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Crafting Humans

From Genesis to Eugenics and Beyond

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Alison Bashford

Julian Huxley's Transhumanism

In the Epilogue to the *Oxford Handbook of the History of Eugenics*, I deemed insufficiently analyzed the trajectory between eugenics and more contemporary projects of human enhancement, imagined and realized as 'transhumanism' and 'posthumanism'.¹ 'Remaking ourselves', is possible, desirable, worthy, and can be socially just, current proponents argue, embracing various levels of technological change that might enhance physical and mental capacity, extend human life and health, and perhaps render 'posthuman' conditions possible.² I suggested that 'there is a long-twentieth-century history of enhancement, eugenics, and transhumanism waiting to be written, book-ended by the work of two philosophers, Nietzsche's *Übermensch* and Nicholas Agar's *Liberal Eugenics*'.³ But posthumanists now seem to be going too far, even for Agar and his defence of human enhancement. He has begun to caution against the trajectory of post-human possibilities, drawing attention to the costs of such ideas in *Humanity's*

1 My thanks to Chris Holdridge for research assistance and to Warwick Anderson for comments. The Woodson Research Center archivists were welcoming and I am grateful for their assistance and interest. This research was enabled by and Australian Research Council grant. Alison Bashford, 'Where Did Eugenics Go?' in *The Oxford Handbook of the History of Eugenics*, ed. by Alison Bashford and Philippa Levine (Oxford and New York: Oxford University Press, 2010), pp. 539–558 (p. 545). For the purposes of this chapter, I won't distinguish between transhumanism and posthumanism, but for proponents' own clarification of the distinction, see 'What is a Posthuman?', http://humanityplus.org/learn/transhumanist-faq/#answer_20 (accessed 1 November 2011).

2 Philip Kitcher, *The Lives to Come: The Genetic Revolution and Human Possibilities* (New York: Simon and Schuster, 1996). See also, Gregory Radick, 'A Critique of Kitcher on Eugenic Reasoning', *Studies in the History and Philosophy of Biology and Biomedical Sciences*, 32:4 (2001), 741–751; Lee M. Silver, 'Reprogenetics: How reprogenetic and genetic technologies will be combined to provide new opportunities for people to reach their reproductive goals', in *Engineering the Human Germline*, ed. by Gregory Stock and John Campbell (New York: Oxford University Press, 2000), pp. 57–71.

3 For Friedrich Nietzsche and *Übermensch*, see Dan Stone, *Breeding Superman: Nietzsche, Race and Eugenics in Edwardian and Interwar Britain* (Liverpool: Liverpool University Press, 2002); Nicholas Agar, *Liberal Eugenics: In Defence of Human Enhancement* (Malden, MA: Blackwell, 2005).

End: Why We Should Reject Radical Enhancement (2010).⁴ It is less Agar than his fellow philosopher, the posthumanist Nick Bostrom who perhaps best captures “overman” for the twenty-first century.⁵ *Übermensch* now materializes as ‘Humanity+’ or ‘H+’, as posthumanists sometimes style themselves.⁶

Transhumanism and posthumanism are both future-oriented intellectual projects. This is strange territory for an historian; the future is definitely a foreign country.⁷ Yet, if anything has a past the future does, and accordingly I raise two questions here. How does transhumanism understand its own history? And, more basically, what is the history of transhumanism? This chapter is a preliminary answer towards both.

At first glance, future-oriented transhumanists are not interested in the past generally, or their own past specifically. Bostrom’s ‘Short History of Transhumanist Thought’ is one of the very few internalist accounts.⁸ On closer investigation, though, a pattern emerges in the transhumanist self-story. The occasional reference to its own history is typically negatively constructed, stating what transhumanism is not: it is not eugenics. In making this claim, transhumanists seem to mean that any implementation of transhumanist or posthumanist ambition is not, or would not be, coerced. Transhumanism should and does defend “freedoms” and especially individual choices, Bostrom argues, thus avoiding ‘last century’s government-sponsored coercive eugenics programs [which have been] thoroughly discredited’.⁹ He eschews any ‘necessary link with coercive eugenics’,¹⁰ and rightly so. The statement is rhetorically and politically useful, but it is also historically and factually spurious since it misunderstands much eugenics in the past. Eugenics functioned as often through liberal governmentalities, as it did through authoritarian coercion, arguably more so, depending of course on national context. Scholars of human enhancement,

4 Nicholas Agar, *Humanity’s End: Why We Should Reject Radical Enhancement* (Cambridge, MA: MIT Press, 2010).

5 See <http://www.nickbostrom.com> (accessed 11/11/2011).

6 ‘Humanity+ is an international nonprofit membership organization which advocates the ethical use of technology to expand human capacities. We support the development of and access to new technologies that enable everyone to enjoy better minds, better bodies and better lives. In other words, we want people to be better than well.’ <http://humanityplus.org/about/> (accessed 1/11/2011).

