



# The Left Atrium

## Brave new biotechnology

### Our posthuman future: consequences of the biotechnology revolution

Francis Fukuyama

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How is medical science promising or threatening to change our lives? One need look no further than Margaret Atwood's *The Handmaid's Tale* or recent films such as *GATTACA* and *Brain Candy* for some futuristic visions — or nightmares. Perhaps Aldous Huxley's classic novel, *Brave New World*, serves as the best guide to a future worth fighting to prevent. Similarly bleak is Francis Fukuyama's *Our Posthuman Future: Consequences of the Biotechnology Revolution*, an expansive journey through science, philosophy and politics that serves to warn us how current trends in medical science threaten to transform the very essence of what we are.

Fukuyama, a professor of social science at Johns Hopkins University, initiates his argument by asserting that there exists a unique and species-uniting human nature that consists of a capacity for language, rationality, art and feeling, and a miraculous spiritedness that may involve free will. Fukuyama finds company in his belief through a clear and thorough literature review in which he shows that most philosophies are grounded in a belief in the existence of core human traits. Less convincingly, he uses evolutionary and neuropsychological concepts such as kin selection and nonviolent sociability to further support the idea that we possess a set of ingrained human behaviours and characteristics.

It is the universality of our common human nature, Fukuyama argues, that provides the basis for a recognized equality under moral and legal codes. However, according to Fukuyama, if intrinsic and absolute differences be-

tween human beings are introduced via chemical or genetic means, the natural link that binds us all may be severed. Moreover, if Fukuyama's proposition is correct, the resulting societal stratification could deny many their right to human dignity. Master and slave, gene-rich and gene-poor, suprahuman and subhuman classes could result from our unregulated striving to manipulate medically our natural fate. Fukuyama argues that not only is this potential divide bad in itself, but it creates an inequality that could provoke rebellion and violent resistance against the ruling classes.

But how is our seemingly benevolent modern medicine contributing to a "posthuman" future in which our very nature may be altered, tragically restricting the diversity of our thoughts, feelings and actions? By analyzing new developments in reproductive technology, life extending techniques and neuropsychopharmacology, Fukuyama illustrates how today's practices may lead to tomorrow's demise. For instance, with an ever-increasing array of prenatal screening tests and the ability to identify genetic markers for gender, disease predisposition, intelligence or criminality, there is ample reason to worry that the metaphor of manufactured "designer babies" is becoming a reality.

Just as the practice of expelling un-

certainty from the beginning of life increases, so too grows the denial of inevitable death, Fukuyama says. With death-defying medicine, transplantation and cryogenics, some of us strive to fulfill a desire to live life to its longest. Fukuyama convincingly argues that gene-enhancing, life-extending techniques could lead to an upheaval in our population demographics, resources and long-entrenched ethical ideals.

His dark indictments continue with a furious attack on the psychiatric profession, which he alleges is leading the race to alter human nature. Without presenting credible statistical evidence, he portrays psychiatry as a pill-pushing enterprise that, for the most part, indiscriminately elevates mood or suppresses hyperactivity, with the goal of bringing all minds to the euthymic middle. He posits that if a perfect happiness-inducing pill such as Huxley's soma were developed, intrinsic human needs

for recognition and feeling of self-worth (Socrates' *thymos*) would be artificially fulfilled. This would obliterate our innate drive to develop inter- and intra-personal relationships.

Fukuyama argues that, as a result of this hypothetical eradication of hope, fear and struggle from human life, we will lose our ability to empathize. If, on the one hand, new biotechnologies are distributed equally, then suffering

may be collectively rooted out — as may the concept of a soul. However, if only the privileged classes benefit from such intervention, they will fail to empathize with the suffering of the disenfranchised. Fukuyama warns that a potentially more horrifying scenario is the denigration of the "lesser class" without their awareness or consent through state-sponsored,



Art Explosion

physician-supported interventions that restrict emotion.

After painting this alarmist picture of our posthuman future, Fukuyama strikes a more positive tone in the last quarter of the book. He argues that the hazards he has presented can be averted by creating national and international regulation that limit the development and use of biotechnology.

