

**The Human Animal: An Ecocritical View of Animal Imagery
in Aldous Huxley's *Brave New World***

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Spring term 2013
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Abstract

The early twentieth century saw the beginning of modern environmentalism. Intellectuals dreamed up solutions to the world's problems and hoped for a better future being made possible by advances in science and technology. However, Aldous Huxley produced *Brave New World* which, as this essay argues, mocks the enthusiasm of his intellectual peers. The dystopian novel depicts a future in which technology dehumanizes the population, and uses a great deal of animal imagery to make this point. This essay analyses the use of animal imagery from an ecocritical perspective arguing that the "pathetic fallacy" is reversed. By examining the use of biotechnology and central planning in the novel, and applying the ecocritical perspective that humanity and nature are part of a whole, this essay argues that society resembles a farm for human animals, which is partly expressed by Huxley's use of the image of a bee colony. The argument is presented that Huxley satirizes his environmentally concerned peers by depicting a totalitarian state which, though unconcerned with environmental issues, echoes the eco-fascist methods proposed by the author's friends and family.

Keywords: Aldous Huxley, Julian Huxley, ecocriticism, biofuturism, zoomorphism, dystopia, science fiction, animal imagery, environmentalism.

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Introduction

Aldous Huxley's novel *Brave New World* (1932) is one of the best known dystopian stories of the twentieth century. It describes a future globalized society which uses technology to maintain absolute control over every aspect of human life. This is a society where humans are grown in a factory laboratory instead of being born and their minds are shaped by extensive conditioning instead of personal experiences or parenting. Furthermore, their emotions are subdued by pharmaceuticals and hedonistic pleasures. The state of humankind as it is conveyed in this novel seems to be one of depravity.

Over the decades *Brave New World* has been studied from a number of different angles. Many Huxley scholars, Bradley Buchanan among others, have made use of psychoanalysis, revealing Freudian themes of family relations, focussing on the Oedipus complex and how society has tried to eliminate parenthood through technology and, consequently, parental relationship issues. Feminist critics, such as Christie L. March, have commented on the abolition of motherhood and forms of female liberation in the novel while recognizing that instead of being trapped in a mother role, women are reduced to sex objects and seen as “[pieces] of meat” (54). Scott Peller has studied the influence of capitalism and Fordism on the novel, and holds that the caste system, with all the biological and social engineering it entails, is a result of such exploitative systems of thought.

Bioethics is another field of study where *Brave New World* is often mentioned, particularly regarding genetic engineering, which also relates to emerging technologies and post-humanism. Also, ever popular, is the comparison of *Brave New World* to George Orwell's *Nineteen Eighty-Four* which shows two forms of totalitarianism that use technology to maintain control: in Orwell by applying force, and in Huxley by means of engineering humans to enjoy their slavery. Technology as a theme runs through all of these interpretations

and is pointed out as the object of criticism. It is a recurring assumption in Huxley studies that the novel is a warning against technology. More recently, however, studies of Huxley's non-fictional writing complicate this view.

This essay will approach *Brave New World* from an ecocritical perspective. Although it is not a novel that immediately brings to mind environmental concerns, it was conceived in an intellectual environment which was part of the environmentalist movement in the early twentieth century. *Brave New World* has been said to lampoon environmentalists in Huxley's social circle, not least his brother, Julian Huxley (henceforth "Huxley" will refer only to Aldous) whose name appears alongside a number of influential environmentalists, and who was well known in these circles. I argue that due to Huxley's ties to environmentalism an ecocritical reading is warranted.

Ecocriticism is a field of literary studies which is relatively new and is said not to be strictly defined. Its main interest is the environment and it raises questions about humankind's relationship with and attitudes towards nature, and even the definition of "the environment" itself. As a field of literary criticism it is, naturally, concerned with how such questions and concerns are represented in literature. However, it has been described as an interdisciplinary theory which includes studies of texts which may not agree with political environmentalism as such but are more scientific or philosophical.

Loretta Johnson lists some of the pioneers of ecocriticism in *Greening the Library: The Fundamentals and Future of Ecocriticism* including William Rueckert who coined the term "ecocriticism" in 1978 (7) and Cheryll Glotfelty and Harold Fromm, who edited a "benchmark text in the field" called *The Ecocriticism Reader: Landmarks in Literary Ecology*. Glotfelty also contributed by "[urging] literary critics to develop an ecological approach to literature" (Johnson 8) focusing on mankind's relationship to nature. Lawrence Buell seems to have answered the call and provided criteria for identifying texts as

environmental in what Johnson labels a “groundbreaking work” (8), *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. He has later attempted to usher in a second wave of ecocriticism. Johnson also mentions Glen Love, who worked to bring the sciences closer to the humanities, as a promoter of an interdisciplinary approach to ecocriticism.

One may summarize the topics of study in the first wave of ecocriticism as having to do with valuing nature and lamenting its destruction by humans. Literature is seen as a platform for promoting ecological sustainability where nature writing and pastorals as well as Romantic poetry play a role in promoting nature appreciation. On the other hand, human destruction of the environment is addressed in stories of eco-disasters or apocalypse. Ecocritics endeavour to point out where humanity has gone wrong, and what attitudes towards nature are preferable. There is, in other words, a political drive for promoting a sense of human responsibility towards the planet.

The second wave of ecocriticism begins to see human and non-human nature as interconnected and part of a whole. The distinction between a manmade and a natural environment is questioned, making ecological readings of urban fiction possible, in which a city is seen as an environment within an ecosystem. Likewise, the distinction between human and animal is questioned and animal stories are examined to illuminate how we think about animals. The idea is also to promote empathy towards animals by highlighting kinship and to break up patterns of anthropocentric thinking. This essay will mainly refer to the separation of mankind and nature.

Focus will be on what might be called the “human animal.” The novel only briefly comments on environmental issues, describing people’s attitudes towards nature and how it is treated. However, there is the issue of the nature of humankind to consider, and some critics have commented on the topic of biological engineering in *Brave New World*. Biological

engineering of human beings is a controversial issue which is often described as “tampering with nature.” The topic of interfering with the physical and mental constitution of people brings to mind the question of what a human being really is. Aldous Huxley’s view of mankind embraced the notion that our biological nature is animal, while he maintains that we have a uniquely high intelligence, as his theory of our “amphibian” nature reveals. In *Aldous Huxley’s Intellectual Zoo* Sanford E. Marovitz explains both Huxley’s theory of humans as “amphibian” creatures consisting of physical, mental and spiritual parts, and his use of animal imagery to highlight our biological nature. Keeping this view in mind, one can analyze the controlled society in *Brave New World* and the people produced by it in terms of how they live up to the expectations of what it is to be human. It is Huxley’s view of human nature and his use of animal imagery that will serve as the starting point of this essay.

I will argue that the utopian aspirations of the world state in the novel lead to dehumanization, which is expressed as people being reduced to animals, as it were. Furthermore, I will claim that Huxley criticizes early-twentieth-century environmentalist ideas about the scientific planning of living environments and human population as overly technocratic and even ecofascist by depicting a totalitarian state which reasons about human beings as a farmer might reason about animals.

