

ALDOUS HUXLEY AND GEORGE ORWELL ON THE POLITICAL USE OF TECHNOSCIENCE

Michel Weberⁱ

Abstract: The main bone of contention between A. Huxley and G. Orwell is easy to identify : could or should political power be benevolent. In order to provide a sound answer, three steps are expedient. First, the political contrast drawing a sharp line between Huxley and Orwell is specified. Second, this contrast is shown to be correlated with Huxley's technophilia, as it is the heir of La Boétie and Tocqueville, and with Orwell's technophobia, mainly summoned by the harsh reality of fascist totalitarianism. Third, we evoke the limited way in which Huxley can be said to have changed, in the sixties, his understanding of the relevance of his own dystopia.

Keywords: Aldous Huxley; George Orwell; technoscience; political power

o. INTRODUCTION

Of all Aldous Huxley's (1894–1963) contemporaries, George Orwell (1903–1950) is arguably the most important fellow essayist—but he is also the one with whom there has been probably the least intellectual kinship. Huxley has indeed made it plain that he never understood Orwell's main intuition: according to the latter, “priests of power” cannot be satisfied with “dictatorship without tears.”

Most of Huxley's works are spread between *Brave New World* (1932) and *Island* (1962). In both books, technoscience constitutes the main background of the narrative, but with quite different outcomes. In *Brave New World's* dystopia, it is the *mysterium tremendum et fascinans* that totally enslaves humans for their own good. In *Island's* utopia, it constitutes—with Tantric Buddhism—the very

backbone of community life. Both narratives are organized around similar patterns involving a strong enthusiasm for technologies and techniques *lato sensu*, such as eugenics, hypnosis, birth-control and the use of psychotropic substances.

Orwell, for his part, finds only alienation in technoscience. In *Nineteen Eighty-Four* (1949), it is used to discipline and punish through military Keynesianism, panoptic surveillance, and scientific electro-torture.

The specification of the main bone of contention—could or should political power be benevolent—will allow us to comprehend better Huxley’s and Orwell’s respective worldviews. The argument unfolds as follows: first the political contrast drawing a sharp line between Huxley and Orwell is specified. Second, this contrast is shown to be correlated with Huxley’s technophilia, as it is the heir of La Boétie and Tocqueville, and with Orwell’s technophobia, mainly summoned by the harsh reality of fascist totalitarianism. Third, we evoke the limited way in which Huxley can be said to have changed, in the sixties, his understanding of the relevance of his own dystopia.

I. THE POLITICAL CONTRAST

The fundamental contrast between Huxley and Orwell is—unsurprisingly—political. It boils down to the difference that exists between benevolent and malevolent political power, i.e., between power exercised for the common good and power exercised for the pathological enjoyment of the ruler(s).¹ This thesis is very easy to establish straightforwardly; it suffices to compare the key episodes of *Brave New World* and *Nineteen Eighty-Four*: on the one hand, the dialogue that takes place between Mustapha Mond and John the Savage makes obvious that the World State is ruling (or at least pretends to rule) for the good of its citizens (or at least claims to do so);² on the other hand, the solemn torture session of Winston deals with the question *why*: why should the Ministry of Love “expend so much time and trouble” on him? O’Brien states explicitly on

¹ This contrast is akin to Aristotle’s criterion structuring the typology of his *Politics* (III, vii ; cf. IV, ii & passim): *who* exercises power and *for whom*?

² Aldous Huxley, *Brave New World* [1932], With an introduction by David Bradshaw, Hammersmith, HarperCollins, 1994, antepenultimate chapter XVI.

that occasion that “the Party seeks power entirely for its own sake.”³

It sounds as if Orwell was precisely answering the question that bothered John the Savage... Let us go through the details because it is difficult to overemphasize the importance of this dark contrast.

1.1. *Huxley*

The dialogue between Mond and John constitutes a dispassionate plea for the World State’s engineered stability:

The world's stable now. People are happy; they get what they want, and they never want what they can't get. They're well off; they're safe; they're never ill; they're not afraid of death; they're blissfully ignorant of passion and old age; they're plagued with no mothers or fathers; they've got no wives, or children, or lovers to feel strongly about; they're so conditioned that they practically can't help behaving as they ought to behave. And if anything should go wrong, there's soma. (pp. 200-201)

In other words, conformal identity and fusional community are not to be thought of as major drawbacks or as impediments to happiness—on the contrary, they grant it:

We believe in happiness and stability. A society of Alphas couldn't fail to be unstable and miserable. Imagine a factory staffed by Alphas—that is to say by separate and unrelated individuals of good heredity and conditioned so as to be capable (within limits) of making a free choice and assuming responsibilities. Imagine it! [...] The Cyprus experiment was convincing. (pp. 202-203)

A truly civilized society cannot afford old-fashioned citizens (in the Greek democratic sense of the term) anymore. Even science has to be bridled for the sake of stability:

“Sometimes,” he added, “I rather regret the science. Happiness is a hard master—particularly other people's happiness. A much harder master, if one isn't conditioned to accept it unquestioningly, than truth.” He sighed, fell silent again, then continued in a brisker tone, “Well, duty's duty. One can't consult one's own preference. I'm interested in truth, I like science. But truth's a menace, science is

³ George Orwell, *Nineteen Eighty-Four* [1949], Introduction by Thomas Pynchon, London, Penguin Books, (also ed. Penguin 1954), 2003, p. 301.

a public danger. [...]”⁴

We thus obtain the best possible world under the guise of a perfect clockwork society.⁵

1.2. *Orwell*

Stability is *also* the ideal cultivated by the Inner Party. The means are however quite different and the ethos of the “elite” is even more so. O’Brien speaks:

“And now let us get back to the question of "how" and "why". You understand well enough *how* the Party maintains itself in power. Now tell me *why* we cling to power. What is our motive? Why should we want power? Go on, speak,” he added as Winston remained silent.

Nevertheless Winston did not speak for another moment or two. A feeling of weariness had overwhelmed him. The faint, mad gleam of enthusiasm had come back into O’Brien’s face. He knew in advance what O’Brien would say. That the Party did not seek power for its own ends, but only for the good of the majority. That it sought power because men in the mass were frail, cowardly creatures who could not endure liberty or face the truth, and must be ruled over and systematically deceived by others who were stronger than themselves. That the choice for mankind lay between freedom and happiness, and that, for the great bulk of mankind, happiness was better. That the party was the eternal guardian of the weak, a dedicated sect doing evil that good might come, sacrificing its own happiness to that of others. [...] “You are ruling over us for our own good,” he said feebly. “You believe that human beings are not fit to govern themselves, and therefore—”

He started and almost cried out. A pang of pain had shot through his body. O’Brien had pushed the lever of the dial up to thirty-five.

“That was stupid, Winston, stupid!” he said. “You should know better than to say a thing like that.”

He pulled the lever back and continued: “Now I will tell you the answer to my

⁴ Aldous Huxley, *Brave New World*, p. 207. Mond continues: “Our Ford himself did a great deal to shift the emphasis from truth and beauty to comfort and happiness. Mass production demanded the shift. Universal happiness keeps the wheels steadily turning; truth and beauty can’t.” (p. 208) “That’s how I paid. By choosing to serve happiness. Other people’s—not mine.” (p. 209)

⁵ “Société-horloge” vs thermodynamical societies (“société-vapeur”)—Georges Charbonnier, *Entretiens avec Claude Lévi-Strauss* [1959], Paris, Éditions Julliard et Librairie Plon, 1961. To speak of a “clockwork” society can either be derogatory or complimentary. When Lévi-Strauss speaks enthusiastically of the archaic communities as being truly democratic, he obviously embraces the latter meaning.

question. It is this. The Party seeks power entirely for its own sake. We are not interested in the good of others; we are interested solely in power. Not wealth or luxury or long life or happiness: only power, pure power. What pure power means you will understand presently. We are different from all the oligarchies of the past, in that we know what we are doing. All the others, even those who resembled ourselves, were cowards and hypocrites. The German Nazis and the Russian Communists came very close to us in their methods, but they never had the courage to recognize their own motives. They pretended, perhaps they even believed, that they had seized power unwillingly and for a limited time, and that just round the corner there lay a paradise where human beings would be free and equal. We are not like that. We know that no one ever seizes power with the intention of relinquishing it. Power is not a means, it is an end. One does not establish a dictatorship in order to safeguard a revolution; one makes the revolution in order to establish the dictatorship. The object of persecution is persecution. The object of torture is torture. The object of power is power. Now do you begin to understand me?"⁶

This quote is self-explanatory. Power is sought for itself—full stop. The consequences are delineated *infra*; for the time being, let us underline that such “politics” necessarily involves pain, humiliation and suffering: “a world of fear, treachery, torment.”⁷ In order to interpret this fundamental contrast with Huxley, it is wise to question the correlation that exists between technique and totalitarianism.

2. TECHNIQUE AND TOTALITARIANISM

In Huxley’s and Orwell’s works, the fundamental contrast between benevolent and malevolent power presupposes a strict correlation between technique and totalitarianism. Let us first define these terms. Whitehead has claimed that we should seek simplicity and distrust it; this is indeed the unavoidable burden of any scholarly discussion.⁸

The Ellulian concept of technique explicates to a great extent Gheorghiu’s dramatic depiction of concentration camps under Nazi, American and Soviet occupations of Central Europe. Technique could be defined in the following

⁶ George Orwell, *Nineteen Eighty-Four*, pp. 300-302

⁷ George Orwell, *Nineteen Eighty-Four*, p. 306

⁸ “Seek simplicity and distrust it.” *The Concept of Nature* [1920], Cambridge, Cambridge University Press, 1964, p. 163.

way: the systematic use of general categories to obtain maximum efficiency when dealing with events in some field of human activity, or with individual human beings themselves.⁹ This is typically of course what science does when it seeks to understand the world and how consequently technology grounds its efficacy.

