

# Human Cloning and the Hazards of Biowonder

António Fernando Cascais  
Universidade Nova de Lisboa

## Índice

1	Introdução	1
2	Cloning , or: the automatism of repetition	2
3	The humanness of the human body	3
4	Overcoming the wisdom of repugnance	4
5	References and Further Reading	5

## 1 Introdução

In a famous piece, originally written in 1971 and recently reprinted, James Watson said that “the embryological development of man does not occur free in the placid environment of a freshwater pond (...) Instead, the crucial steps in human embryology always occur in the highly inaccessible womb of a human female” (Watson, 1998:2), that is, until the the new reproductive technologies changed this ages-old picture by creating unforeseen possibilities of experimental manipulation of the human reproduction process. Although Watson was then confusing in vitro fertilization - by then, a completely new breakthrough in biotechnology - with originating a human by cloning, he warns that it was “a matter far too important to be left solely in the hands of the scientific and medical communities” (Watson, 1998:7) and ends up by

stating that “it appears to me most desirable that as many people as possible be informed about the new ways of human reproduction and their potential consequences, both good and bad” (Watson, 1998:7). Somehow anticipating both the spirit and the letter of the renowned Berg moratorium on recombinant DNA that would ensue in the aftermath of the Asilomar conference in 1974, Watson saw it appropriate to suggest that a “blanket declaration of the worldwide illegality of human cloning might be one result of a serious effort to ask the world in which direction it wished to move. (...) But if we do not think about it now, the possibility of our having a free choice will one day suddenly be gone” (Watson, 1998:8). In fact, the first so-called “DNA cloning” was performed in 1972 by Paul Berg who integrated and expanded a quimeric gene - a mixture of both bacterial and viral origin - in *Escherichia Coli*; vegetal cloning having been largely used in agronomy since the mid-1960s, and animal cloning in reptiles, fish and amphibia having paved the way to the sucessful cloning of mammals since 1986, the path to the cloning of humans was open from then on (Alexandre, 1998a:71-72). But while the Berg moratorium was to have a short term life, the spirit guiding Watson’s concerns about cloning would have a long-lasting effect: it can be

felt as late as 1997, at the American National Bioethics Advisory Commission ban on human cloning (NBAC, 1998:45-65), and the subsequent decree by President Clinton by means of which the United States joined most European countries in totally outlawing human cloning. More recently, however, the lifting of the total ban on human cloning, starting in the United Kingdom, seems to point to a turn in the future course of events.

It's my aim to contend that, although the essential fear from which stems the total ban on human cloning provides a striking evidence for the ultimate importance of whatever is at stake here, such a total ban, as a mere administrative measure, cannot insightfully and effectively counter the technoscientific thrust that makes possible an ever increasing experimental manipulation of biological phenomena in general and the human body in particular.

## 2 Cloning , or: the automatism of repetition

Replication has been typical of inferior organisms, largely vegetal and a few animal ones, as well of cellular populations grown in laboratory cultures. The prospect of extending it to whole human bodies through cloning, that initiated so much uneasiness and controversy, could only arise by virtue of modern biotechnoscience and against the background of the omnipresence of technoscientific mediation to reality.

In fact, it has been said that it is the automatism of repetition that best characterizes modern experimental technoscience to the extent that its *modus operandi* is governed by the mechanical principle. It was

Galileo who, at the dawn of the scientific revolution, stated that the creator of all things could but have been a *deus ex machina* and in this was echoed by La Mettrie's concept of a "homme-machine" that, along with Descartes radical separation between *res extensa* and *res cogitans*, was to have a long course in the epistemology sustaining modern medical science. It has also been insightfully argued, namely by Marshal McLuhan, that since the invention of mechanical printing the "Gutenberg Galaxy" shaped modern culture as a culture of copy. Plus, the automatism of mechanical repetition was also instrumental in shaping the utopian thrust of modern technoscience, best illustrated by Bacon's contention that modern science vowed itself to make a more perfect copy of nature than the original model itself.

The main concern of most critics about cloning human beings is that it conveys a major threat to what is commonly represented as the most valuable in human beings, their individuality and uniqueness, along with an array of concomitant issues of parenthood, identity confusion and so on. A cloned human being risks to become a fungible product that can be used at will to satisfy other human's needs and whims. Such a prospect appears to be specially repulsive to us as inheritors of the categorical imperative that commands us to never treat our neighbours as means but instead always as ends in themselves and by means of which Kant sought to conceive a rational principle of regulation of human relationships, thus shaping the ethical and political world as rationally as modern science appeared to be shaping natural phenomena. From our point of view, such threat to individual autonomy arises not from the fact that cloning would create a bi-

ological copy of a human being - nature has been doing it for ages with identical twins - , but from the purpose of copying in itself. Richard Lewontin, who denounced the fallacy of genetic determinism, according to which both the biology and the biography of the clone would simply repeat the ones of the cloned individual, sheds a fundamental light on this issue. It is actually the danger of commodification of human individuals that arises from the utopian (whether self-proclaimed or subliminal) purposiveness of cloning rather than from whatever biological (ident)entity the clone may assume.

