Representation of the Body in Edward Bulwer-Lytton's *The Coming Race*

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Abstract[1]

Many critics have suggested that most of the monstrous characters in late-Victorian British science-fiction novels represent social misfits and the cultural fear of physical and moral degeneration. However, scholars of critical posthumanism believed that a body born in a techno-scientific context can depict a progressive hybrid that destabilises the natural-unnatural dualism from an anthropocentric view. In line with this posthuman perspective, this article studies Edward Bulwer-Lytton's The Coming Race (1871) in which the non-human characters, the Vril-ya, can be considered advanced beings instead of malformed monsters. It argues that such characters represent progression rather than degeneration since the portrayal of their electric body, a body integrated with electrical technology, affirms the necessity for a bio-technological reform of civilisation. Through the electric body, Bulwer-Lytton seems to suggest the possibility of a new form of life that co-evolves with technology.

Keywords: Body, Victorian Science Fiction, Posthumanism, Edward Bulwer-Lytton, *The Coming Race*

Due to fruitful technological invention and scientific knowledge in nineteenth-century Britain, electricity, a technological legacy of the Age of Enlightenment and one of its prominent scientific breakthroughs, not only brought about social modernisation but also a new perception of life and the body. Following the pioneering discovery of electrical power from lightning by Benjamin Franklin in 1742, studies of electricity and magnetism were developed as part of early nineteenth-century science (previously known as natural philosophy). Synthesised electricity, as a result of chemical studies, led to tremendous electrically-driven machinery like Michael Faraday's electric motor in 1821 and Alexander Graham Bell's telephone in 1875, which marked the nineteenth century as an age of technological innovation. The discovery of

electrical energy in the body originated in Franz Mesmer's animal magnetism or mesmerism and Luigi Galvani's galvanism in the late eighteenth century, which both suggested how the body functioned through self-regulated power. While magnetism was a life force or invisible fluid in all living beings, galvanism was the practice of corporeal reanimation through electrification which was experimented upon a human corpse by Giovanni Aldini in 1803 to prove the reanimation effect of electrical power. A lecture on electrolysis and a chemical experiment to produce electric liquid were also given and conducted by Andrew Crosse whose overreaching attempts to create a living creature from electricity became quite a scandal. Such scientific experiments later paved the way for electrotherapy, a medical and therapeutic treatment for physical and mental sickness. Some mentally ill patients, for instance, received daily "electric baths" as a cure for abnormal nerves (Beveridge & Renvoize, 1988, p. 160). Electrotherapy later proved to be ineffectual and went into decline. With the application of an electrical current as medication for physical illness, the human body was metaphorically transformed into an "Atlantic cable, an electrolytic conductor, an induction coil" and an "electrical device" that configured the image of "a component of machinery" (Morus, 1999, p. 278). This revolutionary change in how the human anatomy was perceived through a scientific gaze unveiled the notion that the body, instead of being an imitation of the divine, was an advanced container of or the material for electric-driven organisms.

With the emerging theory of evolution in the mid-nineteenth century, human beings were scientifically revealed to be biologically related to simians instead of bearing a resemblance to God. "Imago Dei" or the image of God is the Biblical term used to illustrate how the human form, rationality and self-consciousness derive from the great divine. Even though "Imago Dei" marks a certain distance from God, since humans are like God but not Him, the term distinguishes humanity from other creatures on earth. However, the genealogical fact of the human species being descendants of prehistoric apes radically disillusioned many believers in Biblical creationism. The evolutionary hypothesis offered a more tangible answer to how the human species was and would become in the future, and it was hypothesised that the British race would probably be either progressive or regressive. As the fittest or strongest species tended to survive and the weakest would perish, many Victorians were afraid of being categorised as the weakest who would soon be extinct in this competitive struggle for existence. With the concept of degeneration being theorised in Europe during the late nineteenth century, physical, mental and racial extinction crept into the Victorian imagination. The three prominent signs, leading some to believe in the probability of such extinction, included moral decline, physical degradation and immigration. Although the number of criminal cases gradually reduced during the Victorian period, horrific homicides like garrotting and the appalling case of Jack the Ripper towards the end of the century significantly

raised concerns about moral decline. Many Victorians also considered that biological criminality could be inherited among the "criminal classes," whom they regarded to constitute the poor, the working class and the foreign labour of the period (Emsley, 2011, paras. 4-10). Like racism, this prejudiced classification of criminal offenders could be reinforced by anatomical studies such as physiognomy and phrenology which were used to determine criminal traits from physical appearance. Therefore, this bias against the working class and foreigners led people to believe that society would soon face decline and corruption. With these threats of moral, physical and cultural corruption, the British race was in danger and the end of the nineteenth century might connote "the visible index of some approaching end of the world" (Mackail, as cited in Greenslade, 1992, p. 37). Technological progress was not advantageous for everyone since there was an on-going impoverishment of the working class and a feeling of pessimism about machines. Techno-science which was unethically practised and physically affected people could be monstrous in both reality and fiction. In late-Victorian Gothic and scientific tales such as Robert Louis Stevenson's *The Strange Case of Dr Jekyll and Mr Hyde* (1886) and H.G. Wells's *The Time Machine* (1895), as critics like Kelly Hurley and Gail Marshall have suggested in *The Gothic Body* (1996) and *Victorian Fiction* (2002) respectively, most of the monstrous characters could reflect the malice of techno-scientific progress and the cultural fear of degeneration that promised permanent regression of the human physique and mentality.