The essay consists of three sections. The first will present Huxley’s view of human nature and his use of animal imagery in general. It will also compare his view to ecocritical views on humans and animals. The use of animal imagery in *Brave New World* tends to be derogatory, indicating a judgment at odds with ecocritical attitudes. However, at the same time, the novel expresses concerns about anthropocentric attitudes in a technologically empowered society. This section will prepare the reader for the ecocritical approach to the novel, in terms of what lines of thought are considered in this and the following sections.

The second section will deal with biological engineering of human beings. Julian Huxley and others were interested in the potential for controlling the development of the human species as was made possible by emerging technologies. The argument will be that Huxley portrays the bioengineering of humans as dehumanizing, and particularly that undermining the capacity for higher thought renders the subject, not only less than human, but more animalistic. The argument will be supported by examining the various uses of animal imagery which show how low caste individuals are described as animalistic.

The third section will deal with a notion I have formed that central planning resembles “human farming.” Huxley’s criticism of the ideas of his environmentalist peers was not out of disregard for nature, but rather due to their technocratic approach to environmental concerns. Society in *Brave New World* is clearly meant to be a utopia in which everyone is happy. However, it may be argued that the highly scientific approach turns human lives into abstract objects of analysis. The scientific elite decide what is best for everyone and subsequently orders society according to their theories. Although environmentalist utopians who influenced Aldous Huxley had an opposite view of nature and the place of humanity in the world to that of his characters, some of their ideas were no less totalitarian and elitist. According to Anker, Julian Huxley would not have denied this critique, but continued to support scientific planning, and flirted with the idea of being a good dictator (27). If Aldous Huxley still supported scientific planning, his novel has not portrayed scientific dictatorship in a good light. Society in *Brave New World* is portrayed as sterile and efficient, like a well oiled machine. Yet, despite this unnatural appearance, it is attached to the image of bees. It will be argued in this section that society in the novel is like a beehive, or colony, and that such a colony is exploitative like a farm.

1. Human Nature

Humanism and the human condition are central themes in *Brave New World*, and the novel applies a great deal of animal imagery to human beings. One issue in ecocriticism is the notion of distinguishing humans from animals, or further, humans from everything non-human. Environmentalists wish to diminish the importance of such distinctions, saying that we are part of the natural world and its ecosystem. The term “biotic community” is sometimes used, and it has a suitably unifying tone. However, historically, humans have often set themselves above animals and nature.

It is sometimes claimed that Christianity is responsible for separating humans from animals and elevating us above nature. According to Lawrence Buell, Lynn White Jr. “blames Judeo-Christianity for technology’s devastation of the environment, on the ground [sic] that it separated heaven and earth under the aegis of a monotheistic transcendent God and justified human lordship over the rest of creation” (182-83). Even though Buell questions the cause and effect of this accusation, he recognizes that the form of the religion gives a different perspective on nature from polytheism. Buell mentions classicism as having “kept alive the imagination of an interanimate cosmos: of the land and the sea gods and as comprising of hosts of minor local deities; of humans as children of gods; of natural creatures as transformed humans ... or as transformable into human shape” (183).

It may also be argued that other religions provide more inclusive attitudes towards nature as in Pantheism or forms of Earth (or “Gaia”) Worship. So, religion is of importance in forming attitudes towards nature. It is noteworthy that religion in *Brave New World* is replaced by a kind of worship of Henry Ford, whom people see as the father of their civilization, and whose influence is to have provided them with a philosophy of efficiency and calculation, as well as the innovations that started mass production and consumerism. Being created by the production line process in places like the “London Central Hatchery and

Conditioning Centre” (BNW 3), people may well see him as “the creator.” Thereby, their attitudes towards nature are influenced by a sort of religion.

Despite influences from religion, or perhaps because of them, writers have still imagined kinship with nature throughout history. Often, it has taken the form of “[w]hat eventually became known as the ‘pathetic fallacy,’ the ascription of human feelings to nature” (Buell 183). One example is James Thomson, who wrote “The Seasons” (1726-1740), “the first English poem to make natural processes its ‘protagonist’” (184). Thomson’s anthropomorphising even extended to bees: “The happy people, in their waxen Cells, / Sat tending public Cares, and planning Schemes / Of Temperance, for Winter poor” (“Autumn” qtd in Buell 184). Later, William Blake too expressed kinship with insects, and according to Buell “at times goes so far as to imagine a complete interchangeability between animal and human” (185): “Am not I / A fly like thee? / Or art not thou / A man like me?” (William Blake, “The Fly” 1794 qtd in Buell 185) With science growing in importance, demands for more scientific accuracy in the representation of nature grew. John Ruskin recognized the personification of nature as “often pleasing,” but “he categorically stigmatized it as ‘the pathetic fallacy’” (Buell 188). The increasing scientism criticized the romantic imagination, and in the nineteenth century Edgar Allan Poe talked of believing in “‘the sentience of vegetable things’ as a form of madness” (188). To comment on Buell’s overview, it becomes clear from the objections mentioned that scientific thinking is a counterpart to religious belief, and influences how the scientific minded person views nature. In addition, it is noteworthy that religion and science can equally produce attitudes that are either environmentally friendly or anthropocentric. Furthermore, in realizing this, one may notice that the worship of Henry Ford in *Brave New World*, while resembling religion, is actually a worship of science and technology.

Science eventually came to accept human kinship with animals. Buell notes that William Blake despised scientism, and “would have been disgusted to learn” that Erasmus Darwin (botanist, promoter of science and grandfather of Charles Darwin), was “right behind him” in producing the most numerous anthropomorphic nature imagery in English poetry (185). Ironically, Blake and Darwin “represent the two major crisscrossing paths toward the blurring of the traditional hierarchicalizing boundaries separating the human estate from the rest of nature” (Buell 186). As is commonly known, since Charles Darwin’s theory of evolution through natural selection, and his work *The Descent of Man* were published, science has accepted that human beings are part of the natural family. Furthermore, Buell mentions that Darwin theorized that the differences between the minds of the lowest animals and that of man “are of degree, not kind” (189). Darwin has even claimed that “the senses and intuitions, the various emotions and faculties, such as love, memory, attention, curiosity, imitation, reason, &c., of which man boasts, may be found in an incipient, or even sometimes in a well developed condition, in the lower animals” (qtd in Buell 189). Thus, I argue, scientism comes full circle, and though transcending the pathetic fallacy, realizes that animals and human beings have much in common. Consequently, we have no reason to assume that animals lack emotions. On the contrary, we have every reason to assume that they have them because we share a common ancestry.

