

Published in final edited form as:

*J Mod Eur Hist.* 2012 November 1; 10(4): 480–499. doi:10.17104/1611-8944\_2012\_4.

## ‘Julian Huxley and the Continuity of Eugenics in Twentieth-century Britain’

**Professor Paul Weindling**

Wellcome Trust Research Professor in the History of Medicine; Dept of History, Philosophy and Religion Oxford Brookes University, Oxford OX3 0BP, UK, pjweindling@brookes.ac.uk

The life and ideas of Julian Sorrell Huxley (1887-1975) represent not only considerable contributions to evolutionary theory but also to eugenic thought and social planning. Huxley’s career history was complex and disjointed making him an international and very much a public figure. This paper sees Huxley’s peripatetic career as linked to ideological agendas, not least of “a new world order”.<sup>1</sup> The problems addressed here are, first, the extent of continuities in eugenic commitments from his interwar views and, second, to determine the contours of Huxley’s post-Second World War eugenic thinking. Huxley emerges as a crucial bridging figure from what has been referred to as “old eugenics” to a new eugenics based on molecular biology, providing an influential analysis of human evolution and a set of persuasively appealing concepts for both the wider public and scientific elite.<sup>2</sup>

A full-scale critical biography of Huxley has eluded historians, because of the sheer complexity of his activities. Historians of the life sciences have recognised the theoretical originality of his scientific contributions, and his role in developing what he called in 1942 “the evolutionary synthesis”.<sup>3</sup> His popularising of natural history and ornithology in a new guise of ethology showed his visionary ability to define a field of research. His central commitment to “reform eugenics” linked to social planning has been elucidated for the pre-Second World War period.<sup>4</sup> While Huxley’s role in co-authoring the anti-Nazi *We Europeans* has been duly recognised, Huxley’s overlooked support for refugee scientists from National Socialism, not least at London Zoo from 1935-42 can be linked to his evolutionary agendas. A number of historical initiatives open the way for reconsidering Huxley: these include interest in the early years of Unesco and the Unesco declaration on race, elucidation of how Cold War Culture was shaped by intelligence agencies, and historical reconstruction of the place of eugenics in international population policies and practices.

It will be shown here that despite Huxley’s diverse and disjointed career, his public statements on biology and its social implications manifest a coherence of concerns with continuing evolution. Huxley’s post-Second World War concept of “evolutionary humanism” represented a continuity of eugenic commitment from the founding years of the eugenics movement. The only significant change was to drop “race” from this agenda as a result of Huxley’s anti-racist and anti-Nazi engagement in the 1930s. His later skilful uses of the term “evolutionary humanism” meant that he sustained the image of eugenics as “humane” by linking it to the post-Second World War human rights revolution. During the 1950s defined eugenics as socially progressive (in contrast to Nazism and Stalinism) by

linkages to the newly comprehensive welfare states, and as offering “solutions” to poverty and disease at a time when disease eradication set international agendas. He adeptly associated eugenics with a range of reformist movements, such as the popularisation of birth control, the decriminalisation of homosexuality and abortion law reform. Biographical factors show how Huxley linked these agendas (often quite detached from eugenics) to eugenic modernisation.<sup>5</sup>

## i. Early Years

Huxley was a chameleon like figure, adept at fitting in with current social rhetoric while pursuing a social agenda defined by long-held evolutionary convictions. Huxley always qualified humanism with the terms “scientific” or “evolutionary” to emphasise the determining role of the natural sciences. His distinctive “scientific humanism” was rooted in his formative period as a student and young academic in Oxford (and elsewhere), and sustained throughout his life. Taking up the mantle of his crusading grandfather, T.H. Huxley, his public role was an apostle for evolutionary eugenics. This was in keeping with British middle class interests, as Huxley shaped an agenda of issues regarding the state of the nation’s physical and mental health from the pioneering welfare legislation of the Edwardian period to the reformist and welfare oriented 1960s. His role in organisations like the British Social Hygiene Council, Political and Economic Planning (PEP), and the British Population Society, formed in 1929, very much reflects this. He was an outstanding advocate of the advance of what Paul Mazumdar calls “the scientific intelligentsia” and seeking to shape what historian Harold Perkin has called the rise of professional society.<sup>6</sup> Huxley was convinced that science had to have both impact and meaning. As a public intellectual, he deployed his promotional talents in order to direct the current of public discourse on birth control and welfare, by setting it within a biologically conceived framework.

