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Not So Dystopian: A Historical Reading of Eugenics in Science Fiction

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***Abstract:** Broadly, this paper is an effort in complicating traditional readings of eugenic themes in science fiction. Two landmark novels, Wells' *The Island of Dr. Moreau* (1896) and Huxley's *Brave New World* (1932), are highlighted as representative of the early and late stages of eugenics. By focusing on the troubling historical context surrounding these authors, I denounce the simple reading of these works as merely "dystopian". Scholars like Francis Fukuyama advance these simplistic readings by instinctively assuming that Wells and Huxley were against eugenics. This paper continues the tradition that David Bradshaw popularized in his book *The Hidden Huxley*, which argues that biographical details of science fiction authors are relevant when extracting meaning from their work. Looking at the crossroads between science fiction, popular culture, and technological development, this paper argues that a historical interpretation of these incredibly influential works of science fiction will infuse conversations surrounding new genetic technology like CRISPR with the necessary nuance to wisely march into the 21st century.*

"Eugenics" is commonly uttered in the same breath as 19th century Social Darwinism or Hitler's 20th century racial cleansing. But the idea has roots much farther back in history: Plato, in *The Republic*, was one of the first to envision a method for producing a better human by encouraging high class citizens to procreate and discouraging marriages between lower classes. Francis Galton, twenty-four years

after his cousin Charles Darwin published *On the Origin of Species* in 1859, pinned down this idea first proposed by Plato as “eugenics”, literally meaning “good creation”.¹ Science fiction’s relationship with eugenics can be traced back to the very beginning of the genre. *Frankenstein*, believed by Brian Aldiss to be the first true work of science fiction, features a man using science to artificially create a human. Clearly, there is considerable overlap between the theme of eugenics and what Aldiss believes is the function of science fiction: a domain to “search for a definition of mankind and his status in the universe”.² This paper is concerned with how the theme of eugenics is demonstrated in science fiction from the late 19th to mid-20th century. To achieve this, I will apply two landmark science fiction works that feature this theme: *The Island of Dr. Moreau* (1896) written by H. G. Wells, and *Brave New World* (1932) written by Aldous Huxley.

One crucial aspect of science fiction, especially in relation to eugenics and bioethics, is the genre's transactional nature. The first side of the transaction is clear: authors take the current science around them and make creative projections into the future. The second, and most overlooked side, is the reversal: when science fiction alters how real science is done. Specifically, how a fictional work like *Brave New World* can alter a real bioethical debate with broad terms like “Brave New Worlders,” or “test-tube babies”. As we creep into the 21st century, we must match technological advancements in biotechnology with increased nuance towards these influential works of science fiction in

¹ Patrick Parrinder, "Eugenics and Utopia: Sexual Selection from Galton to Morris." *Utopian Studies* 8, no. 2 (1997): 1, accessed May 10, 2020. <https://www.jstor.org/stable/20719681>

² Brian Aldiss, "On the Origin of Species: Mary Shelley", In *Trillion Year Spree* (New York: Athenium, 1986), 25-27, accessed May 10, 2020. Course Site.

order to avoid a shallow, one-sided debate. By pointing this out, I am choosing to side with scholars like Evie Kendall who see it as mandatory that scholars ponder what science fiction achieves for the rapidly expanding field of bioethics, both in terms of the “potential for providing accessible philosophical arguments for public debate, and the risks of fueling sensationalist or negatively prejudiced images of emerging technologies.”³ On the other side of the argument are scholars like Francis Fukuyama, who, in his work *Our Posthuman Future*, assumes science fictions like *Brave New World* are unequivocally denouncing genetic engineering and the doctrine of eugenics.⁴ My role is to join other scholars like Adam Roberts, who highlights Wells’ eugenic sympathies, or David Kirby, who places *Moreau* and *Brave New World* in the historical context of the early and late eugenics movements, in their efforts to complicate the traditional readings.⁵

I believe interpretations like Fukuyama’s, which treat these two works as simple dystopias, are ahistorical and fail to contend with the complex historical context that surrounded their creators. Other scholars like David Bradshaw have successfully countered a simplistic

³ Evie Kendal, “Utopian Visions of “Making People: Science Fiction and Debates on Cloning, Ectogenesis, Genetic Engineering, and Genetic Discrimination.” In *Biopolitics and Utopia*, edited by Patricia Stapleton, (New York: Palgrave Macmillan, 2015), 95-96, accessed April 28, 2020. One Search.

⁴ Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution*. (New York: Farrar, Straus, and Giroux, 2002) accessed May 10, 2020. Internet Archive.