Huxley’s view of the human/animal distinction is informed by evolution. Like Darwin, Julian Huxley expressed a view that “the biological difference between man and animal [is] in degree and not kind” (Anker 29). Darwin’s influence on Julian and Aldous Huxley was to be expected because their grandfather Thomas Henry Huxley had been part of Darwin’s inner circle and defended his theories fiercely. T H Huxley was known as “Darwin’s Bulldog” (Mayr x). Marovitz presents Huxley’s view of the origins of humankind thus: “In a sense, each character in Huxley’s fiction—like every human in the flesh—is ‘an ape that has learned

to talk” (496). This view is expressed in the context of Huxley’s notion that humans are “amphibian,” by which he means that we “inhabit many different and even incommensurable universes” (qtd in Marovitz 495). To clarify, Huxley stated that he considered humans to be “composite” beings consisting of parts such as mind body and soul; “Man ‘is at once an animal and a rational intellect ... a product of evolution closely related to the apes and a spirit capable of transcendence” (qtd in Marovitz 495). The wording reveals an attitude that is inclusive, stating that man is an animal. However, it juxtaposes “animal” and “rational intellect” which seems to imply that we are “more than” animals. Being an animal is one thing, but being a rational intellect is an additional characteristic which is ascribed exclusively to human beings. This shows that Huxley connects intelligence with human status.

The compartmentalization of animal and rational might be said to “dignify” the human intellect and instil a sense of superiority. However, Marovitz describes how Huxley deliberately avoids “subordinating Man to Mind” (498) in making his characters.

[If] not perfectly natural and well-rounded— [they are] at least human enough to be organically alive And if we are to catch the full charge of Huxley’s irony and satire, we must recognize that no matter how high their minds soar in the cosmic ether of philosophy ... his figures are still lizard-like or leonine, dog-like, ape-like, ‘ferret faced’ or aquiline human animals who indulge in exactly the same fundamental natural processes as the beasts called forth to represent them. (496)

This indicates that Aldous’ characters inhabit the mental universe of philosophy, on the one hand, and the physical universe with all the indignities of animal existence on the other. Exploiting this dual nature, Huxley used animal imagery to satirize “London’s intellectual elite, with whose foibles he was most familiar” (Marovitz 497). One reason is the ironic effect produced by “the intimate juxtaposition of high intellect and low animal” (498). It may

be argued, however, that it is not only done for comical effect; pointing out how people resemble animals may also serve to humble human beings. It seems that Huxley prevents us from letting the fact that we have a superior intellect convince us that we are better than animals by pointing out that we still carry the family resemblance.

It may sound paradoxical but Marovitz also explains that Huxley uses animal imagery to make his characters more human: “[T]he type of fiction [Huxley] wrote [is] ‘the novel of ideas’ in which the character might simply be a ‘mouthpiece’” (498). This means that in referring to people’s bodies (the animal part of our beings), characters are literally fleshed out. Furthermore, as one of Huxley’s own characters, Philip Quarles in *Point Counter Point*, explains: “The great defect of the novel of ideas ... is that it’s a made up affair. Necessarily; for people who can reel off neatly formulated notions aren’t quite real” (qtd in Marovitz 498-99). So, Huxley felt that human beings are not realistic as simply intellects. However, Quarles adds that “they’re slightly monstrous. Living with monsters becomes rather tiresome in the long run” (qtd in Marovitz 499). While Marovitz concludes that stressing “the animalistic features of their appearance and actions” makes Huxley’s characters less monstrous while “[giving] their ideas full play” (Marovitz 499), it may also be argued that in *Brave New World* the intellectual “world controllers” retain their “monstrousness” by being mostly intellect. The novel makes it clear that the World Controller Mustapha Mond can counter every criticism of his planned society with various rationalizations that justify, at least to him, what John Savage, and presumably the reader too, see as insane. The implementation of, or the deliberate avoidance of animal imagery can thus be used to make a character less human, or more so, by adding or subtracting the flesh.

However, if a lack of a body makes Mustapha Mond “monstrous” and less human, the loss of humanity for the lower castes, such as the “Epsilon-Minus Semi-Moron” (BNW 58) results from a lack of intellectual ability, which is expressed through animal imagery. The

Epsilon-Minus Semi-Moron tending the lift is described as “a small simian creature” in appearance. However, to describe his mind, he is likened to a dog. The only word he says is “roof” (like the onomatopoeic barking of dog) and he “smiled up with a kind of doggily expectant adoration into the faces of his passengers” (BNW 59). Furthermore, he is so absent-minded that he needs a voice to command him in a repetitive manner: “Then a bell rang, and from a ceiling of the lift a loud speaker began, very softly and yet very imperiously, to issue its commands ... ‘Floor Eighteen. Go down, go down. Floor Eighteen. Go down, go...’” and after following the commands, he falls back into his “habitual stupor.” This character, which is characterized by a lack of intelligence more salient than his physical deformity, is described entirely in animal terms. So, characters are described as animalistic when they are stupid.

Marovitz explains that Huxley’s use of animal imagery expresses symbolically the traits of his characters. He chooses specific animals for specific characters, based on personality types. A passage in Huxley’s *Island* explains this principle: Children are taught “in terms of analogies with familiar animals Cats like to be by themselves. Sheep like being together. Martens are fierce and can’t be tamed. Guinea pigs are gentle and friendly. Are you a cat person or a sheep person...? [etc.]” (qtd in Marovitz 502). This, Marovitz claims, “can be taken as a key to all of the animal imagery in Huxley’s fiction” (502). Furthermore, not only did he use animal images for comical effect, but as he became more concerned with social criticism, animal imagery also came to represent “man’s bestial nature” (Marovitz 502) which is perhaps expressed most blatantly in *Ape and Essence* in which humans are simply replaced by baboons. The story depicts “a society of baboons—warlike, egocentric, sensual, and materialistic—that is a duplicate of our own but for the physical features of its members” (505). Here, again, in criticizing society as being like a society of baboons, with the intention to malign, we are presented with the attitude that

animals are beneath us. As this essay will argue, Huxley makes human society in *Brave New World* appear animalistic, but there, the image is of bees and not baboons.

Comparing Huxley's view to that of ecocriticism, it is clear that he agrees on the scientific level that humans and animals are part of the same family. He also expresses sympathy with animals in that their emotions are taken seriously and their temperaments inspire descriptions of his characters. However, being an intellectual, Huxley expresses a degree of superiority over those with lesser minds. Usually it is a matter of calling human beings with lesser minds beastly rather than judging animals for their lack of intelligence. It seems that Huxley expects more of humans, and when they do not live up to the human potential he compares them to animals. If a human being is not an intelligent animal, what is he?

However, Huxley also makes a point of using animal imagery for those people and things that are supposed by society to be above nature. In *Brave New World*, machines "purred" (6) the steelwork is "spidery" (11) students look up "like chickens drinking" and what the Director of the Hatchery has to say comes "[s]traight from the horse's mouth" (4), an expression repeated several times referring to Alphas talking to the students. There is, thus, a rich use of animal imagery and not all is derogative. I would argue that instead of anthropomorphizing non-human nature, Huxley zoomorphizes humans and the human-made environment, which are really two sides of the same coin. If humans display animal characteristics, animals must display human characteristics. In this sense the pathetic fallacy is reversed in Huxley's fiction.

