplantation, it seems that not enhanced men would lose their privileged position. They would have to either submit themselves to the same practices in order to be improved and rise at the level of the super-humans, or to accept an inferior status.

The enhancement of humans is a central issue in contemporary science and ethical debate. As Capella argues, the development of in vitro fertilization therapy proved that "human reproduction was something which could take place outside intercourse. It could be a process that was subject to quality control in a laboratory."³⁴⁹ From choosing the best embryos out of those made available by this procedure, to choosing the desired characteristics that will form the embryo itself, is just a small step. While some oppose it, others consider it the achievement of utmost freedom, a moral obligation:

John Harris, a leading proponent of germline intervention argues that it is an instrument similar to education, whose purpose is to enhance children, and therefore it does not pose ethical problems. Cappella criticizes this position and instead argues that "enhancement procedures, and in particular germline intervention, cannot be used to achieve enhanced intelligence, health or one or other capacity for the simple reason that they cannot be

Man is becoming free, not only from the external tyrannies and the caprice of toil and famine and disease, but from the very internal constraints of our animal inheritance, our physical frailties, our emotional anachronisms, our intellectual limits. We must hope for the responsibility and the wisdom and the nobility of spirit to match this ultimate freedom.³⁵⁰

³⁴⁹ Vicente Bellver Capella, "Biotechnology, Ethics and Society: the Case of Genetic Manipulation", W. J. Gonzalez (ed.), *New Perspectives on Technology Values and Ethics*, Cham, Springer, 2015, p. 135.

³⁵⁰ From Robert L. Sinsheimer's speech for the 75th anniversary of California Institute of Technology, 1966. In Cappella, *op. cit.*, p.136.

achieved by these means."³⁵¹ Additionally, he argues that while education aims at making people free and happy, therefore better, germline enhancement deprives the individual of freedom and transforms him into a product of his designer, who chooses the characteristics to impose.

While in the development of diseases as well as psychological traits too many factors are involved, and this limits the effects of genetic engineering, it remains true that some improvement has been demonstrated. Experiments have shown that intelligence and memory can be enhanced by genetic engineering, for example in the case of mice. However, the control mice have also had improved intelligence and memory by means of educational enhancements. This makes the opponents of genetic engineering to argue that there are other means, less dangerous and at least equally effective. However, even if it might prove highly effective in comparison to other technologies, genetic engineering raises significant ethical and biological concerns regarding, first of all, its deviation into an eugenics program: "fears that state-based eugenics programs could be recapitulated, and that liberal approaches toward genetic engineering technologies could lead down a slippery slope to human rights violating eugenic programs of the past."³⁵² Secondly, the effects of genetic engineering are unpredictable on a large scale as it could lead to a "biological monoculture that reduces our resistance to disease or renders human populations less flexible in the face of novel environmental challenges."³⁵³ It can be seen therefore how contemporary concerns raised by genetic engineering were anticipated by Wells in his novels, where themes such as traits selection are addressed in *The Island of* Dr.Moreau and evolution resulting in vulnerability towards diseases in The War of the Worlds. The underlying issue of Wells's early narrative is related to defining humanity in order to determine how and when it is maintained or, on the contrary, lost, and this is also a problematic aspect of scientific development, as argued by Fukuyama:

While it is legitimate to worry about unintended consequences...the deepest fear that people express about technology is not a utilitarian one at all. It is rather a fear that, in the end, biotechnology will cause us in some way to lose our humanity – that is, some essential quality that has always underpinned our sense of who we are and where we are going, despite all of the evident changes that have taken place in the human condition through the course of history.³⁵⁴

³⁵¹ Cappella, *op. cit.*, p. 138.

³⁵² Powell et al., *op. cit.*, p. 443.

³⁵³ *Idem*, p. 444.

³⁵⁴ Francis Fukuyama, "Our posthuman future", Farrar, Straus and Giroux, p.101, cited in *Powell et al.*, p. 444.

Bioconservatives such as Fukuyama argue against human enhancement not because of the biological or social risks it presents, but in virtue of the inherent moral value of the integrity of human nature as such. However, this is an intuitive reluctance, as hard to define as the concept of dignity, which also plays an important role in ethical debates regarding genetic engineering and other practices of biotechnology. Other opponents of human enhancement by means of genetic engineering, such as Michael Sandel and Leon Kass also argue against the pursuit of perfection, which is, they argue, a dehumanizing practice that will ultimately result in the creation of post-humans: "for bioconservatives, the quest for perfection – understood as mastery over human nature – constitutes a decisive moral concern with human enhancement technologies, a concern beyond those expressed in terms of safety, autonomy and justice"³⁵⁵.

In his "Case Against Perfection", Sandel argues that the ethics of enhancement cannot be tackled without first considering the more general problem of the moral status of nature and the proper stance of human beings towards the world. Muscle and memory enhancement, growth-hormone treatment and reproductive technologies are all treatments that can easily be commercialized as another instrument in the pursuit of perfection. By analyzing each of these scenarios and their potential consequences, Sandel argues that the problem with these consumerist practices is not so much that they would create inequality between those who cannot afford such enhancement and those who do have access to it and can gain an advantage which could even be transmitted to offspring³⁵⁶; but rather its dehumanizing effect. Sandel does not share the common opinion according to which the problem with enhancement is that it minimizes human agency since they can no longer be blamed or praised for their achievements. Rather, the main problem of enhancement, in his view, is that it opposes humility and gratefulness while exacerbating ambition and encouraging hubris:

I do not think the main problem with enhancement and genetic engineering is that they undermine effort and erode human agency. The deeper danger is that they represent a kind of hyperagency - a Promethean aspiration to remake nature, including human nature, to serve our purposes and satisfy our desires. The problem is not the drift to mechanism but the drive to mastery. And what the drive to mastery

³⁵⁵ Chan, *cit.*, p. 648.

³⁵⁶ This objection is known as the hormonal arms race: "As the unenhanced began to feel shorter, they too might seek treatment, leading to a hormonal arms race that left everyone worse off, especially those who couldn't afford to buy their way up from shortness.", Michael J. Sandel, "The Case Against Perfection. What is wrong with designer children, bionic athletes, and genetic engineering", in *The Atlantic Monthly* - April 2004, pp. 51-62, p. 53.

misses and may even destroy is an appreciation of the gifted character of human powers and achievements $^{357}\,$

The issue is not that enhancement opposes effort, because it can be interpreted as the "ultimate expression of the ethic of effort and willfulness – a kind of high-tech striving"³⁵⁸. Instead, it opposes the cultivation and display of natural talents, which has always been the object of human admiration and awe. An illustration of its deeply dehumanizing nature is the impact it can have on parental love, which should be unconditional, by transforming it in another instance of the pursuit of perfection. Just as parents should find a balance between accepting love and transforming love, so should science, which "engages us in beholding the given world, studying and savoring it, and also in molding the world, transforming and perfecting it."³⁵⁹ The most pressing issue nowadays is the generalized pressure to achieve perfection, to be performant and competitive and the possibility of enhancement only exacerbates it:

The steroids and stimulants that figure in the enhancement debate are not a source of recreation but a bid for compliance – a way of answering a competitive society's demand to improve our performance and perfect our nature. This demand for performance and perfection animates the impulse to rail against the given. It is the deepest source of the moral trouble with enhancement.³⁶⁰

The same objection applies to genetic engineering. Sandel states that both enhancement and bioengineering lead to eugenics, which, even if is masked as "privatized" or "free market", remains unacceptable. While libertarian philosophers such as Agar, Nozick or Rawls all agree that new-eugenics is acceptable as long as is not coercive and not state-based, Sandel argues that

removing coercion does not vindicate eugenics. The problem with eugenics and genetic engineering is that they represent the one sided triumph of willfulness over giftedness, of dominion over reverence, of molding over beholding(...)This would transform three key features of our moral landscape: humility, responsibility and solidarity(...)The awareness that our talents and abilities are not wholly our own doing restraints our tendency towards hubris.³⁶¹

By taking evolution into their own hands, people also assume absolute responsibility for its outcome and can no longer blame chance. Not only do men's expectations explode, but also, on the other hand, solidarity is compromised. Empathy depends on people's possibility to share their risks and thus the most fortunate subsidize for the less so, because

³⁵⁷ Sandel, op. cit., p. 54.

³⁵⁸ *Idem*, p. 55.

³⁵⁹ Ibidem.

³⁶⁰ *Idem*, p. 85.