7 David Lowenthal, *The Past is a Foreign Country* (Cambridge: Cambridge University Press, 1985).

8 Nick Bostrom, ‘A Short History of Transhumanist Thought’, *Analysis and Metaphysics*, 5 (2006), 63–9; Nick Bostrom, ‘A History of Transhumanism’, *Journal of Evolution and Technology*, 14:1 (2005), 1–25.

9 Nick Bostrom, ‘In Defense of Posthuman Dignity’, *Bioethics*, 19:3 (2005), 202–214 (p. 206).

10 Nick Bostrom and Rebecca Roache, ‘Ethical Issues in Human Enhancement,’ in *New Waves in Applied Ethics*, ed. by Jesper Ryberg, Thomas S. Petersen and Clark Wolf (Basingstoke: Palgrave, 2007), pp. 120–152.

transhumanism, and posthumanism make the common error of imagining that eugenics only operated through the radical right. They might look again at the history of eugenics, however, where they will find as much talk of “freedom” as they will of ‘coercion’. Therein lies the real link.¹¹ As Diane Paul has pointed out, transhumanists have far less in common with the radical right than with the utopian visions of socialist scientists like J. B. S. Haldane.¹² And, I might add (and perhaps even more to the point), liberal Julian Huxley. My intention here, though, is not to offer an exposé of the eugenics lurking within transhumanism – such exposés are tiresome and historically are often both crude and lazy. Rather, I explore the transhumanism of a mid-twentieth-century biologist and eugenicist who sits squarely in the middle of the long intellectual history from Nietzsche to Bostrom (via Agar): Julian Huxley.

Vital Destinies

When it comes to the Huxleys, authors on transhumanism are far more likely to mention Aldous and *Brave New World*, than his brother Julian.¹³ Yet Julian was by far the closer antecedent. He came up with the word:

The human species can, if it wishes, transcend itself—not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps *transhumanism* will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature.¹⁴

Notwithstanding this critical intervention, Julian Huxley is strangely absent from transhumanist scholarship. He is nowhere, for example, in John Harris’s *Enhancing Evolution: The Ethical Case for Making Better People*. An index entry

11 Freedom as comprehended and analysed by Nikolas Rose, *Powers of Freedom: Reframing Political Thought* (Cambridge: Cambridge University Press, 1999).

12 Diane B. Paul, ‘On Drawing Lessons from the History of Eugenics’, in *Reprogenetics: Law, Policy, and Ethical Issues*, ed. by Lori P. Knowles and Gregory E. Kaebnick (Baltimore, MD: Johns Hopkins University Press, 2007), pp. 3–19.

13 For example, Andy Miah, ‘A Critical History of Posthumanism’, in *Medical Enhancements and Posthumanity*, ed. by Bert Gordijn and Ruth Chadwick (New York: Routledge, 2007), pp. 71–94.

14 Julian Huxley, ‘Transhumanism’, in *New Bottles for New Wine*, ed. by Julian Huxley (London: Chatto & Windus, 1957), pp. 13–17. Bostrom repeats an incorrect citation to Huxley’s 1927 volume of essays *Religion without Revelation* (London: Benn, 1927). While there were certainly some ideas approaching transhumanism in those essays, this quote was not part of that book. Huxley wrote, for example, ‘[Man] is always not only surmounting what it thought were the limitations of its nature, but, in individual and social development alike, transcending its own nature and emerging in newness of achievement’. (p. 356)

appears for Humpty Dumpty but not Huxley, even though it was the latter not the former who wrote *Evolution: The Modern Synthesis*.¹⁵ Nicholas Agar is one of the few philosophers of human enhancement seriously to recognize the biologist's significance.¹⁶

Julian Huxley was grandson of Thomas Henry the great defender of Darwin, son of Leonard the publisher, and brother of Aldous the essayist and novelist. This was a family that lived and breathed ideas about humans and nature, science and the future, evolution and social progress. Indeed his entire generational, familial, and scholarly milieu thought and wrote about future humans, not least his co-author H.G. Wells and his colleague the geneticist J.B.S. Haldane. This was a left and progressive political milieu, in Wells' case socialist, in Haldane's case communist, in Huxley's case broadly liberal and latterly strongly anti-communist. Born 1887, died 1975, Huxley's was a twentieth-century life. He was educated at the beginning of the century in zoology at Oxford; taught at Rice University, Texas, just before the First World War; returned to the UK, first as Oxford ornithologist and then at Kings College, London as professor of zoology. Intellectually, he was born into a generation of biologists who were connecting Mendelian genetics to the theory of evolution by natural selection. And he entered a generation of early ecologists, especially at Oxford, who were attempting to bring the new methods and insights of ecology to the understanding of all life, including humans.¹⁷