Totalitarianism is the political system that imposes the single authority of the State over all aspects of public and private life. This is achieved through technique: individual human beings are seen, and, so to speak, taken care of, through a screen that defines them as members of one or more given classes. Human beings are not considered in themselves, as unique individuals endowed with absolute value, but as a mere accidental bundle of data.

In sum, from the perspective of Ellul, technique and totalitarianism go hand in hand. That correlation between technique and totalitarianism actually involves two complementary arguments. On the one hand, since technique relies upon the categorization of individuals and ignores everything that cannot be categorized according to its own standards, it necessarily negates what makes them unique. Technique being intrinsically totalitarian, it pushes history in that direction: it does not only make totalitarianism possible, it makes it inevitable. On the other, totalitarianism cannot implement its agenda without the extensive use of appropriate techniques.

How are these processes embedded in, respectively, Huxley and Orwell? Some reference to the history of ideas will be handy to unravel their respective conceptual threads.

2.1. Huxley's *technophilia*

Huxley's correlation is anchored in the well-known arguments of La Boétie and Tocqueville. On the one hand, the creation of the best possible world requires the use of conformation techniques. On the other hand, the recent scientific advances are pushing politics towards a new form of totalitarianism. In other words, *Brave New World* lies at the junction of a top-down and a bottom-up process.

⁹ Jacques Ellul, *Le système technicien*, Paris, Éditions Calmann-Lévy, 1977. Constantin Virgil Gheorghiu, *The twenty-fifth hour* [1949], Translated from the Romanian by Rita Eldon, New York, Alfred A Knopf, 1950.

2.1.1. La Boétie

The import of La Boétie's *Discourse of Voluntary Servitude* (1574) is well-known: if tyrants want to establish their power, it is far more efficient to use opinion than force. Obedience, in other words, can be guaranteed if you enslave people's minds. Why would you regret liberty if you have never known it? Or, as Orwell would put it, if there is even no word to name it anymore? "The essential reason why men take orders willingly is that they are born serfs and are reared as such."¹⁰

The use and abuse of opinion is of course not a new theme in Western philosophy, as Plato's corpus amply shows. In his *Tractatus theologico-politicus* (1677), Spinoza forcibly labours the exact same point,¹¹ as does Hume's "Of the First Principles of Government" (1741).¹² So Huxley is in good company when he emphasizes that

There is, of course, no reason why the new totalitarianisms should resemble the old. Government by clubs and firing squads, by artificial famine, mass imprisonment and mass deportation, is not merely inhumane (nobody cares much about that nowadays); it is demonstrably inefficient—and in an age of advanced technology, inefficiency is the sin against the Holy Ghost. A really efficient totalitarian state would be one in which the all-powerful executive of political bosses and their army of managers control a population of slaves who do not have to be coerced, because they love their servitude. To make them love it is the task assigned, in present-day totalitarian states, to ministries of propaganda,

¹⁰ "On ne regrette jamais ce que l'on a jamais eu. [...] La première raison pour laquelle les hommes servent volontairement, c'est qu'ils naissent serfs et qu'ils sont élevés comme tels." (Étienne de La Boétie, *Discours de la servitude volontaire* [1574]. *Traduction en français moderne et postface de Séverine Auffret*, Paris, Éditions Mille et une nuits, 1995, pp. 17-19; I quote Harry Kurz's translation, p. 62)

¹¹ "The supreme mystery of despotism, its prop and stay, is to keep men in a state of deception, and with the specious title of religion to cloak the fear by which they must be held in check, so that they will fight for their servitude as if for salvation [...]." (Spinoza, *Tractatus theologico-politicus*, Tr. by Samuel Shirley, p. 389)

¹² "Nothing appears more surprizing to those, who consider human affairs with a philosophical eye, than the easiness with which the many are governed by the few; and the implicit submission, with which men resign their own sentiments and passions to those of their rulers. When we enquire by what means this wonder is effected, we shall find, that, as Force is always on the side of the governed, the governors have nothing to support them but opinion. It is therefore, on opinion only that government is founded; and this maxim extends to the most despotic and most military governments, as well as to the most free and most popular. The sultan of Egypt, or the emperor of Rome, might drive his harmless subjects, like brute beasts, against their sentiments and inclination: But he must, at least, have led his *mamaluks*, or *praetorian bands*, like men, by their opinion." (David Hume, "Of the First Principles of Government," Essay V of *Essays, Moral and Political*, Edinburgh, 1741)

newspaper editor and schoolteachers. But their methods are still crude and unscientific.¹³