Since his time as a student at Balliol College, Oxford (from 1906-1909) and young zoologist, he was a committed eugenicist. The Eugenics Education Society was founded in 1907 although its Oxford branch was launched in 1913 when Huxley was at Rice University Texas. T.H. Huxley in his Romanes Lectures spoke stridently against social selection, and although it is difficult to pinpoint the exact date of any eugenic epiphany for Julian Huxley around 1912-13 eugenics was certainly intensively debated at Oxford. For example, Huxley, Harold Laski and J. B. S. Haldane all debated “Heredity” at the student Essay Society at New College, Oxford in 1912, a Galton Club was formed at the College, and further debates took place at the Oxford Union.<sup>7</sup> From 1919 until 1925 Huxley was Fellow at New College, and the population geneticist J.B.S. Haldane (Huxley’s former “fag” at Eton) was Fellow from 1919 until 1922. Huxley’s students included the cytologist and contraception pioneer J.R. Baker who was undergraduate at New College from 1919-22, and the population geneticist E.B. (“Henry”) Ford. These bio-social theorists represented a political spectrum from Haldane on the extreme left to Ford and (a later Oxford recruit) the botanist Darlington on the extreme right: they all continued to exert influence on questions of biology and society on into the 1960s.<sup>8</sup> C.P. (“Pip”) Blacker (1895-1975) was another Huxley student, who went into clinical medicine, and became Huxley’s lifelong friend and fellow eugenicist. Whereas Allen focuses on Huxley the fully formed left-leaning eugenicist of the 1930s,

Barkan discovered a right-leaning Huxley at Rice.<sup>9</sup> This continued on into 1920s when at the World Population Conference of 1927 Huxley maintained his stance for restrictive immigration controls.<sup>10</sup> Yet Huxley's Oxford phase merits consideration as culturally elitist, a conviction that he held fast to as an axiom of his ideas of human evolution.

Huxley was not content with the cloistered life of an Oxford academic. He had a rootless and unsettled temperament, and sought a wider stage for developing his dynamic research agendas and presenting his global vision: he became an international figure preferring appointments where he could communicate to a wider public. Transatlantic links to the United States were an early feature of Huxley's career, and these were sustained in the 1950s and 60s. An early contact was the talented American geneticist and eugenicist Herman Muller, whom Huxley brought to his new Department of Biology at Rice University, Texas when appointed from 1912. As Barkan points out, Huxley returned to Britain convinced of the "Negro" cultural inferiority and of the rectitude of US immigration controls designed to keep out racial inferiors.<sup>11</sup> Huxley gravitated to a social vision of a scientised society, organised on rational lines, efficient, productive and prosperous. Huxley, along with Haldane in his utopian publication *Daedalus* of 1924, prophesied the coming of what was termed "ectogenesis" or the test tube baby. Muller and Haldane around 1924-5, and Huxley although the most expert in embryology somewhat lagged in developing futuristic schemes.<sup>12</sup> Scientific efficiency went with a scientised ethics and world view. Huxley adopted the role of communicator and spokesman for a biologically based social philosophy. This was arguably at the cost of in-depth research, but suited Huxley's unsettled visionary temperament.<sup>13</sup> He was an academically innovative public figure who was constantly evaluating the social implications of biological innovations.

## ii. Eugenic Campaigner

Although seeing the social potential of genetics, Huxley did not restrict himself to eugenics as applied genetics. He advocated eugenics as a social science, addressing the issue of a "social problem group".<sup>14</sup> He was Life Fellow of the Eugenics Society from 1925, active on its Council from 1931, its Vice-President 1937-44, and President from 1959-62. He supported the campaigns for voluntary sterilisation legislation in the early 1930s, and for negative eugenic measures against persons carrying the scientific stigma of "mental defect". Huxley straddled science and social action. He saw biology as a means to solve social welfare problems. He consequently built bridges between eugenics and the social sciences by working on behalf of Political and Economic Planning (PEP), of which he was a founder member in 1931. Huxley's advocacy of social planning and state centralism clashed with an older style of eugenic imperialist. Huxley was similarly supportive of Mass Observation. The historical consensus is of Huxley as a moderniser and reformer, seeking to establish eugenics as part of an agenda of social planning and to shape the emergent welfare state on biological lines.<sup>15</sup> Within the Eugenics Society this meant collaborating with other social progressives, combining left of centre thinking with biological thought: the psychiatrist Blacker and the demographers Alexander Carr-Saunders (who had accompanied Huxley on the Oxford expedition to Spitsbergen in 1921) and D.V. Glass (both Carr-Saunders and Glass becoming powerful figures at the London School of Economics) were fellow travellers with Huxley down the welfare eugenics road. This meant a fundamental

redefinition of eugenics as concerned not with race but with biological qualities. Huxley's advocacy of "reform eugenics" meant a break with an old guard of racist imperialists among eugenicists like Leonard Darwin and Cora Hodson of the Bureau of Human Heredity.<sup>16</sup> He ceased to speak of racial deterioration during the 1930s.<sup>17</sup> This is fundamental understanding for Huxley's position during the 1950s and 60s.