By the late 1920s Huxley had abandoned academic life for a future as science writer and popularizer, what would now be called a science communicator or even science journalist. He worked voraciously for decades as a speaker, in print, in broadcasting, and eventually in television. As one of the few books devoted entirely to Huxley is titled, he was also a 'Statesman of Science'.¹⁸ Before the Second World War he was Secretary of the Zoological Society in London. After the war, he was the first Director-General of UNESCO, and a founding member of the World Wildlife Fund. Throughout he was internationalist, conservationist, Malthusian, and eugenicist. He was also, latterly, anti-racist.¹⁹

15 John Harris, *Enhancing Evolution: The Ethical Case for Making Better People* (Princeton and Oxford: Princeton University Press, 2007). Similarly in the essays in *Human Enhancement*, ed. by Julian Savulescu and Nick Bostrom (Oxford University Press, 2009) it is Aldous Huxley not Julian Huxley who is mentioned in passing in the essay by A.J. Coady, 'Playing God', 151 – 176. Huxley is not mentioned in *Future Perfect: God, Medicine and Human Identity*, ed. by Celia Deane-Drummond and Peter Manley Scott (London: Continuum, 2006).

16 Agar, *Humanity's End*, p. 3.

17 See, Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895 – 1945* (Cambridge, MA: Harvard University Press, 2001).

18 C. Kenneth Waters and Albert Van Helden (ed.), *Julian Huxley: Biologist and Statesman of Science* (Houston: Rice University Press, 1992).

19 For Huxley's wider activities, see Alison Bashford, 'Population, Geopolitics and International

In the 1920s – before he abandoned academic and research life to write the monumental *Science of Life* with H.G. Wells – Huxley's biological interests were already circling around radical futures: the radical enhancement of the flatworm. This was experimental work on life extension, reported playfully as 'Long-Sought Elixir of Life is Found: Oxford Savant Experiments Successful. But Alas! With Flatworms'.²⁰ He explained that the common-sense view of a life cycle – beginning as cells, rapidly growing and differentiating, followed by growth without differentiation, and finally death – might be rethought. This trajectory was not necessarily irreversible and was not inevitable in all organisms. The rate of growth and the length of the period of growth could be modified, by temperature for example. And in the case of mammals, the normal life of rats had been prolonged experimentally by about 40 per cent. He explained the regeneration work of Charles Manning Child, challenging the idea that all somatic cells must die. This was also part of Alexis Carrel's work on tissue culture and Huxley was intrigued by the prospects of prolonging the life of any given organism, by grafting for example. 'We can save any particular part of an old plant from death by taking it for a cutting'. And likewise he reported, in a typescript importantly titled 'Man's Place in the Universe': 'it has been found possible to continue growing the cells of a single original piece of tissue not merely for weeks or months, but for over 7 years'. The cells of the tissue showed no sign of ageing: 'it would seem that tissues cultivated thus outside the body are probably immortal'.²¹ But what interested him especially about the flatworm experiments was that they seemed not so much suspended in time, but under certain conditions to look younger rather than older. In concert with numbers of others in the high modern interwar years, it all made Huxley think about the relation between age and time. Age was not a matter of the passage of external time, that is, it was not determined by the lapse of years, but was, more truly, a matter of physiology, which could be independent of external time.

All very well for flatworms, but humans are tricky organisms, Huxley warned. 'We are so constructed that we cannot live upon our own tissues, nor can our temperature be altered'. Humans are delicately balanced, he explained, so the aim must be 'to preserve and to extend this state of balance that we call healthy

Organizations in the Mid Twentieth Century', *Journal of World History*, 19 (2008), 327–47; Glenda Sluga, 'Unesco and the (One) World of Julian Huxley', *Journal of World History*, 21:3 (2010), 393–418; and, Paul Weindling, 'Julian Huxley and the Continuity of Eugenics in Twentieth-century Britain', *Journal of Modern European History*, 10:4 (2012), 480–497.

20 Rice University, Texas, Woodson Research Center, Fondren Library, Julian S. Huxley Papers, Box 6, Folder 4, Newsclipping, 1921. Hereafter 'Huxley Papers.'

21 Huxley Papers, Box 63, Folder 7, Julian Huxley, 'Man's Place in the Universe' (1933), typescript.

maturity'.²² Viennese endocrinologist Eugen Steinach was thinking about precisely this in the 1920s; Huxley was thoroughly intrigued and watched his work closely. The so-called rejuvenation work on humans – mainly men – potentially suspended or reversed ageing, independently of time.²³ Various procedures of ligation and grafting made the time of onset of old age appear to not be inevitable at all. 'Are we ever to know enough,' he pondered, 'to be the control of our own vital destinies...for greater growth, for greater vitality, for long life'.²⁴ Vital destinies absorbed Huxley. Like the medical doctors involved in rejuvenation, and entirely like proponents of human enhancement now, Huxley aimed for augmented individual capacity.