³⁶¹ *Idem*, p. 60.

they can always imagine themselves in a similar situation. Instead, when individuals can determine their destiny, they feel entitled and all-deserving, and thus are less empathetic and compassionate towards others:

the bigger danger, admittedly more speculative, is that genetic enhancement, if routinely practiced, would make it harder to foster the moral sentiments that social solidarity requires. (...) perfect genetic control would erode the actual solidarity that arises when men and women reflect on the contingency of their talents and fortunes.³⁶²

Eugenics and enhancement can grant men a superior status, as they no longer are a mere link in the evolutionary chain, but become agents endowed with the power to decide and transform the evolutionary outcome. These technologies are dangerously tempting as they offer the illusion of supreme freedom and power, and this is what makes them so disturbing in Sandel's view:

Such a warning is implicit in the character of the Doctor Moreau, the impersonation of hubris and desire to master nature and impose his own will on evolution. His lack of humility, absolute loneliness and tragic destiny are the proof that Wells sanctioned this attitude and, therefore, would have probably shared Sandel's position.

Similar concerns are expressed by Leon Kass, former chairperson of the US President's Council on Bioethics. He also refers to "new uses for biotechnical power that soar beyond the traditional medical goals of healing disease and reliving suffering. Human nature itself lies on the operating table, ready for alteration, for eugenic and psychic enhancement, for wholesale re-design" ³⁶⁴ and warns "For anyone who cares about preserving our humanity, the time has come to pay attention." ³⁶⁵ The scientist explains that, while it is crucial that people control the technological developments, they fail to do so because of the fatalistic belief in technological automatism, the respect for scientists', entrepreneurs' and private citizens' freedom to develop, invest in and use new technologies; as well as the cultural pluralism and relativism that dismiss any moral

It is more plausible to view genetic engineering as the ultimate expression of our resolve to see ourselves astride the world, the masters of our nature. But that promise of mastery is flawed. It threatens to banish our appreciation of life as a gift, and to leave us with nothing to affirm or behold outside our own will.³⁶³

³⁶² Sandel, op. cit., p. 62.

³⁶³ Ibidem.

 ³⁶⁴ Leon Kass, "Preventing a Brave New World", *Ronald L. Sandler (ed), Ethics and Emerging Technologies*, Palgrave Macmillan, 2014, pp. 76-89, p. 77.
³⁶⁵ *Ibidem*.

objection as religious or sectarian. Finally, the most troubling impediment is the equivocal understanding of humanity itself: "our views of the meaning of our humanity have been so transformed by the scientific-technological approach to the world that we are in danger of forgetting what we have to lose, humanely speaking"³⁶⁶. However, for each of these impediments there is a solution, he argues, and taking cloning as an example of the destructive potential of biotechnology, he extensively explains the reasons which render it morally unacceptable. The final appeal is for the complete ban of such technologies, which threaten human dignity and freedom.

Another issue addressed by Kass in the same critical manner as Sandel is "the use of biotechnical powers to pursue "perfection", both of body and of mind"³⁶⁷. Although these technologies arise from the need to prevent or cure diseases, they will produce new desires and be used outside medical purposes and even give raise to peer pressure. This shows their unpredictability and the need for precautionary regulation. In particular, even if all the objections regarding the generalized use of these biotechnologies are dismissed with, still remains an intuitive and deep-rooted reluctance towards the individual employment: "we sense that it may have something to do with what is natural, or what is humanly dignified, or with the attitude that is properly respectful of what is naturally and dignifiedly human."³⁶⁸ Once again the argument invokes the concept of hubris, or the act of "usurping God-like powers, but doing so in the absence of God-like knowledge"³⁶⁹. This kind of unweaning ambition with tragic and dehumanizing consequences is the theme of Wells's narratives, in particular *The Island of Doctor Moreau*, as it has been observed:

Whether art for art's sake or science for science's sake, the constant quest for human innovation threatens to subvert the makers, materials and products of creativity. From the intellectual and creative expansion of the nineteenth century and in the face of the twentieth century, Wells's dystopia warns of the propensity of human nature to disguise its desire for mastery with the veils of art, science, knowledge and religion, and to threaten both the community and the individual in the pursuit of progress, creation and labour for its own sake.³⁷⁰

³⁶⁶ *Idem*, p. 78.

³⁶⁷ Leon R. Kass, "Ageless Bodies, Happy Souls: Biotechnology and the Pursuit of Perfection", *The New Atlantis*, *1*, 2003, pp. 9-28, p. 10.

³⁶⁸ *Idem*, p. 17.

³⁶⁹ Ibidem.

³⁷⁰ Faulkner, op. cit., p. 186.

Kass shares Sandel's opinion that enhancement compromises moral values such as modesty, restraint and humility. However, Kass adds, nature's gifts are not all good and are not all distributed equally, therefore appreciation is not enough without a critical analysis: "We need a particular regard and respect for the special gift that is our own given nature (...) We must move from the hubristic attitude of the powerful designer to consider how the proposed improvements might impinge upon the nature of the one being improved."³⁷¹ Consequently, biotechnological means to artificially improve one's state of mind or body are undesirable because they

act directly on the human body and mind to bring about their effects on a subject who is not merely passive but who plays no role at all. (...) All of our encounters with the world, both natural and interpersonal, would be mediated, filtered, and altered. Human experience under biological intervention becomes increasingly mediated by unintelligible forces and vehicles, separated from the human significance of the activities so altered.³⁷²

Technologies thus mediate at least part of humans' activities. Yet, as long as these instruments remain external, humans can always free themselves from their influence and mediation, in order to experience an authentic, unmediated relationship with the world. Once these technologies are integrated in the human body or mind, such freedom will be lost, as well as any responsibility or worthiness for the actions fulfilled under the influence of such biotechnologies: ""personal achievements" impersonally achieved are not truly the achievements of persons"³⁷³. Considering that competition represents only a fraction of what life as a whole means, the most fulfilling and rewarding activities are not those that require performance but presence and full emotional involvement. From this perspective, such technologies are not only useless but even detrimental:

most of life's activities are non-competitive, most of the best of them – loving and working and savoring and learning – are self-fulfilling beyond the need for praise and blame or any other external reward. In these activities, there is at best no goal beyond the activity itself. It is the deep structure of unimpeded, for-itself, human being-at-work-in-the-world, in an unimpeded and wholehearted way, that we are eager to preserve against dilution and distortion.³⁷⁴

The aim of biotechnologies is to improve not only life quality but also life span, but if this objective was achieved, humans would lose "many of the best things in human life: engagement, seriousness, a taste for beauty, the possibility of virtue, the ties born of

³⁷¹ Kass, *op. cit.*, 2003, p. 20.

³⁷² *Idem*, p. 22.

³⁷³ *Idem*, p. 23.

³⁷⁴ *Idem*, p. 24.

procreation, the quest for meaning."³⁷⁵ Similarly, a pharmacologically assisted happiness and the indiscriminate elimination of all negative memories and feelings would not only be shallow but also damaging, as much learning, maturity and identity itself arise from these negative experiences: "There is therefore a double-barreled error in the pursuit of ageless bodies and factitiously happy souls: human fulfillment depends on our being creatures of need and finitude and hence of longings and attachment."376

So far, the issues raised by enhancement and biotechnologies involved the concepts of human nature and the criticism of dehumanizing men and depriving their life of the fundamental human values. This view on evolution as enhancement and technology can be associated to Wells's The Island of Doctor Moreau, with its dehumanized, overly intellectual scientist and enhanced yet not human enough Beast Folk, and The Time *Machine*, with its technological but merciless Morlocks. Another issue is the inequality between those enhanced, who are referred to as post-humans, and not enhanced humans. This difference can even result in a morally bifurcated world, where the unenhanced would no longer enjoy the highest moral status, as they did when there were no enhanced post-humans. This is the scenario presented by Wells in the War of the Worlds, where the narrator repeatedly argues that humans cannot victimize themselves since the Martians are superior beings and this gives them a right to pursue their wellbeing by all means. This is an ironic remark, meant to criticize the British centrism, but nonetheless pertinent in the more extended scenario of biotechnologies and human enhancement.