In contrast to the negative implications of the non-human and monstrous identity, twentieth and twenty-first century scholars of critical posthumanism proposed that a life form with a human-non-human hybridity is a progressive identity which goes beyond the humanistic and anthropocentric worldview of the superiority of human beings to non-human creatures and human-non-human dualism. It can be said that a number of non-human characters born from or blended with technology in science fiction are not only monstrous representations of otherness and degeneration but also entities that disrupt the anthropocentric dualism between the organic and the inorganic, the natural and the unnatural. Most of these fictional characters were viewed by readers and critics as negative representations once they were situated in the late nineteenth-century context. Nevertheless, in the twentieth and twenty-first centuries, they could be regarded as progenitors of posthuman beings whose bodies and identities destabilise the human-centric or anthropocentric belief of human superiority to all other creatures. This article studies Edward Bulwer-Lytton's *The Coming Race* (1871) as an example of Victorian science fiction with a progressive view about technologised life instead of degeneration. While the subterranean humanoids, the Vril-ya, with their electric bodies which seem hyper-technologically advanced but fatally invincible in the novel are seen as a threat to the human race, from the posthuman perspective and by focusing on the

depiction of the body merged with technology, however, this article argues that the Vril-ya embody a progressively technologised life since the portrayal of their electric body affirms that a biological and technological reform is necessary for civilisation. On the one hand, as his biographer Victor Bulwer-Lytton (1913) suggested, Bulwer-Lytton subtly satirised the utopian ideology through his representation of the Vril-ya that mocks the excessively organised society, making the Vril-ya and their community disagreeably immaculate (p. 462). On the other hand, the author seriously engaged with presenting a possible life with technology which, whether humans like it or not, will continuously evolve.

Reinvestigating the Monstrous Body

In spite of growing industrialism and scientific knowledge, there was resistance to technological advancement which was considered by many people to be the result of amoral and seemingly unfair practices. While science was meant for studying the natural world and enlightening people through rationalism, technology could be a direct or indirect product of science and industrialism that facilitated Britons' ways of living. Although pure science, rationally conducted for the sake of human knowledge, was praised and defended by its practitioners, technological inventions, particularly from "non-scientific" or reckless scientists, were subject to denunciation (Haynes, 1980, p. 70). The negative attitude towards technology and machinery stemmed from two noticeable impacts. Firstly, the use of industrial machines which replaced the human workforce, was unacceptable for many workers who lost their jobs and proper wages. From 1811-1812, for example, a group of workers, the so-called Luddites, later known as machine- haters, denounced the way in which industrial machines stole their wages and were used in a "fraudulent and deceitful manner"[2]. Secondly, machines were believed to dehumanise people, especially plant workers. The proximity of industrial machines to human bodies caused British workers to be perceived as an industrialised body useful to national productivity. Symbolising the human body as a machine was later criticised by some Victorian intellectuals. Thomas Carlyle (1852), for instance, expressed his concern in "Signs of the Times", that Victorian people were turning into mechanical subjects and that "men are grown mechanical in head and in heart, as well as in hand" (p. 189). Industrial machinery and its role in dehumanising the human subject was also addressed in John Ruskin's *The Stone of Venice* (1851-1853). Although Ruskin (1867) agreed that humans can be taught to work with "admirable speed and perfect precision" like machines, he worried that the quality of man as a "thinking being" would die out and humans would soon become a mere "animated tool." (p. 161)

In addition to the social distrust of technology, the possibility of human extinction was worrying for many Victorians at the turn of the nineteenth century. The scientific and secular explanation of human genealogy could cause dismay about the future of the species. While studies of electricity demystified

the human body into a collage of living organisms, a breakthrough in genealogical knowledge from the emerging theory of evolution in *On the Origin of Species* (1859) by the naturalist Charles Darwin, revealed how human beings were physically related to simians instead of inheriting the likeness of God in terms of the perfect human form and rationality. This hypothesis radically undermined Biblical creationism and reinforced the possibility of a biological collapse into animals (Margree & Randall, 2012, p. 218). Herbert Spencer, the socialist and philosopher, added the idea of how the fittest or strongest species would replace the weakest one. As the Industrial Revolution and capitalism in Britain brought about an influx of foreigners and labourers, a number of Victorians were scared of becoming endangered and replaced by foreign immigrants who would outnumber, biologically contaminate and lead the British race to extinction. "Jewish 'alien' immigrants," for example, were seen by degenerationists as the new "fittest" who would survive and overshadow "the indigenous working class" in Britain during the 1880s (Greenslade, 1992, pp. 42-44). Due to the possibility of racial regression, degeneration discourse gradually took hold in the mid and late nineteenth-century Europe. Degeneration was a reversal of the evolutionary narrative with its focus on accelerated "mutability" and the possible extinction of species (Hurley, 1996, p. 65). Even before the publication of Darwin's evolution theory, in *Treatise on the Degeneration of the Human Species* (1847), Bénédict Augustin Morel, a French psychiatrist, first theorised a degeneration model central to abnormal parentage in which hysterical ancestors would result in insane, dull-witted and infertile offspring and lead to extinction. Physical appearance became a determiner of devolution as the "invisible source of contamination" was shown by "visible physical deformity" (Hurley, 1996, p. 66). In the late nineteenth century, Cesare Lombroso, an Italian physician and psychiatrist, also proposed bio-criminology or the study of physical traits which link criminality with primitiveness that set off the theory of bodily decay or regressive genes leading to the extinction of the human species. Max Nordau, a German social critic, also saw the unfit traits of the mentally ill and morally corrupted as a biological threat to the population as a whole. In late-Victorian Britain, hostile life conditions could accelerate biological decline. James Cantlie, for instance, was concerned about "urban degeneration" in London where Londoners were afflicted by the "lack of ozone" and would produce physically deformed children whereas J. Milner Fothergill predicted that the lower class in the East-End would go "further and further back" to primitiveness and beget a race of "mannikins" or "dwarfs" (Fothergill, as cited in Hurley, 1996, p. 69).