⁵ See Adam Roberts, *The History of Science Fiction* (New York: Palgrave Macmillan, 2016); and David Kirby “Are We Not Men?: The Horror of Eugenics in The Island of Dr. Moreau,” *Paradoxa 17* (2002) : 93-108, accessed May 23, 2020, One Search.

reading of eugenics in science fiction, in his case by digging up Aldous Huxley's unknown nonfiction essays, to suggest that he was not the racially enlightened traditional liberal that many assume.⁶ In the same historical spirit as Bradshaw, I intend to argue that each source actively participated in different arguments tied to two separate time periods. Published 40 years after Darwin's *On the Origin of Species*, *The Island of Dr. Moreau* mocked the Victorian stance on evolution by weakening the barrier between man and animal, while spearheading debates surrounding the definition of humanness and how eugenics should be properly carried into the 20th century. For Wells, this meant a form of eugenics closely tied to Darwin's natural selection. *Brave New World*, written at the peak of the late eugenics movement, is not just a dystopian critique of eugenics, but Huxley's imaginative portrayal of the late eugenics discourse defined by the blossoming role of pro-eugenic state planning, and Haldane's influential book *Daedalus; or, Science and the Future*.

To properly place these primary sources in their historical context, I will divide the late 19th century and early 20th century into two periods of eugenics, early and late, to investigate how each work was rooted in a specific conversation. *Moreau* exemplifies the early period (1859 to 1900), and *Brave New World* is representative of the late or "golden" era of eugenics (1900-1945). This periodization will be useful in explaining how the eugenics movement progressed throughout the 20th century and how both works are a direct product of a complex and widespread eugenic debate.

⁶ David Bradshaw, "Huxley's Slump: Planning, Eugenics, and the 'Ultimate Need' of Stability". In *The Art of Literary Biography*, edited by John Batchelor, 220-240. (Oxford: Oxford Press, 1995) accessed April 28, 2020, 10.1093/acprof:oso/9780198182894.001.0001.

Both Wells and *The Island of Dr. Moreau* were shaped by the early eugenics period, a time span defined by Darwin's revolutionary publication *On the Origin of Species*, Francis Galton, and the complex debate surrounding how to properly conceptualize Darwin's discoveries. It is hard to overstate how influential Darwin's theory of evolution was across Victorian society. As David Kirby points out, Darwin forced humanity to rethink its position in the natural world by arguing that humans *are* animals with an evolutionary link to all life on earth.⁷ This was especially relevant to natural scientists at the time, as before the publication of *On the Origin of Species* in 1859, "most people did not look to biology for solutions to societal problems."⁸ It was Francis Galton, one of the many inspired scientists (and Darwin's cousin) who took the notorious leap of applying Darwin's ideas of natural selection to his own species. In 1883, Galton coined the term "eugenics" or "well born" in which the main guiding question, inspired by Gregor Mendel's mathematical approach to breeding pea plants, was: "Could not the race of men be similarly improved?"⁹ Despite Galton's unwavering assurance of the affirmative, the science at the time was extremely muddled; genetics — indeed the word genetics itself — had not yet been invented. Consequently, a confused and frenzied debate on how to apply Darwin's ideas ensued.

Amidst this uncertain scientific culture, H. G. Wells was introduced to the blossoming debates surrounding human primitiveness that dominated Victorian Britain. Wells was first a scientist taken under the wing of Thomas Huxley, or "Darwin's Bulldog", a staunch defender

⁷ Kirby, "Are We Not Men?" 95.

⁸ Ibid.

⁹ Daniel Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (Berkeley: University of California Press, 1985), 1, accessed May 23, 2020, Pro Quest.

of natural selection and evolution. It was during this mentorship that Wells was initially drawn to evolutionary topics in support of Darwin. John McNabb argues that “while most scientists and lay public accepted the reality of evolution by the 1890’s, fear of the implications of the Victorian Man’s primitive heritage pervaded popular and scientific works.”¹⁰ Drawing off the broad interest in man’s primitive origin, the eolith question — a debate surrounding the finding of early stone tools — was front cover material through 1890 as Wells was writing *Moreau*. In its early stages of drafting, scientists like Eugene Dubois were traveling Europe “attempting to persuade scholars they had discovered a creature that was genuinely part way between man and the beasts from which he had evolved.”¹¹

As unsettling discussions of humanity’s link to animals swept through Europe, the fear of evolutionary devolution or “degeneration” dominated the Victorian consciousness, which, for Wells, highlighted critical flaws in how his peers conceptualized evolution. As Wells was writing *Moreau*, the common Victorian belief towards evolution was that humans “represented the top of the evolutionary tree, an inevitable consequence of their being a superior species.”¹² However, this was thrown into doubt due to Darwin’s theory of degeneration, in which Darwin argued that an “ape-like, simple brain of a macrocephalus idiot offered a potent case of evolutionary reversion.”¹³ For the Victorians,

¹⁰ John McNabb, “The Beast Within: H.G. Wells, The Island of Doctor Moreau, and human evolution in the mid-1890s,” *Geological Journal* 50, no. 3 (2015): 2, accessed April 27, 2020. 10.1002/gj.2607.