### 3 The humanness of the human body

How human is the human body? It is a truism to say that the body isn't human in itself and that being human couldn't possibly be reduced to having a body; however nothing human can do without a body. How human the body, then? Descartes' radical separation between *res extensa* and *res cogitans* definitely removed the body from the realm of humanness, and the Enlightenment never ceased to consider it as a means to the ends of the autonomous subject that inhabits or possesses, rather than is dependent on, one such body. Accordingly, the autonomous subject is free to give away his or her blood, or blood products, or entire organs, or any other biological tissue or product, to be used in all sorts of medical procedures, for they lack the human quality - except maybe for Yehova's Witnesses - that allows us to make use of our bodies like any other commodified good; it seems that, in order to be deprived of such human quality - which amounts to

saying: acquire the status of commodified good - the human body just needed to be beheaded. The fact that the autonomous subject actually depends on his or her corporeality to pursue autonomous ends is not really overlooked by thinkers such as Kant, but, instead, qualified by free rational will that enables the subject to decide freely and rationally - both being equivalent - in spite of corporeality. The ban on slavery was based on such assumptions, while the fact of every child being born without having his or her free will consulted about it was extenuated and even absolved by the claim that the ultimate purpose of a child ever being brought to the world must be the fulfillment of his or her own ends, not the parents'. In this sense, also, the autonomous individual was allowed to freely give up momentarily a part of his or her own freedom, such as in the labour relationship, or definitely and totally for a higher collective good, such as in military duties or for the sake of someone else's life. In all instances, however, such a renunciation could lawfully never entail a dismissal of his or her own free will, which would happen if, against reason and freedom, the individual chose to reduce himself or herself to slavery. In the modern Enlightened tradition and thought, that is precisely what would occur in human cloning: the purpose of the existence of the clone totally ignores the free rational will of the clone to the extent that all its life was meant not to be its own to live and decide about, but someone else's commodity. And the reason why the clone would risk to be degraded by his or her becoming a mere commodity is because his or her body is whole. No wisdom of repugnance - as Leon Kass called it, very much on the line of Hans Jonas' heuristics of fear -

would have the chance of being called upon to justify a ban on cloning if just a section of the body was cloned. But this, from the standpoint of the state of the art in cloning techniques is still science-fiction.

#### **4 Overcoming the wisdom of repugnance**

The ethical issues arising from cloning give a hint about what a fundamental feature of an ethics for biotechnology might be. It simply cannot be an ethics that regulates scientific research from outside science itself, in the sense that it simply refuses to acknowledge the omnipresence of technoscientific processes in the contemporary world, as moral theology has been attempting too, along with some trends of anti-technoscience philosophies inspired by such prominent thinkers as Martin Heidegger. The basic claims of onto-theo-anthropologism arise from the assumption that religious belief and theology suffice to predefine human nature regardless of individual experience that is deeply rooted in time and space, history and culture. Although not sharing the humanist vision of the former, Martin Heidegger also preconceives symbolic ability as the fundamental trait of the human individual with his concept of authenticity of Dasein's experience, who inhabits this world as a poet rather than a scientist and so heroically makes room for himself in the world. In this sense, moral theology enabled itself to ignore, for instance, the suffering of women in favor of respect for the presupposed humanity of the embryo or the foetus, and Heidegger allowed himself to disregard the victims of nazi Holocaust for not dying an heroic, that is, human, death,

thus degrading their killing to the level of the processing of both living and dead bodies in a modern high-technology slaughterhouse rather than taking it for the truly human tragedy that it was. Both perspectives ignore the individual, and they do so not in what regards its uniqueness and autonomy, but - and this is what really is at stake here - in the fact that it is the individual the only one who can experience either pain and pleasure, misery or happiness, and reacts and decides according to his or her own wellbeing and interests. Accordingly, excessiveness of individual claims can only be limited by considerations of respect for the equivalent wellbeing and interests of other individuals, not the wellbeing or the interests of abstract human nature or predefined authenticity.