At the very end of his own sometimes troubled life, Huxley was engaged in a not dissimilar project. The New York-based Huxley Institute for Biosocial Research was also about ageing, preservation, and extending a state of balance. Established in 1971, the Huxley Institute brochure paraded the family name and line proudly – Thomas Henry, Julian, Aldous – and sought to assist what was called "orthomolecular medicine". Linus Pauling's research, the Huxley Institute claimed, 'can lead to the alleviation of widespread suffering and result in the general enhancement of human life'. Its aim was to 'guarantee the right to optimum health' of every individual, in particular an enhancement of life and health of those suffering from 'schizophrenia, alcoholism, learning disabilities, drug addiction, memory loss, and other diseases of the ageing'.²⁵ This was to bolster the work of Nobel Prize winning molecular geneticist Pauling who himself wrote the book *How to Live Longer and Feel Better*.²⁶

In thinking about future humans, then, Julian Huxley was engaged in changing medical therapeutics at both ends of his life. Some of the projects he was interested in and supported had medical ambitions to increase longevity, and these would simply fall into the domain of standard public health.²⁷ Others – rejuvenation, for instance – were stranger and altogether more ambitious. These were the projects in which current transhumanists might not want to recognize themselves, but should, involving techniques and possibly outcomes that we would now call radical enhancement: rejuvenation, for example. Transhumanism before the fact, this was certainly perceived at the time as radical

22 Huxley, 'Man's Place in the Universe'.

23 For a clear rendition of Steinach's procedures, in English, see Norman Haire, *Rejuvenation: the work of Steinach, Voronoff, and others* (London: G. Allen & Unwin, 1924).

24 Huxley, 'Man's Place in the Universe', handwritten note on p. 56.

25 Huxley Papers, Box 113, Folder 1, Pamphlet, The Huxley Institute for Biosocial Research.

26 Linus Pauling, *How to Live Longer and Feel Better* (New York: Avon Books, 1986).

27 For therapy, enhancement, and transhumanism see Ted Peters, 'Perfect Humans or Trans-Humans?' in *Future Perfect*, ed. by Deane-Drummond and Scott, pp. 15 – 32.

enhancement of individual life, but in ways that raised much larger questions about future humans and future humanism.

Future Human(ist) Populations

As a biologist, Huxley was interested in individual organisms and species. As an ecologist he was interested in populations of organisms in relation to their environment, other species, and their interactions over place and time. He thought through all this in terms of evolution, in terms of Mendelian genetics, and as the neo-Darwinian synthesis in which he was so closely involved.²⁸ There was always a social and political dimension too, for Huxley. Politically and scientifically, individual humans – even what they might be in the future – were in the end less intriguing, even less important to Huxley, than the social and collective organization of human populations.

When Huxley came to engage with human improvement fully from the 1930s, through the Second World War and into the post-war period, individual enhancement was to some extent irrelevant. He began to think much more in population terms, influenced not least by the population geneticists around him – J.B.S. Haldane and R.A. Fisher in particular. This deeply shaped his eugenics, as well as his anti-racist work in *We, Europeans*, for example. For his eugenics – his plans for human improvement – the mean level of intelligence of any given population needed to be raised. This was the central idea of the 1939 ‘Geneticists Manifesto’ published in *Nature*, of which Huxley was a signatory:

the raising of the level of the average of the population, nearly to that of the highest now existing in isolated individuals, in regard to physical well-being, intelligence and temperamental qualities, is an achievement that would – so far as purely genetic considerations are concerned – be physically possible within a comparatively small number of generations.²⁹

And importantly in terms of tracing the genealogy of transhumanism, the manifesto continued: ‘Thus everyone might look upon “genius”...as his birth-right’.³⁰ What doesn’t resonate so strongly with current transhumanism, though, is that Huxley’s first measure in pursuit of such a goal involved social policy of a very particular mid twentieth-century British welfare kind. Population-level improvement would be achieved in the first instance socially not technologically,

28 Julian Huxley, *Evolution: the Modern Synthesis* (New York and London: Harper & Bros., 1942).

29 Julian Huxley, ‘Social Biology and Population Improvement’, *Nature*, 144:3646 (16 September 1939), 521 – 522.

30 Huxley, ‘Social Biology’.

part of his broadly left politics. Once opportunity for health and education was levelled and levelled up, implementing further improvement or effective eugenic policies would be easier and more effective.³¹

At core, though, it was not particular human populations but the entire human species that were at issue for Huxley. His humanism and even his transhumanism once he started using that term, was always based on what he called evolutionary humanism. 'It related every kind of human activity to the yardstick of desirable evolutionary direction'.³² Deeply shaped by developments in ecology, Huxley was trained to think in terms of inter-relationships and systems (far more than the current transhumanist focus on the individual). But the system he saw was an apparently open one in which *development* would be species *improvement*. Why? Because humans themselves now directed that evolutionary outcome, that evolutionary improvement.