5.2. Evolution beyond emotions: a moral case in favour of empathy and compassion

Wells's scenario involving humans, animals and hybrids aims at replacing common racist or speciest assumptions with a trans-species empathy and compassion and this could be relevant for a critical reflection on contemporary science. To begin addressing this issue, a moral analysis of Moreau's practices is needed. Confronted with contemporary principles of applied ethics, his scientific behaviour can be deemed immoral, indifferently

³⁷⁵ *Idem*, p. 25. ³⁷⁶ *Idem*, p. 27.

of whether the Beast Folk are seen as human beings or animals. Starting from the assumption that the dignity of creatures should be considered when dealing with the genetic engineering of animals, the question that arises in ethical debate is how can this dignity be defined. One solution is to consider that a creature has dignity if it has a good of its own, described as follows:

They can, by successfully adapting to their environment, keep the normal biological functions of their species throughout their lifetime. They can do well: they can thrive and flourish. What the good of different living beings precisely consists in is dependent on what sort of beings they are, what species-specific characteristics they have.³⁷⁷

Such a moral test is, step by step, failed by Moreau. While the creatures he starts from meet all the above requirements, his surgical and hypnotic interventions compromise their abilities and leave them "crippled" since they are not even allowed to move like they would normally do³⁷⁸:

It is prima facie wrong to impair the normal functions and abilities of a living being. (...) If genetic interventions impair the normal functions and abilities, then they are prima facie wrong, that is to say, they are morally inadmissible, unless they can be justified by other morally relevant reasons.³⁷⁹

Consequently, Moreau's experiments are immoral because they do impair the normal functions of the creatures and, as far as the second clause of the test is concerned, he does not have other morally relevant reasons to justify his actions. As his speech suggests, his experiments are only fueled by his ambition and megalomaniac desire to conquer a millennial obstacle and thus impose his power over nature, without contributing to the wellbeing of others:

His choice to perform ab-useful labour purely because it brings him joy reveals it as unproductive not only to the society from which he is isolated but also to his individual self through its ab-use. (...) Furthermore, the Beast Men eventually revert to their animal states, emphasizing the unproductivity of Moreau's labour in its failure to accomplish even his individualistic goal of success of self-satisfaction.³⁸⁰

By referring to the human dignity argument that opposes the creation of animal-human chimera, Moreau's experiment is morally unacceptable not because it hurts the Beast Folk, which are not human and therefore their dignity as such cannot be harmed; but because it affects Prendick's dignity, it forces him to associate himself with such different

³⁷⁷ Robert Heeger, "Genetic Engineering and the Dignity of Creatures", *Journal of Agricultural and Environmental Ethics*, Volume 13, Issue 1, March 2000, pp 43-51, p. 46.

³⁷⁸ "Not to go on All-Fours, that is the law", The Island of Dr. Moreau, cit., p. 49.

³⁷⁹ Heeger, op. cit., p. 45.

³⁸⁰ Faulkner, *op. cit.*, pp. 181, 185.

and yet similar creatures that he ultimately loses not only its sense of self but also fails to identify the humanity in others. It thus becomes an exiled, an outcast from himself and society as a whole. Thus, Moreau's experiments can be considered immoral from more perspectives. These violate the dignity of both non-human creatures and humans and one of the first proofs is the isolation of his laboratory. The scientist's endeavors have been deemed unacceptable and therefore he is forced to abandon society and, in a way, Prendick is also forced to isolate himself: although he seems to have escaped Moreau's malefic influence, he can no longer fit in. This suggests that society, as a moral guardian, can oppose scientific development when it threatens its fundamental values: "Can one ever truly escape the moral dichotomies that arise between the lineaments of religion and scientific endeavour? Equally, can one reconcile the nature of isolation with a cohesive system of morality?" ³⁸¹

5.3. The influence of science fiction on bioethical debates and the public opinion

The critical analysis of a science-fiction text is fruitful because it can stimulate the interest and awareness of the wide public towards issues that can seem highly specialized but can have a significant impact on society. In particular, by appealing to the readers' emotions, compassion and empathy, literature can shape their moral attitude towards controversial scientific practices such as animal experimentation and genetic engineering:

Science fiction then does an important favor to its readership by translating biomedical and other scientific developments to the world of their imagination, thereby inviting a greater audience to engage with critical topics. In addition, the perspective that changes from human to nonhuman or hybrid beings within the novels invites the reader to change her or his own perspective for once. This can create empathy and lead to more sensitivity toward other beings. Most importantly, the factor of emotion, which is left out of scientific practice, is added to the picture.³⁸²

As Evie Kendal states, journalism often uses literary references in order to emphasize a particular position on an issue and influence the public's reception: "the study of bioethics is one area that relies heavily on the language of utopian sf literature and film to debate

³⁸¹ Gianluca Guerriero, "Punishment, Purgatory, and Paradise: Hating the Sin, and Sometimes the Sinner, in H.G. Wells's *The Island of Doctor Moreau* and *The Invisible Man*", in Godfrey, *op. cit.*, pp. 189-207, p. 205.

³⁸² Pusch, op. cit., p.71.

such issues as the meaning of life, the nature of humanity, and the ethical concerns surrounding certain medical and technological advances. (...) Through a process known as "valenced framing", journalists can represent scientific development through media coverage in a way deliberately intended to evaluate their associated political issues in either a positive or negative light."³⁸³

On the one hand, the point made here is that science fiction can be used as a "fear tactic" by "socially conservative technophobic political agendas"³⁸⁴. On the other hand though, these examples suggest the appeal science-fiction imaginary has on the wide public, "demonstrating the potential for sf to fill an important role in mediating between different stakeholders in our biotechnological future."385 Moreover, Kendal argues that science fiction also provide utopian scenarios, which are often overlooked. Instead, they should be also employed when referring to science: "although most of the sf references used in bioethical literature involve negative portrayals of reproductive biotechnologies, positive examples do exist in the genre and could be used to argue in favor of technological development."³⁸⁶ While it might be true that science fiction is used biasedly in order to influence the public opinion regarding contemporary or future scientific developments, its function as a moral and emotional appeal might be more important than its function as a supporter of scientific research. The latter will always be promoted by various factors, from economical to political. Capella also points out that scientific research depends on the society's support, especially financial, and therefore it often attempts at persuading the public of its excellence, even by making unfounded promises:

As history shows, no society can ever consider itself free from racism, speciecism and other ideologies that could lead to discrimination or even state-based eugenics policies.

The media is the main source of information about science for the public and those best placed to guide public preferences when it comes to giving financial support to one or another area of research. (...) Human embryonic stem cells were presented as the great promise for regenerative medicine and cloning embryos as the ideal technique to deal with the problem of rejection. However, in the first decade of the twenty-first century it has been proven that these expectations were very often overstated and in some cases fraudulent.³⁸⁷

³⁸³ Evie Kendal, "Utopian visions of 'Making People': Science Fiction and Debates on Cloning, Ectogenesis, Genetic Engineering, and Genetic Discrimination", in Stapleton (ed.), *Biopolitics and Utopia*, Palgrave Macmillan US, 2015, pp. 89-116, pp. 90, 92.

³⁸⁴ *Idem*, p. 95.

³⁸⁵ *Idem*, p. 97.

³⁸⁶ *Idem*, p. 107.

³⁸⁷ Capella, *op. cit.*, pp. 130-131.

Therefore, science fiction is needed more as a moral, warning voice. The obsessive and reckless pursuit of enhancement and perfection can, and probably will, lead to inequality, exploitation and ultimately extinction. The problem is that the public are either too enthused by the promise of immediate and long-lasting happiness, either too ignorant or indifferent to the threats posed by biotechnologies. Literature overcomes the lack of scientific knowledge or interest towards it, as it appeals to the fundamental moral intuitions and feelings of all humans, such as empathy and compassion. It offers compelling scenarios which manage to grab the public attention and to alert them with regards to the potential dystopic consequences of biotechnologies. Therefore, literature can contribute to the bioethics debates by encouraging critical reflection of the wide public, which should be stimulated to reflect on the impact of emerging technologies and participate in the debate.

Not even an exhaustive analysis of the promises and negative aspects of biotechnologies can be conclusive, as the question remains whether they should be stopped, and where the line should be drawn, or if they should be allowed to develop and ultimately lead to enhanced humans or post-humans. Since scientific and technological is essentially unstoppable, the solution for the threats it poses could be the proportionate development of moral abilities. Biotechnologies have a great destructive potential and therefore could represent a serious threat if they were used by an elite for selfish reasons. The solution against this pessimistic scenario of inequality, exploitation and ultimately extinction, is enhanced morality. Persson and Savulescu³⁸⁸ argue that the same biotechnological means used to enhance cognitive abilities can and should also be employed towards the enhancement of morality: since humans are fundamentally animals, their moral sense is rooted in biology and therefore can be influenced by these technologies. In particular, moral qualities such as altruism and a sense of fairness have been developed and maintained because they proved to be useful from an evolutionary perspective. Similarly, as they helped humanity to survive, they should be further, artificially developed, in order to balance the threats that accompany each scientific advancement. However, the authors also admit that

³⁸⁸ Ingmar Persson, Julian Savulescu, "The Perils of Cognitive Enhancement and the Urgent Imperative to Enhance the Moral Character of Humanity", *Journal of Applied Philosophy*, Vol. 25, No. 3, 2008, pp. 162-177.