The pessimism about transformative technology and the emerging degeneration hypotheses were to have an impact on the negative representations of the body in British science fiction during the nineteenth century. Some fictional monsters and the "devolution of life" could be the products of

technology (Edwards, as cited in Szabo & Crisan, 2018, pp. 148). Scientists in nineteenth-century science-fiction novels are mostly characterised as Faustian men obsessed with science and playing God as they invent or create something that deviates from what is natural. Their invention then turns monstrous and the inventor faces his own punishment. An early example is Mary Shelley's *Frankenstein* (1818), a scientific fantasy about a man who defies God through his creation of a living being. It influenced later science-fiction novels in the century and showed how the "monstrous" body, as perceived in the eyes of the creator Victor Frankenstein, and the monstrosity of science are created. Shelley's creature, reanimated by electrical power, has a freakishly deformed and "aberrant" physique as the manifestation of "monstrosity" (Ng, 2004, p. 144) and is a threat to what is perceived as a normal human being and a conventional life. He is also the vile product of unethical and unnatural science. His creator, Victor, "ha[s] been the author of unalterable evils" and "lived in daily fear" of the "monster", so he is both a reflection and a victim of this evil (Shelley, 2004, p. 130). Electrical technology in *Frankenstein*, under the control of an overreaching scientist who produces a living creature that turns against its creator, is suggestive of how God's power of creation is challenged by humans and how technology can be destructive to humankind. The creature's misshapen appearance also shows the degenerative signs most Victorians feared. Characters with a dehumanised appearance can be seen in many late nineteenth-century novels. For instance, in *Erewhon* (1872), Samuel Butler expressed his concerns about the excessive dependence on "mechanical limbs" that could lead to humans' degenerated bodies (Butler 1872, as cited in Parrinder, 2015, p. 91). In Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886), monstrosity deals with both the external and internal forces of humans. Henry Jekyll whose beastly doppelgänger, Edward Hyde, brings him to his downfall and death represents the triumph of the inner savage and the ambivalence of science which is "neither diabolical nor divine" (Stevenson, 1886, p. 115). In addition, H. G. Wells's scientific romances introduce monstrous characters, ranging from human-animal hybrids brought to life by an overreaching scientist in *The Island of Doctor Moreau* (1896) to threatening aliens invading human territory in *The War of the Worlds* (1898). These monstrous, non-human characters who threaten the very existence of humanity set the trend for or reflected the cultural fear of degeneration.

However, from the twentieth and twenty-first-century view of critical posthumanism, representations of non-human characters are not limited to issues of degeneration, anti-technology and socio-political symbolism. While debunking the humanistic or anthropocentric notion of the human-non-human dichotomy by revealing that the human species is not arbitrarily superior to non-human others but co-evolves with them, twentieth and twenty-first-century critics of anthropocentrism have seen "monstrous" hybrid life as an assemblage of human-non-human, organic-

inorganic elements. Donna Haraway (1985) explained that a half-organic and half-mechanical subject, a cyborg, challenges the traditional binary oppositions of human and non-human, nature and culture. This non-binary identity can be seen in the recent representation of extraterrestrial aliens in science-fiction films where their appearance and existence not only connote racial and sexual deviation but also distort such binary oppositions or the "either/or logic of anatomical reference" with their peculiarly asexual reproduction (Hurley, 1995, pp. 209-221). Like Haraway, N. Katherine Hayles (1999) saw the body as a mere vehicle or device since "there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism…" (p. 3). The complex life forms are not innately horrifying but probably "constructed and understood" to be so (Hayles, 1999, p. 291). Non-human characters as a natural-technological hybrid in late nineteenth-century science-fiction are not only socio-culturally symbolic of the undesirable quality of humans but a prefiguration of a life constituent of non-human others. Technological otherness is not a demonic but a transformative force that constitutes a new body. A monstrous and unconventional figure, although its "diabolic role" is still preserved (Milburn, 2003, p. 621), becomes a posthuman entity since it is "beyond man and humanism" (Derrida, as cited in Milburn, 2003, p. 603). This loss of human qualities implies a progressive movement and the possibility of a new, unfamiliar identity rather than a degenerative pathway to primitiveness. In this sense, *Frankenstein* can be said to embody the artificial life or the electric body that is later reiterated in modern novels and films in the modern form of robots, cyborgs and artificially intelligent aliens or humanoids. Electrical technology is thus an essential source of scientific fantasy. It is controversially "similar to a life force or was, in fact, life itself" (Harkup, 2018, p. 37) and also creates an advanced life form which progressively transforms the body and destabilizes the human-non-human dichotomy. While it is true that the Victorian British were mostly preoccupied with the fear of degeneration or devolution and many science-fiction novels reflected or were influenced by it, this article reexamines Edward Bulwer-Lytton's *The Coming Race* (1871) through the lens of critical posthumanism to argue that the Vril-ya or human-like creatures whose electric body, the organic body supported by electric-like power and machines, affirms the possibility of biological evolution. With the depiction of the electric body, the novel implies how technology is transformative and vital for progression even though it can be destructive. Although he was known for and specifically passionate about the Gothic and supernaturalism, Edward Bulwer-Lytton created works in various literary modes due to his "all-round interests" (Chesterton, 1913, p. 136). *The Coming Race* was his attempt to write a tale of techno-scientific utopia. In a letter to John Foster, Bulwer-Lytton "did not mean Vril [the mysterious power in *The Coming Race*] for mesmerism, but for electricity, developed into uses as yet only dimly guessed…"[3]. He was evidently ready to engage in the contemporary progression and predict a possible life when humans

and technology coexisted at the turn of the century. With his prophetic view of the human species, concocted from technological and scientific ideas such as evolutionism and electricity, *The Coming Race*, instead of re-representing the cultural fear of degeneration, can be read as a science-fiction novel about the possibility of a new form of life co-evolved with technology.

The Electric Body in *The Coming Race*

Bulwer-Lytton's depiction of a race of humanoids whose body is charged with the electric-like power Vril in *The Coming Race* is reminiscent of both contemporary techno-scientific developments and the creature who is brought to life by electrical power, in Mary Shelley's *Frankenstein*. Electrical use ranging from medication to urban power supplies in nineteenth-century Britain was marked as the beginning of "the Age of Electricity" (Anon, 1883, as cited in Beveridge & Renvoize, 1988, p. 157). The marvellous electric lights are introduced in *The Coming Race* when the narrator accidentally falls to the bottom of a mine cave and is surprised that there is "a brilliant light" that seems like "artificial gas-lamps" and is later perceived as "a diffused atmospheric light, not like that from fire, but soft and silvery, as from a northern star" (Bulwer-Lytton, 1871, pp. 8-10). This astonishing application of electrical technology makes the narrator feel in awe of the energy source, Vril, which is both creative and destructive. Bulwer-Lytton (1871) noted in another letter that "the notion of Vril might be more cleared from mysticism and mesmerism by being simply defined to be electricity and conducted by those staves or rods" (p. 467) and "it would be safe to omit all reference to the power of communicating with the dead" (Bulwer-Lytton, 1871, p. 467). Instead of mysticism, Vril is, indeed, associated with contemporary technology. Like Mary Shelley's use of electricity in *Frankenstein*, Vril energy in *The Coming Race* is a double-edged sword. Bulwer-Lytton and Mary Shelley might have been inspired by electrical fantasy and technological dualism but Bulwer-Lytton's depiction of electricity is extended to a higher level of imagination in *The Coming Race* in which the electric body, flying boats, mechanical protheses and lightning staffs are beyond what the contemporary practice of electrolysis ever achieved. As humans and non-humans were drawn closer in a complex relationship by technology, questions of life and artificiality or human-non-human entity were not merely of interest to scientists and philosophers but also writers.