On the one hand, humans – Man – were part of cosmic nature: 'not only is he made of the same matter and operated by the same energy as all the rest of the cosmos but for all his distinctiveness, he is linked by genetic continuity with all the other living inhabitants of his planet.' Everything was evolution, and evolution was everything. 'Life is in one sense a collective term for all organisms, from bacteria to man.'³³ But on the other hand, he thought the human species was an organism apart, different in kind because of cognition and self-reflection, because of language and culture, all outcomes of the evolutionary process itself. Most importantly, humans had insight into the very process of evolution itself.

Such a view put humans generically into a singular category, compared to all other organic life. But it also reserved an extra-insightful place for those humans who happened to be evolutionary biologists (that is to say Huxley himself). Huxley thought this of his historical moment too. He happened to be living in the third key moment of evolutionary time. The first moment 'at which the process transcended itself' was passage from the inorganic to the biological. The second was passage from the biological to what he called the psychosocial. Now (his present) was the third stage, 'from the psychosocial to the consciously purposive phase of evolution'. And further, this means that 'Man's destiny is to be the sole agent for the future evolution of this planet'.³⁴ While animal studies theorists now would want to attribute sentience to many organisms, Huxley did not. Sentience was what made humans unique on planet Earth, and if there was other

31 D. Hubback, 'Julian Huxley and Eugenics', in *Evolutionary Studies: a Centenary Celebration of the Life of Julian Huxley*, ed. by Milo Keynes and G. Ainsworth Harrison (London: Macmillan, 1989), pp. 194–206 (p. 200).

32 Julian Huxley (ed.), *The Humanist Frame* (London: Allen & Unwin, 1961), preface, p. 6.

33 Huxley Papers, Box 75, Folder 2, Notes on Evolution, 1958–9.

34 Huxley (ed.), *The Humanist Frame*, p. 17.

sentience it was on other planets.³⁵ Thinking about future humans for him, was, at one level, simply thinking in evolutionary terms, but humans were set apart as the only organisms able to imagine, envisage, and consciously direct the future. The human capacity to imagine the future shifted the total earth environment from 'biosphere' to 'noosphere' he pronounced, borrowing concepts from Russian cosmic Vladimir Vernadsky through French philosopher and Jesuit Pierre Teilhard de Chardin, who was himself busy rethinking Genesis.³⁶

The evolved capacity to imagine and direct the future should render evolution the new religion, Huxley claimed, an extension of his claims that eugenics might be the religion of the future.³⁷ Evolutionary humanism, indeed, was to be "the new world faith". If the editors of this volume write that the most central story in history is that of human perfectibility,³⁸ Huxley would say that the most central metanarrative in history is evolution. With not a little hubris, Huxley took on much of the responsibility personally for this newly evolved capacity of humans to imagine and shape evolution. Notwithstanding his depressive illness, the whole idea of thinking about possibilities for the future suited him temperamentally and intellectually. Huxley's personal papers show endless folders, notebooks, scraps of papers, and lists on 'possibilities': 'possibilities of Sex'; 'possibilities of biosociety'; 'possibilities of Psycho societies'; 'possibilities of filter feeding'; 'biochemical possibilities'; 'ecological possibilities'. The 'Need for A Science of Human Possibilities' was his special plea and the related idea of university Chairs of the Future was something he was enormously taken by.³⁹ Huxley would likely be delighted that his own Oxford University now boasts a Future of Humanity Institute. Indeed, we might see Huxley as an antecedent to its Director, Nick Bostrom. Just what were humans and what might they be, Huxley questioned. He even ended up asking, 'What are People For?'⁴⁰ In so many ways, Director and Founder Nick Bostrom and Julian Huxley speak as one. Writes the former: 'Not only is this a natural extension of the traditional aims of medicine

35 Huxley (ed.), *The Humanist Frame*, p. 18.

36 Julian Huxley, *The Future of Man*, Evolutionary Aspects, Typescript Lecture, 1963, Box 109, Folder 9. It is significant that it was Huxley who wrote the foreword to Teilhard de Chardin's *The Phenomenon of Man* (New York: Harper, 1959).