It does not seem likely, given the present state of knowledge and paltry research effort into moral enhancement, that we shall be able to effect any noticeable improvement in moral character and behavior before it is very possible for some morally warped individuals to misuse our potent scientific knowledge and technology with fateful consequences. To repeat, this is so because for this to happen, it may be enough that some tiny minority of humanity is morally corrupt.³⁸⁹

Therefore, combined interdisciplinary efforts should be made in order to control the direction and outcome of the development of such biotechnologies. Constant public debate on bioethics issues and preventive regulation can only be enforced by an active public, which is aware both of the threats and the promises that these biotechnologies hold. Such a militating effect can be provoked, as it has been seen, by literary discourse, which manages to combine scientific imagination, social awareness and emotional appeal and thus involves every citizen in a debate which he can no longer afford to ignore. Wells, as well as other science fiction authors, have the merit to have brought such apparently specialized and complex issue in the homes of every reader, encouraging them to pay attention to the often isolated and elitist scientific world:

Fictional scenarios can help to shift the focus away from the anticipated positive outcome to that of the ethical and moral concerns not being examined in the context of the experiments themselves and not being written down in the proposals for research grants. By involving bioethics with science fiction, public awareness for animal experimentation may be increased. It is much easier to express certain imagined outcomes in fiction than in other genres of text³⁹⁰

As suggested by science-fiction and as proved by history, science will not limit its freedom and scope and will not regulate itself in the absence of an exterior pressure or incentive. And such a guardian can only be a democratic one: the intervention of the State, or, even better, of a community of states, in the name of the public interest. Precisely the often hidden and subtle threats on the public interest, scenarios that are often ignored by the scientific discourse, are instead brought in the spotlight by literature.

With its pervasiveness and persuasiveness, science fiction often has a deep, longlasting impact that reverberates in the media and in the ethical and legislative spheres. One example is Wells's early narrative, which has shaped many of the categories widely used nowadays to speculate on the future of mankind. Rooted in fundamental interrogations regarding humanity, morality and man's status in the universe, and building upon the revolutionary theory of evolution and other scientific discoveries of the epoch, Wells's science fiction continues to extend its branches up, towards the future.

³⁸⁹ *Idem*, p. 172.

³⁹⁰ Pusch, *op. cit.*, p. 63.

With a profound understanding of human nature, H. G. Wells warned men that they could eventually suffer because of their hubristic ambition. This "too perfect triumph of man", which signs humankind's absolute dominion over nature while also destroying it, is nowadays a threat more pertinent than ever before, and therefore works such as *The Time Machine, The Island of Doctor Moreau, The War of the Worlds,* still deserve critical appreciation.

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"Oltre il Grande Trionfo dell'Umanità: dall'Evoluzione Biologica alla Degenerazione nella Fantascienza di H. G. Wells"

Riassunto

Che spingersi oltre i propri limiti abbia sempre definito la natura umana è una verità antica quanto il mito di Icaro. Ma proprio come ricorda il mito, un'ambizione così smisurata potrebbe rivelarsi tragica. Mentre il desiderio di miglioramento ha contribuito in modo significativo al progresso dell'umanità, lo stesso può anche portare a un declino schiacciante dell'uomo. Interrogandosi costantemente sul significato della vita e sul suo posto nell'universo, l'uomo non si è mai accontentato e ha cercato di imporre la sua volontà sulla natura, sulle altre specie e persino su sé stesso, lottando costantemente per maggiore libertà e progresso. Le più recenti scoperte scientifiche e gli sviluppi tecnologici non fanno altro che esacerbare questo desiderio e consentono agli esseri umani di ottenere di più, ma ciò che sembra un progresso da questo punto di vista, potrebbe rivelarsi, da una prospettiva morale, un segno di degenerazione. Questa osservazione porta a una serie di quesiti riguardanti il ruolo della scienza nell'affermare la supremazia dell'uomo sulla natura e i conseguenti problemi etici, così come il rapporto instaurato dagli occidentali con gli altri uomini ma anche con gli animali. Sono domande profonde e sempre attuali e, sebbene non trovino una risposta esaustiva e definitiva, meritano comunque attenzione e riflessione critica.

Tali interrogativi si intravedono nei primi romanzi scientifici di Herbert George Wells, ma costituiscono anche l'oggetto dei dibattiti etici contemporanei. Le opere analizzate in questa tesi, *La Macchina del Tempo, L'isola del Dottor Moreau* e *La Guerra dei Mondi*, coinvolgono temi come l'evoluzione biologica e il colonialismo, lo statuto dell'uomo nell'universo e la sua natura bestiale, il suo rapporto con gli altri esseri e, infine, il potenziale utopico e distopico del progresso scientifico e tecnologico. Questi sono anche gli assi principali su cui questa tesi è costruita, con l'obiettivo di evidenziare le tracce darwiniane nella narrativa di Wells e di interpretare la concezione pessimistica dello scrittore sulla natura umana e il futuro dell'umanità. Infine, gli avvertimenti trasmessi dallo scrittore saranno correlati al dibattito etico contemporaneo riguardante le biotecnologie, dimostrando non solo l'attualità dei suoi romanzi, ma anche il ruolo che la fantascienza in generale può e dovrebbe svolgere in questo contesto di riflessione sulla scienza e tecnologia.

Una delle rivoluzioni che ha marcato il diciannovesimo secolo fu senza dubbio la teoria dell'evoluzione di Darwin. Questo è il tema del primo capitolo, che analizza le due opere cardini del naturalista (L'origine Delle Specie e L'origine dell'Uomo e la Selezione Sessuale) e l'impatto che esse ebbero sulla teoria morale ma anche sulla letteratura. Charles Darwin ha dimostrato che le specie non sono distinte e immutabili, come sostenuto dal creazionismo, ma gruppi di organismi che variano e si evolvono nel tempo a partire da un antenato comune. Le varietà che si dimostrano più adatte in un determinato ambiente sopravvivono attraverso il processo di selezione naturale e continuano ad evolversi, differenziandosi ulteriormente dalle altre varietà e formando una specie distinta. Questo meccanismo venne illustrato per la prima volta a un pubblico non specialistico con dettagliate prove scientifiche che l'autore ebbe il tempo di accumulare sia durante il secondo viaggio del HMS Beagle nel 1830 sia al suo ritorno, preparando diligentemente la sua teoria per due decenni. L'uomo stesso non è altro che un elemento di questo meccanismo universale e quindi la teoria darwiniana toglie all'umanità non solo la supremazia nei confronti delle altre specie ma anche l'identità stabile e immutabile. Poiché gli esseri umani sono il risultato dell'evoluzione, è possibile che questi meccanismi di variazione e selezione naturale agiscano ancora e che gli uomini continuino ad evolversi in una direzione imprevedibile e incontrollabile. Inoltre, alla luce del fatto che le specie precedentemente considerate distinte si rivelano in realtà discendenti dello stesso antenato, anche l'uomo diventa legato biologicamente alle altre specie e perde il suo statuto di creazione suprema oppure di 'immagine di Dio'. Di conseguenza, questa teoria profondamente rivoluzionaria ebbe un impatto così forte da riecheggiare in altre discipline, come la letteratura che speculò a lungo sulle scoperte scientifiche dell'epoca e le loro potenziali conseguenze. Uno dei più noti esempi è il romanzo di Mary Shelly, Frankenstein, o il Prometeo moderno, che riflette le preoccupazioni dell'epoca riguardanti il potere distruttivo della scienza. Ebbe così inizio la tradizione letteraria dello scienziato pazzo, e una figura rappresentativa è costituita anche dal Dottor Moreau, ideato da Wells. La formazione biologica acquisita sotto la guida del grande scienziato Huxley segnò profondamente la personalità di Wells, il cui interesse verso gli sviluppi e le scoperte scientifiche dell'epoca emerge anche all'interno della sua attività letteraria. Nei suoi romanzi, lo scrittore affronta la teoria Darwiniana, e illustra non solo la potenziale evoluzione delle specie ma anche la loro regressione e suggerisce che il loro legame biologico contraddice la supremazia di una specie o una razza su un'altra. Di conseguenza, lo sfruttamento e la tortura imposte da parte di una specie che si considera biologicamente superiore su un'altra non è giustificabile dal punto di vista morale. È questa la posizione di Wells che si intravede nelle sue narrazioni, dove la colonizzazione, l'espansione militare o la vivisezione sono criticate in modo aperto o velato.