Huxley sought to reconfigure public opinion in terms of making a eugenically informed biological ethics acceptable to a wide public. Huxley picked up on the public's traditional taste for both natural history and general morality, and offered a cleverly formulated synthesis on a modernistic basis of biology. Since the 1920s Huxley engaged in public outreach as an essayist and author of popular books, not least with H.G. Wells. Huxley espoused new media for communicating the biological gospel of a healthy society. Film represented a novel means to analyse animal behaviour (notably in filming *The Private Life of Gannets* in 1934) as well as a channel for popularisation. Relishing the role of film commentator, he appeared in the Eugenics Society film, *From Generation to Generation* in 1937. He extolled the idea that exceptional characters were inherited, and delivered the cruel verdict that a family, whom he labelled as "mental defective", should never have been born. He incurred the wrath of the puritanical BBC by advocating birth control in a broadcast of 1930. Reprieved, he took part in the prestigious and popular "Brains Trust" (Huxley was a founder member in 1942, and he continued appearances when the series transferred to BBC television in the 1950s): he was one of a select group of celebrated academic luminaries who pontificated on public affairs. Here the expert was in a position of authority, directing and dictating opinion. Huxley combined these exercises in communication with a stream of popular lectures and essays in widely read magazines as *The Radio Times*. As co-author with the pioneer of science fiction, H.G. Wells and Wells' son of *The Science of Life* (1931), he popularised biology and eugenics with the support of major newspapers.<sup>18</sup> Their *Science of Life* coincided with his brother Aldous' futuristic *Brave New World*. Then, as Secretary of the Zoological Society and director of London Zoo, Huxley broadened the public appeal of science, cultivating public participation. He commissioned such masterpieces as the modernist architect Berthold Lubetkin's penguin pool. However, his post at the zoo was terminated in 1942 by the fellows of the Zoological Society of London opposing his populist and participatory stance.<sup>19</sup> Again, these issues although addressed in the secondary literature, need to be highlighted in order to understand Huxley's post-Second World War ideology.

### iii. Against Race

Huxley caught the mood of the times politically. In the 1930s he supported the critique of Nazi race theory, by co-authoring *We Europeans* (an anti-racist study of 1936). He astutely substituted the term "ethnic group" for the discredited idea of race, which he saw as by now debased "pseudo-science". The menace of Nazism taught Huxley to be critical of anything linked to the idea of race. He was a strident opponent of Nazism, and, signed whatever anti-racist manifesto was afoot.<sup>20</sup> The "Geneticists' Manifesto" (authored by his friend Muller) of 1939 very much expressed the wider shift of opinion to a position critical of Nazi racial politics, while preserving commitments to biologically based social reform.<sup>21</sup> He still found it difficult to shed an elitist form of thinking that differentiated between peoples as

supposedly culturally inferior or superior.<sup>22</sup> Sluga points out that Huxley retained ideas of Britain's imperial role in contexts like Africa, in advancing literacy and disease control.<sup>23</sup>

Despite his lack of an academic department, he assisted many academic refugees from Central Europe through recommendations. Among these were Ignaz Zollschan, the Austro-Czech radiologist and author on the Jewish racial attributes, whom Huxley supported in efforts to build a scientific coalition against Nazi race ideology.<sup>24</sup> In 1942 Zollschan published a tract "Racialism against Civilisation" with a preface by Huxley. He and Aldous supported Charlotte Wolff, a refugee Berlin sexologist, at London Zoo to study the handprints of animals – alongside those of "mental defectives".<sup>25</sup> Huxley collaborated with the photographer Wolf Suschitzky, an Austrian refugee and brother of the talented Edith Tudor-Hart, and Ludwig Koch, the pioneer of recordings of bird song. He helped the geneticist Fabius Gross to a position, yet not the Lamarckian Vienna Vivarium veteran zoologist, Walter Finkler was to be disappointed in Huxley indicates how the refugees whom he supported had to fit in with Huxley's evolutionary agenda.<sup>26</sup>

After the war, Huxley advocated that science should be a means of social reconstruction. He supported through UNESCO an observer at the Nuremberg Medical Trial (a role taken by his protégé the neuro-physiologist John Thompson).<sup>27</sup> But his stance towards Nazi biologists became indulgent as can be seen in his support of Konrad Lorenz. At Unesco Huxley had uneasy relations with both British and US officialdom. From Huxley's perspective, state officials were part of the problem of unscientifically minded vested interests, while government officials in turn suspected Huxley of leftist leanings.<sup>28</sup> An interview at the US State Department raised the issue whether UNESCO aimed to make "the scientists as dictators of political policy".<sup>29</sup> But the Soviet attack on genetics meant Huxley became a scourge of Stalinist biology.<sup>30</sup> Huxley aligned with those like the pharmacologist Henry Dale supporting a revival of German science, and engaged strenuously on behalf of the ethologist Lorenz.<sup>31</sup> Huxley attacked Lysenkoist biology, less as a threat to liberty than as a threat to genetics and molecular biology. Huxley was an opportunistic magpie for whatever could support evolutionary humanism. He was in sympathy with the introduction of the National Health Service in 1948, seeing its potential for maternal health improvements. He rapidly grasped the potential of James Watson's and Francis Crick's discovery of the double helix in 1953.