37 Julian S. Huxley, 'Eugenics and Society', *The Eugenics Review*, 28:1 (1936), 11.

38 Crafting Humans Conference, Oxford. See <http://www.theberendelfoundation.com/node/100> (accessed 7/09/2011).

39 Huxley Papers, Box 75 Folder 2, Evolution, Introduction 1958–59; Box 63, Folder 7, untitled typescript.

40 Huxley Papers, Box 75, Folder 9, Julian Huxley, Notes and corrected typescript, Lasker Award Address 1959.

and technology, but it is also a great humanitarian opportunity to genuinely improve the human condition'.⁴¹

The Future of Humanity: Transhumanism Now

If the connections between Bostrom and Huxley are evident and interesting enough, how is current transhumanism (of course quite diverse) different from Julian Huxley's transhumanism? The place of the individual is one key point of difference. Transhumanism in the twenty-first century is so monumentally worried about eugenics that it is intent on distancing itself through liberal individualism, at every turn. It constantly stresses the choice of the free individual to pursue radical enhancement. The Transhumanist Declaration (1998) pronounces:

We favour allowing individuals wide personal choice over how they enable their lives. This includes use of techniques that may be developed to assist memory, concentration, and mental energy; life extension therapies; reproductive choice technologies; cryonics procedures; and many other possible human modification and enhancement technologies.⁴²

The virtue of free individual choice accords with neo-liberalism, but it also serves to distinguish transhumanism from the over-determined history of forced state implementation of population and eugenics policies over the twentieth century.

In pursuing this individualism, transhumanists now espouse a principle of equality of all humans. For some philosophers of human enhancement this is the bedrock of transhumanism. Its non-negotiable. John Harris in 2007, for example, rightly insisted: 'All persons are equal and none are less equal than others. No enhancement however dramatic, no disability however slight, or however severe, implies lesser (or greater) moral, political, or ethical status, worth, or value'.⁴³ Strangely, though, the individual so important to current transhumanism would be decidedly difficult for Huxley. This was not just because he privileged populations and species, but also because when he *did* think about individuals, he did not actually believe in their equal worth. Like Jan Smuts who invented the term *holism* in an evolutionary context, the parts that made up the privileged whole would and should be different (variation was important) but

41 Nick Bostrom, 'Transhumanism: the World's Most Dangerous Idea', <http://www.nick-bostrom.com/papers/dangerous.html> (accessed 7/09/2011).

42 <http://humanityplus.org/learn/transhumanist-declaration/> (accessed 11/11/2011).

43 Harris, *Enhancing Evolution*, p. 86.

they would not necessarily be equal.⁴⁴ Julian Huxley was quite clear: 'Human beings are not born equal in gifts or potentialities, and human progress stems largely from the very fact of their inequality.' Indeed, he said quite unashamedly, "'Free but unequal" should be our motto', in a book titled *The Humanist Frame*, no less.⁴⁵ However, for Huxley, unlike for Smuts, this inequality had nothing to do with racial inequalities, necessarily. He was quite explicit about this too. It concerned the range of ability across any given population, where for him intellectual ability and disability was the most important factor.

Another difference between Huxley's transhumanism and the current field relates to the imagining of the future at a planetary level. For Huxley, planetary-scale thinking was easy: 'a new vision of human destiny ... from the planetary web of world ecology to the individual lives entangled in it, from the dim roots of man's past to the dawning possibilities of his far future'.⁴⁶ What a wonderful writer he was. But it all came seamlessly to him because this kind of planetary scale and integrative sensibility was already, in the 1950s, a standard part of the Malthusian repertoire, of which he was a recipient. This is what I call elsewhere the cosmopolitics of population that came out of Malthusian work on earthly limits. In Huxley's register we find something rather more akin to deep ecology than its opposite, transhumanism. Who would have thought they shared an intellectual ancestor?⁴⁷

Given that Huxley talked planetary catastrophe fairly readily, and given that the rest of the twenty-first century planet seems to be talking both globalization and catastrophic climate change, this raises the question of how, precisely, transhumanists now address global issues. The Future of Humanity Institute does, after all, have the brief to address 'big picture questions for humanity'.⁴⁸ Recently Nick Bostrom and Milan Cirkovic co-edited *Global Catastrophic Risks*.⁴⁹ As formulated in 2008, global catastrophic risks are, or were: astrophysical processes; supervolcanism and geological forces; climate change; plagues and pandemics; nuclear war; and totalitarian threat. It is instructive to line this up with Huxley's catastrophes. 'What future do we contemplate for the human race?' he asked after the apocalypse of the Second World War. In *The*

44 For Smuts, see Anker, *Imperial Ecology*. For Huxley on variation, see Diane Paul, 'The Value of Diversity in Huxley's Eugenics', in *Julian Huxley*, ed. by Waters and Van Helden, pp. 223–229.

45 Huxley (ed.), *The Humanist Frame*, p. 23.

46 Huxley (ed.), *The Humanist Frame*, p. 15.

47 For planetary scale of population thought in this period, see Alison Bashford 'Life on Earth: Geopolitics and the World Population Problem' book manuscript in preparation.