At first, the Vril-ya can be seen as primitive and monstrous criminals who stir the fear of degeneration. Their representation is indeed ambivalent since they seem monstrous and benevolent, physically degenerative but technologically advanced. According to the imperialistic narrator, the Vril-ya's appearance bears atavistic traits as the subterranean world provides a dark, primitive atmosphere with forgone architecture and is inhibited by massive, ancient-looking reptiles. The underground humanoids also share some

resemblance to humans who live on the surface of the earth but they seem to belong to an exotic, primitive race as their facial "outline and expression" remind the narrator of the face of "the sculptured sphinx" (Bulwer-Lytton, 1871, p. 18). The Vril-ya's strangely red skin with "large black eyes, deep and brilliant, and brows arched as a semicircle" (Bulwer-Lytton, 1871, p. 18) reminds the narrator of the Red Indian and primitive Indo-Europeans with dark complexions and taller figures. Apart from the unfriendly appearance of the Vril-ya which suggests inhumanity, their staff or what the narrator refers to as the "inimical" weapon seems hazardous to him. Even though their atavistic physique can be, but is not entirely, associated with Lombroso's concept of biological criminality, the Vril-ya do not look like murderers. Instead, they look like mystique seers or hypnotizers as the narrator notices how one of the Vril-ya approaches to help him "with an eye that seem[s] to read to the very depths of [his] heart" (Bulwer-Lytton, 1871, p. 19). Although he feels safe under their care, the narrator, from his own perspective, interprets their cold-looking faces as reflecting "the instinct of danger which the sight of a tiger or serpent arouses" (Bulwer-Lytton, 1871, p. 18) as the criminal motive behind this race. He thus fears becoming an abductee being "captured and dissected for scientific purposes" (Bulwer-Lytton, 1871, p. 172) and describes these creatures as criminals whose appearance is associated with the degenerates. Therefore, the narrator here acts like Mary Shelley's Frankenstein who demonises the indescribable creature by using his personal and limited judgment.

The monstrosity seems to stem from the narrator's imperialistic judgement rather than the creatures themselves. The cynical tone in *The Coming Race* could be a mockery of the human-centric mindset and the representation of human subjective judgment. The story is told from an adventurous Victorian man's point of view which is unreliable. With the first-person narration, the readers not only identify themselves with the "I" but also distance themselves from the non-human entity the narrator is confronting. This point of view allows the narrator to emphasise his subjective rather than objective judgment and to personally construct the image of the Vril-ya as the criminal others endangering him, a representative of humankind. Meanwhile, the Vril-ya, too, belittle humans as an inferior and threatening species. Bulwer-Lytton seemed to point out that the angst and xenophobia both species have towards each other derive from their self-centredness: the narrator's worry about his own physical destruction and the Vril-ya's concern about biological regress. This underlying racism in the novel reflects an imperialistic dread deeply rooted in a worldview that allows a species to recognise its own race as supreme. Although the Vril-ya are not humans and reject being so, they and the narrator share a similar idea of idolising their own race and seeing the other as a threat. This idea seems to be satirised since it serves as a racial fantasy and prejudice which is not based on a comprehension of each other's truth. To the narrator's empirical and perhaps

shallow scrutiny, the creatures' appearance only belongs to primitive or exotic groups of people on earth. The truth for him is evidently one-sided and unreliably subjective.

The technological environment where the Vril-ya dwell can turn them into an advanced species. After the death of his engineer friend whose body is consumed by a gigantic reptile in the subterranean region, the narrator staggers away and finds himself in a utopian-like wonderland surrounded by peculiar vegetation and Mesopotamian buildings. Although the mysterious town is indicative of an ancient civilisation, it is technologically supported. In addition to tamed deer-like animals, a grand entrance to buildings and extraordinarily oversized and synthetic-like plants, there is a flying vehicle described by the narrator as "a small boat, impelled by sails shaped like wings" (Bulwer-Lytton, 1871, p. 15). The flying boat with "wings" is obviously not a hot air balloon but is quite similar to the airplane that the Wright brothers thought of in 1899. In Britain, airplanes were not successfully invented until the early twentieth century. Aviation technology in *The Coming Race* is thus more advanced than that on the surface of the earth where humans live, especially Great Britain. Once the narrator draws closer to the Egyptian buildings, he meets the human-like creatures who call themselves Vril-ya and is hospitalised by them.

With their technological advancement, their body closely assimilating with electrical technology recalls the image of an advanced creature such as a cyborg. While the narrator stays in this subterranean city, he learns about the Vril-ya's way of living, language, mechanical garments and the mystical electric-like power called Vril. Vril is a life-giving and life-destroying force that energises their bodies and the entire city. The narrator is at first captivated but then horrified by the appearance of a male humanoid who looks extremely tall and is dressed up with mechanical devices:

> Its chief covering seemed to me to be composed of large wings folded over its breast and reaching to its knees; the rest of its attire was composed of an under tunic and leggings of some thin fibrous material. It wore on its head a kind of tiara that shone with jewels, and carried in its right hand a slender staff of bright metal like polished steel. (Bulwer-Lytton, 1871, p. 18)

The physical description recalls the chivalric and mythical image of a knight, a winged immortal or a wizard with a magical staff. The narrator later learns that the winged attire can make these humanoids float in the air when he sees the child named Taë, who carries him to a room, fly through the window. Instead of being the organic wings of poultry, from the narrator's observation, the wings are indeed mechanical because the child "[does] not flap to and fro as a bird does, but the wings [are] elevated over his head" and "bear him steadily aloft

without effort of his own" (Bulwer-Lytton, 1871, pp. 24-25) like a mechanised airplane. Staying at the house of the host or Aph-Lin, a chief of the Light-preserving Council in this tribe, the narrator suspects that the wings are electrified when he touches the host's wings and "a slight shock as of electricity pass[es] through [him]" (Bulwer-Lytton, 1871, p. 30). The truth behind these magical wings and all subterranean technology is explained by Zee, the host's daughter, that Vril is the key energy, which the narrator assumes to be electricity and refers to it as Faraday's "atmospheric magnetism" (Bulwer-Lytton, 1871, p. 42), used for animating every technological device and supporting all lives in this subterranean region as if it were the sun of the underworld.