¹¹ *Ibid.*, 9.

¹² *Ibid.*, 3.

¹³ Bonnie Cross, “But They Talk: Historical and Modern Mechanisms Behind the Beast Folk’s Language in The Island of Dr. Moreau,” *International*

especially the cliché tea-sipping aristocracy, this was pure horror, for not only did this mean humans were not at the top of the evolutionary tree, but they may already possess a “degenerative” quality of which they were unaware. Wells saw the general public’s outlook on evolution as one of arrogance and complacency. Due to his tight relationship with Thomas Huxley and unfettered support of Darwin, Wells believed that Victorians were fatally out of touch with the pressing reality of degeneration and pushed that “humans could not be assured of their continued dominance in the world.”¹⁴ A potent example of this sentiment can be found in Wells’ *Zoological Retrogression* published in the popular *Gentleman’s Magazine*. In this nonfiction work, Wells likened human evolution to a lost city dweller who takes many turns and backtracks on himself, therefore asserting that the true character of evolutionary change is not linear and instead full of unexpected twists and turns.¹⁵

Given Wells’ displeasure with the Victorian outlook on evolution and his certainty that human evolution is not linear, I argue that *The Island of Dr. Moreau* should be read as Wells’ attempt to stoke Victorian anxieties surrounding man’s link to animal. Wells achieves this in *Moreau* by injecting the maximum amount of confusion regarding the barrier between beast and man. John Glendening echoes this sentiment, stating the “text’s handling of evolution casts an incapacitating net of indeterminacy over all characters by destabilizing those binary oppositions that help people make sense of their world.”¹⁶

Journal of Comparative Literature and Arts 1, no. 2 (2014): 51, accessed April 27, 2020. One Search.

¹⁴ McNabb, “The Beast Within,” 10.

¹⁵ *Ibid.*, 9.

¹⁶ John Glendening, “Green Confusion”: Evolution and Entanglement in H. G. Wells’s “The Island of Doctor Moreau.” *Victorian Literature and Culture*

As Pendrick, the main character who finds himself shipwrecked on Dr. Moreau's eugenic experiment, scurries through the forest, he comes across one of Moreau's vivisected half-beast, half-man creations and instantly blurts, "What on earth was he, — man or beast?"¹⁷ Pendrick, in a fashion similar to how many Victorians reacted to Darwin's theory of evolution, is terrified when he utters "the three creatures were human in shape, and yet human beings with the strangest air about them of some familiar animal."¹⁸ This is demonstrated most glaringly when Pendrick effortlessly assimilates with the beast creatures and observes the beasts were "human enough and even conceived a friendly tolerance," suggesting that the beasts not only looked human, but exhibited human-like empathy. Wells drives his evolutionary point home in his depiction of Pendrick's return to normal British society in which he could not persuade himself that "the men and women were not also another Beast People, half wrought into the outward image of human souls."¹⁹

Given Moreau's failure to alter the beasts and his eventual demise, it is tempting to assume that Wells was denouncing the blossoming field of eugenics and its goal to speed up human evolution. This is certainly plausible, for despite his unfettered determination, Moreau failed to fully turn beast into man and eventually fell victim to a fatal popular uprising orchestrated by his own eugenic creations. However, this interpretation fails to account for Wells' personal stance

30, no. 2 (2002): 584, accessed April 27, 2020.
<https://www.jstor.org/stable/25058605>

¹⁷ Wells, H.G. *The Island of Dr. Moreau* (Global Grey eBooks, 2019), 39, accessed May 23, 2020, <https://www.globalgreyebooks.com/island-of-dr-moreau-ebook.html>

¹⁸ *Ibid.*, 38.

¹⁹ *Ibid.*, 126.

on eugenics. As Adam Roberts points out, Wells, in addition to having been comparably racist to the vast majority of middle class England at the time, was strongly affiliated with late 19th century eugenics and championed preventing inferior races and the disabled from procreating.²⁰ This racism is illustrated in *Moreau*, easily seen in Wells' description of the beasts having "black negroid faces" or in the common comparison between black faces and simian creatures.²¹ Wells' eugenic sympathies are best demonstrated in his work *Anticipations*, where he lays out a utopian republic in which natural selection is brutally applied to humans in hopes that "weakness will be prevented from propagating weakness and cowardice and feebleness are saved from the accomplishments of their desires."²² In this utopia, Wells wished to limit the "feeble, ugly and inefficient."²³

The question then becomes: why did Wells, a racist eugenicist, publish a novel that illustrates a failed eugenics attempt? I argue that Wells was promoting a specific version of eugenics, in his case a eugenics program strictly opposed to directionalism and positive eugenics, and supportive of Darwinist principals. In other words, Wells was attempting to pinpoint how eugenics should be properly taken into the 20th century. Galton was a staunch supporter of positive eugenics, or the idea that specific superior qualities should be identified and bred at a high rate. Wells, in response to one of Galton's 1904 lectures before the British Sociological Society, dismissed positive eugenics by stating the "conscious selection of the best for reproduction will be

²⁰ Roberts, *History of SF*, 221.