Not only was Huxley a pivotal figure in 1950s reproductive biology in the UK, but he also preached the application of biology to medicine. He called medicine "death control", seeing it as the inverse of birth control, which he prioritised. Innes Pearce wrote to Huxley of her hopes to turn the Pioneer Health Centre at Peckham (the holistic "Peckham Experiment") into a national laboratory for the pursuit of human biology. The idea was to develop the core question of "what is health" in biological and experimental terms.<sup>32</sup>

As the first Director-General of Unesco from 1946 to 1948 Huxley outlined a biologically based philosophy.<sup>33</sup> He can be interpreted as part of a wave of visionary experts who took command of the new United Nations organisations after the Second World War (as the nutritionist John Boyd Orr in the Food and Agriculture Organisation, Ludwik Rajchman in conceiving of Unicef, and John Holmes in the UN Human Rights Division), before these

organisations felt the controlling chill of cold war power politics.<sup>34</sup> In his key manifesto, “Unesco: its Purpose and Philosophy” of 1946, he advocated a “scientific world humanism” based on evolutionary biology. He saw culture as a higher stage of evolution, supplanting natural selection in human societies. He argued for quality over quantity as regards the world’s population, and that human population size should be planned and controlled. At the same time he called for animal conservation. He even maintained that Unesco should begin to examine “the eugenic problem”, while recognising that a radical eugenic policy was at the time unrealistic in terms of public attitudes.

It is worth probing the development of Huxley’s views on science and religion, and how he sought to underpin his social agenda through religious underpinnings. His views on a scientifically based religion were voiced as early as 1916.<sup>35</sup> In his *Essays of a Biologist*, published in 1923, Huxley was developing a biologically based theory of social and moral progress. Indeed, the progressive principle was cosmic in nature. Whereas his grandfather, T.H. Huxley, separated ethics from science, grandson Julian saw ethics as part of the wider natural processes. This monistic outlook set Huxley apart from conventional dualistic thinking on the separation of the natural world from the moral and psychological. Huxley defied any idea of the “two cultures” that C.P. Snow diagnosed as characterising intellectual thought in twentieth-century Britain.

#### iv. The Humanist Agenda

During the 1930s Huxley took a public stance as an avowed “scientific humanist”, by which he meant that his ethical ideas had a basis in evolutionary theory.<sup>36</sup> As President of the Social and Political Education League, his lectures were published by the Rationalist Press Association. He linked his evolutionary ethics to the social agenda of eugenics: it meant approval for family allowances to encourage professional middle classes to have children of (hopefully) good eugenic quality, and the elimination of mental defect by reproductive controls.<sup>37</sup> He explained that eugenicists should avoid a “holocaust” of the unfit by segregating mental defectives to prevent their reproduction.<sup>38</sup> The economic and social system had to be altered to advance the reproduction of “the most successful stocks” particularly of the professional classes.<sup>39</sup> Huxley advocated the ideas of eugenics as a sacred ideal and of “racial hope”, so that religion would advance his ideals of social evolution.

Huxley was always at pains to differentiate his views of eugenics from Nazism. During the war this was a clear-cut matter of opposing the anti-democratic Nazi state as well as of its racist underpinnings as “pseudo-science”. In 1940 Huxley viewed Communism and Nazism as “social movements of a religious nature”, which were destructive of life.<sup>40</sup> In 1941 Huxley published a tract *Religion without Revelation*, a work reprinted in 1945. This manifesto for “a socially founded humanist religion” appeared in a secularist series, the Thinker’s Library, the first volumes in the series being works by Darwin, Haeckel and Herbert Spencer. Huxley argued for a humanist religion which would be life sustaining on the basis that mankind had outgrown old superstitions, and had evolved to a stage when a new religion was needed. Religious feelings like grace were natural experiences, and that a reverent approach to reality was needed to make the most of life: Huxley concluded “I believe in the religion of life”.<sup>41</sup>

Huxley argued that Nazi race theory was “pseudo-scientific” while his ideas were linked to scientifically valid observations. In 1940 Huxley forthrightly condemned the Nazi system as a negation of all civilised values: as organised destruction. Using the Freudian concept of projection, he diagnosed how the Nazis transposed their own inadequacies and failings on the Jews.<sup>42</sup> Unesco was less concerned with diagnosis and post-mortem on Nazism, but rather a forward looking set of social beliefs, ones that Huxley was already hoping for in the darkest days of the war when an Allied victory was still uncertain.<sup>43</sup> His Romanes Lectures on Ethics and Evolution of 1943 argued that “conscious evolution” should be the primary focus of ethical endeavours.<sup>44</sup>