The close assimilation between the organic body and mechanical wings suggests a seamless assemblage of life and artificiality that defies the organic-mechanical separation. According to Haraway, the cyborg's bodily representation depicts the collapse of organic-inorganic and natural-artificial boundaries. Its imagery was proposed to show how complicated life and identity were in the late twentieth century and to call for human-non-human, physical-non-physical and nature-culture binary breakdowns through techno-science. The Vril-ya's body is not only invigorated by electricity or Vril but this is also an indescribable entity that disrupts the organic-mechanical division. The representation of Vril-ya's electric body agrees with what Haraway said about "machines" that can be "lively" while humans become "frighteningly inert" (Haraway, 1985, p. 69). It can be inferred that the state of being of a cyborg is either a machine which is lifelike or a living being who acts like a machine. In the novel, the narrator is an injured man who is under the care of the Vril-ya. In spite of being an active, adventurous bourgeois, he seems inert because of not only the injury but also his less abled body compared to the Vril-ya's advanced one. In contrast, these humanoids are more alive and energetic as the young Vril-ya, Taë, flies like "an eagle that basks in the sun" (Bulwer-Lytton, 1871, p. 31). Zee, the host's daughter, shows the narrator around the museum where she performs Vril power using her electrical staff to reinvigorate objects. As the astonished narrator observes,

> She [Zee] seemed to endow them [substances] with intelligence, and to make them comprehend and obey her command. She set complicated pieces of machinery into movement, arrested the movement or continued it, until, within an incredibly short time, various kinds of raw materials were reproduced as symmetrical works of art, complete and perfect. Whatever effect mesmerism or electro-biology produces over the nerves and muscles of animated objects, this young Gy [a female Vril-ya] is produced by the motions of her slender rod over the springs and wheels of lifeless mechanisms. (Bulwer-Lytton, 1871, pp. 109-110)

Zee, like other humanoids, uses the electrical staff to energise "lifeless mechanisms" and make them look lifelike. Although the narrator has the chance to wear those wings and learns how to fly, he finds that these mechanical devices are not easily synched with the human body. He remarks, while struggling in his flying lesson, that he is "the servant of the wings; the wings were not [his] servants—they were beyond [his] control…" (Bulwer-Lytton, 1871, p. 159). In contrast, flying is natural for the Vril-ya as if the mechanical wings are organic parts of the body. As Zee explains, the Vril-ya have been familiar with using mechanical wings since they were young. With their bodies fused with and adjusted to the electric device, they soar into the sky with artificial wings "intuitively and unconsciously" as if flying were their "instinct" (Bulwer-Lytton, 1871, p. 160). It hints that regular use of machines familiarises the organic body with the inorganic machine and that this non-human race is more capable of using machines than humans. These non-human characters are born cyborg-like as they need to practise using machine-driven wings as though they were their own limbs so that the body and technology can fully interlock.

Furthermore, the subterranean humanoids can also embody multi-species due to their racial, biological and cultural complexity. The narrator firstly recognises that they are not natives of Western Europe but rather belong to primitive races such as ancient Egyptians or Red Indians or people of colour in exotic countries. The narrator, in spite of his earthly experience, is perplexed and unable to clearly describe the Vril-ya as humans or non-humans, Westerners or non-Westerners. They have a human silhouette with distinctively serene and beautiful faces, mechanical garments and taller bodies. At the College of Sages, where female Vril-ya or Gy study as professors of "purely speculative philosophy" (Bulwer-Lytton, 1871, p. 57), the narrator notices that there are ancient pictures of the Vril-ya's ancestors known as the uncivilised Ana. These humanoids regard the pictures as a "higher degree of art" instead of primitive art in the eyes of Westerners. The painted humanoids bear a resemblance to "[the] upper world and European types of countenance" with "Italian heads" (Bulwer-Lytton, 1871, p. 113). However, their culture is close to the culture of the Indo-European tribes and, as the narrator observes, their language is "akin to the Aryan or Indo-Germanic" (Bulwer-Lytton, 1871, p. 80). Following their folklore, the Vril-ya are also believed to be descended from frogs. Their archaeological evidence maintains that the Vril-ya and their ancestors display physical and cultural ambiguities. Once the subterranean race had become civilised and technologically developed, their bodies were also transformed and "a thousand years after the Vril revolution," the Vril-ya's countenance is calmer and more graceful unlike that of the Tish (Bulwer-Lytton, 1871, p. 114), the term for inferior humans. Their socio-cultural and biological identity is undeterminable by anthropological observation and looks like a perplexing collage of multi-species.