In sum, La Boétie offers the astrolabe (or final cause) of Huxleyan politics: to give rise to and nurture people's love of their own servitude. But what about the plummet (or efficient cause)?¹⁴

2.1.2. Tocqueville

Three authors deserve to be named to circumscribe the required efficiency. *Ab Jove principium*, Tocqueville sets the tone of the discussion in his *De la démocratie en Amérique* (1835 & 1840). The thesis is simple: a democracy where conformism and atomism are structurally ingrained is likely to degenerate into a “friendly fascism” of sorts.¹⁵ Please notice that his argument runs in the opposite direction as La Boétie's: we do not deal with a policy that moulds the social tissue but with the corruption of the tissue itself. Ellul has also insisted on this, basically following the lead of Francis Bacon's *Nova Atlantis* (1624): everything that is technically feasible will be actualized and the social tissue will be modified accordingly.

Now, Tocqueville defines the form of the argument but not its content. Huxley is here mainly relying upon two contemporary scientists: J. B. S.

¹³ Aldous Huxley, “Foreword” [1946] in *Brave New World*, 1932. Interestingly enough, Orwell teases the same idea at one point: “By comparison with that existing today, all the tyrannies of the past were half-hearted and inefficient. The ruling groups were always infected to some extent by liberal ideas, and were content to leave loose ends everywhere, to regard only the overt act and to be uninterested in what their subjects were thinking. Even the Catholic Church of the Middle Ages was tolerant by modern standards. Part of the reason for this was that in the past no government had the power to keep its citizens under constant surveillance. The invention of print, however, made it easier to manipulate public opinion, and the film and the radio carried the process further. With the development of television, and the technical advance which made it possible to receive and transmit simultaneously on the same instrument [telescreen], private life came to an end. Every citizen, or at least every citizen important enough to be worth watching, could be kept for twenty-four hours a day under the eyes of the police and in the sound of official propaganda, with all other channels of communication closed. The possibility of enforcing not only complete obedience to the will of the State, but complete uniformity of opinion on all subjects, now existed for the first time.” (George Orwell, *Nineteen Eighty-Four*, p. 235)

¹⁴ “Love is the plummet as well as the astrolabe of God's mysteries”; “[...] the teleological pull from in front. This teleological pull is a pull from the divine Ground of things.” (Aldous Huxley, *The Perennial Philosophy*, London, Chatto & Windus, 1947, pp. 274 et 276)

¹⁵ Tocqueville actually speaks of “servitude” (p. 656), “asservissement”, “barbarie”, “despotisme doux” (p. 646). “Friendly fascism” is Bertram Gross's expression: cf. his *Friendly Fascism: the New Face of Power in America* (New-York, M. Evans & Co., 1980)—that curiously does not quote Tocqueville.

Haldane and his own brother Julian.¹⁶ It is in their works that we find Huxley's chief intuition: techno-science will inevitably transform the cultures (not simply the modalities of social intercourse) in which they dwell. The tone and content of *Brave New World's* narrative clearly bears the mark of the biological science of his time. Eugenics is a constant theme in Huxley.

In a nutshell: in *Brave New World*, La Boétie's intuition is filled with the trends in contemporary biological science.

2.2. *Orwell's technophobia*

The same pattern is at work in Orwell—*Nineteen Eighty-Four* also lies at the junction of a top-down and a bottom-up process—, but the result he obtains is completely different. For one thing, La Boétie is irrelevant: people are *not* meant to ignore their total servitude. For another, the technical possibilities are almost trivial: what really matters is the toxic climate they create and the crux of Orwell's argument—the scientific use of electro-torture—does *not* require the sophisticated apparatus sketched (sometimes clumsily) by Huxley.

Orwell's correlation between technique and totalitarianism is bluntly anchored in the post-war descriptions of totalitarianism: his reading of Eugene Zamyatin¹⁷ and his understanding of Stalinism and of the impact of Nazi concentration camp policies on power games.¹⁸ The political vision *per se* was his own.

2.2.1. Nineteen Eighty-Four

Huxley's vision sprang from a LaBoétian argument of sorts and was made operative by a scientific form of Tocqueville's striking anticipation. Orwell's vision is peculiar to him (with Zamyatin as a probable catalyst) and was, in all likelihood, nourished by the accounts and reflections of camp survivors. Power

¹⁶ John Burdon Sanderson Haldane, *Daedalus or Science and the Future* [A paper read to the heretics, Cambridge, on February 4th, 1923]. 3rd impr., London, Kegan Paul, Trench, Trubner, 1924; Sir Julian Huxley, *What Dare I Think? The Challenge of Modern Science to Human Action and Belief*. Including the Henry LaBarre Jayne Foundation Lectures (Philadelphia) for 1931, London, Chatto & Windus & Harper, 1931.