Il tema del secondo capitolo è la ricezione della teoria dell'evoluzione da parte di Wells attraverso l'analisi di alcuni dei suoi primi saggi e romanzi scientifici. Opere come "Una visione sul passato", "La regressione zoologica", "Ottimismo biologico" e "L'evoluzione umana: un processo artificiale", riflettono sulla posizione dell'uomo nell'universo in confronto alle altre specie, e criticano la concezione troppo ottimistica secondo cui l'evoluzione avrà sicuramente un percorso positivo. Invece, come Wells suggerisce, la vanità umana che detta la convinzione nella supremazia dell'uomo e la sua eventuale conquista della perfezione, non è fondata e sarò contradetta dall'evoluzione. Con la sua ironia caratteristica, Wells avverte che, nel corso della futura evoluzione millenaria, l'uomo è piuttosto condannato. Questo pessimismo, tratto fondamentale della sua narrativa come si evincerà dall'analisi dei suoi romanzi, non è solo una caratteristica stilistica ma un'idea derivata dalle scoperte scientifiche dell'epoca, come la sconvolgente teoria dell'evoluzione. La prima fase della sua attività letteraria, dedicata alla fantascienza, illustrerà quindi alcuni dei possibili scenari della futura degradazione dell'umanità che ne minacciano persino la sopravvivenza.

Gli elementi scientifici introdotti dallo scrittore nei suoi romanzi sono molto diversificati: l'uso della quarta dimensione nella *Macchina del Tempo*, i riferimenti alla vivisezione e alla chirurgia nell'*Isola del Dottor Moreau* e gli sviluppi tecnologici ipotizzati nella *Guerra dei Mondi*. Questi sono alcuni esempi che illustrano la sua capacità immaginativa ma anche l'abilità di preconizzare lo sviluppo scientifico-tecnologico. La sua prima opera letteraria, *La Macchina del Tempo: Un'invenzione*, fu pubblicato a puntate sul periodico *New Review* nel 1894 e, un anno dopo, sotto forma di romanzo. Wells aveva già precedentemente affrontato l'idea del viaggio nel tempo,

nella breve storia del 1888 'La Cronica degli Argonauti', il cui grande successo incoraggiò l'ulteriore sviluppo del tema e la stesura del romanzo. *L'Isola del Dottor Moreau* invece, pubblicato nel 1896, è un romanzo che fa riferimento all'interesse crescente della società inglese verso i diritti degli animali e la natura immorale delle pratiche medico-scientifiche come la vivisezione. Comunque, l'influenza scientifica più significativa nei romanzi di Wells rimane la teoria Darwiniana, che si riscontra sia a livello stilistico, sia di contenuto. I narratori spesso assumono il discorso naturalistico di Darwin nella loro evocazione e interpretazione dei fatti, e molti dei temi e motivi letterari rimandano all'evoluzionismo.

L'utilizzo dell'utopia e della distopia così come anche la struttura narrativa sono analizzate nel secondo capitolo, con particolare attenzione sui concetti darwiniani come il caso, la confusione e il conseguente fallimento su piano epistemologico. All'interno dei romanzi di fantascienza di Wells viene suggerito che l'uomo non può controllare né il suo destino individuale, né l'evoluzione collettiva, a causa dei troppi fattori coinvolti e interconnessi. Di conseguenza, dato che il ragionamento di tipo causa-effetto non funziona per l'elevata complessità, la razionalità sembra essere insufficiente per fare senso del mondo circondante, così come lo dimostrano i protagonisti di Wells. Essi falliscono ripetutamente nel loro tentativo di interpretare le cause e il significato degli eventi, anche a causa delle loro forti emozioni che compromettono il loro autocontrollo e capacità di ragionare. La Macchina del Tempo, L'Isola del Dottor Moreau e La Guerra dei Mondi saranno analizzati da questa prospettiva darwiniana: la rilevanza del caso e della fortuna e l'impossibilità di comprendere una realtà che non è più governata dai principi di causa-effetto. Attraverso l'esplorazione del tempo e dello spazio sotterraneo, esotico o cosmico, i protagonisti di Wells sono costretti a riconciliare le conoscenze precedenti e quello che pensavano essere la verità con quello che scoprono, un compito difficile dal punto di vista fisico ma anche psicologico. Non a caso, la realtà è descritta come profondamente ambigua, i cui elementi si situano in relazioni complesse e incomprensibili, misteriose o persino caotiche. Lo scrittore costruisce le sue trame dopo il modello del discorso scientifico di Darwin: entrambi partono dall'osservazione della realtà, per ulteriormente ipotizzarne il significato ed esplorare le varie spiegazioni e interpretazioni. Nonostante questo, la conclusione finale non può che essere la stessa sospensione del giudizio: le conoscenze sono troppo limitate per poter prevedere il futuro, ci si può soffermare solo sul presente, e neanche questo è pienamente comprensibile. I narratori spesso assumono una strategia naturalistica, pseudo-scientifica nel loro tentativo di offrire ai lettori una spiegazione completa e giustificata però ogni supposizione, nonostante quanto sembri fondata e persuasiva, viene ulteriormente confutata e tutte le conclusioni sono solo temporanee. I protagonisti non sono omniscienti ma vengono a conoscenza dei fatti gradualmente e quindi anche al lettore la verità viene svelata in questo modo. Di conseguenza, anche la credibilità dei narratori è contestata, sia perché non hanno accesso a tutte le informazioni e la loro conoscenza è limitata, sia perché non hanno la capacità di comprendere e interpretare in maniera giusta la realtà. Inoltre, il caso gioca un ruolo fondamentale, risparmiando in più di un'occasione la vita stessa dei protagonisti, che sopravvivono non grazie alle loro abilità ma alla fortuna.

Questo introduce uno dei temi fondamentali affrontati da Wells: il rapporto tra le specie e la vulnerabilità dell'uomo, non solo da una prospettiva biologica ma anche dal punto di vista morale. Nei suoi romanzi di fantascienza lo scrittore immagina vari modi in cui l'uomo potrebbe evolversi nel futuro, e inserisce nei suoi scenari personaggi fantastici come i Marziani, gli Eloi e i Morlock, tutti pensati per illustrare la degenerazione dell'umanità. Comunque, l'ipotesi più sconvolgente nella narrativa di Wells è l'idea secondo la quale la connessione tra uomini e animali è così profonda e forte, che l'uomo può diventare animale e viceversa, come dimostrato dalle Bestie su cui lavora il dottor Moreau. Questo complesso legame tra le specie e l'impossibilità di differenziarle in modo categorico è affrontato soprattutto nel terzo capitolo, dove sono analizzati la natura umana e i suoi istinti bestiali, insieme ai doveri morali verso gli esseri non umani. Piazzando l'Uomo in mezzo a Morlock, Marziani e Bestie, lo scrittore critica l'assunto antropocentrico secondo cui la natura umana è fondamentalmente distinta e superiore rispetto a tutte le altre specie, e sottolinea invece il legame che sussiste tra l'uomo occidentale e le bestie, con le quali condivide ancora istinti, emozioni e persino comportamenti come il cannibalismo. Di conseguenza, il terzo capitolo è dedicato ai concetti di carne, umanità, civiltà e istinti, identità e virilità. Nei romanzi già menzionati l'Uomo è costantemente confrontato con l'Altro e in seguito a questi scontri la distanza tra loro è diminuita mentre la figura umana si rivela più frantumata, con una razionalità e moralità lontane dalla perfezione. Nelle situazioni