In terms of biological sex, the Vril-ya are heterosexual but their gender paradigm is the opposite of the Western male-female identity and relationship. Female Vril-ya are called Gy-ei or Gy, and their bodies are more massive than Ana or An, the male, and free to do activities and choose their own husbands while Ana are more passive. In Victorian Britain, while men were allowed to do outdoor activities, women were supposed to be domesticated and were not advised to wander outside at night or they would be considered prostitutes. This double standard which suppressed women but privileged men enabled the latter to take advantage of the public and the private spheres: they could work and travel freely outside the house and in the family their status as husbands gave them superiority over their wives. As many middle-class women internalised these gender stereotypes, their womanhood was described by the metaphor of the "angel in the house," whose lives were properly positioned as obedient daughters, dedicated housewives and careful mothers ready to serve fathers, husbands and children at home. Sexual expression was forbidden to all women, otherwise they would be seen as prostitutes or radically progressive and self-reliant individuals. Therefore, Victorian women were expected to be passionless and embrace femininity, motherhood and morality so that they would be good daughters, wives and mothers who devotedly supported households and a nation ruled by men. The Vril-ya's society in *The Coming Race* seems like a parody of the world above the ground where men are active thinkers and women are passive housewives. The Gy-ei are physically strong and active, yet beautiful. According to the narrator's comments, the host's daughter, Zee, is "a magnificent specimen of the muscular force which the females of her country attain" with a "grand" and "faultless" face which reflects "abstract thought" and "sternness" (Bulwer-Lytton, 1871, p. 109). She is taller and more well-built than the male, Ana, as she can "lift up a cannon as easily as [the narrator] could lift a pocket-pistol" (Bulwer-Lytton, 1871, p. 109). The narrator is amazed and terrified by this female creature's strength and masculinity. As a Victorian man who seems physically strong and active, his body seems fragile compared to that of a Gy who can carry a "cannon" like a man holding a "pocket-pistol." Zee, apart from being a parody of the progressive woman, is like a heroic warrior or an unconventional "angel" who deviates from Victorian feminine values. The Vril-ya's courtship is also puzzling for the narrator when one of the female Vril-ya disputes with him that in this subterranean world, females approach men first and doing otherwise is "a strange reversal of the laws of nature" (Bulwer-Lytton, 1871, p. 206). Females' overt sexuality is normal for this race but a deviation for the narrator who values Victorian gender roles.

In terms of sexuality, the narrator attempts to liken these creatures to Victorian people instead of being sexually unidentifiable creatures. To Haraway, the cyborg should be sexually fluid or unspecified by sexual attributes to establish a post-gender identity. In science-fiction, extraterrestrial aliens can

make gender stereotypes as well as cultural and biological fixations of the humankind obsolete (Hurley, 1995, p. 209) as extraterrestrial beings can transform human males into "mothers" of alien babies since the aliens can inject their embryos into a male body to reproduce (Hurley, 1995, p. 218). For Rosi Braidotti (2013), the idea of posthuman life rejects not only sexualised bodies but also racialised and animalised ones. The posthuman body, thereby, becomes the site of biological, organic and sexual multiplicity. In *The Coming Race*, this perplexing body image is found when the narrator first meets the Vril-ya whom he confusedly calls he, she and it. After having learned their sexual difference, the narrator finds that, on the one hand, the Gy-ei or females are more physically masculine and sexually active than the males who seem passively effeminate. On the other hand, the female Vril-ya's masculine strength is feminized by maternity. To illustrate, Zee is "the wisest and the strongest" of all Gy-ei and is "a very centre of innocent delight" (Bulwer-Lytton, 1871, pp. 162-164). Her protective, nurturing mother figure is noted by the narrator, especially in his one-sided view, that her "kindly and protective sentiment" is like the "affection for 'pets' which a human female at every age shares with a human child," and her "desire to aid, to succour, to protect, to comfort, to bless, seem[s] to pervade her whole being" (Bulwer-Lytton, 1871, p. 162). Moreover, the way in which female humanoids are wingless during marriage but can be winged when divorced or unwed (Bulwer-Lytton, 1871, p. 161) makes the narrator think of the Victorian convention of gender roles. As a Victorian man, the narrator undoubtedly adores this maternal part as evidence of the "noblest womanhood" (Bulwer-Lytton, 1871, p. 165) in accordance with the Victorian concept of femininity. Zee's womanhood, physical masculinity and superior intellect to the males are contrasting characteristics which bewilder the narrator in terms of gender opposition. On the one hand, the swapped gender roles of the humanoids in the novel can be a sarcastic comment on strong Victorian women overthrowing men. On the other hand, the narrator's rigid division of gender roles in Victorian society is also undermined.

The mighty, electric-like energy, Vril, is another non-human entity that is transformative and disrupts the organic-inorganic dualism. In addition to Bulwer-Lytton's intention to create Vril as "electricity," the power is also associated with "virility" (Hassler, 2009, p. 356) or the vigour of the Vril-ya. Vril, as a bodiless force, can reinvigorate non-human objects, destroy life and penetrate every inch of the subterranean creatures. It is the force that diminishes the difference between organs and machines. This mysterious force was discovered underground and used to unify the country in which there were separate tribes violently waging wars against one another. It is an "all-permeating fluid" which can be manipulated to "destroy like the flash of lightning," "replenish or reinvigorate life," and treat physical ailments (Bulwer-Lytton, 1871, p. 51). It can also be used only by those in the Vril-ya's clan due

to genetic limitation. The multipurpose quality of Vril is not only similar to that of a magical charm but also resembles the electrotherapeutic cure for nervous and muscular maladies and the electrical energy used to run industrial engines during the late Victorian era. For Bulwer-Lytton, this presentation of automata being electrically charged can be seen when soulless robotic servants are animated by just a single "vril staff" as though the electric power were being transferred from one body to another object (Bulwer-Lytton, 1871, p. 109-110). The narrator explains how these humanoids manipulate "inert and stubborn" objects using remote-control staff infused with Vril energy,

> If a heap of metal be not capable of originating a thought of its own, yet, through its internal susceptibility to movement, it obtains the power to receive the thought of the intellectual agent at work on it; and which, when conveyed with a sufficient force of the vril power, it is as much compelled to obey as if it were displaced by a visible bodily force. It is animated for the time being by the soul thus infused into it, so that one may almost say that it lives and it reasons. Without this we could not make our automata supply the place of servants. (Bulwer-Lytton, 1871, p. 112)

The non-living machines are imbued not only with life but also with "the thought of the intellectual agent." On the one hand, Vril seems like a spirit invoked to possess and animate non-human matters. On the other hand, through scientific explanation based on the Vril-ya's College of Sages, it is the electrical fluid that mobilises all mechanisms in matter and organisms. The distinction of human beings, especially White Europeans, is also underpinned by classical humanism during the Age of Enlightenment where humans are distinguished from all non-human creatures due to their superior rationality and self-consciousness. When an automaton seems sentient and conscious, self-consciousness no longer belongs only to humans. The anthropocentric belief in humankind as rational beings or descendants of God is, therefore, disturbed by how a Vril-ya's mechanical object "lives and reasons" after being energised by Vril power. In this case, machines becoming rational beings destabilise the human subject as the most special, cultivated and reasonable species. As the organic body is becoming machine-like by being attached to mechanical wings, apparatuses become alive by Vril.