²¹ Wells, *Island of Dr. Moreau*, Moreau 23.

²² H. G. Wells, *Anticipations: Of the Reaction of Mechanical and Scientific Progress Upon Human Life and Thought* (Auckland: The Floating Press, 1902), 289, accessed May 20, 2020. ProQuest Ebook Central.

²³ Ibid.

impossible,” and instead “it is in the sterilization of failures, and not in the selection of successes for breeding, that the possibility of improvement lies.”²⁴ Therefore, it is no coincidence that Wells created Moreau as a strictly positive eugenicist who consciously selected all the “best” traits for his creations. E. E. Snyder similarly argues that Wells created Moreau to push against positive eugenics but adds directionalism as a theory of which Wells also disapproved.²⁵ Directionalism, a common Victorian stance, was the belief that evolution is a directed process aimed towards the perfection of human beings, a sentiment Moreau certainly holds in his extraordinarily confident eugenic experiments. Snyder argues that “Moreau’s muddled philosophy read designed progress into an evolutionary process.”²⁶ Furthermore, Wells purposefully depicts Moreau as a perversion of Darwin’s theory of evolution by claiming to select traits with the randomness of natural selection. However, as Snyder points out, although Moreau claims to operate in line with Darwin-like randomness, “Moreau’s experiments display a terrible obsessiveness manifesting in the idea of progress (or directionalism).”²⁷ Overall, considering that Moreau was a failed positive eugenicist and a believer in directionalism, Wells was attempting to steer eugenicists like Galton

²⁴ Francis Galton, “Eugenics: Its Definition, Scope, and Aims” (Well’s contribution to the post- debate at a meeting for the School of Economics at London University, London, May 16th 1904) accessed May 22, 2020, <http://galton.org/essays/1900-1911/galton-1904-am-journ-soc-eugenics-scope-aims.htm>

²⁵ E.E. Snyder, “Moreau and the Monstrous: Evolution, Religion, and the Beast on the Island.” *Preternature: Critical and Historical Studies on the Preternatural* 2, no. 2 (2013): 215, accessed April 27, 2020, <https://www.jstor.org/stable/10.5325/preternature.2.2.0213>

²⁶ Ibid.

²⁷ Ibid., 222.

away from perfectionist positive eugenics and towards a eugenics more in tune with Darwin's impartial natural selection. This version would be much closer to his desired utopia in *Anticipations*, a utopia where "nature, not man, would slay the hindermost".²⁸

In 1932, thirty-six years after the publication of *The Island of Dr. Moreau*, Aldous Huxley, grandson of Wells' famed mentor Thomas Huxley, wrote the revolutionary book *Brave New World*. The mixed critical response soon after its publication was opposite the ubiquitous, dulled down consensus one finds today. Joanne Woiak proposes that most critics saw it as a "thin little joke" aimed at merely disgusting readers with perverse depictions of sex, but, among contemporaries who grasped the novel's complexity, Bertrand Russel "read the World State as a viable alternative to mass destruction in a future world war."²⁹ Today, *Brave New World* is primarily used and read as a universal dystopia that undoubtedly, given the alarming soulless and machine-like society that still terrorizes readers, denounces radical biotechnological research and certainly the eugenic dogma behind it. Perter Firchow agrees, observing *Brave New World* has left so "deep a mark on the modern mind that the mere mention of it evokes a whole complex of hostile attitude towards science."³⁰ Firchow goes even farther, stating it has "become a byword for a society in which the values of scientific technologies are dominant and has therefore reduced man to a species of machine."³¹ While there are an overwhelming

²⁸ Roberts, *History of SF*, 239.

²⁹ Joanne Woiak, "Designing a Brave New World: Eugenics, Politics, and Fiction Authors," *The Public Historian* 29, no. 3 (2007): 111, accessed April 27, 2020, <https://www.jstor.org/stable/10.1525/tph.2007.29.3.105>.

³⁰ Peter Firchow, "Science and Conscience in Huxley's "Brave New World". " *Contemporary Literature* 16, no. 3 (1975): 301, accessed April 21, 2020, <https://doi.org/https://www.jstor.org/stable/1207404>.