2. Biological Engineering

As a futuristic science fiction novel, *Brave New World* offers a vision of future technologies that radically alter the human condition, including what humanity itself is like. According to Christopher Coenen, biofuturism was developed in the intellectual circle of which Julian Huxley was a part (149). The influence the Huxley brothers had on each other is plain to see. Julian Huxley showed enthusiasm for “how to synthesize genetics and evolutionary biology through mathematics” (Anker 27). However, in *A Companion to Science Fiction*, David Seed mentions that Julian wrote a short story called “The Tissue Culture King” in which he expresses a fear that biological engineering might go too far (477). Judging by how bioengineering is portrayed in *Brave New World* it would seem that Aldous Huxley did not share his brother’s enthusiasm for scientific reproduction. However, in *Brave New World* he uses the idea from “The Tissue Culture King” of “circus freaks” being produced by applying the “mass-production methods of Mr Ford” (qtd in Seed 477). The consequences of biological engineering can be appreciated on an ecological level in that bioengineered species may upset the ecosystem and cause disaster. Genetically engineered crops are often criticised as a potential threat to natural species. Even though this chapter deals mostly with how human beings are reduced to animals, the concern still holds because human beings as a species, in this context a type of animal, upset the ecosystem enormously.

Although the topic of biological engineering in *Brave New World* is often discussed in terms of genetic engineering or eugenics, the most forceful engineering described in the novel is the environmental conditioning of the developing foetuses. “Ectogenesis” is the growing of an organism outside of the body, in this case growing a human being in an artificial womb. The genetic engineering portion of the production of human beings is on the level of eugenic selection—the first chapter describes a form of artificial insemination. There is no reference to gene-splicing or anything to do with manipulating the DNA due to the fact that DNA

research was in its infancy at the time of writing. Instead, it is selection based on heredity and the techniques of ectogenesis, which was a theoretical topic of interest at the time, that provide the ability to create people of different types. Regarding technologies used to alter human beings in a techno-futurist vision, there is the perspective that “through physiological and embryological alterations, and by the substitution of machines for his parts If we want a man without legs, we don’t have to breed him, we can chop them off; if we want a man with a tail, we will find a way of grafting it onto him” (qtd in Coenen 150). A direct approach to bioengineering such as this seems to be what is found in *Brave New World* instead of techniques for manipulating the genome.

The first chapter of the novel describes the various techniques used to create the desired characteristics in the final products (human beings) and it reveals a very dehumanizing, unnatural procedure. The setting for the development of human beings is a factory/laboratory where embryos in bottles move along a conveyor. Everything is highly controlled and systematic. The bottles are equipped with everything needed to grow the foetuses, and machines provide them with “blood surrogate” and hormones. Some of the products needed for the process come from animals, showing how society is still dependent on farming, and connects human beings with animals in a fundamental way. How would “sow’s peritoneum” (BNW 9) and “foetal foal’s liver” (BNW 12) be useful in human gestation, if we have no kinship with them? On the other hand, the animal products could indicate dehumanization because all people produced this way are nurtured by machines and animals instead of a mother. Thus produced, one may ask if they are themselves a mix of machine and animal, and barely human.

Thus far the development has only reached a “slavish imitation of nature” (BNW 13). However, the chapter also describes how human nature is engineered. Fertilized eggs from lower caste individuals are subjected to “Bokanovsky’s Process” (BNW 6) which makes the

eggs divide, yielding from a single egg “anything from eight to ninety-six embryos—a prodigious improvement, you will agree, on nature” (7). So all members of the lower castes are part of “Bokanovsky groups” of identical individuals—something which is repeatedly portrayed as particularly disturbing. It is ironic that this “improvement on nature” makes the lower castes appear subhuman.

Another part of the process is the “social predestination” conditioning. This is where biological engineering really becomes active, and scientific hubris further dehumanizes the subjects. They “[do not] content themselves with merely hatching out embryos: any cow could do that” (BNW 13) but produce “socialized human beings ... Alphas or Epsilons” (BNW 13). This is an instance of scientific thinking separating humanity from nature. Further, to produce an Epsilon they need to have “an Epsilon environment” which is provided by lowering the supply of oxygen to the foetus to keep it “below par” (BNW 14). This technique accounts for much of the deformity as well as the lower intelligence of the lower castes. “The first organ affected was the brain. After that the skeleton. At seventy per cent of normal oxygen you got dwarves. At less than seventy eyeless monsters” (BNW 14). The technique is, in other words, to deliberately cause birth defects. “‘The lower the caste,’ Said Mr Foster, ‘the shorter the oxygen.’” So it is clear that the lower castes are engineered to be unintelligent, and this is really their defining feature. Their stunted and deformed bodies are incidental. In a rather crass way, Huxley introduces the notion of “circus freaks” being produced by this scientific manipulation. “Dwarves” and “midgets” are mentioned later in the novel although these terms, as well as the institution of “sideshows,” are nowadays considered very offensive.

In addition to damaging the foetuses in this way, other techniques are aimed at conditioning the foetuses for their future work, which results in a loss of individuality. This process involves various environmental alterations combined with “discomfort,” like X-rays,

or shortening the oxygen supply. Thus, they can instil “a horror of cold” (BNW 16) in those predestined to work in hot environments, or make future rocket-plane engineers “associate topsy-turvydom with wellbeing” (17). Furthermore, they immunize the foetuses against tropical diseases, train future chemical workers in “the toleration of lead, caustic soda, tar, chlorine” and for rocket-plane engineers the bottles are kept spinning to “improve their sense of balance” (BNW 17). There is also conditioning for foetuses predestined to become intellectuals, but this is not explained. What is evident, though, is the cold calculating approach to creating human life displayed by society. The individual is not allowed any other future than the one chosen for them. Conditioning for future work is done on all individuals from Alphas to Epsilons. Thus, every person loses their individuality.

The very first chapter shows that humans set themselves above nature, and animal imagery is used derogatively to refer to people who lack full human status. Furthermore, dehumanization is to be found in the wording and imagery used in describing the process and the developing humans. The facility is called a “hatchery,” which is a term usually used in a farming context. Also, it may be mentioned that, generally, designations such as “Alpha,” “Beta” and so forth, are mostly used when studying hierarchies in groups of animals, so their use in *Brave New World* further reduces people to animals. Moreover, references to animals are used regarding the various stages of development. For instance, the storage of sperm cells at lower temperature is summed up with the line: “Rams wrapped in theremogene beget no lambs” (BNW 5). It is also said that “[t]he embryos still have gills. We immunize the fish against the future man’s diseases” (17). Furthermore, as regards Alphas, Mr Foster says that “[y]ou can’t really do any useful intellectual conditioning till the foetuses have lost their tails” (18) hinting that the Alphas are less animalistic by referring to the atavistic tail. Referring to the tail also serves to connect intelligence with human status because the tail must be lost before Alpha conditioning can begin.

Reversely, in reference to the production of Epsilons there is also a discussion on growth rate in humans comparing it to that of horses and elephants. Epsilons “don’t need human intelligence” (BNW 15) which requires a long period of maturation, so they say it would be good to increase their growth rate to the “normality of dogs and cows,” practically equating Epsilons with animals. What can be seen here is that undeveloped fetuses are compared to “lower” life forms. Similarly, the reference to gills and a tail can be interpreted as the fetuses undergoing a process mirroring human evolution from very early ancestors up to primates and lastly, human beings. Furthermore, Alphas are distinguished from lower castes who are still compared to animals after their development is complete. In addition, since the other castes can be conditioned earlier, Alphas are assumed to be “more evolved.” Alphas are placed higher on the evolutionary scale, as it were. On the other hand, Epsilons are not supposed to have human intelligence, and, therefore, they can never attain full human status; they will always be regarded as subhuman and animalistic.