¹⁷ Eugene Zamyatin, *We: A Novel* [1920], New York, E. P. Dutton, 1924

¹⁸ John Newsinger claims that “while [Orwell] certainly knew about and wholeheartedly condemned the mass murder of European Jews perpetrated by the Nazis, there is just no evidence to show that this was in any way central to his thinking.” (Rodden, John (Edited by), *The Cambridge Companion to George Orwell*, Cambridge, Cambridge University Press, 2007, p. 123)

is exerted *for the sake of power*. As Arendt will later claim, *terror is an end in itself*.

Orwell's vision can be boiled down to what could be called the four ignoble truths of totalitarianism. Primo, power is not a means but an end; secundo, power is collective; it is power over human beings; tertio, power seeks total control of the mind in order to totally control matter; quarto, power *necessarily* consists in the capacity to inflict suffering and, ultimately, to torture.¹⁹ As Huxley could have said: the *habeas corpus* is replaced by an *habeas mentem*...²⁰

In sum, Orwell offers a vision that updates Hobbes' *Leviathan* (1651) with Sade's *Cent Vingt Journées de Sodome* (1785). By doing so, he makes transparent the inherent (or nascent) psychopathy of the power seeker.

2.2.2. Concentration camps

Three sources would need to be tracked to understand how Orwell's own borderline experiences have carved this vision. First, his life as a tramp in the years 1928–1931 (described in *Down and Out in Paris and London*, 1933). Second, his participation in the Spanish Civil War in 1936–1937 (that is accounted for in *Homage to Catalonia*, 1938). Third, his understanding of the concentrational logic, that lies at the root of the historical expression of Nazi totalitarianism. Since the present paper basically deals with the contrast between *Brave New World* and *Nineteen Eighty-Four*, it seems adequate to focus only on the third issue.

Some historical reminder is however needed. First, the Gulag system (1930–1960) does not belong to the practice of concentration *per se* : quite unfortunately, Arendt and many other Western scholars were obviously not interested in introducing a sharp *distinguo* between the incriminated States.²¹ Second, concentration camps *per se* were created during the Ten Years' War with Cuba (1868–1878). Animated with a “let rot and die” policy, they were soon used during the Second Anglo-Boer War (1899–1902) and the Philippine-

¹⁹ George Orwell, *Nineteen Eighty-Four*, pp. 301 sq. Cf. “Will you please remember, throughout our conversation, that I have it in my power to inflict pain on you at any moment and to whatever degree I choose? If you tell me any lies, or attempt to prevaricate in any way, or even fall below your usual level of intelligence, you will cry out with pain, instantly. Do you understand that?” (p. 281) See my *Whitehead's Pancreativism. Jamesian Applications*, Frankfurt / Paris, ontos verlag, 2011.

²⁰ Aldous Huxley, *Brave New World Revisited* [1958], New York, Harper & Row, 2006, p. 114.

²¹ See, e.g., Geoffrey Roberts, *Stalin's Wars: From World War to Cold War, 1939–1953*, New Haven & London, Yale University Press, 2006; Domenico Losurdo, *Stalin, Storia e critica di una leggenda nera*, Milano, Carocci, 2008.

American War (1899–1902).²² What happened in Nazi Germany was in continuity with these “contingency plans:” the concentration camps were created in 1933 (i.e., in the aftermath of the Reichstag arson, an event that is called in naval warfare a false flag operation) to house mainly communists and trade unionists, but also Gypsies, petty criminals, Jehovah's Witnesses, freemasons and homosexuals. Jews were deported only if they did belong to one of these categories. The policy had changed however: it was no longer a matter of gathering individuals and to let them die because of poor hygiene, malnourishment and ill-treatment—but of working the inmates to death, while terrorizing and torturing them in the process. After the *Anschluss* (1938), this policy specifically targeted the Jews because of their Jewishness. When the Stalingrad moment came (1942), quick extermination became the goal.

Bruno Bettelheim was perhaps the first to publish an account of the life in the camps. The purpose the concentration camps, he claimed, was fourfold: “to break the prisoners as individuals and to change them into docile masses,” “to spread terror among the rest of the population,” “to provide the Gestapo members with a training ground,” and to create “an experimental laboratory” using human subjects.²³ As a result, prisoners would behave aggressively towards the so-called “unfit” prisoners, arrange their own clothing to imitate the guards’ uniforms, reject the idea of intervention by foreign powers aimed at liberating them (before the outbreak of World War II), and even defend some elements of Nazi ideology.

Bettelheim was followed by Leo Löwenthal, who brought to the fore additional elements and insights.²⁴ First, he explicitly linked fascist terror with “the pattern of modern economy”²⁵ (a thesis anticipated by Mumford²⁶). Second, he showed that the terror enforced in camps produced the atomization

²² They were factually anticipated during the Indian wars (e.g., the Cherokee removal, 1836–1839).