An ethics for the technological age, able to encompass biotechnological breakthroughs, cannot keep as its only task to evaluate and regulate biotechnological procedures and ends according to predefined patterns of good and evil, aiming to adjust all new biotechnological possibilities to a given concept of human nature whose unchangeability is both the horizon of all ethical judgment and the final accomplishment of applied ethics in the regulation of technoscientific action. Neither would such an ethics reduce itself to a mere professional ethics or deontology of the scientific community, which is much too often concerned with peer regulation interests than attentive to real human misery.

In this sense, I would say that one could reasonably expect that, maybe not for the first time ever, but surely for the first time in an unprecedented scale and with an ultimate relevance, bioethics might deflect the technoscientific thrust - that not demiur-

gically control its unstoppable course - in that it would be instrumental in inspiring technoscientific efforts to pursue research on cloning needed body parts instead of whole bodies.

## 5 References and Further Reading

- Alexandre, Henri (1998a), "Clonagem", in Hottois, Gilbert; Parizeau, Marie-Hélène et al. *Dicionário da bioética*. Lisboa: Instituto Piaget: 70-73
- Alexandre, Henri (1998b), "Partenogénese", in Hottois, Gilbert; Parizeau, Marie-Hélène et al. *Dicionário da bioética*. Lisboa: Instituto Piaget: 300-301
- Annas, George J. (1998a), "Scientific Discoveries and Cloning: Challenges for Public Policy", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 77-83
- Annas, George J. (1998b), "The Prospect of Human Cloning: An Opportunity for National and International Cooperation", in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 51-63
- Annas, George J. (1994), "Regulatory Models for Human Embryo Cloning: The Free Market, Professional Guidelines, and Governments Restrictions", *Kennedy Institute of Ethics Journal* 4(3):235-249
- Anees, Munawar Ahmad (2000), "The Islamic View", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 289-293
- Bailey, Ronald (2000), "What Exactly Is Wrong with Cloning People?", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 107-114
- Burley, Justine; Harris, John (2000), "Human Cloning and Child Welfare", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 234-250
- Caplan, Arthur (2000), "If Ethics Won't Work Here, Where?", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 58-67
- Cohen, Cynthia B. (1995), "Reproductive Technologies: Ethical Issues", in Warren T. Reich, ed. et al., *Encyclopedia of Bioethics, Vol. 4*. New York: Simon & Schuster MacMillan: 2233-2241
- Cohen, Cynthia B. (1994), Future Directions for Human Cloning by Embryo Splitting: After the Hullabaloo", *Kennedy Institute of Ethics Journal* 4(3): 187-192
- Cohen, Jacques and Tomkin, Giles (1994), "The Science, Fiction, and Reality of Embryo Cloning", *Kennedy Institute of Ethics Journal* 4(3): 193-203
- Cohen, Jonathan R. (2000), "Creation and Cloning in Jewish Thought", in Glenn McGee, ed. et al., *The Human Cloning*

- Debate*. Berkeley: Berkeley Hills Books: 251-267
- Eisenberg, Leon (2000), "Would Cloned Humans Really Be Like Sheep?", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 170-183
- Gould, Stephen Jay (1998), "Dolly's Fashion and Louis's Passion", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 101-110
- Haas, John (2000), "A Catholic Perspective on Cloning", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 276-284
- Heller, Jan C. (1998), "Religiously Based Objections to Human Cloning: Are They Sustainable?", in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 153-176
- Hottois, Gilbert (199), "Aux frontières de l'eugénisme", in Jean-Noël Missa, Charles Susanne, eds. et al., *De l'eugénisme d'État à l'eugénisme privé*. Bruxelles: De Boeck: 143-176
- Humber, James M.; Almeder, Robert F., eds. et al. (1998), *Human Cloning*. Totowa: Humana Press
- Johnson, George (1998), "Don't Worry: A Brain Still Can't Be Cloned", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans*. Berkeley: Berkeley Hills Books: 170-183
- A Reader*. Lanham: Rowman & Littlefield Publishers: 9-11
- Jones Jr., Howard W. (1994), "Reflections on the Usefulness of Embryo Cloning", *Kennedy Institute of Ethics Journal* 4(3): 205-207
- Kahn, Alex (1998), "Clone Mammals... Clone Man?", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 111-114
- Kahn, Axel and Papillon, Fabrice (2000), *A clonagem em questão*. Lisboa: Instituto Piaget
- Kass, Leon (2000), "The Wisdom of Repugnance: Why We Should Ban the Cloning of Humans", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 68-106
- Kass, Leon R.; Wilson, James Q. (1998), *The Ethics of Human Cloning*. Washington: The American Enterprise Institute
- Kitcher, Philip (2000), "Human Cloning", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 136-153
- Kitcher, Philip (1998), "Whose Self Is It, Anyway?", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 67-75
- Klugman, Craig M.; Murray, Thomas H. (1998), "Cloning, Historical Ethics, and