The attitude towards human beings displayed by their makers really reduces them to a means to an end. Apart from animal imagery, the developing embryos and fetuses are also discussed in terms of inanimate objects: “Embryos are like photographic film ... [T]hey can only stand red light” (BNW 11). They are talked about like products, and they are metonymically called “bottles” to be predestined (BNW 10) and also “rubies,” which contain “dim red spectres of men and women” and “red ghosts” (BNW 11). These “ghosts” have symbolic value because humanity itself seems to be a mere ghost of what it used to be in this vision of the future. The laboratory is described as wintery, and the light shining in is “frozen, dead, a ghost” (BNW 3). To really spell out the state of humanity, the Director of the hatchery later explains why unorthodox behaviour is worse than murder: “Murder kills only the individual—and, after all, what is an individual?” With a sweeping gesture he indicated the rows of microscopes, the test tubes, the incubators. ‘We can make a new one with the greatest

ease—as many as we like” (BNW 148). The definition of humanity seems to be that they are manufactured disposable parts to be used in the social machine, and have no individual dignity or value. This attitude towards humans is also reminiscent of how a farmer might reason about his animals. Their existence is predicated on their utility for the farmer and their value lies in what they produce to maintain the farm economically. Like the people in *Brave New World*, they are completely replaceable.

The technology used to design human beings to have certain desired traits (transhumanist technology) is portrayed as a dangerous liability to be feared. However, Nick Bostrom analyses *Brave New World* defending transhumanism. Bostrom sees in the novel a vision of the future where the transhumanist goals of human enhancement are not on the agenda. Instead he sees the opposite; deliberate crippling of moral and intellectual capabilities (qtd in Coenen 162). Christopher Coenen argues that Bostrom is wrong. He remarks that there are enhancements made on specialist workers, such as the rocket plane-engineers, and thus the story can indeed be seen as one of “human enhancement gone amok” because of how enhancements are used (Coenen 162). It may be argued that the matter of defining “enhancement” is rather subjective, and as the first chapter has shown, society in *Brave New World* considers their bioengineering improvements on nature.

Their view would likely be that they are fulfilling transhumanist aspirations. A stupid Epsilon is “better” than a smart one because the smart one is not suitable for Epsilon work. So the relativism inherent in the value term “enhancement” means it could still be called transhumanism. In addition, enhancements that would be recognizable as such today are made, such as resistance to diseases and toxins, not to mention that Alphas are rendered more intelligent.

However, even Mustapha Mond agrees that Shakespeare’s *Othello* is better than the “feelies” but that “high art” must be sacrificed for stability, and also that a society made up

entirely of Alpha Double Plusses would be unstable, so they deliberately keep eight ninths of the population stunted mentally (BNW 222-23). Thus, Bostrom's argument seems to have some support in the novel. People are not generally engineered to become better, but to fulfil certain functions. Yet, it may still be argued that *Brave New World* warns against transhumanist technology because society may have a tendency to use technology for the wrong purposes.

Animal imagery used on human beings in *Brave New World* also comes to mirror ecological thoughts, making society itself subject to natural imagery. Dehumanization is not only present at the hatchery. The attitude towards the lower castes remains dehumanizing and they are compared to animals throughout the rest of the novel. In the recreational park, the "fore-shortened life" is described as "maggoty" (BNW 62). John Savage compares a congregation of Deltas to maggots who "swarmed defilingly over the mystery of Linda's death" (BNW 209). John further perceives lower caste people as a "caterpillar of men and women" (164), "less than human monsters" (212), "twin herds" (221) and "lice" (246). In addition, they swarm, crawl, growl, squeak chatter and howl, and display the "stupid curiosity of animals" (202)—the list is long. Furthermore, a group of Deltas are described by Bernard as "identically small, black and hideous" (BNW 64). The impression seems to be so negative partly because the lower castes congregate in large Bokanovsky groups of identical twins, which makes them even less of individuals than the high castes, and therefore more disturbing, and also less human. In addition, based on the mandatory colour-coding of the clothes worn by the different castes to make the separation clearer, Gammas and Deltas are also compared to (leaf-green) aphides and (black) ants respectively (BNW 63). Although the low castes are deemed repellent by the high, it is recognized that they perform indispensable services, which seems to echo current eco-friendly attitudes towards insects, maggots and other "lower" life forms. In fact, part of the mental conditioning people receive in *Brave New*

World is that “[e]veryone works for everyone else. We can’t do without anyone. Even Epsilons are useful...” (BNW 74). So in a sense, there is a consciousness of the human-made environment as an ecosystem with interdependence between individuals performing different tasks. Be that as it may, the fact remains that these deformed and mentally deficient creatures are meant to be hideous to the reader, and they are clearly sub-human. This does not mean that the analogy breaks. In fact, it reinforces it because even though the “creepy crawlies” in nature perform indispensable services, they are commonly regarded as disgusting, repellent creatures.

On the whole, the use of animal imagery is concentrated to the lower castes. Although even Alphas are compared to animals, this is not common and the tone is different. The Director of the Hatchery, when delighting in the expected termination of Bernard Marx’s employment, is compared to a serpent (BNW 148), which is traditionally regarded as a wise fiendish creature. The savages on the reserve are associated with dogs, but more heavily with snakes. The words “serpent” and “snake” have different connotations: “Serpent” evokes the biblical figure, whereas “snake” is not associated with intelligence, which leaves only an impression of its primitive, reptile nature. However, one could argue that the savages have something in common with Alphas. Neither group have been stunted mentally by bioengineering. Be that as it may, although there is a distinction made between low and high castes, it seems that all members of society are reduced to animals. John Savage curses the “feely picture” called “Three Weeks in a Helicopter” and seemingly all of society, calling them (in Othello’s words) “Goats and monkeys!” (BNW 219). Mustapha Mond, being the overseer and master of all people in Northern Europe replies: “Nice tame animals, anyhow,” indicating that he views the people as animals to be looked after. Thereby, the elements of biological engineering, dehumanization and animal imagery have reduced human beings to domesticated animals.

3. Human Farming

Generally speaking, the societies of ants and bees have for a long time been regarded as good examples of ordered societies worthy of imitation by humans. Each individual performs a function necessary for the continuation of the colony in an ordered fashion. Aspirations for a planned, ordered human society sprang up in the early twentieth century in the form of city planning. Organizations were founded for the planning of cities, and some of these had ties to environmental organizations with various ideas on how to establish an ecologically sound society. Among these thinkers was Julian Huxley who was an active participant in the propagation of city planning, population control, environmentalism and scientific planning, involved in several organizations. Gregory T Cushman mentions that Julian Huxley was the first director-general of UNESCO, and worked together with William Vogt to create the International Union for the Conservation of Nature in 1947 (277). Apparently, for a brief period Aldous Huxley became a member of one which his brother co-founded, the Political and Economic Planning organization (PEP) but was, according to Anker, disenchanted by the technological and scientific approach to designing life and environments (27). Supposedly, he quit the organization to write *Brave New World* which is said to parody and poke fun at the PEP and other organizations with similar ideas for controlling and designing society and human life.