³¹ *Ibid.*

amount of valid interpretations to choose from, I believe the most common and accessible one critically ignores the environment in which Huxley crafted *Braved New World*, and therefore demands additional context. The most drawn-upon representation of this near-ubiquitous view is defended by the neo-conservative scholar Francis Fukuyama in his work *Our Post-Human Future*. Mirroring Firchow's summary of popular reception, Fukuyama scatters the first chapter with phrases like "the nightmare of *Brave New World*," and identifies the World State's drug soma, among many other things, as methods to keep citizens as "happy slaves with a slavish happiness."³² Fukuyama defends this by pointing to real life biotechnology that he feels was mirrored in *Brave New World*, most notably drawing a direct link between the World State's cloning process (or Bokanovski process) and current in vitro fertilization. Most importantly, Fukuyama claims the purpose of his book is to argue that "Huxley was right, that the most significant threat posed by biotechnology is the possibility that it will alter human nature."³³ Here, Fukuyama displays his lack of historical nuance, for his claim contains wide-ranging assumptions surrounding Huxley's stance on eugenics that, given the immense collection of scholarship available surrounding Huxley's complex position on eugenics, are severely jeopardized.

Representations of *Brave New World* like Fukuyama's are ones that I, and well-researched scholars like Evie Kendall and Sheryl Hamilton, fear could erode current debates in biotechnology by using slippery slope scare tactics. Kendall states that "biopolitics and SF speculation converge at the point at which political governance extends to biological life," and claims that some people (scientists and

³² Fukuyama, *Our Posthuman Future*, 6.

³³ *Ibid.*, 7.

politicians alike) rely on “SF genre tropes to dramatize potential threats science may pose to humanity.”³⁴ Following the *TIME* magazine cover-worthy cloning of Dolly the Sheep in 1996, both her creator and leading biologists instantly injected broad statements referring back to *Brave New World* and Mary Shelley’s *Frankenstein* in hopes of arguing that “cloning should be in the realm of science fiction.”³⁵ This scientific reality points to Hamilton’s central argument that Fukuyama-like scholars and even credited scientists often have not read *Brave New World* and primarily reference it at the level of “broad trope” or “general symbol” to gain quick argumentative points.³⁶ Just seven months after Dolly the Sheep made the cover of *TIME* magazine, Japanese scientists also successfully incubated a goat in an artificial womb. In response, the *New York Times* ominously titled their article “The Artificial Womb is Born,” which included direct references to *Brave New World*, even comparing the Japanese lab to the Social Predestination Room, the site where the World State takes full control over lab-created fetuses.³⁷

Much like *Moreau* and Wells were a product of the early eugenics evolutionary debacle, I argue Huxley and *Brave New World* should be conceptualized in the late eugenics period (1900-1945) so as to best read the eugenics theme with historical nuance. The term “late” is fitting in terms of periodization, for it accurately foreshadows the popular downfall of eugenics after WWII in which the term eugenics was, and still is, automatically linked to the horrific race cleansing atrocities of the Holocaust. The turn of the 20th century, however,

³⁴ Kendall, “Utopian Visions,” 91.

³⁵ *Ibid.*, 96.

³⁶ Sheryl Hamilton, “Traces of the Future: Biotechnology, Science Fiction and the Media,” *Science Fiction Studies* 30, no. 2 (July 2003): 270, accessed May 2, 2020. <https://www.jstor.org/stable/4241173>

³⁷ Kendal, “Utopian Fiction”, 93.

marked the popular explosion of Galton's eugenics, previously confined to scholarly circles. Galton passed the baton to Charles B. Davenport who, in 1910, founded the Eugenic Record Office in Long Island, established to provide "the basis for eugenics efforts to prevent reproduction of the genetically unfit."³⁸ The terms "genetics" and "gene," only slightly less muddled surrounding *Moreau's* conception, were coined a year prior by the Medellin prodigy William Bateson.³⁹ Michael Sandal rightly qualifies that the American eugenic crusade "was no marginal movement of racists and cranks," highlighting eugenic sympathies of household names like Theodore Roosevelt and pioneer feminist Margaret Sanger.⁴⁰ By the end of the American eugenic movement, "Fitter Family" contests were the mainstage at state fairs and the 1927 Supreme Court upheld the constitutionality of sterilization in *Buck v. Bell*.

Across the Atlantic, an elitist group of left-wing intellectuals containing Aldous Huxley, J. B. S. Haldane, Julian Huxley (Aldous's brother) and Bertrand Russell felt interwar Britain was deteriorating and supported state-run eugenics in hopes of breaking the cycle. Eugenics scholars like Kevles see this consequential group as part of the "Reform Eugenics" movement, a group defined by the grey area between (mostly) rejecting old eugenic doctrines of racial superiority and the widespread acceptance of mandatory IQ testing to rid Britain of the "feeble-minded".⁴¹ Regardless of whether Aldous Huxley fits this classification, he certainly does not emerge unscathed from Bradshaw's

³⁸ Michael J. Sandal, *The Case against Perfection: Ethics in the Age of Genetic Engineering* (Cambridge: Harvard Press, 2007), 64, accessed May 21, 2020. EBSCO.