Moreover, this creative and destructive Vril power is represented as an ambiguous entity whether it is a life force or life itself. Like bodily fluids, this electrical current runs like blood in veins and freely passes in and of the body. The Vril-ya's electric body is regularly maintained by taking a bath "charged with vril" believed to be "a great sustainer of life" (Bulwer-Lytton, 1871, p. 97) and to prolong their life span. Their convenient way of living is facilitated by

Vril energy, advanced transportation and extraordinary medication. Their body is also objectified as a battery or mechanical device within the electric-like network. Vril's ability to automatically travel makes it more like an electrical symbiont and a self-organising mechanism. This entity is, in a way, God-like when one humanoid says a prayer in a cremation ceremony: "Behold how great is the Maker! To this little dust He gave form and life and soul. It needs not this little dust for Him to renew form and life and soul to the beloved one shall be soon seen again" (Bulwer-Lytton, 1871, p. 193). The power is said to be "Lent to" the Vril-ya and in the time of death, it will be "Recalled from" them (Bulwer-Lytton, 1871, p. 194). It is not only addressed as "the Maker" but also materialises the electric body as a temporary vessel for Vril. Instead of a sheer product of science, electric-like Vril is perceived as a mighty deity whose power can be distributed to the Vril-ya and also self-regulated by holistically returning to its whole. The way this electric-like force merges itself with the body from birth to death demonstrates how the Vril-ya are part of a Vril-centric network. It can be associated with what Braidotti called "Zoe" or a self-organising mechanism. In her posthuman concept, she attempts to characterise the technological age in the twentieth century as a Zoe-centric or post-anthropocentric era in place of the anthropocentric and humanistic domain which polarises all life forms into the human and the non-human, culture and nature dichotomies. Braidotti contends that the other-than-human, namely non-human and natural agents, are usually exploited and antagonised in Western anthropocentrism. To disrupt an anthropocentric hierarchy appointed by humans, putting humans on top of all beings, she proposes Zoe as a non-hierarchical, self-organising life system. This Zoe-centric[4] thinking is based on the idea of vitalist materialism[5] or cosmic energy that unifies all matter without relying on human force. This posthuman force is intelligent since Braidotti (2013) associates it with information technology that is built by humans but later becomes an "expanded relational self" (p. 60). Similarly, Vril can be seen as an ambivalently self-organising entity with destructive, healing and creative qualities. It is constituted as a network, like that of information technology, passing through the body and carrying information or thoughts from one body to another as seen in the Vril-ya's telepathic practices. Although the Vril-ya posit themselves in a superior status to the Tish or humans, they are submissively objectified as instrumental apparatuses or particles by this vital life energy.

This mysterious power Vril enables the Vril-ya to intrude into the human body through telepathy and acquire a new language. In the scene where the narrator, having been injured by the fall, is rescued, he is cured by a child, Taë, who "approach[es] his lips to [the narrator's] forehead, breathing on it softly" and relieves the pain with "a drowsy, happy calm" (Bulwer-Lytton, 1871, p. 22). This medical treatment is like magic that affects the narrator's body and mind. This is similar to the hypnotism that the Vril-ya use to learn English by making

the narrator unconsciously teach them in his sleep (Bulwer-Lytton, 1871, p. 34). This learning process done by penetrating the unconscious mind proves that these cyborg-like humanoids are intelligent and have a rapid linguistic input. While there is an imperialistic expansion of the English language in the upper world, the Vril-ya's terrain is not colonised. The host and his children learn English out of inquisitiveness and through the use of telepathy which is similar to the colonisation of the human mind. This ability is made possible by Vril energy, not magic; as the narrator discusses with the host's daughter and a professor of the College of Sages, Zee:

> [B]ut applied scientifically through vril conductors, they [the Vril-ya] can exercise influence over minds and bodies, animal and vegetable, to an extent not surpassed in the romances of our mystics…all the faculties of the mind could be quickened to a degree unknown in the waking state, by trance or vision, in which the thoughts of one brain could be transmitted to another. (Bulwer-Lytton, 1871, p. 43)

In this way the human brain, representing human knowledge, is encroached by non-human interests, critics of anthropocentrism, since thoughts and reasons are exclusively owned by human beings but easily stolen and intruded by the non-human entity. From the humanistic view in the Age of Enlightenment during the late eighteenth and early nineteenth centuries, it was conventionally believed that humans possess their own selfhood, body and reason known as "possessive individualism" (Macpherson, as cited in Rossini, 2017, p. 161). According to John Locke, personhood is man's own "property," and this statement was affirmed by René Descartes who asserted that "body which…I call mine, belonged to me more properly and more closely than any other" (Locke, as cited in Rossini, 2017, p. 162). Westerners influenced by humanism tend to assume that reason, body and originality are legitimised as personal property. Nevertheless, in the posthuman view, the body can be invaded, transformed and can ultimately lose its intrinsic quality. In *The Coming Race*, the way the narrator's body and consciousness are technologically invaded by the Vril-ya suggests a moment at which man loses ownership of his consciousness. His brain is opened and read without permission. His mother-tongue, representing his intellect and culture, is snatched and makes the Vril-ya look more intelligent since they learn a new language effortlessly using their advanced technology.