This section will argue that the end result in *Brave New World* is a society which can be compared to a farm for human beings, and is also connected to the image of a bee colony. To show this, I will argue that Huxley's criticism of scientific planning, and central planning in particular stem from the notion that planning people's lives for them and reasoning about them over their heads removes people's dignity as thinking human beings and amounts to treating them like animals.

Julian Huxley was prominent among early twentieth-century intellectuals and biologists who were visionaries and futurists, and imagined various utopias. Thus, Julian Huxley and the intellectual circle in which both brothers moved was a great influence on the writing of *Brave New World*. The Utopians wrote science fiction novels and proposed technological solutions to environmental problems and social control. Huxley read the work of his intellectual peers and was apparently not impressed. It is claimed by Gregory T. Cushman that Huxley wrote *Brave New World* to parody his brothers “technocratic approach to human ecology and reproduction” (277).

According to Brad Congdon, the book is also said to be a warning against technology. However, the notion that Huxley wrote *Brave New World* as a warning against technology has been contested. In “‘Community, Identity, Stability’: The Scientific Society and the Future of Religion in Aldous Huxley’s *Brave New World*,” Congdon presents a number of arguments based on Huxley’s non-fictional writing. Huxley’s essays and letters written around the time of the publication of the novel reveal that he had a “positive view of eugenics and scientific planning” (Congdon 84). Congdon credits Robert S Baker, David Bradshaw, and Joanne Woiak for arguing that “analyzing *Brave New World* in the light of Aldous’s interest in eugenics and scientific planning reveals a highly ambivalent novel, one which cannot be simply read ‘as a cautionary tale about the dehumanizing effects of technology’” (84). Congdon does not believe, as Michel Bouellebecq (whom he references), that *Brave New World* was originally meant to be a utopia, but recognizes the problem with arguing that it is a dystopia due to the technology used. In Huxley’s defence, it could be argued that he was an intellectual, and engaged in intellectual speculation both in his novels, and in his non-fictional writings. Whereas an academic text is subject to a certain level of formality and objectivity, a novel can be used to experiment with ideas and to express moral and personal sentiments regarding theoretical subjects without having to follow the same

rules. It is true that the novel expresses a certain ambivalence towards science, saying that it may be used wrong, but, at the same time, it portrays the suppression of pure science as hypocritical and mad.

Congdon maintains that the story is dystopian and offers a solution to the interpretive problem. In this solution techniques used by the state become evident and reveal how scientific planning turns human beings and human life into objects of analysis and control. The way technology is used is dehumanizing, and the reason for this, Congdon, as well as Martin Kessler, argue, has to do with the prevailing value system. Congdon's view is that Huxley argues against the implementation of "Fordism" as a religion because the value system it supports, one of mass production and consumer capitalism, drives the use of, for instance, the technologies of biological engineering and conditioning, which are the objects of horror and ridicule in the novel. Congdon reveals that both Aldous and Julian Huxley believed that religion is an "intrinsic drive found in the human animal," which would be controlled in a scientific society (93). Aldous recognized that there are "surrogates" for religion in politics, nationalism and the arts (Congdon 95).

In *Brave New World* the religious instinct is channelled into worshipping Henry Ford, and the dogma of mass production and consumer capitalism are the results, with some absurd effects: Congdon notes that "a society structured as [Huxley's] would have no need for money" (97) and that capitalism would not exist because "there is total state control of production, goods and services—but ... consumerism remains as a sort of vestigial limb" (97). This means that society is only going through the motions of capitalism, and it does so solely because society worships Henry Ford. The contradiction is a deliberate effort by the state to satisfy what is termed "the individual religious emotion" (97).

Furthermore, in *Brave New World*, power is exercised not through violence, but through methods of mind control. The state conditions people to want what they can get, and

not to want what they cannot have. Kessler argues that by supplying people with what makes them happy, they become habituated to the status quo, and “[h]appiness, in other words, becomes a technique of power” (572). To put these arguments in perspective, the state analyses how human beings work beyond what the individual can understand. Then they exploit their natural tendencies and shape them using various technologies in order to make people perform the function the state needs and behave in ways that are not disruptive to social stability. The relationship between individual and state is much like the relationship between a farmer and his animals. The world controllers in *Brave New World* reason about the population “over their heads,” and are only concerned with getting results from them that satisfy their designs.

The problem seems to lie in the fact that technology will be in the hands of human beings who will use it in accordance with their idea of doing good. The prevailing ideology does not encourage improvement of the human species, and Kessler remarks that the higher castes, Alphas and Betas, are not really necessary for social stability, which makes people like Mustapha Mond superfluous (575). However, while it is true that the ultimate expression of the World State’s motto “Community, Identity, Stability” would be perfected to the point where no more overseeing is necessary because everyone would behave correctly on their own, it can also be argued that the version of the *Brave New World* described in the novel is a work in progress. This is indicated by the numerous chemical “fixes” found in the novel (Soma, Violent Passion Surrogate, Pregnancy Substitute) which reveal that the products (humans) are not yet perfect, and the higher castes endeavour to solve problems in the production of human beings. At the same time, world controllers like Mustapha Mond fulfil the function of controlling scientific development (BNW 177) so that it does not serve purposes other than the exalted motto.

Science does not by itself lead to Huxley's dystopia. In fact, science is regarded by Mustapha Mond as potentially subversive (BNW 225). What Huxley is arguing against, then, is the wrong ideology setting the goals for social development while technology empowers society to achieve them. This makes the story dystopian, and it also functions as a warning against technology because humanity may not be wise enough to use it without disastrous results, not even when our intentions are good. Pure science can, as humanity has seen, lead to the development of the atomic bomb. In addition, the more power humanity gains through technology, the more we are able to destroy the environment, which is likely to happen when the prevailing ideology is one of exploitation with no regard for nature.

With the perspective that good intentions can lead to bad results when zealous leaders use technology and science to implement their order in the world, one can see Huxley as checking the zealousness of his peers in their designs, even if he does not necessarily think their ideas are theoretically invalid. For example, consider the case of Malthusianism: its originator, Thomas Robert Malthus, warned against overpopulation in the nineteenth century, arguing that population growth exceeded the capacity for food production (Robertson 4). This would inevitably lead to starvation and competition for resources. Malthusian concerns have since appeared in different forms and urged that measures be taken to prevent the anticipated negative effects. Although concerns regarding population and limited resources have often been economical in nature, after World War I an environmental Malthusianism emerged (6). Clearly, it stands to reason that the human population cannot grow perpetually without becoming unsustainable. Therefore, it would be prudent to control the human population. However, any attempt by a central power to achieve this goal will inevitably be oppressive.