eccezionali all'interno delle quali vengono inseriti, i protagonisti faticano a mantenere la propria umanità, il controllo di sé e i valori morali, e si rivelano deboli e disposti ad accettare qualsiasi compromesso nella lotta per la sopravvivenza. La superiorità biologica, intellettuale e morale dell'uomo è quindi contestata nei romanzi di Wells, che mettono in dubbio anche la convinzione che l'evoluzione sia accompagnata dal progresso della società e dal miglioramento della natura umana. Invece, lo scrittore si concentra sui lati più oscuri dell'uomo, sui difetti che possono portare alla degenerazione della società, e quindi gli scenari presentati sono piuttosto distopici e minaccianti. Per Wells l'evoluzione rappresenta uno scontro tra le specie o una lotta all'interno della stessa specie che è incapace di autodefinirsi e controllare il proprio progresso. Tutti i tre romanzi scientifici presentano la storia del fallimento e del regresso. Sull'isola del dottor Moreau, la ricerca del progresso e della perfezione porta solo ad una tragica trasformazione. Nella Guerra dei Mondi e La Macchina del Tempo il protagonista è un rappresentante del presente che ha però accesso al futuro, e contesta l'idea del progresso unidirezionale. Mentre i Morlock e gli Eloi sono effettivamente futuri discendenti dell'uomo, i Marziani possono anch'essi essere considerati 'uomini del futuro', perché appartengono ad un pianeta simile però più evoluto rispetto alla Terra. Infatti, il narratore sembra essere primitivo però alla fine dimostra la sua superiorità, intellettuale nella Macchina del Tempo, e biologica nella Guerra dei Mondi. In più, questi mondi futuri e più evoluti, si dimostrano privi di cultura, con un linguaggio rudimentale, senza creatività o contenuto astratto: gli Eloi lo usano scarsamente e solo nei contesti più semplici, legati alla realtà quotidiana, al linguaggio dei Marziani si fa poco riferimento e, infine, le Bestie non hanno accesso al significato figurato e astratto del linguaggio, quindi ripetono senza comprendere i 'grandi' concetti.

Dal punto di vista biologico, così come detta la teoria dell'evoluzione, l'uomo è, fondamentalmente, un animale, seppur più evoluto. Alcuni tra gli elementi spesso associati alla bestialità sono l'aggressività e la crudeltà nei confronti degli altri e non incidentalmente, la violenza, anche sotto forma di cannibalismo, è un leitmotiv in tutti i tre i romanzi. I riferimenti alla carne, al sangue e al cannibalismo non sono solo strumenti narrativi per creare una tensione gotica all'interno dei romanzi, ma un mezzo attraverso il quale l'autore allude agli istinti primitivi e bestiali che sussistono ancora nella natura umana. Il terzo capitolo analizza i vari episodi che rivelano la natura bestiale degli uomini oppure dei loro discendenti. Enfatizzando il ruolo giocato dagli istinti, nonostante le restrizioni sociali e morali che cercano di inibirli, l'autore suggerisce che il legame tra la bestia e l'uomo occidentale è molto forte e profondo. Un altro mezzo attraverso il quale i protagonisti umani sono paragonati e associati ai personaggi non-umani è lo specchiamento: molto spesso gli interrogativi riguardanti l'identità dell'Altro sono ripiegati sull'uomo stesso. È, appunto, attraverso lo scontro con l'Altro che avviene la de-costruzione dell'identità e un esempio ne è Prendick, il protagonista dell'Isola del Dottor Moreau. I suoi valori morali sono sfidati sin dall'inizio, quando sembra disposto a ricorrere al cannibalismo pur di sopravvivere. Da questo punto in poi, sarà costantemente messo alla prova e gradualmente sacrificherà la propria umanità, avvicinandosi sempre di più alle Bestie, anche come tratti comportamentali. Se all'inizio è convinto che esse siano uomini degenerati e ha paura di subire la stessa trasformazione, in seguito scopre che sono in realtà animali umanizzati. È precisamente su questa confusione che il romanzo è costruito e, mentre Prendick cerca di esplorare l'identità e l'umanità delle Bestie e ne subisce l'influenza, il confine tra uomo e Bestia diventa sempre più ambiguo e indefinito. Una simile 'contaminazione' è osservabile negli altri romanzi. Seppure sia i Morlock sia gli Eloi dovrebbero essere più evoluti, il protagonista dimostra ripetutamente la sua superiorità, intellettuale e fisica. Comunque, questo non lo rende immune alla degenerazione e, soprattutto, lo scontro con i Morlock influisce negativamente sulla sua personalità, rivelando tratti come violenza e crudeltà. Di conseguenza, La Macchina del Tempo allude non solo alla possibilità che l'uomo evolva in due specie diverse, ma anche al fatto che queste due dimensioni coesistano già nella natura umana e che entrambe lo definiscano. Così si spiega l'influenza malefica dei Morlock sul protagonista, che non subisce una vera e propria trasformazione, ma semplicemente svela i lati più oscuri e nascosti di sé. Le due estremità illustrate dai Morlock e dagli Eloi rappresentano le due dimensioni opposte della coscienza umana, il conflitto tra la sua natura, istintiva, primitiva e combattiva, e quella estetica, occidentale, persino decadente. Così come Prendick assume alcune delle caratteristiche delle Bestie, anche il Viaggiatore nel tempo dimostra alcuni tratti estranei, come la vulnerabilità infantile degli Eloi ma anche l'aggressività dei Morlock. Nessuno è quindi immune alla degenerazione, né può dare per scontate la propria superiorità e natura progredita. La violenza generalizzata della

Guerra dei Mondi è un'ulteriore prova del fatto che l'ordine sociale fallisce davanti all'invasione dei Marziani e non può rispondere adeguatamente a questa minaccia. Nel loro tentativo di sfuggire dagli invasori, gli inglesi sono conquistati dalla disperazione e avidità, perdono la propria identità e si confondono in una marea di terrore. Persino il protagonista causa la morte di due personaggi per assicurare la propria sopravvivenza, e questo pesa sulla sua coscienza. Anche se non ammette la sua colpevolezza, il ricordo degli eventi tragici lo perseguita e lo spinge a cercare una giustificazione.

Per sottolineare il forte legame tra uomo e gli esseri non-umani e mettere in dubbio gli assunti riguardanti l'umanità e la sua evoluzione, Wells immagina degli antagonisti fantastici, arrivati dal futuro o da altri pianeti. È proprio la loro natura ambigua e difficile da definire che mette in crisi i protagonisti umani. La loro descrizione è ricca di allusioni e metafore, lasciando spazio a molte interpretazioni. I Morlock, ad esempio, possono essere associati ai poveri, e quindi sono uno strumento della critica socio-politica. Il loro ambiente sotterraneo e la loro organizzazione alludono alle condizioni di vita e di lavoro della classe lavorativa inglese dell'epoca. Immaginando una classe oppressa che si ribella contro i suoi padroni e ottiene il potere, Wells avverte la minaccia posta dall'ineguaglianza e ingiustizia sociali. Da un punto di vista più profondo, psicanalitico anche, essi possono anche essere interpretati come un elemento atavistico, inseriti nella narrazione piuttosto come un prodotto del sogno o dell'immaginazione. Per confrontarli, il protagonista è costretto a scendere sotto terra, un'esperienza quasi iniziatica, che ha degli effetti viscerali, disgustosi. La descrizione delle Bestie è anch'essa costruita gradualmente, tramite dettagli e impressioni ambigue. Inizialmente, prima di capire la loro natura non umana, il narratore si riferisce all'aspetto delle strane creature, profondamente sorpreso e confuso dai loro gesti forzati. Anch'essi possono essere interpretati come un riferimento agli elementi marginali della società o persino al discorso razziale. Allo stesso tempo, siccome sono creati sul modello umano, si distinguono come personalità individuali, ognuno con le sue caratteristiche fisiche e comportamentali, che non riescono ad aggregarsi in una collettività e obbedire alla stessa legge. Manifestando la loro personalità e volontà però, essi scatenano gli istinti più primitivi e violenti, il che porta alla disintegrazione della comunità e alla frantumazione della loro vulnerabile umanità acquisita in seguito alla tortura e agli interventi imposti da Moreau. A differenza loro, sia gli Eloi, che i Morlock e i marziani sono descritti come elementi indistinguibili di una comunità, senza una propria volontà o identità. Tutte queste creature, ad eccezione degli Eloi, provocano una reazione forte, quasi fisiologica, di paura, terrore e profondo disgusto nei protagonisti umani, che li descrivono in termini molto forti e peggiorativi. Le descrizioni sono molto simili, però ci sono delle peculiarità: le Bestie sono caratterizzate dai tratti animalistici, grezzi, mentre la natura dei Morlock non è semplicemente disgustosa, ma persino demonica. I Marziani invece, attraverso il paragone con le Gorgoni, diventano dei mostri capaci di causare la fine della civiltà umana. Comunque, la voce narrativa sottolinea spesso che la loro invasione non va condannata dal punto di vista morale, poiché è molto simile all'espansione coloniale dell'impero inglese.