- NBAC”, in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 1-50
- Lewontin, Richard C. (2000a), *It Ain't Necessarily So. The Dream of the Human Genome and Other Illusions*. New York: New York Review of Books
- Lewontin, Richard C. (2000b), “The Confusion Over Cloning”, in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 154-169
- Macklin, Ruth (1994), “Splitting Embryos on the Slippery Slope: Ethics and Public Policy”, *Kennedy Institute of Ethics Journal* 4(3): 209-225
- Mattei, Jean-François (1997), “Le clonage”, in Dominique Folscheid, Brigitte Feuillet-Le Mintier, Jean-François Mattei et al., *Philosophie, éthique et droit de la médecine*. Paris: Presses Universitaires de France: 468-471
- McGee, Glenn ed et al. (2000), *The Human Cloning Debate*. Berkeley: Berkeley Hills Books
- McGee, Glenn; Wilmut, Ian (2000), “A Model for Regulating Cloning”, in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 221-233
- Meilaender, Gilbert (2000), “A Protestant Perspective on Cloning”, in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 268-275
- Meilaender, Gilbert (1998), “Begetting and Cloning”, in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 39-44
- Murphy, Timothy F. (2000), “Entitlement to Cloning?”, in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 212-220
- Murphy, Timothy F. (1998), “Our Children, Our Selves: The Meaning of Cloning for Gay People”, in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 141-149
- National Advisory Board on Ethics in Reproduction (1994), “Report on Human Cloning through Embryo Splitting: An Amber Light”, *Kennedy Institute of Ethics Journal* 4(3):251-282
- National Bioethics Advisory Commission (1998), “Cloning Human Beings”, in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 45-65
- Nuland, Sherwin B. (2000), “The Uncertain Art”, in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 127-135
- Pence, Gregory (1998), “Will Cloning Harm People?”, in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham:

- Rowman & Littlefield Publishers: 115-127
- Pence, Gregory ed. et al. (1998), *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers
- Ravindra, Ravi; Roach, Geshe; LaFleur, William; Simmer-Brown, Judith; Gross, Rita; Weitsman, Sojun (2000), "Buddhist Perspectives on Cloning", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 285-288
- Rieusset-Lemarié, Isabelle (1999), *La société des clones à l'ère de la reproduction multimédia*. Arles: Actes Sud
- Robertson, John (2000), "The Question of Human Cloning", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 42-57
- Robertson, John A. (1998), "Wrongful Life, Federalism, and Procreative Liberty: A Critique of the NBAC Cloning Report", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 85-100
- Robertson, John A. (1994), "The Question of Human Cloning", *Hastings Center Report* 24(2):6-14
- Robinson, Paul (1998), "Prenatal Screening, Sex Selection and Cloning", in Peter Singer, Helga Kuhse eds. et al., *A Companion to Bioethics*. Oxford: Blackwell Publishers: 173-185
- Rorvik, David (1978), *À sua imagem. O primeiro clone humano?* Mem Martins: Europa-América
- Strong, Carson (2000), "Cloning and Infertility", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 184-211
- Tiefel, Hans O. (1998), "Human Cloning in Ethical Perspectives", in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 177-207
- Tooley, Michael (1998), "The Moral Status of the Cloning of Humans", in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 65-101
- Verhey, Allen D. (1994), "Cloning: Revisiting an Old Debate", *Kennedy Institute of Ethics Journal* 4(3): 227-234
- Watson, James (1998), "Moving toward the Clonal Man: Is This What We Want?", in Gregory Pence, ed. et al., *Flesh of my Flesh. The Ethics of Cloning Humans. A Reader*. Lanham: Rowman & Littlefield Publishers: 1-8
- Wickware, Potter (2000), "The Science of Cloning", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 16-41
- Wolf, Susan M. (2000), "Ban Cloning? Why NBAC Is Wrong", in Glenn McGee, ed. et al., *The Human Cloning Debate*. Berkeley: Berkeley Hills Books: 115-126

Zaner, Richard (1998), "Surprise! You're Just Like Me! Reflections on Cloning, Eugenics, and Other Utopias", in James Humber, Robert F. Almeder, eds. et al., *Human Cloning*. Totowa: Humana Press: 103-151