In *Brave New World* Malthusianism is enacted by eliminating "viviparous reproduction" and growing people in a factory. Furthermore, most people are sterilized before birth and the remaining fertile women are controlled with contraceptives which they are

indoctrinated into using willingly although free will hardly exists at all in their society because it has been eliminated as far as possible by the state. To control people's ability to think for themselves, and thereby control their entire life, must be seen as a form of tyranny, as other Malthusian methods would be, such as the forced sterilization programs of the twentieth century. Even if the goal in *Brave New World* is not an environmentalist one, the criticism of Malthusian methods as tyrannical still holds, and can in another context be deemed eco-fascist.

Society in *Brave New World* treats nature in very destructive ways. People in general do not care about the environment. They could just as well have cared about it, had the government wanted them to, but the state sees the environment as something to be exploited. John Savage learns that savage reservations exist because the land is poor in natural resources, and the climate is unfavourable. The land surrounding the reserves is controlled by the state and they put up electrified fences. The fence is highly symbolic. Its shape is "irresistably the straight line, the geometric symbol of triumphant human purpose" (BNW 108). However, this "triumphant human purpose" is described as cutting through the landscape "[u]phill and down, across the deserts of salt or sand, through forests, into the depths of canyons, over crag and peak and the table-topped mesa," with electrocuted animals littering the ground beside it (BNW 108). This contact with the symbol of human purpose is described by the Warden of the Reservation: "To touch the fence is instant death" (BNW 102). In other words, humanity relentlessly invades nature anywhere on the planet and brings instant death with it. To come into contact with civilization is to die. This is the result of anthropocentric central planning combined with the technology to make the plans come true.

Why does humanity not care about nature in *Brave New World*? To put it simply, because people are conditioned to have an aversion to nature. The technocratic state uses "neo-Pavlovian conditioning" to decide people's reaction to natural things, on one occasion to

create appreciation for nature, but later to create aversion. In both instances the decision was made by calculating how people would spend their money; there was no environmentalism involved. It may be noted that the novel describes this conditioning being done against books and nature at the same time, seemingly indicating that appreciation of books and nature go together, which suggests that literature may be a vehicle for environmentalism. The possibility of spreading appreciation of nature through literature is crushed by the state which is only interested in economics and capitalism. When the state wanted people to enjoy nature, it was so that they would consume travel. However, they ended up consuming nothing else, and, consequently, the state decided that appreciation of nature is useless because it does not drive industry.

In this respect, there is a parallel to the creation of national parks. On the one hand, promoting national parks can make people care about nature as they travel there. On the other, commercializing nature creates a need to control the natural habitat that was supposed to be preserved to make it safe and convenient for tourists. Furthermore, civilization will set root around the parks, and so nature tourism can serve to make civilization spread into natural areas that should be left alone. So the environmental utility of national parks is somewhat dubious. Perhaps it would be better to concentrate people into cities. Such ideas have been promoted as environmentally sound, for instance in the United Nations' Agenda 21 for a sustainable development. Aversion to nature may be useful, but it may be considered eco-fascist to manipulate the constitution of people's minds simply because it is useful for the environmentalist agenda.

Having people live in cities may require some city planning, and though the novel does not go into detail on the subject, some ideas of city planning are identifiable. Julian Huxley was interested in city planning, and tried to develop theories for how to build a better city environment for humans while working for the London Zoo experimenting with designs

for animal enclosures (Anker 29). Huxley's brief references to what human living environments in *Brave New World* are like reveal that, as planned by the world state and its controllers, they consist of a countryside for farming and sports, and cities. Cities and farming villages are comprised of high rise buildings. There is Guildford, which consists of seven skyscrapers, and Puttenham "a modest village nine stories high" (BNW 245). The portrayal of London from a helicopter's point of view describes the buildings, with their helicopter landing pads as "a bed of geometrical mushrooms sprouting from the green of park and gardens" (BNW 61). The city is thus seen as a part of the landscape. Ironically, though, the reason for the cities being made up of skyscrapers is another way of separating humanity from nature. When travel is commonly facilitated by helicopters taking off from the rooftops, people do not need to go down to the ground, and given their conditioning, they would want it that way. Thus, the design of the cities reflects an anthropocentric attitude towards nature, where humanity exists above the greenery and usually does not interact with it.

However, although civilization sees itself as separate from nature, the buildings are compared to natural organisms. The view of these buildings, with helicopters lifting off and landing throughout the day, with "aphides" and "caterpillars" crawling on them seems like a natural scene. The helicopters are constantly compared to flying insects of different kinds, such as bees, bumblebees, wasps and hornets, mosquitoes, locusts, cockchafers and stag beetles. Reinterpreting the shape of the skyscraper and towers, with stems and landing areas on top, it is easy to form the impression of bees flying from flower to flower. At the same time, the London Hatchery is described as a "hive of industry" (BNW 146) evoking the image of bees: "Buzz, buzz! The hive was humming" (BNW 147) in "ordered motion" (146). This connection to the image of bees is suitable to the system in place. The motto "Community, Identity, Stability" and the hypnopædic teaching "everyone works for everyone else" is the kind of collectivism that makes some people see bees as role models. Bees even seem to have

a kind of caste system in which individuals are born into certain roles. There are the regular working bees, identical sisters working to bring home resources and making honey; there are the drones, whose function is to impregnate the all important queen, whose function, in turn, is to produce new bees, laying eggs in cells, which could be compared to the incubators at the hatchery. There are even larvae, which resemble the maggoty presence of the lower castes. In this light one can re-imagine the world state as a bee colony. Considering the efficiency of both societies and their highly ordered structures, and also how everyone is engineered to be happy with their lives, the words from James Thompson's poem seem relevant again: "The happy people, in their waxen Cells, / Sat tending public Cares, and planning Schemes / Of Temperance, for Winter poor" (qtd in Buell 184) The skyscrapers with their apartments and rooms now also resemble hives, with concrete and steel cells instead of waxen ones.

However, the "beehives" of the city do not resemble natural beehives, but more so the human made kind that farmers keep, square, with straight lines and right angles; human purpose built into its shape. Those beehives exist to serve the farmer, producing honey and wax, and pollinating crops. It is a conditional existence, and exploitative. In *Brave New World* the World Controllers have the role of farmers working together with other Alphas to sustain the human farm. It may, however, be argued that Alphas are also products of the same system, because they are predestined to be Alphas, and conditioned into their roles. This puts them in a similar position to the queen bees, who really work for the collective and not themselves. This final reflection has an ecological tone because it recalls the notion that even the farmer is dependent on nature, and a product of it. The hybrid image of cities as unnatural and natural, of the world controllers as both farmers and part of the bee colony, blurs the line between mankind and nature.

Conclusion

Brave New World is a dystopian science fiction novel which presents a vision of a high tech society gone wrong. Out of the many interpretations of the novel, technology stands out as an object of suspicion. The subject of biological engineering of human beings has been criticised as a dehumanizing affair and the state of humanity in the novel has been made a topic of inquiry. This essay has focused on the view of humanity as an animal. It has shown how Huxley's imagined society dehumanizes people through bioengineering and scientific planning, and how this relates to the environment. It has explained ecocriticism as a theory which takes as its main focus the relationship between literature and the environment. Ecocriticism has been presented as an interdisciplinary field which aims to bring scientific knowledge to bear on interpretations of fictional texts, to judge the realism of nature writing, pastorals and eco-apocalyptic stories. It has been argued to encourage the writing of texts that promote an awareness of environmental issues and an appreciation of nature. The essay has taken an approach inspired by the development in ecocriticism which views human-made environments as incorporated into nature and human beings as a species of animal among all others.