I romanzi sono costruiti quindi intorno al tentativo di opporre al sentimento iniziale di repulsione provocato dall'Altro, la rivalutazione del rapporto tra uomo e nonumano. Il rifiuto dello scrittore di tracciare un confine definitivo sulla scala evoluzionaria tra uomo e bestia, occidentale e selvaggio, futuro e passato allude al fatto che questi rapporti debbano essere concepiti come un continuum ontologico che presenta immense potenzialità positive così come negative. Se l'evoluzione biologica non garantisce il futuro progresso dell'umanità e il miglioramento dell'uomo fino alla perfezione, la domanda rimane se la soluzione potrebbe essere l'educazione, la scienza e la tecnologia. Sembra questa la convinzione degli occidentali, fiduciosi nel loro diritto e potere di dominare la natura e superare le vulnerabilità biologiche, persino la mortalità stessa, attraverso la tecnologia e la scienza. È questo il tema affrontato nel quarto e nel quinto capitolo, il primo dedicato alla figura letteraria dello scienziato pazzo e al fallimento della ragione come illustrato dai personaggi di Wells, quali il dottor Moreau, i Marziani e i Morlock; e, l'altro concernente la rilevanza e pertinenza della prospettiva di Wells nei dibattiti etici contemporanei riguardanti le biotecnologie.

Wells suggerisce che l'evoluzione naturale non garantisce il progresso dell'umanità. Di conseguenza, sembra che la natura debba essere controllata e dominata attraverso gli strumenti sviluppati dalla civiltà. Comunque, l'opposizione non è definitiva e l'idea che la scienza e la tecnologia siano indubbiamente positive va riconsiderata. *La Macchina del Tempo, L'Isola del Dottor Moreau* e *La Guerra dei Mondi* sono tutti romanzi che esplorano le conseguenze della teoria darwiniana, sfumando il confine tra le specie. Nella sua critica all'antropocentrismo e

all'imperialismo, Wells enfatizza la natura bestiale dell'uomo, la sua mancanza di autocontrollo e la tendenza verso la degenerazione. In opposizione ai protagonisti che illustrano questa debolezza stanno altri personaggi come il dottor Moreau, il Viaggiatore nel tempo, i Marziani e persino i Morlock, perché questi godono di una posizione di potere non solo sugli altri uomini o creature, ma anche sulla natura stessa. Caratterizzati da forte auto-controllo e una razionalità molto sviluppata, questi personaggi riescono ad imporre la propria volontà attraverso la scienza. Allo stesso tempo però, la tecnologia sviluppata si rivela vulnerabile, e il loro intelletto compromette altre caratteristiche umane, come le emozioni e l'affettività. Sono spietati, consumati dalla propria ambizione smisurata e il loro progresso, il loro trionfo si rivelano invece una degenerazione, perché compromette altri valori fondamentali come la compassione, la sociabilità e l'affettività.

Nel diciannovesimo secolo, il genio era considerato degenerato e malato perché fuori dalla normalità, e questo si riflette nella narrativa di Wells. All'epoca, autori come Nordau e Galton sostenevano che l'umanità avesse sviluppato un'intelligenza superiore al costo della forza fisica, capacità riproduttiva e sensibilità morale. Di conseguenza, qualsiasi sviluppo ulteriore sul piano intellettuale avrebbe compromesso ancora di più le altre funzioni dell'essere umano e quindi il genio, in quanto deviazione dalla normalità, fu associato alla follia e all'infermità mentale, insieme all'imbecillità. Una delle sue manifestazioni è la monomania: un'idea fissa, una preoccupazione patologica, che porta all'ambizione smisurata. E una tale ossessione che controlla una mente altrimenti sana, caratterizza entrambi i protagonisti dell'*Isola* e della *Macchina del Tempo*.

Dottor Moreau è un personaggio memorabile, che ha profondamente sconvolto i lettori dell'epoca ma che continua a lasciare una forte impronta sui lettori e critici tutt'oggi. Spesso paragonato ad altri personaggi celebri, come Dr. Frankenstein oppure Dr. Jekyll, descritto come 'scienziato pazzo' oppure 'intellettuale spietato', può anche essere interpretato come un personaggio gotico che riceve una punizione divina per la sua violazione delle regole religiose e morali fondamentali. La natura satirica delle leggi che impone e il suo desiderio di essere il creatore di esseri umani, lo rendono una figura deittica, mentre altri critici lo considerano una metafora dell'evoluzione naturale. Infine, da una prospettiva più laica e contestualizzata storicamente, i suoi assunti razzisti e l'ambizione di educare e civilizzare i selvaggi lo collegano all'espansione coloniale. È effettivamente un uomo di genio, però un genio piuttosto tormentato, che si lascia dominare dominato da un'ossessione che distrugge lui e tutti quelli che lo circondano. La sua tragedia deriva dalla sua ambizione smisurata, dal desiderio di controllare, trasformare e anche migliorare la natura a seconda della sua immaginazione. Eppure quello che compie è solo una trasformazione dolorosa e grottesca di uomini e animali in creature subumani.

Una delle più importanti preoccupazioni dell'epoca era la critica di pratiche come la vivisezione e la difesa dei diritti degli animali. Attraverso la vivida descrizione della tortura che Moreau infligge sugli animali nel capitolo 'Il pianto del puma', e la voce di Prendick che si oppone alle pratiche dello scienziato, Wells introduce il tema della tortura e dei limiti morali degli esperimenti scientifici. Anche se la sua fisionomia potrebbe non rispecchiare i tratti dell'uomo degenerato, Moreau spaventa Prendick con la sua razionalità fredda e la sua completa mancanza di compassione e affettività. Il suo genio sostituisce tutte le altre caratteristiche umane, tanto da renderlo quasi inumano, per questo viene esiliato ed è costretto a costruire la sua propria piccola società, dove però non trova il riconoscimento che tanto desidera. È appunto per la sua mancanza di umanità e intelligenza troppo sviluppata che viene paragonato ai Marziani. Un altro personaggio esiliato e tormentato è il Viaggiatore: un genio sicuramente, la cui scoperta della quarta dimensione sconvolge gli assunti fondamentali della realtà e gli permette di ovviare le leggi della natura e viaggiare nel tempo. Anche lui si avvicina alla figura dello scienziato pazzo: isolato per propria volontà dalla sua società e intellettuale fino a perdere la capacità di compassione, anche lui è divorato dalla monomania, cioè la sua ricerca scientifica. La sua scoperta, la macchina del tempo, rimane per tutto il romanzo, la sua priorità, e sembra anche acquisire una dimensione affettiva ed emozionale. Quest'interpretazione svela la nocività dello sforzo scientifico, quando esso diventa una preoccupazione ossessiva. Allo stesso tempo, si rivela che la tecnologia, comunemente considerata uno strumento attraverso il quale l'uomo impone la sua volontà, può anche diventare una debolezza, in quanto consuma il potere e la volontà del suo proprietario fino a renderlo profondamente vulnerabile. Questi sono solo due dei molti aspetti del concetto di tecnologia sviluppato da Wells nei suoi primi romanzi di fantascienza. L'analisi dei vari riferimenti alla tecnologia, sia della Macchina del Tempo che della Guerra dei Mondi, rivela un'ulteriore opposizione: essa è un prodotto della civiltà e

quindi dell'evoluzione, ma può anche portare alla degenerazione e al regresso se dovesse essere usata in modo sbagliato, abusata oppure sottovalutata. Questa duplice funzione degli strumenti tecnologici, che possono sia potenziare sia debilitare, è pienamente osservabile nel caso dei Marziani. Dal punto di vista fisico e biologico, essi sono deboli, vulnerabili e non adatti all'ambiente terrestre; però la loro tecnologia, attraverso strumenti come i tripodi, il raggio di calore e il nero fumo tossico, compensa le altre mancanze. Il loro corpo ripugnante e maldestro è meccanicamente potenziato in una creatura ibrida minacciosa, veloce e graziosa, uno dei primi riferimenti letterari al cyborg. La natura tecnologica dei marziani solleva i problemi già menzionati, come l'uso belligerante della tecnologia per imporre la propria supremazia sugli altri, in particolare nel contesto imperialista; e la vulnerabilità che tale dipendenza comporta. Nel descrivere l'invasione dei Marziani, Wells confronta ripetutamente la natura spietata e le conseguenze distruttive della conquista con l'atteggiamento dell'impero britannico nei confronti delle popolazioni dominate. Se la superiorità culturale "giustifica" l'espansione e la supremazia tecnologica è usata come arma sulla Terra, di conseguenza anche i marziani devono essere esonerati da ogni colpa se usano la supremazia tecnologica nello stesso modo. Oltre all'uso innovativo della tecnologia, i marziani sono anche ricordati per il loro aspetto insolito. Wells descrive i Marziani come delle semplici teste, con un cervello sviluppato e senza organi interni, ad eccezione del cuore e dei polmoni. Questo è un altro riferimento alla teoria del genio come essere degenerato: il cervello troppo sviluppato porta all'atrofizzazione delle altre funzioni. Da un lato, in coerenza con la teoria neo-lamarckiana, l'evoluzione intellettuale dei Marziani compromette lo sviluppo del loro corpo, che è ridicolmente fragile e sarà sconfitto, in una svolta darwiniana, dai più piccoli organismi sulla Terra. Dall'altra parte, però, sono creature intelligenti, meccanizzate, libere da ogni istinto ed emozione che potrebbero compromettere la loro razionalità. L'evoluzione naturale compie quindi quello che Moreau aveva sognato.