²³ Bruno Bettelheim, “Individual and Mass Behavior in Extreme Situations,” *Journal of Abnormal and Social Psychology*, 38, 1943, pp. 417–452, here pp. 418–419.

²⁴ Leo Löwenthal, “Terror's Atomization of Man,” *Commentary* 1, 1945/1946, pp. 1–8.

²⁵ “I believe that [the fascist terror] is deeply rooted in the trends of modern civilization, and especially in the pattern of modern economy.” (p. 1) According to the axioms of neoliberalism—that are likely to have been written by Frank H. Knight (1885–1972)—pure and perfect competition mainly requires atomicity of supply and demand (i.e., infinite buyers and sellers), homogenous products, market transparency (i.e., perfect information), zero entry and exit barriers and perfect factor mobility.

²⁶ Lewis Mumford, *Technics and Civilization*, New York, Harcourt Brace and Company, 1934.

of the individual, who lived independently of his/her fellow human beings.²⁷ Third, he claimed that the terror furthermore dissociated the individual, who lived in a state of stupor, in a moral coma.²⁸

Basically the same conclusions were also reached by Viktor Frankl, Virgil Gheorghiu, Victor Klemperer, and Hannah Arendt after the epoch-making Eichmann trial of 1961.²⁹

The logic of torture is clearly a logic of power. It is never a matter of retrieving information. In so far as data mining is concerned, it seeks to obliterate memories, to destroy evidence and to dispose of the witness. Sometimes implanting new (i.e., fake, memories is also sought. It is always a matter of ruining the individual, of his/her own identity, culture, and social tissue. Only absent-minded lay persons or ranting ideologues can believe that torture is justified by so-called asymmetrical threats. Additionally, if the purely pragmatic question of the reliability of data obtained during torture is raised, the answer is simply zero.³⁰

3. THE TECHNOLOGICAL CHIASMA

In conclusion, technique *lato sensu* and technoscience *stricto sensu* are put at work completely differently in *Brave New World* and *Nineteen Eighty-Four*. In both cases,

²⁷ “Essentially, the modern system of terror amounts to the atomization of the individual. We shudder at the tortures inflicted on the physical bodies of men; we should be no less appalled by its menace to the spirit of man. [...] The individual under terrorist conditions is never alone and always alone. He becomes numb and rigid not only in relation to his neighbor but also in relation to himself; fear robs him of the power of spontaneous emotional or mental reaction. Thinking becomes a stupid crime; it endangers his life. The inevitable consequence is that stupidity spreads as a contagious disease among the terrorized population. Human beings live in a state of stupor, in a moral coma.” (p. 2) To specify this one should revisit the physiology of predation, that happens to throw light on the mechanism of (post-)traumatic stress: the keys are hyperarousal, constriction, fight/flight or freezing/dissociation, release/collapsus or helplessness, re-enactment...

²⁸ “In a terrorist society, in which everything is most carefully planned, the plan for the individual is—to have none; to become and to remain a mere object, a bundle of conditioned reflexes which amply respond to a series of manipulated and calculated shocks. [...] In a system that reduces life to a chain of disconnected reactions to shock, personal communication tends to lose all meaning [...]” (p. 3)

²⁹ Viktor Frankl, *Trotzdem Ja Zum Leben Sagen: Ein Psychologe erlebt das Konzentrationslager*, Wien, Deuticke, 1946; Virgil Gheorghiu, *Twenty-fifth hour*, op. cit., 1949; Victor Klemperer, *LTI-Lingua Tertii Imperii: Notizbuch eines Philologen*, Reclam Verlag Leipzig, 1947; Hannah Arendt, *Eichmann in Jerusalem. A Report on the Banality of Evil* [1963]. Revised and enlarged edition, Harmondsworth, Penguin Books Ltd, 1977.

³⁰ Cf., e.g., Françoise Sironi, *Bourreaux et victimes : Psychologie de la torture*, Paris, Odile Jacob, 1999.

the narrative relies heavily upon the Malthusian threat and the requirement of social stabilization while the unavailability of industrialism, productivism, materialism, standardization (overorganization), and oil-guzzling militarism is accepted at face value.

Amongst the significant variations we have the following: the World State secures peace and abundance, whereas the Inner Party purposely maintains a state of war, scarcity and morbid austerity. The former exploits a shame culture in which you have to conceal your trespassings from the community's sight; the latter imposes a guilt culture that involves full confession to a priest of power. Accordingly, the penalty is exile or torture.

The bottom contrast is, as claimed *supra*, the difference between the soft, so to speak benevolent, totalitarianism of *Brave New World* and the harsh, clearly malevolent one, of *Nineteen Eighty-Four*. It is reflected in the specificity of the infantilization involved: on the one hand, denizens are treated liked spoiled brats expected to (unconsciously) love their servitude; on the other hand, they are akin to terrorized children who are asked to hate their servitude in a borderline manner.