48 The Future of Humanity Institute. <http://www.fhi.ox.ac.uk/> (accessed 7/09/2011).

49 Nick Bostrom and Milan Cirkovic (ed.), *Global Catastrophic Risks* (Oxford: Oxford University Press, 2008).

Humanist Frame he listed the challenges ahead that would be catastrophic if not addressed. In his words:

the threat of over-population; the threat of super-scientific war, nuclear, chemical, and biological; the rise and appeal of Communism especially in the under privileged sectors of the world's people; the over-exploitation of natural resources; the erosion of the world's cultural variety; the widening gap between the haves and the have-nots between the rich and poor nations.⁵⁰

Any one of either Huxley's list or Bostrom and Cirkovic's list deserves serious thought. But what interests me most is this: the most pressing item for Huxley is totally absent for current transhumanists (as least as represented here): 'the threat of over-population'. This is not to argue or even necessarily suggest that population growth should be itemized as globally catastrophic. It is, rather, to wonder why transhumanist Huxley's number one issue has fallen off (or more likely has been actively removed from) the current transhumanist agenda at a global level. Most likely, population growth, population control, and eugenics are too closely linked for political comfort.

Huxley was a Malthusian and an active member of early Neo-Malthusian organisations, alongside and as part of his eugenics. This was also where his conservation work sprang from, as well as his cosmopolitan politics and his internationalism.⁵¹ One of his many folders, on the 'Pursuit of Possibilities', shows a small, scribbled qualifier: 'always limitations too'. Although he talked about an open system, possibilities for Huxley did not mean growth. Neither an acceleration in population growth nor acceleration in growth of the consumption of goods and resources was desirable, or ultimately possible, he would say.

Indeed, Huxley's vision of future human improvement positively required a slowing of this growth. For him, thinking at population level again, the acceleration of growth meant an increased threat of war: for this generation population density was almost always comprehended as a cause of war, because it was about land, and this was why population growth on a global scale was considered catastrophic even apocalyptic. But the question was also about 'quality', for Huxley. Slowing population growth he considered a precondition for the levelling-up of population quality. 'The population-explosion...cannot continue much longer...man's destiny is to make possible greater fulfilment for more human beings and fuller achievement by human societies'.⁵² Huxley would slip easily from a eugenic use of the idea of quality into what he termed the low 'quality of life', an economic use that referred at one level to standard of living.

50 Huxley (ed.), *The Humanist Frame*, p. 21.

51 This is all explained in Bashford, 'Life on Earth'.

52 Huxley (ed.), *The Humanist Frame*, p. 25.

'What future do we contemplate for the human race?', he would often ask. 'Do we just have to put up with more people?'⁵³ In a speech called 'The Impending Crisis', he described current world culture as 'one in which quantity is threatening quality and also, if you like, one in which the present is threatening the future'.⁵⁴ Explosive population increase he said again and again 'prompts us to ask the simple but basic question *what are people for?*'⁵⁵ Eugenics returns at this point, where both purpose and worth were being questioned. This was not far, conceptually, from *Lebensunwertes Leben*, 'lives unworthy of life'. But where Nazi policy-makers argued this of already-born humans, neo-Malthusians like Huxley argued it of the not-yet-conceived. The difference, needless to say, is critical.

This was a standard argument for birth control, one that only made sense in the context of high infant mortality rates; those born only to die in infancy or to live with a disability were better not to have been conceived in the first place.⁵⁶ It is important to remember that for Huxley's generation, life-span enhancement at a population level was still simply about lowering infant mortality rates: longevity for a population could massively change, demographically, if infant mortality was reduced. Unlike transhumanists now, he would see the benefit accruing to 6 month olds, not 100 year-olds. Low infant mortality is often just presumed or taken for granted by twenty-first century transhumanists (or else is just too mundane), but for Huxley and his generation, achieving this was itself part of the vision for radical human improvement. Huxley's demographic radar was always up, and he would never talk life-extension (controlling death) without also talking reproductive and fertility regulation (controlling birth). Death planning, life planning, and birth planning were necessarily connected enterprises for future humans.

Huxley would align quite easily with the transhumanist tendency to think from the present forwards, rather than to wonder how the present came about, in historical time. For example, one current transhumanist scholar writes with no reference whatsoever to the past, or even to Julian Huxley who said precisely the same thing (and with similar self-enhancing awe):

This possibility of a new phase of evolution, [is one] in which Darwinian evolution by natural selection, will be replaced by a deliberately chosen process of selection ... This

53 Huxley Papers, Box 63, Folder 7. Untitled Typescript.

54 Huxley Papers, Box 75, Folder 5, Julian Huxley, 'The Impending Crisis', Speech Typescript.

55 Huxley (ed.), *The Humanist Frame*, p. 24. This is a phrase and an idea that circulated between Huxley and another zoologist and Eugenics Society General Secretary, Colin Bertram. See G.C.L. Bertram, 'What are People For?' in *The Humanist Frame*, ed. by Huxley, pp. 373–384.