In tutti questi casi la ragione fallisce perché i protagonisti non sono in grado di anticipare e superare le difficoltà che affrontano, come lo scenario di un futuro distopico, la perdita della macchina del tempo e la tragica battaglia con i Morlock per il Viaggiatore nel tempo, la regressione delle bestie nel caso del Dottor Moreau e, infine, l'inadeguatezza biologica per i marziani. La loro intelligenza superiore e le conoscenze scientifiche o tecnologiche si rivelano insufficienti e le mancanze più notevoli sono la compassione, la solidarietà e il senso morale. Così, Moreau, i marziani e i Morlock sollevano il problema dell'evoluzione umana e del suo potenziamento attraverso mezzi scientifici e tecnologici. In relazione a ciò, un altro problema è quello dello sfruttamento di una specie o razza, giustificato tramite la superiorità evolutiva e tecnologica o con il fine di raggiungere tale progresso.

Alla luce del fatto che lo sviluppo dell'intelletto risulta in un potere superiore, ma anche in un'atrofia dell'emozione e dell'empatia verso l'Altro, come illustrato dai romanzi, l'egoismo e la spietatezza di tale dominio sono incontrollabili. Il problema è rilevante non solo in uno scenario distopico, ma può anche essere collegato alle preoccupazioni contemporanee riguardo al progresso tecnologico e scientifico, il cui esito è difficile da prevedere. Le pratiche di Moreau possono essere interpretate come un'anticipazione dell'ingegneria genetica e dello xenotrapianto, che viola il confine tra organismi umani e non umani e dà vita a chimere a sé stanti. Tuttavia, altri romanzi come La Guerra dei Mondi e La Macchina del Tempo esplorano anch'essi il rapporto tra esseri umani e non umani, con particolare attenzione alla selezione artificiale, nonché alle pratiche riproduttive e ai tentativi falliti di migliorare la natura. Pertanto, la domanda fondamentale riguarda la definizione dell'umanità e in che misura dovrebbe essere permesso alla ragione, alla scienza e alla tecnologia di alterare l'essere umano. Pertanto, la narrativa di Wells e gli attuali sviluppi scientifici sollevano interrogativi morali simili. Un'analisi comparativa potrebbe essere fruttuosa sia nel dimostrare la pertinenza e il potere intuitivo dei romanzi di Wells, che rimangono rilevanti anche dopo oltre un secolo dalla loro pubblicazione, sia nel rendere i dibattiti etici contemporanei accessibili e interessanti. Questo è l'argomento dell'ultimo capitolo, che analizza gli avvertimenti di Wells e gli scenari distopici in relazione alle preoccupazioni contemporanee riguardanti le biotecnologie volte a migliorare gli esseri umani e le creature non umane. L'intervento umano nell'evoluzione naturale è iniziato con l'addomesticamento e l'allevamento selettivo ed è giunto oggi a metodi più controversi e invasivi, promettendo procedure ancora più drastiche in futuro. Questi sollevano questioni morali anticipate da Wells nei suoi romanzi, come la violazione dei diritti e della dignità degli animali e degli esseri umani coinvolti nelle sperimentazioni

scientifiche e il pericolo associato all'eugenetica e persino la perdita dell'umanità tramite la sostituzione di emozioni e valori morali fondamentali con la razionalità.

Il miglioramento artificiale dell'uomo, sul piano biologico ma anche cognitivo, è un obiettivo centrale della scienza contemporanea. La fertilizzazione in vitro ha dimostrato che la riproduzione umana può avvenire in laboratorio per essere sottoposta ad un controllo di qualità e dalla scelta dei migliori embrioni alla selezione delle caratteristiche desiderate che formeranno l'embrione stesso, manca solo un piccolo, però controverso, passo. Mentre alcuni si oppongono, altri lo considerano il raggiungimento della massima libertà e quindi un obbligo morale. Il quinto capitolo presenta alcuni degli argomenti a favore e contro tali pratiche e analizza anche gli esperimenti di Moreau dal punto di vista del dibattito etico contemporaneo che riguarda le biotecnologie. I bioconservatori si oppongono a questo tipo di intervento non solo a causa dei rischi biologici o sociali che presenta, ma soprattutto in virtù del valore morale dell'integrità della natura umana in quanto tale, e ritengono che la ricerca della perfezione tramite l'ingegneria genetica sia una pratica disumanizzante che porterà alla creazione di post-umani, che godono del potere assoluto sul loro destino, sull'evoluzione naturale ma al contempo perdono la compassione e l'empatia verso l'altro. Tale avvertimento è implicito nella figura di Moreau: la rappresentazione assoluta della hybris e del desiderio di dominare la natura e superare i limiti umani, che però viene punito per la sua arroganza tramite solitudine e una morte tragica. Un altro problema è la disuguaglianza che si instaura tra le persone 'migliorate', che vengono definite post-umane e quelle che non hanno accesso a queste tecnologie, diventando inferiori. Questo è lo scenario presentato da Wells nella Guerra dei Mondi, dove il narratore sostiene ripetutamente che gli inglesi non possono considerarsi delle vittime, poiché i marziani sono esseri superiori e questo dà loro il diritto di perseguire il loro benessere con tutti i mezzi. Quest'osservazione ironica, destinata a criticare il centrismo britannico, mantiene la sua pertinenza nel contesto più ampio delle biotecnologie e del miglioramento dell'uomo. È chiaro quindi che gli avvertimenti dei bioconservatori non devono essere trascurati e occorre un dibattito pubblico al fine di controllare la direzione e la natura di tali sviluppi scientifici che altrimenti potrebbero modificare radicalmente la società e l'umanità, creare profonde disuguaglianze o addirittura condurre all'estinzione. Per rivolgersi al vasto pubblico e coinvolgerlo in questo
dibattito è necessario un dialogo interdisciplinare. Il contributo della fantascienza, grazie alla sua natura pervasiva e persuasiva, potrebbe rivelarsi molto prezioso in quanto il discorso letterario riesce a combinare l'immaginazione scientifica, la consapevolezza sociale e stimola il coinvolgimento affettivo. Essa supera la mancanza di conoscenza scientifica o di interesse del vasto pubblico, poiché fa appello alle intuizioni e ai sentimenti morali fondamentali di tutti gli esseri umani, come l'empatia e la compassione, attraverso scenari avvincenti e memorabili che riescono a catturare l'attenzione del pubblico e ad allertarli in merito alle potenziali conseguenze distopiche delle biotecnologie. H. G. Wells è uno degli scrittori che è riuscito a portare un tale contributo: grazie alla sua profonda comprensione della natura umana e della sua arroganza, egli avvertì gli uomini che alla fine avrebbero potuto soffrire a causa della loro ambizione che alimenta il progresso scientifico e tecnologico. La sua narrativa mira a stimolare l'empatia e la compassione nonostante i cosiddetti confini biologici, e questo è molto rilevante per una riflessione critica sulla scienza contemporanea: il "trionfo troppo perfetto dell'uomo", che segna il dominio assoluto e distruttivo dell'uomo sulla natura, è al giorno d'oggi una minaccia più pertinente che mai, e quindi opere come La Macchina del Tempo, L'Isola del Dottore Moreau, La Guerra dei Mondi, sono ancora attuali. Con le radici nelle questioni fondamentali riguardanti l'umanità, la moralità e la posizione dell'uomo nell'universo, e sviluppandosi sulla base della rivoluzionaria teoria dell'evoluzione e su altre scoperte scientifiche dell'epoca, la fantascienza di Wells continua ad estendere le sue ramificazioni verso il futuro.