We have claimed that the young Huxley shows clear signs of technophilia whereas Orwell is uncompromisingly pessimistic in that regard. Of tremendous importance is the fact that *Huxley never understood Orwell's meaning and significance*. The letter Huxley wrote to his fellow novelist after reading *Nineteen Eighty-Four* leaves no doubt about this:

The philosophy of the ruling minority in *Nineteen Eighty-Four* is a sadism which has been carried to its logical conclusion by going beyond sex and denying it. Whether in actual fact the policy of the boot-on-the-face can go on indefinitely seems doubtful. My own belief is that the ruling oligarchy will find less arduous and wasteful ways of governing and of satisfying its lust for power, and these ways will resemble those which I described in *Brave New World*. [...] Within the next generation I believe that the world's rulers will discover that infant conditioning and narco-hypnosis are more efficient, as instruments of government, than clubs and prisons, and that the lust for power can be just as completely satisfied by suggesting people into loving their servitude as by flogging and kicking them into obedience. In other words, I feel that the nightmare of *Nineteen Eighty-Four* is destined to modulate into the nightmare of a world having more resemblance to that which I imagined in *Brave New World*. The change will be brought about as a result of a felt need for increased efficiency. Meanwhile, of course, there may be a large scale biological and atomic war—in which case we shall have nightmares

of other and scarcely imaginable kinds.³¹

There was obviously something in Huxley's education and life experience that prevented him from grasping Orwell's message. There are things, we are told, that a gentleman would not contemplate doing. Needless to say that his intelligence and wide culture cannot account for such a blunder.

By means of conclusion, it is interesting to question the likeliness of a late shift in Huxley's appraisal of the vices and virtues of technique. *Brave New World Revisited* (1958) showed a clear concern for the totalitarian potential of technoscience, but Huxley still claimed that a scientific enslavement is better—say more comfortable—than the old-fashioned one! The West is after all the heir of the enlightenment. Here's a statement he made in 1961 at San Francisco's California Medical School:

There will be, in the next generation or so, a pharmacological method of making people love their servitude, and producing dictatorship without tears, so to speak, producing a kind of painless concentration camp for entire societies, so that people will in fact have their liberties taken away from them, but will rather enjoy it, because they will be distracted from any desire to rebel by propaganda or brainwashing, or brainwashing enhanced by pharmacological methods. And this seems to be the final revolution.

Likewise in 1962:

It seems to me that the nature of the ultimate revolution with which we are now faced is precisely this, that we are in process of developing a whole series of techniques which will enable the controlling oligarchy, who have always existed and presumably always will exist, to get people actually to love their servitude. This seems to me the ultimate malevolent revolution... This is a problem which has interested me for many years and about which I wrote, 30 years ago, a fable *Brave New World* which is essentially the account of a society making use of all the devices at that time available and some of the devices which I imagined to be possible, making use of them in order to, first of all, to standardize the population, to iron out inconvenient human differences, to create, so to say, mass produced models of human beings arranged in some kind of a scientific caste system. Since then I have continued to be extremely interested in this problem and I have noticed with increasing dismay that a number of the predictions which were purely fantastic when I made them 30 years ago have come true or

³¹ Letter to George Orwell, 21 October, 1949, in Huxley, *Brave New World Revisited*, op. cit., "P.S." section, p. 8 sq.

seem in process of coming true. A number of techniques about which I talked seem to be here already, and that there seems to be a general movement in the direction of this kind of ultimate revolution, this method of control by which people can be made to enjoy a state of affairs which by any decent standard they ought not to enjoy. I mean the enjoyment of servitude.³²

The late Huxley seems thus keen to brush away *some* of the ambiguities of *Brave New World*, that navigated between disenchanted narrative knots factually arguing for the political use of technoscience and passages suggesting that life would lose its meaning in such a framework. It does not seem wise to privilege the heuristical thesis of a purely satirical work.

If we peruse the categories used earlier to contrast *Brave New World* and *Nineteen Eighty-Four* in order to screen *Island* (1962), we obtain the following. Interestingly enough, *Island* also accepts the Malthusian threat and the requirement of social stabilization: all three political systems are instances of “clockwork societies.” But the status of technoscience and its contribution are here radically different: for one thing, technoscience is not piloted anymore by a blend of politics that is reminiscent of the “market economy,” but by Buddhist spirituality; for another, it fosters an organic, non-dualistic, social fabric instead of a materialistic, productivistic one. Furthermore, the insular kingdom—that has no army—is also characterised by peace and abundance, but the comparison with *Brave New World* stops here: a constitutional monarchy replaces the benevolent totalitarianism whereas individual growth and solidarity replace infantilization and unconscious servitude.