Gazing into a biotechnological future that is very uncertain, this book provides a fascinating framework for exploring the possibilities that await us. Although many of Fukuyama's propositions are controversial — such as his often unrelenting attack on medicine and, more specifically, psychiatry — he should be applauded for attempting to move us beyond everyday talk of ethics to a deeper examination of human nature and its natural limits. *Our Posthuman Future* is an engaging, expansive and well referenced stimulus for discussion among health professionals, policy-makers and the general public. Fukuyama challenges the reader to follow Nietzsche's philosophical ideal by becoming aware of society's chosen goals and values, so that we may move forward with our eyes open.

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#### Entrée côté cœur

On dit parfois que la poésie, c'est ce qui disparaît dans la traduction. De même, les jeux de mots se traduisent rarement. Au fil des ans, le titre «De l'oreille gauche» — jeu de mot sur «oreillette» — a suscité tant de perplexité chez les lecteurs que notre service de traduction a voulu nous proposer une autre solution. Ainsi, que vous préféreriez à la scène le côté cour ou le côté jardin, nous vous invitons à être des nôtres alors que nous fixerons les projecteurs côté cœur.

#### Lifeworks

## Flaunting it

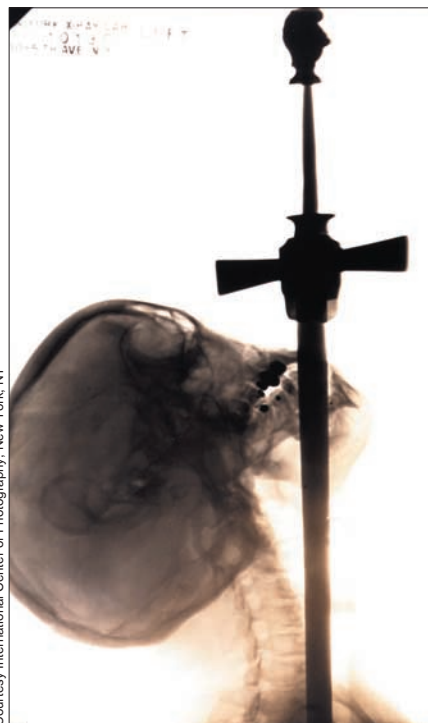
Writing in *Harper's* magazine, Edward Hoagland recently recalled the experience of watching circus performers doing “things they shouldn't reasonably do, with no ostensible purpose but showing off.”<sup>1</sup> With total confidence they would perform impossible feats that shocked and amazed, and the shameless flaunting of their physical disfigurements transformed them into figures of pure spectacle. Hoagland gawked without guilt at these almost inhuman figures who, in the same day, against all conceivable reason, “were said to have bought cough medicine, underpants, and other personal stuff in the local stores.” Thus, circus performers simultaneously participated in the mundane world and in total fantasy.

In *Step Right This Way*, the first museum exhibition of Edward J. Kelty's photographs of travelling circus performers (presented at the International

Center of Photography in New York from Sept. 13 to Dec. 1, 2002), we witness images that both praise the performers for their audacity and strip away a little of their mystery.

The 46 photographs that were included in this show are a mere handful of the circus photos found in Kelty's apartment after his death in 1967. Kelty was never a hugely successful photographer. He had a commercial studio in Manhattan in the 1920s and 30s. What made him unique was his use of a large-format banquet camera and his interest in photographing circus people. During the summer, in a truck that he had outfitted with a darkroom and sleeping area, he would follow small circuses as they crisscrossed the country. With his enormous camera, he was able to produce negatives up to 12" × 20" — ideal for registering the minute detail necessary for images in which he arranged groups of up to a thousand people. By the time the 1940s rolled around many of these small circuses began to disappear, and Kelty moved to Chicago, where he abandoned photography altogether.

The discovery of these photos does more than provide a document of the mysterious lost world of the travelling circus. Kelty's photographs were clearly a labour of love. They demonstrate a sensitivity and fondness for the unconventional way of life of circus performers. These circuses were built on the showmanship of the bizarre. The more unusual the feat or physical deformity, the more awe-inspiring and enticing the spectacle. Along with daredevils, dwarfs and giants were other side-show attractions, such as “The Alligator Man,” who suffered from ichthyosis, a disfiguring affliction of the skin. While many other photographers at the time exploited people with rare conditions for personal gain, Kelty demonstrated respect for his subjects. His photographs are of people who convey not only ac-



Edward J. Kelty, 1928. X-ray of Ajax, “The Swordswallower.”

Courtesy International Center of Photography, New York, NY