Life for Huxley had a positive social value. Unesco adopted a forward looking philosophy of universal education aimed at preventing a future war. Here Huxley supported the psychiatrist John Thompson in developing its German programme as a therapy for a maladjusted nation.<sup>45</sup> Huxley took up a number of issues at UNESCO notably conservation, utilisation of natural resources, and over-population.<sup>46</sup> Huxley continued to develop these themes on leaving UNESCO. He was well positioned to drive forward a eugenically informed agenda in 1950s Britain and on a broader world stage. But at the same time, Huxley was also in a politically exposed position, out of step with Cold War culture. His espousal of biological values earned him enmity from the right, including Roman Catholics, and advocates of individual rights. He did not participate in the movement for the freedom of science of J.R. Baker and Michael Polanyi, nor the Congress for Cultural Freedom, in which his friend the poet Stephen Spender was so prominent. His only contributions were a review of Teilhard de Chardin, and an appreciation of the left-leaning Haldane for the journal *Encounter*.<sup>47</sup>

## v. The Post-war Era

Huxley should not be portrayed as simply a publicist. His manifesto for Unesco – that of a “world evolutionary humanism” – remained the basis of his eugenic proselytising in the 1950s and 60s. Yet, as his brief period with Unesco showed, the immediate reaction was hostile: American diplomats saw him as a left wing if not a communist suspect. This amounted to a profound misreading of his scientised position).<sup>48</sup> Catholic opposition intensified, having the alternative of a Catholic human rights position, as advocated by the philosopher (and former biologist) Jacques Maritain.

Julian Huxley’s brother, the novelist Aldous, as the author of the prescient novel *Brave New World* (1931) portrayed both the possibilities of an ordered rationalised society based on cloning, and its defects. By 1958 when Aldous wrote “Brave New World Revisited”, he felt, “The prophecies made in 1931 are coming true much sooner than I thought they would.” Aldous felt intensely how in the 1950s, the world was post-atom bomb and post-Holocaust: “Death control is something which can be provided for a whole people by a few technicians working in the pay of a benevolent government.” Julian Huxley, who endorsed the Voluntary Euthanasia Society, meant by “death control” the new medical ability to prolong life. By way of contrast, Aldous Huxley’s main fear by then was brain washing and mind control:

In the *Brave New World* of my fable socially desirable behavior was insured by a double process of genetic manipulation and postnatal conditioning. Babies were cultivated in bottles and a high degree of uniformity in the human product was assured by using ova from a limited number of mothers and by treating each ovum in such a way that it would split and split again, producing identical twins in batches of a hundred or more. In this way it was possible to produce standardized machine-minders for standardized machines. And the standardization of the machine-minders was perfected, after birth, by infant conditioning, hypnopaedia and chemically induced euphoria as a substitute for the satisfaction of feeling oneself free and creative.<sup>49</sup>

Aldous Huxley's nightmare shifted from planned breeding to mind-manipulation:

Lacking the ability to impose genetic uniformity upon embryos, the rulers of tomorrow's over-populated and over-organized world will try to impose social and cultural uniformity upon adults and their children. To achieve this end, they will (unless prevented) make use of all the mind-manipulating techniques at their disposal and will not hesitate to reinforce these methods of non-rational persuasion by economic coercion and threats of physical violence.

Julian Huxley was untroubled by this post-Orwellian 1984 nightmare – instead he continued to proselytize for the opposite: the idea of an evolutionary religion, based on objective science rather than revelation.

For all Huxley's achievements, his temperament had a manic quality. Ironically for someone who demanded sterilisation for those with mental defects and illnesses, he suffered periodic bouts of depression, and underwent electro shock therapy. All this was part of a pattern of holding a series of senior appointments, involving a period of manic activity, followed by resignation or dismissal.<sup>50</sup> After Unesco, aged 63 in 1950, he held only visiting positions, and was mainly a writer, public figure, and occasional advisor on public policy.

Yet in the 1950s and 60s, we find Huxley seeking the mantle of high priest of a new creed of scientific humanism, making prophetic statements on the future of mankind. He now took some very generalised positions, giving his views a sort of sovereign authority. He outlined a philosophy of education based on ideas of integration and the unity of mankind as a biological species. Huxley's "humanism" meant evolution and eugenics, and culture was a component part of the evolutionary process.<sup>51</sup> His writings were widely translated into French, German and Italian, and were boosted by his Unesco reputation. Huxley became a key figure in how during the 1950s eugenics had to reposition itself, both socially and biologically. In social terms, the Cold War had placed left wing progressives in an uncomfortable position, and scientifically rapid developments in molecular biology and immunology meant that human genetics had to respond to new challenges. Huxley responded by redefining eugenics as "a form of applied human genetics."<sup>52</sup>

Huxley, then, sought to establish a biologically based social philosophy. Part of this agenda was population policies – Huxley tried to get population problems onto the agendas of the United Nations as well as onto those of its specialised agencies, not least UNESCO, FAO,

WHO as well as supporting the UN Population Commission. He took up population questions while still director general of UNESCO in 1948. He was aligned with the Rockefeller Foundation, being on good terms with the physical sciences programme officer, Warren Weaver. On the population front, there were dividends for the population lobby. The Population Council managed to intrude birth control into the United Nations agenda, and population control came to be regarded as a legitimate part of the politics of international assistance.<sup>53</sup> Huxley endorsed the strategy of world population control.