We could discuss other relevant contrasts such as the Moksha/Soma one, that exemplifies the difference between a natural entheogenic medicine enhancing awareness and a synthetic drug that induces total obliteration. Or the difference between hypnosis *qua* natural healing process and social engineering mated with hypnopaedia, between true love and promiscuous sex, initiation and consumption, meaningful life and meaningless pleasure... There is no need to clarify all interpretational issues in the context of the present argument. Suffice it to say that the synergy *Island* depicts between technoscience and spirituality corresponds, *mutatis mutandis*, to the

³² “The Ultimate Revolution,” March 20, 1962 Berkeley Language Center—Speech Archive SA 0269 cf., e.g.: <http://pulsemedia.org/2009/02/02/aldous-huxley-the-ultimate-revolution/>.

Whiteheadian interpretation of postmodern science that calls for a society rooted both in science and in Christian religiosity. (Sadly enough, Whiteheadians have not yet realized this.)³³

In conclusion, there is a long-lasting technophilia in Huxley that is completely foreign to Orwell's vision. As a matter of fact, Huxley's dystopia does provide a plausible picture of our future (the work on ectogenesis is only starting) while recent scientific advances (like cellular phones, internet, geolocalization and RFID technology³⁴) make a Big Brother state perhaps more likely in the immediate future. One should certainly not forget that the global systemic crisis is only starting and will have devastating effects on all aspects of our live.³⁵

There is no need however to work out the odds because the respective arguments hold actually at two different levels. *In fine*, Huxley and Orwell provide indeed antagonistic perspectives on the stakes of power: Huxley sees the exercise of power as purely technocratic and, *volens nolens*, happily envisions

³³ See Griffin's constructive postmodernism, e.g. in his *The Reenchantment of Science. Postmodern Proposals*, Albany, New York, State University of New York Press, 1988. Cf. my *Whitehead's Pancreativism. Jamesian Applications*, op. cit., § 8.2.3.

³⁴ To simplify, there are basically two types of RFID tags: passive RFID tags, which have no built-in power source and require an external electromagnetic field to initiate a signal transmission; and active RFID tags, which contain a battery and can transmit signals once an external source ("Interrogator") has been successfully identified. Some are "read-only" chips, other can be modified after implantation. In order to keep the argument tight, the following schematization of the technical possibilities could be proposed: to peruse, on the one hand, passive nanochips that can be widely used to tag commodities; on the other, active microchips that are developed in order to help specialized institutions to cope with some animal or some human beings. The thesis would be that we are about to enter bigmotherhood and that, from there, Big Brother will arise. Please note that the impending merging of bio and nano technologies with IT offers actually a far gloomier picture than the one I sketch here, but it is also more difficult to envision pragmatically in the context of this short essay. Some pioneering work has been done by a French group—Pièces et Main d'œuvre—, e.g. in *Rfid: la Police Totale—Puces Intelligentes et Mouchardage Electronique*, Paris, Éditions de L'Échappée, 2008.

³⁵ The expression "global systemic crisis" covers two main dimensions: on the one hand, the fact that all fields of human activity are now in a critical state and, on the other, the fact that all these dysfunctions are linked. The dematerialization of the economy fostered a global financial speculation; peak oil means the end of cheap energy and of all the petrol-derivative; the collapse of biosphere involves the exhaustion of vital ressources (minerals, water...), but also climat change (as it is linked with pollution), and the 6th mass extinction; social unrest (riots, famine, pandemics) are expected since the political vacuum is flabbergasting; wars and neocolonialism are already widespread while the demographic racing (social Darwinism) remains threatening.

the complete fulfilment of La Boétie's nightmare. For his part, Orwell uncovers the very dynamics of power and demonstrates that, whatever the technological sophistication, the basics of politics ("101") will remain the same ("Room 101"). The exercise of power involves the capacity to impose suffering on human beings. There is even no need of a very sophisticated argument to establish this: only the suffering of the subordinate demonstrates the power of the superior (happiness can have various sources) and only torture secures that the suffering is real (more benign forms of torment allow the subordinate to *pretend* that s/he is not hurt).

weber@chromatika.org

ⁱ Dr. Michel Weber is Director of the Centre for Philosophical Practice (Brussels) and Adjunct Professor at the Department of Educational Foundations of the University of Saskatchewan. His current research program mainly deals with political philosophy and the philosophy of psychiatry. Dr. Weber is the author of fifteen monographs (e.g., *The Political Vindication of Radical Empiricism*, 2016) and the (co-)editor of fifty books (e.g., with Will Desmond, *Handbook of Whiteheadian Process Thought*, 2008); <http://chromatika.academia.edu>.

This argument was drafted for *The Condemned Playground. Aldous Huxley and His Contemporaries*. Fifth International Aldous Huxley Symposium, Balliol College, Oxford, Sept. 1-4, 2013. The Author expresses his thanks to Uwe Rash (Westfälische Wilhelms-Universität Münster) for his feedback on an earlier draft.