³⁹ Kevles, *In the Name of Eugenics*, 44.

⁴⁰ *Ibid.*, 68.

⁴¹ Kevles, *In the Name of Eugenics*, 173.

research in *Huxley's Slump*. After touring the unemployment-ridden coal mining slums of Britain, Huxley was convinced that “the country faced a catastrophic collapse of its social and political structures and that a radical overhaul of government had to be effected.”⁴² However, Huxley saw the parliamentary system as weak and inefficient, making “prompt and comprehensive action all but impossible.”⁴³ Aldous and Julian Huxley, in an effort to revitalize Britain, joined the Political and Economic Planning group, a national planning organization aimed at bypassing democratic processes and implementing eugenic reforms. In Aldous’ case, PEP meetings were a time to flirt with ideas of state control, often “sanctioning the bypassing of parliamentary opposition to Soviet-style planning.”⁴⁴ One meeting featured Julian Huxley stating: “it is of utmost necessity to plan for quantity of population and for racial improvement,” a position of which Bradshaw believed, “Aldous would have concurred with every word.”⁴⁵ Huxley’s role in 1930’s state planning should make readers like Fukuyama think twice about the “dystopian” world government in *Brave New World*. With some scholarly reticence to avoid Fukuyama-esque certainty, Bradshaw suggests that, rather than a “fictional embodiment of supposed loathing of statism and eugenics, *Brave New World* may be seen as a tentative, paradoxical expression of Huxley’s fervent interest in the planned state.”⁴⁶

Haldane’s *Daedalus; or, Science and the Future* (1924) had an immense influence on the late eugenic discourse and *Brave New World*. Haldane, conforming to Kevles “Reform Eugenics” idea, dismissed

⁴² Bradshaw, “Huxley’s Slump”, 5

⁴³ *Ibid.*

⁴⁴ *Ibid.*, 8.

⁴⁵ *Ibid.*, 12.

⁴⁶ *Ibid.*, 7.

“old eugenics” for its limited application of genetic principles, but as David Kirby qualifies he, like Aldous, “believed strongly in the need for some sort of eugenics program.”⁴⁷ This program would be centered around direct biological control or a “technological solution to the eugenics problem.”⁴⁸ Haldane realized that while biological theories such as Darwin and Mendel’s can have alarming effects conceptually, applied biology or the direct control of human genetics would change society far more rapidly.⁴⁹ In *Daedalus* this was expressed as the fictional “ectogenesis” or the creation of embryos in artificial conditions. Not so fictional today, the buzzword is now “test tube babies”. Haldane’s acceptance of direct biological control is directly mirrored in *Brave New World’s* notorious opening scene in the World State hatchery. A group of young children are lead through the state controlled “modern fertilizing process” in which machine packed, temperature controlled rooms are stuffed with ova, egg and sperm.⁵⁰ After the consideration of “optimum temperature, salinity and viscosity,” state eggs are brought to the decanting room to be checked for abnormalities.⁵¹ Clearly, a human controlled process of direct eugenics is present in Huxley’s opening scene, but even Haldane’s term “ectogenesis” found its way into *Brave New World* when Mustafa Mond, the lead world controller, remarks that direct biological control, like ectogenesis, is a much easier way to control populations when

⁴⁷ Kirby, “Are We Not Men?”, 96.

⁴⁸ *Ibid.*, 97.

⁴⁹ Mark Jeffreys, "Dr. Daedalus and His Minotaur: Mythic Warnings about Genetic Engineering from J.B.S. Haldane, Francois Jacob, and Andrew Niccol's Gattaca," *Journal of Medical Humanities* 22, no. 2 (2001): 140, accessed May 21, 2020, [https://doi.org/1041-3545/01/0600-0137\\$19.50/0](https://doi.org/1041-3545/01/0600-0137$19.50/0).

⁵⁰ Aldous Huxley, *Brave New World* (New York: Harper Collins, 2006), 5.

⁵¹ *Ibid.*

compared to direct force.⁵² Although Haldane is not realized as a scientific influence by the public, it is Huxley's uniquely haunting depiction of his direct genetic manipulation, first touted in *Daedalus*, that explains the omnipresent dystopian interpretation.