On leaving Unesco, Huxley continued his efforts to promote biological values. He took the position that mankind had a unique responsibility – and capacity – for further evolution.<sup>54</sup> Humanity was in a unique position among all living species as having the means to manage and control its evolution. This meant that conclaves of experts – as opposed to government representatives – had both a cultural and biological importance. In 1950 Antoine/ Antonin Besse (the Aden-based, French trader – and donor of funds for St Antony's College, Oxford) sponsored Huxley in these endeavours.<sup>55</sup> Huxley organised a study group “to study the problem of a possible new “ideology” appropriate to the present situation”.<sup>56</sup> Huxley wanted this to be an interdisciplinary, and yet also a secret and anonymous group, linking high powered thinkers with practical activities. This was Huxley in elitist mode. In fact, it involved a range of writers (notably his long-standing Oxford friend, Stephen Spender), the social scientists E.M. Nicholson (previously of PEP), and Barbara Wootton, the philosopher A.J. Ayer and L.L. Whyte, the psychoanalyst John Rickman, and the science writer and mathematician, Jacob Bronowski. Huxley though wanted a fully fledged “New Humanist Institute” in association with PEP.<sup>57</sup> Spender referred to it as “Julian Huxley's Idea Systems Group”, remarking “Every idea Julian has, of a kind that anyone else would write a book about, doing his own research, Julian turns first into a committee for turning it into an institute.”<sup>58</sup> The initiative was cut short by Besse's death that year.<sup>59</sup>

By 1951 Huxley approached Robert Hutchins as a leading adviser to the Ford Foundation. Huxley was interested in establishing an international network of elite intellectuals, for example the German psychologist Bernard Rensch at Münster, Konrad Lorenz, and the left-leaning physicist and science populariser Jacob Bronowski. In the event the Ford Foundation rejected the proposal, supporting instead a Center for Behavioral Studies.<sup>60</sup> Huxley stood to the right of the Marxist geneticist JBS Haldane (a communist party member from 1942-1950), but on the left of the geneticist (and racist biologist) Cyril Darlington (who condemned Huxley's advocacy of cultural factors in evolution, replacing natural selection) and, his former student, the population geneticist, E.B. (“Henry”) Ford.<sup>61</sup> Huxley positioned himself with the biologists and physical anthropologists who sought to retain a biological component in the term “race” as a population group, when it was discussed by UNESCO during 1950.<sup>62</sup> Huxley's humanism remained firmly founded in evolutionary theory.<sup>63</sup> It was at this juncture that Huxley coined the term “transhumanism”, a term that he used only intermittently.<sup>64</sup>

During the 1950s Huxley took a series of temporary positions linked to public lecturing in the United States, and in the UK he was an established public figure. He was well placed to support and endorse how a series of foundations notably the Rockefeller and Ford Foundations and the Milbank Memorial Fund, as well as the Ciba and Gulbenkian

Foundations took up the issue of eugenics and population control. They funded scientific committees and (a novel concept of expert conclaves) “think tanks”. In turn, the funded experts and academics were to influence non-governmental organisations or NGOs (another novel post 1945 concept) on national and international policy on the need to institute population control. There continued to be associations – not least the Eugenics Society – and lobbying groups, as for family planning, notably the International Planned Parenthood Federation, and for abortion law reform, Huxley becoming Vice-President of the Abortion Law Reform Association in 1969-70. These linkages provided a supportive context for the development of the contraceptive pill during the 1950s, and its introduction and dissemination during the 1960s. Human Artificial Insemination became feasible, and was considered by a departmental committee. Vasectomy became accepted on a voluntary basis. This contrasted to the controversial sterilisation programmes in South East Asia, ostensibly voluntary, but for many in effect coercive. C.P. Blacker and kindred spirits in the Eugenics Society argued that sterilisation based on consent was in fact legal.<sup>65</sup> Most of the involved experts in the various family planning organisations were committed to eugenics.<sup>66</sup>

Public attitudes on moral questions were also liberalising.<sup>67</sup> Huxley had been a signatory to a *Times* letter of 5 March 1958 calling for implementation of the Wolfenden report recommending decriminalisation of homosexuality.<sup>68</sup> The decriminalisation of homosexuality with the Sexual Offences Act of 1967, the Abortion Act of 1967, and the abolition of theatre censorship in 1968 indicate a greater public tolerance of liberalised sexual values. He was in line with the tide of opinion against the death penalty, repealed for murder in 1965.<sup>69</sup> He also took a lead on conservation issues, in 1960 calling for what became the World Wildlife Fund.<sup>70</sup> While eugenics was not a major factor in shaping birth control practices in everyday life, Huxley had substantive influence on the liberalising legislation of the mid-1960s.