Environmentalism developed in the early twentieth century among intellectuals and scientists, and both Aldous and Julian Huxley were involved in these circles. The legacy of their grandfather Thomas Henry Huxley, Darwin's Bulldog, influenced their view of nature and humanity. The first section of this essay covered the view of humans and animals and how humanity has traditionally set itself above nature. Religion has been pointed out as having played a part in shaping anthropocentric attitudes, and it has been argued that the worship of Henry Ford has shaped the attitudes towards nature held by people in the world state, which are capitalistic and practical in an anthropocentric way. Science has also been pointed out as a counterpart to religion, which has produced anthropocentric attitudes as well.

Furthermore, the first section described Aldous Huxley's philosophy of "amphibian" human beings consisting of mind, body and soul. Aldous' use of animal imagery is instrumental in making the point that humans are both rational intellect and animals but also portrays the personality types of his characters as well as their physical appearance. His use of animal imagery is often derogatory and points out when people do not live up to the classic epithet of "rational animal" and is thus connected to "stupidity." However, by pointing out how humans have animal traits, animals are put on the same level as humans and the pathetic fallacy is reversed.

The second section of this essay dealt with biological engineering as it appears in the novel arguing that it is dehumanizing. It explains that *Brave New World* deals with ectogenesis and cloning rather than genetic engineering. The use of this technology is argued to reduce humanity to mass-produced commodities, most stunted physically and mentally by design, their individuality reduced to almost nothing. The challenge that the novel does not warn against transhumanist technology because people are not "enhanced" was considered, and the conclusion has been that the technology itself is not to blame, but the "improper" use of it. This still serves as a warning against technology because it is up to human ideologies to put it to use, and humanity is not guaranteed to make rational choices. The fence surrounding the savage reserve, symbolizing "triumphant human purpose" also symbolizes how mankind invades nature wherever it suits them, and that coming into contact with civilization means death. The use of animal imagery to describe the lower castes is explained to show a great deal of dehumanization, and how society reduces people to animals.

In the third section Aldous Huxley's attitude towards scientific planning was discussed and the question of whether *Brave New World* was originally meant to be a utopia was raised. The traditional interpretation is that Aldous warns against science and technology because of the ill effects described in the novel. The issue of ideology and religion is raised again to

explain how also the design of society itself (setting the conditions for how biological engineering is used) is caused by the prevailing ideology and belief systems, indicating a “religious instinct” exploited by the state. The “world gone mad” is the result of central planning, with science and technology being used to achieve its ends. In this context environmentalism is considered as it pertains to the manipulation of people’s attitudes. Though indoctrination either to make people appreciate nature or avoid it (symbolized by the neo-Pavlovian conditioning against books and nature) may serve also an environmentalist agenda, it is portrayed as a highly objectionable way to order society. The aspiration for a planned and ordered society and the writing of utopias in the early twentieth century are said to be lampooned by Huxley even though he may have agreed on some things in theory. Finally, the use of animal and natural imagery in the novel connects the cities and ordered structures of society to insects, and particularly to bees. Comparing a bee colony to the world state in *Brave New World* reveals intriguing similarities including a caste system and a shared devotion to collectivism.

Viewed as an environmental text, the novel holds firm an attitude that makes anthropocentric societies out to be destructive to the environment. The reader is not meant to agree with the disregard for nature displayed by the characters. When technology is combined with an anthropocentric world view, and particularly with capitalism, nature is exploited and made comfortable for human beings. It is clear that Huxley cared about the environment. Ultimately, *Brave New World* may serve as a warning against the wrong ideology setting the agenda for the future development of the world, and part of Huxley’s warning is that nature will be subordinated to selfish human schemes unless we change our ways. A final reflection on the opposing images of the humans and human made environments described as unnatural yet in terms of animals and natural images indicates that we are still a part of nature, and depend upon it, even when we do our best to be separate.

Works Cited

- Anker, Peder. *From Bauhaus to Ecohouse: A History of Ecological Design*. Baton Rouge: Louisiana State University Press, 2010. Print.
- Buchanan, Bradley W. "Oedipus Against Freud: Humanism and the Problem of Desire in *Brave New World*." *Huxley's Brave New World: Essays*. Eds. David Garret Izzo & Kim Kirkpatrick. Jefferson: McFarland & Company Inc, 2008. Print.
- Buell, Lawrence. *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. Cambridge, Mass. Harvard University Press, 1995. Print.
- Coenen, Christopher. "Utopian Aspects of the Debate on Converging Technologies." *Assessing Societal Implications of Converging Technological Development*. Eds. Armin Grunwald, Gerhard Banse, Gordon Nelson, Imre Hronszky. Berlin: Edition Sigma, 2007. 141-72. Print.
- Congdon, Brad. "'Community, Identity, Stability': The Scientific Society and the Future of Religion in Aldous Huxley's *Brave New World*." *ESC* 37:3-4 (2011): 83-105. Print.
- Cushman, Gregory T. *Guano and the Opening of the Pacific World: A Global Ecological History*. New York: Cambridge University Press, 2013. Print.
- Huxley, Aldous. *Brave New World*. 1932. New York: Harper Perennial Modern Classics, 2006. Print.
- Johnson, Loretta. "Greening the Library: The Fundamentals and Future of Ecocriticism." *Choice Magazine* Dec 2009. 7-13. Print.
- Kessler, Martin. "Power and the Perfect State." *Political Science Quarterly* 72:4 (1957): 565-77. Print.

- March, Christie L. "A Dystopic Vision of Gender in Aldous Huxley's *Brave New World* (1932)." *Women in Literature: Reading Through the Lens of Gender*. Eds. Ellen S. Silber & Jerilyn Fisher. Westport: Greenwood Press, 2003. Print.
- Marovitz, Sanford E. "Aldous Huxley's Intellectual Zoo." *Philological Quarterly: A Journal Devoted to Scholarly Investigation of the Classical and Modern Languages and Literatures* 48:4 (1969): 495-507. Print.
- Mayr, Ernst. Prerace, 1998. *The Evolutionary Synthesis: Perspectives on the Unification of Biology*. Eds. Ernst Mayr & William B. Provine. Cambridge: Harvard University Press, 1980. Print.
- Peller, Scott. "Labouring for a Brave New World: *Our Ford and the Epsilons*." *Huxley's Brave New World: Essays*. Eds. David Garret Izzo & Kim Kirkpatrick. Jefferson: McFarland & Company Inc, 2008. Print.
- Robertson, Thomas. *The Malthusian Moment; Global Population Growth and the Birth of American Environmentalism*. New Brunswick, N.J. : Rutgers University Press, 2012. Print.
- Seed, David. "Aldous Huxley's *Brave New World*." *A Companion to Science Fiction*. Malden: Blackwell Publishing, 2005. Print.