In the end, the human subject is rejected by this race. The human character is also perceived as a monstrous image due to his genetic taint that might deteriorate the Vril-ya's physique. As non-human characters were in most cases antagonised in literature, it might be surprising to readers of *The Coming Race* that the human character is, indeed, a symbol of a biological threat since interbreeding between the Vril-ya and Tish, the humans, would produce

carnivorous offspring. By referring to the eugenic tradition, Aph-Lin warns the narrator, who is loved and wooed by Zee, that he must comply with the rules by rejecting her love no matter how invincible she is or else he will be burned to dust by Vril power. Aph-Lin seriously points out that interracial marriage is entirely impossible: "I grieve for you, because such a marriage would be against the A-glauran, or good of the community, for the children of such a marriage would adulterate the race: they might even come into the world with the teeth of carnivorous animals; this could not be allowed…" (Bulwer-Lytton, 1871, p. 176). On the one hand, xenophobia and miscegenation can be what Bulwer-Lytton aimed to reflect on and to subtly mock the human fear of biological degeneration which could lead to contempt for or even genocide of people of different races. On the other hand, the Vril-ya as a "new species developing itself out of our own one [human species]" will never "amalgamate with but destroy us[humans]"[6]. Bulwer-Lytton noted, however, that the Vril-ya race "ought not to be represented [as] terrible" as its destructive characteristic derives "not from its vices but its virtues" (Bulwer-Lytton, 1913, pp. 466, 468) as they, being seen as an actual species, need to protect themselves from being rendered extinct by humans' poisonous and incompatible genes. Apart from a satire on chauvinism and ethnocentrism, *The Coming Race* criticises human beings, the very representatives of humanism and anthropocentrism, for their imperfect genes.

The fear of degeneration is not so much intensified by the representation of the Vril-ya as by the lingering anxiety of the narrator. In his final remark after he returns to the upper world, the narrator not only warns the reader about the terrifying non-human race but also suggests that humans adjust and improve themselves in preparation for the coming race. As the Vril-ya usually eliminate any "untameable" creature (Bulwer-Lytton, 1871, p. 60) in order to preserve their well-being, humans will certainly be eliminated if they remain less advanced. Although the narrator's precautions against possible genocide are well-meant, they reflect his excessive fear since humans and the Vril-ya might not meet again. The door between the upper world and the subterranean one is permanently closed by Zee. It shows that the Vril-ya decide to disconnect and isolate themselves from human beings probably for the sake of peace. The narrator's worrisome obsession with how these creatures will slaughter humans seems overstated and reflects his anthropocentric assumption that his kind will never surrender and the Vril-ya are merciless. His uneasy voice at the end, in contrast to his bold, daring behaviour at the beginning, is thus meant to be mocked by the author. As Bulwer-Lytton intended to assert "Darwinian proposition" (Bulwer-Lytton, 1913, p. 465) to show how the Vril-ya develop into an unrivalled and advanced species, the way the Vril-ya are physically and intellectually progressive can serve as a parody of the degeneration hypothesis. When asked if her ancestors will ever devolve back into tadpoles, Zee argues

that the Frog race of Ana is now a funny story for children and now her race has "improve[d] in wisdom," it is impossible for the body to relapse into "the form of a tadpole" (Bulwer-Lytton, 1871, p. 121). The fearless voice towards physical regress of the Vril-ya becomes underlying scorn for the fear of degeneration felt by the narrator. In addition, the humanoids like Zee and Taë who assist his escape to the upper world show that they are, indeed, kind to humans instead of being entirely dangerous. Even though intermarriage between humans and Vril-ya is punishable by death, Zee's benevolence and Taë's helpfulness free the narrator from being destroyed. Zee and Taë break the law by saving the human or Tish. It can be said that although these non-human creatures are so biologically advanced that any genetic contamination is rigidly banned, the nonhuman characters like Zee and Taë are the hope for the survival of humanity. If humans biologically evolve, there is also a chance that the Vril-ya might retreat from the genocide of the untamed Tish. The novel probably suggests that evolution is fearful but bodily transformation, infusion with technological others and departure from the old form of life as an evolutionary process, is vital for human survival.

Conclusion

With the destructive and dangerous power of Vril, it is understandable that the narrator fears the Vril-ya. However, instead of being generalised as monsters and symbolised as a degenerative group of people, the Vril-ya are imagined as a new life form that is an advanced hybrid of organic and mechanical parts deviating from anthropocentric logic. This hybridity not only affirms progressive evolution but also disrupts the boundary between life and artificiality, organic part and machine. As the narrator's mind and body are easily penetrated and controlled by the Vril power, the notion of human self, rationality and conscience is destabilised. This electric-like power serves as a transformative technology that makes the Vril-ya evolve and become civilised. Bulwer-Lytton's parody of the imperialistic protagonist can be seen as a criticism of the anthropocentric presumption and exceptionalism that obstruct the narrator from eliminating his fear of otherness. It can also be concluded that the fear regarding degeneration comes from imperialistic illusions and obsessions about negative representations of the other, the Vril-ya, who are not exclusively monstrous but indeed benevolent. The electric body proving that the continuously evolved Vril-ya will never devolve subtly undermines the degeneration hypothesis of the century and suggests that change is unstoppable and necessary for the survival of a species even though physical transformation seems unbearable. This, thereby, adds nuances to the representation of nonhuman characters in late-Victorian science-fiction novels which are not only a socio-cultural reference to humans but also a device for criticising degeneration fantasy as well as the concept of man as the centre of all things.

Notes

1. This article is adapted from a chapter of the MA graduate thesis entitled "Representations of the Body in British Science-Fiction Novels from the Late Nineteenth to the Early Twentieth Century: A Study of Edward Bulwer-Lytton's The Coming Race, H.G. Wells' The Time Machine and Aldous Huxley's Brave New World".

2. See the declaration of the framework knitters, 1 Jan. 1812. Public Record Office, Home Office, 42, p.119 (Aspinall & Smith, 1959, p. 531).

3. See Bulwer-Lytton (1913), page 466, for Edward Bulwer-Lytton's letter to John Foster dated 20 March 1870.

4. Braidotti (2013) relies on the ecological concept of monism or the unity of all matter as a model for her Zoe-centric thinking. The process of becoming-earth suggests that Zoe is a "dynamic and generative force" moving on its own without human influence (p. 86). It is a life force that needs no humanisation and categorisation as animal or non-living things. Instead of the anthropocentric era driven by humans, Braidotti suggests that the anthropocentric convention is drawing to an end and the Zoe-centric or post-anthropocentric era, implying the end of humanism or the emergence of the posthuman, is beginning.

5. Braidotti (2013) is referring to Spinoza's idea of "matter is one" or a holistic or "monistic universe" which led other French philosophers to think that matter is self-organised without human interference (pp. 56-57).

6. See Bulwer-Lytton (1913), page 465-466, for Edward Bulwer-Lytton's letter to John Foster dated 20 March 1870.

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