Considering the chilling atmosphere of the government hatchery, many people assume that Huxley was against state-controlled eugenics. Joanne Woiak concurs, stating "many readers of Huxley's story probably assume that he was wholly critical of eugenics, given the way he presents gamete selection, embryo cloning, and artificial wombs as techniques for eliminating individuality and meaningful personal relationships."⁵³ Fukuyama clearly illustrates this assumption in his decision to place the single mention of ectogenesis in *Brave New World* as the introductory quote to the chapter "Why we should be worried". This chapter, unsurprisingly, uses brief mentions of the state-run eugenics program in *Brave New World* to bolster his claim that modern society should be tremendously skeptical, in some areas even outright opposed, to any scientific progress in biotechnology.⁵⁴ Bilal Hamamra makes a similar claim, asserting that *Brave New World* depicts a dystopian systematic control of the mind and body through eugenic engineering and biological conditioning.⁵⁵ More specifically, Hamamra argues that Huxley is criticizing biological engineering and eugenics

⁵² Ibid., 50.

⁵³ Woiak, "Designing a Brave New World", 118.

⁵⁴ Fukuyama, *Our Posthuman Future*, 84-105.

⁵⁵ Bilal Hamamra, "A Foucauldian Reading of Huxley's Brave New World." *Theory and Practice in Language Studies* 7, no. 1 (January 2017): 12, accessed April 28, 2020, <http://dx.doi.org/10.17507/tpls.0701.02>

“since *BNW* bears witness to a nightmarish fear of ideology that crushes man’s humanity”⁵⁶.

While I, and scholars like Bradshaw, agree that *Brave New World* is one of the most daunting literary depictions of biological control to date, Huxley’s lesser-known nonfiction essays complicate this dystopian reading. In a 1927 *Vanity Fair* essay, Huxley asserts that “[w]e know nurture cannot alter nature and that no amount of education will make men virtuous,” and instead, “eugenics will be practiced in order to improve the human breed.”⁵⁷ Noteworthy is his former claim that “we do not believe in equality.”⁵⁸ This “we” is most likely his brother Julian who was likewise frustrated with the “nurture approach,” complaining that “our understanding of controlling human machinery has been limited by being confined to the period after birth,” a period when the “placidity of the organism has been lost.”⁵⁹ Julian therefore wished that if “ectogenesis were possible, we could play all the tricks we liked on the early development of man.”⁶⁰ Similarly, in his short but telling essay “What is Happening to Our Population?”, Aldous resents a decrease in infant mortality due to its unintended consequence of increasing the number of “defective halfwits,” a reality, he fears, that

⁵⁶ *Ibid.*, 14.

⁵⁷ James Sexton, Robert Baker, eds. *Aldous Huxley Complete Essays* (Chicago: Ivan R. Dee Press, 2000), 93, accessed May 23, 2020, Online Archive.

⁵⁸ *Ibid.*

⁵⁹ Brad Congdon, “Community, Identity, Stability”: The Scientific Society and the Future of Religion in Aldous Huxley’s: *Brave New World*.” *English Studies in Canada* 37, no. 3-4 (2011): 3, accessed April 28, 2020. One Search.

⁶⁰ *Ibid.*

could “impair the potential efficiency of Britain.”⁶¹ Considering this unambiguous support, scholars like Fukuyama and Hamamra should reconsider appealing to Huxley’s supposed scorn of eugenics in order to support their dystopian reading.

Given Huxley’s worrisome support of state control and eugenics, the exact question posed at Wells becomes relevant again: how should the theme of eugenics in *Brave New World* be read, if not a gleaming paradigm of anti-eugenic argument? Michel Houellebecq ambitiously claims that “*BNW* is our idea of heaven,” and that both of the Huxleys “believed totally in the kind of society depicted in *BNW*.”⁶² Alongside Brad Congdon, I disagree, for a “close reading of *BNW* reveals too many sites of satire to simply claim Aldous was endorsing the specific society he depicted.”⁶³ Woiak claims that the extreme version of eugenics was “obviously being ridiculed,” but also keeps in mind that Huxley was a “known supporter of the eugenics movement.”⁶⁴ While there is certainly not one correct answer, I believe a middle ground must be taken somewhere in between Fukuyama’s dystopian reading and Houellebecq’s claim that Huxley supported mass government sanctioned cloning.

This middle ground position must consider the often-overlooked negative portrayal of John the Savage’s native homeland Malpais and the parallel between the fictional world controller Mustafa Mond and the real Aldous Huxley. Curtis Carbonell saw Huxley’s

⁶¹ Aldous Huxley. “What is Happening to Our Population?” In *Politics and Population Control: A Documentary History*, edited by Kathleen A. Tobin, 36. (Westport: ABC-CLIO, 2004). Accessed April 29, 2020. Pro Quest.

⁶² Congdon, “Community, Identity, Stability”, 1.

⁶³ Ibid.