Eugenics remained controversial during the Cold War period of the 1950s. There were two sets of criticism: first, the shadow of Nazi Germany as a state which had imposed laws of racial selection with devastating cruelty. Nazi racial and eugenic policy meant that a link could be drawn between forced sterilisation and genocide. During the 1950s the Catholic Church intensified its opposition to birth control and abortion, a position going back to the Papal encyclical *Casti Conubii* of 1932. A strengthening of Roman Catholic religious revivalism during the 1950s with its stress on the Incarnation and Infallibility meant continuous tensions between reproductive biology with the Roman Catholicism over birth control.

The second argument was formulated by Haldane, that in terms of population genetics any eugenic measure, whether negative or positive, was unlikely to have an effect.<sup>71</sup> The visionary Aldous Huxley in 1958 saw a solution in terms of the imminent introduction of an oral contraceptive:

“The Pill” has not yet been invented. When and if it is invented, how can it be distributed to the many hundreds of millions of potential mothers (or, if it is a pill that works upon the male, potential fathers) who will have to take it if the birth rate of the species is to be reduced?<sup>72</sup>

The continuation of these endeavours can be seen in a 1961 conference sponsored by the CIBA Foundation, *Man and his Future*. The topic was suggested by Gregory Pincus, a biochemist, a key figure in the development of an oral contraceptive, and an advocate of sperm banks. The meeting of twenty-seven distinguished scientists was to consider the ethical issues surrounding eugenic technologies: author Germaine Greer makes the point that all were men.<sup>73</sup> Julian Huxley gave the opening address on “The Future of Man – Evolutionary Aspects”, painting an alarming spectacle of genetic defectives, and pointing to the need for more education on evolution and a eugenically oriented ecology. Whereas the immunologist Peter Medawar was cautious and pointed to diversity of opinion and the need for piecemeal research, Huxley had no such reservations. He was convinced that major new concepts had crystallised as a basis for educational and social reorganisation.<sup>74</sup> The radiation geneticist Muller introduced the section on Eugenics and Genetics. The molecular biologists Francis Crick and Joshua Lederberg, and the immunologists Medawar and Alan Parkes (a pioneer of ovary transplantation) gave support to the eugenic schemes of donor insemination outlined by Huxley and Muller. Again, the issue was that conceived by Huxley – of biology as a foundation for a new “humanist ethics”. Huxley wished to avoid “any definite eugenic ideal”, and instead recommend very general schemes of “gradual improvement”.<sup>75</sup> He also argued that education in evolution and ecology would assist a new openness to eugenic measures.<sup>76</sup> Francis Crick argued that there was no innate right to have children and proposed to tax children.<sup>77</sup> On the other hand, sperm banks gave the possibility that elite donors could father future generations. As Medawar observed, “We all have a pretty good opinion of our own intellect and our worthiness as sperm donors.”<sup>78</sup> Haldane, supported by Jacob Bronowski, was more critical as regards the possibilities of a selective breeding elite.<sup>79</sup>

Huxley’s endeavours represent a conscious and sustained effort to advance a biological philosophy to underpin eugenic values. Historians have focused on the transition from eugenics to human genetics. The point of controversy (as between Diane Paul and Daniel Kevles) has been whether human genetics represented a camouflaged eugenics (as argued by Paul) or a science now free from the taint of eugenics.<sup>80</sup> Huxley’s “evolutionary humanism” provides important evidence for the continuity thesis. Whereas Paul has focused on eugenic practices in new branches of reproductive medicine, Huxley indicates how a eugenic value system continued to operate in the social sciences. Huxley was not only a synthesiser in terms of presenting a coherent world view but also in integrating scientists as he drew into eugenics figures from molecular biology and immunology. The Ciba symposium represented an important link between biologists working on the whole animal and its reproductive behaviour, and the new wave of research at the biochemical and molecular level.