56 See for example Huxley Papers, Box 63, Folder 7, untitled Typescript, Notes and manuscripts, 'Adventures of the Mind, 1958–59'.

new process of evolutionary change will replace *natural selection*, with *deliberate selection*, *Darwinian evolution with enhancement evolution*.⁵⁷

It is, I suppose, the apparent novelty of this idea that justifies its italicized textual specialness. But of course – and without wanting to diminish the importance of the idea – it is hardly novel to our generation at all. It is eugenics, as the likes of Huxley saw human improvement.

Conclusions and Speculations

The transhumanist self-story involves eugenics disappearing, but really it *will*s eugenics to have disappeared.⁵⁸ This does a lot of work for transhumanism's comprehension of its own past. It serves to distinguish current transhumanism from inevitable critique about problematic past practices, and so it can move on to the future untainted. Transhumanism, or Nicholas Agar's more honestly nominated, 'liberal eugenics', is thus redeemed. And yet, through Julian Huxley (at the very least) present-day transhumanism and eugenics are obviously linked. Huxley was a life-long advocate of eugenics, even in the light of the Holocaust, and even though he had authored anti-racist texts like *We, Europeans* and was involved in the UNESCO Statement(s) on Race. He simply didn't perceive eugenics to be necessarily about race at all, nor necessarily about the kind of coercive politics that transhumanist scholars imagine eugenics to have typically or even solely been. Here lies, perhaps, the real usefulness of Huxley for the project of historicizing transhumanism. Huxley's ideas and politics suggest that it's not totalitarian eugenics that needs thinking through; rather, it is the history of eugenics as itself a mode of liberal governmentality. For the likes of Huxley, coercion was the very last mode of governance to be deployed in the pursuit of human perfection and improvement. This is not in the least to suggest that coerced eugenic measures were not also in operation. Nor is it to suggest that the 'freedom' of liberalism is not also problematic. It is rather, to understand that authoritarian, totalitarian, and forced measures were the very opposite of what many eugenics advocates sought in their dreams of future human improvement.⁵⁹ Voluntary self-governance, not authoritarian coercion, marked the real

57 Harris, *Enhancing Evolution*, pp. 3–4.

58 Bostrom, 'A History of Transhumanist Thought'.

59 See for example, A. M. Carr-Saunders, 'Eugenics in the Light of Population Trends' *Eugenics Review*, 60:1 (1968), 46–56 (p.55). This was originally published, *Eugenics Review*, 27:1 (1935), 11–20. For the significant of voluntary measures, see John Macnicol, 'Eugenics and the Campaign for Voluntary Sterilization in Britain Between the Wars' *Social History of Medicine*, 2:2 (1989), 147–169 (pp.161–62).

biopolitics of eugenics.⁶⁰ The irony in the tendency of transhumanists to eschew eugenics (even if it is understandable) is that lifelong eugenics advocate Julian Huxley himself would have been the first to agree with Bostrom's bid for freedoms. Indeed historically he was partly responsible for discrediting the kind of coercion that current transhumanists also have problems with. But in Huxley's own terms and by his own account, this made him rather more than less of a eugenicist. Julian Huxley, then, is the direct link between eugenics and contemporary transhumanism, in ways far more complex and interesting than simply his coining of the term.

Transhumanists are often charged with a kind of hubris with respect to their ambitions for the future. However, that might better be understood with respect to their sense of having arrived in the present *de novo*, either without a history, or at best with a history that is self-serving. Were Huxley alive, and still at Oxford, he would not be talking to zoologists let alone historians. He would be working the corridors of The Future of Humanity Institute and the James Martin Institute for Science and Civilization, talking about tomorrow's technologies, tomorrow's people, and tomorrow's planet, the Institute's own agenda.⁶¹ How he would or would not fit in the twenty-first century conversation is a measure of change over the last 50 years. And it is also a measure of transhumanism's current location in time, in a very specific historically-produced present, not a future at all.

60 Far more so, I suggest, than the 'biopolitics' of states. This is the kind of 'freedom' that reforming eugenicists like Frederick Osborn, Carlos Paton Blacker, and Julian Huxley envisaged. See Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism, and Public Health* (Basingstoke: Palgrave, 2004), pp. 172–80 (p. 189); and Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton and Oxford: Princeton University Press, 2007), pp. 54–64.

61 Steve Rayner, 'Foreword', in *Enhancing Evolution*, ed. by Harris, p. x.