⁶⁴ Woiak, “Designing a Brave New World”, 118.

depiction of Malpais as a “damning representation of the indignity of human frailty.”⁶⁵ This may show that Huxley, at the time, considered a state that controlled its population's biology as either equal to, or more appealing than, the brutal limits of humanity that played themselves out on the Savage reservation, a place where old age ravages everyone, disease spreads, religious ritual deforms the body, and pain is ubiquitous. Given his support of state control at the time of writing *Brave New World* shown by David Bradshaw, and his avid support of eugenics shown in his nonfiction essays, it is likely Huxley wrote *Brave New World* as a speculative eugenic thought experiment, one in which he embodied Mustafa Mond. Bradshaw claims that not only does Mond “have the most persuasive voice in *BNW*,” but he can be seen “as Huxley’s ideological spokesperson” given Huxley’s aggressive position in the 1930’s planning movement in which his number one goal, like Mond’s, is social stability.⁶⁶ This becomes less speculative when one considers that Aldous’s favorite model of social planning was the work of Alfred Mond, the industrialist who in 1926 had amalgamated and rationalized the major British chemical companies.⁶⁷

Further pointing to Huxley’s connection to Mustafa Mond is his essay *A Note on Eugenics*. Given Huxley’s equivocal, sometimes even concerned approach, towards eugenics in this 1927 publication, one could interpret this source as Huxley arguing against eugenics. However, this is not the case, and instead it should be understood parallel to Wells’ depiction of eugenics in *Moreau*: a calculated stipulation regarding how eugenics should be *properly* carried out. In

⁶⁵ Curtis Carbonell, “Misreading Brave New World.” *Extrapolation* 56, no. 3 (2015): 288, accessed April 28 2020, 10.3828/extr.2015.16.

⁶⁶ Bradshaw, “Huxley’s Slump”, 10

⁶⁷ Woiak, “Designing a Brave New World”, 117.

his essay, Huxley proposes a society crafted by Haldane's ectogenesis, a society in which "every genius will be able to scatter his Maker's image through the land," but worries that a society filled with genetically perfect individuals will inevitably fall into "chronic civil war."⁶⁸ Mustafa Mond, as Congdon puts it, is "essentially ventriloquizing Aldous's point of view" in his identical reservations illustrated in the "Cyprus Experiments". Mond acts as a vehicle for Huxley to envision this perfect, eugenically designed society, in this case a failed utopian society filled with "Alphas", the highest cognitive caste created by the World State, which, "within six years, fell into a first class civil war" and "nineteen out of the twenty two thousand died."⁶⁹ Both Huxley and his creation, Mond, seem to agree that a eugenic society must have inferior and superior members with Huxley concluding that a eugenic society "must have its subjects and rulers" and Mond concluding that the optimum society must be modeled after the iceberg: "eight-ninths below the water line, one ninth above."⁷⁰ This is illustrated front and center with the notorious class system consisting of genetically perfect "Alphas" at the top and near-disabled "Epsilons" at the bottom. The connection between Mond and Huxley shows two things: Mustafa Mond should be interpreted as an intellectual

⁶⁸ James Sexton, Robert Baker, eds. *Aldous Huxley Complete Essays* (Chicago: Ivan R. Dee Press, 2000), 283-284, accessed May 23, 2020, Online Archive.

⁶⁹ Huxley, *Brave New World*, 223.

⁷⁰ Ibid.

⁷¹ Kendal, "Utopian Visions", 93.

experiment of Huxley, and that Huxley was not against eugenics, but merely skeptical of a society in which everyone is the genetic 1%.

At first glance, both *Moreau* and *Brave New World* seem to depict eugenics as a unilaterally horrifying practice to avoid, may it be Moreau crafting beast-men by the stroke of his scalpel or a World State designing subvariant slaves in a lab. Consequently, a dominant, almost unconscious, assumption has ruled popular culture that both works should be read as dystopias aimed at obliterating eugenics. Using relevant historical and scientific context, this essay complements a uniquely contextually focused area of science fiction scholarship that aims to introduce much needed nuance so as to alter current conversations in the rapidly developing field of biotechnology in which we find ourselves today that, often troublesomely, uses SF dystopia as a broad-brush scare tactic. Looking onwards, it is clear that science fiction's impact on real science did not end in 1996 with Dolly the Sheep. In 2013, the 1996 *New York Times* article previously titled "The Artificial Womb is Born", which compared the creation of Dolly to the horrific Social Predestination Room in *Brave New World*, was republished under the new title: "The Artificial Womb is Born and the World of the *Matrix* Begins". Thus, the media once again superimposed the SF nightmare of widespread human enslavement onto genetic engineering.⁷¹ As science marches on, developing new genetic technology like CRISPR, an ever-cheapening genetic tool which can directly alter the human genome, the impact of eugenic science fiction on real science must be studied more. This crucial task will demand open-minded and historically complex discussions, two features that a one-dimensional dystopian reading will be quick to stifle.

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