The radical libertarianism and counter-culture of the mid-1960s initiated a radical critique of scientific expertise that went with libertarian sexual morals. Until then Huxley and fellow biological reformers enjoyed immense status and prestige. The eugenic modernisers remained a highly active elite, bidding for the opportunities of power and influence over public policy and opinion in the new post-1945 welfare state, as well as drawing on innovations in biology and medicine. How far an older generation of moral reformers like

Huxley paved the way for the 1960s loosening of moral strictures is open to question. Eugenacists were never in favour of free love and freely available contraception and abortion but saw these as ways of managing a population's eugenic qualities. Eugenacists adopted an elitist stance of engineering a society open to merit rather than based on inherited social privilege and traditionalist ceremony. In matters of educational policy, selective education favoured by eugenically minded psychologists was weakened by advocates of non-selective comprehensive schooling. Radical feminism in many ways represented a challenge to eugenics, although women activists on birth control and health issues like the veteran advocate of contraception, Marie Stopes and long-term advocate of eugenics and control of sexually transmitted diseases Sybille Neville-Rolfe show how eugenics empowered women's activism. Margaret Sanger in the United States provided a similar linking of biochemical innovators like Pincus with classic eugenic aims. As regards abortion and birth control eugenacists – or as some termed it “crypto-eugenacists” gained in influence through such organisations as the International Planned Parenthood Federation and the Family Planning Association. Huxley was a speaker at the Sixth Planned Parenthood International conference at New Delhi in 1959. The Eugenics Society during the 1960s was a source of informal support for birth control and abortion lobbying associations. The *Eugenics Review* included informative papers by family planning activists like Margaret Pyke on the incidence of illegal abortion, and mortality rates. Here there was a spectrum of opinion between those alarmists like Pyke arguing for a high incidence of illegal abortions, and those more soberly suggesting that abortion and mortality rates were fairly low.<sup>81</sup>

## vi. Dissolution and Dissent

Huxley packaged his eugenic views as “humanism” – the Pelican edition of his essays from the period between 1959 and 1962 were published as *Essays of a Humanist*. He endorsed the view of the world population “explosion” as a global threat to the survival of humanity. He linked prescient conservation policies to an international population policy.<sup>82</sup> He argued that environmental improvement – widely called for – could not solve problems of genetic defect. Any blind artificial insemination scheme should be substituted for a register of donors from which a recipient might select. Donor insemination could be deployed when there was genetic defect. Revealingly, Huxley pointed out that what the immunologist Peter Medawar called “genetic engineering” was really a new form of negative eugenics.<sup>83</sup> Eugenics remained at the core of Huxley's humanism.

Huxley struck a futuristic tone in the Cold War– he called for deep shelters for sperm-banks. These should consist of a sperm samples from “healthy and intelligent males”. He hoped that deep frozen ova could also be engrafted into women. Huxley explained that shelters for sperm would be more effective than shelters for people. He envisaged a system of “E.I.D.” – by which he meant Eugenic Insemination by preferred Donors. His system of selective controls stood against any voluntaristic reproductive initiative. Huxley hoped that rather than a state agency, which could be seen as authoritarian, the collective choice of all couples practising “euselection” would determine the range of preferred types.<sup>84</sup>

Huxley rightly felt that birth control in the 1960s had achieved a breakthrough in terms of moral and public acceptability. He remained firm that science had to be in a position of

control, not least because science was on the threshold of achieving in practice what had hitherto been a matter for speculation. Yet for all Huxley's eminence and ability to command the media of the 1960s, the actual influence of eugenicists on public opinion and reproductive behaviour is open to question: sexual behaviour, and demands for reproductive medicine appear to have had their own autonomous dynamic, related to the intensification of a counter-culture of protest, individual life style choices, women's education and employment, economic prosperity, and consumption patterns. Biology played a part in the culture of protest and love with the making available of the pill. Libertarian social protest and a culture when the taking of hallucinogenics was fashionable meant that eugenics was hardly centre stage by the later 1960s, when sexual attitudes as well as societal controls were being liberalised.

Reproductive technologies were taken up, while the intellectual framework of eugenics devised and disseminated by Huxley was perceived as not only redundant, but as a grim authoritarian spectre that had to be exorcised. The edited collection, *The Social Impact of Modern Biology*, dating from 1971, can be seen as a follow-up to the Ciba symposium and shows how a change occurred with a new radical sociology and history of reproductive biology making an impact.<sup>85</sup> Science was no longer a source of value-neutral authority, but subject to a perceived need to be reconstructed. For the civil rights movement and allied movements of social protest during the later 1960s and early 1970s gave rise to a libertarian and critical attitude to Social Darwinism and eugenics. As Huxley passed from the scene, the critique of post-1945 eugenics as embedded in an international network of population and mental health organisations arose.<sup>86</sup> Civil rights protests, the critique of professional authority and feminism at the close of the 1960s marked the crystallisation point for libertarian and socio-political critiques of science as value-laden and itself constituting vested social interests and structures of biopolitical power. The critique marked the starting-point for the social history of eugenics and population policies that would deconstruct the public attitudes and authoritarian structures that Huxley had endeavoured to create.

## Funding:

This work was supported by the Wellcome Trust [082808].

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