

# Cloning humans: ethical implications for identity and discrimination in contemporary society. An international consensus?

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## Introduction

Cloning and reproduction, and especially cloning the human embryo had already made headlines after the report at one of the American Fertility Society meetings, in 1994, of an experiment describing embryo splitting. This eventually led to Federal funds being withheld from embryo research in the USA, with the consequence of its happening practically solely in the private sector since. The principle of the creation of identical human beings is thus not a new subject, but the method described by Wilmut et al (1997) certainly is. The actual birth of Dolly after somatic nuclear transfer renewed the debate about the meaning of human identity for society. This paper is firmly placed within the several responses triggered by the event, whether from philosophers, practitioners, scientists at the personal level, their representative societies at the professional level, or the larger societal frame as represented by national or international institutions.

The social recognition of an entity is translated into legal terms by its status. The status of the human embryo was discussed for three days in December 1996 at a meeting at the Council of Europe; its nature (a potential for life, life itself?) has led to many debates, all rekindled by this recent scientific achievement. Cloning is indeed a matter also linked to research on preimplantation embryos, and all different types of cloning, namely nuclear transplantation, blastomere separation or bisection elicit discomfort. The terms used by Robertson (1994) highlight some of the concerns: cloning variations threaten as they do «the inherent uniqueness and dignity of individuals» and question the nature of the entity «embryo» by the consequence of creating identical potential persons. In the human, this implies the danger of «trivialisation of the individual by replication».

We may use this statement to outline the concerns debated three to four years later, namely the dangers of «deliberate twinning». The term deliberate is crucial in more than one sense. A deliberate action implies responsibility for that action, and in the field of reproduction, which has created international furor, whom better to refer to than Jonas (1995). He based his ethical

analysis on «the responsibility principle», and stated that the two most awesome kinds of responsibility we may ever face are those of politicians towards society, and of parents to their children. This arguably may be extended to future or planned children, the matter which concerns us in assisted reproduction. It is indeed because we are responsible, or moral subjects, that we wish to analyse rationally the arguments for and against cloning for reproductive purposes. The matter of therapeutic cloning (or the other applications of cloning technology which do not involve the creation of genetically identical individuals) will not be discussed, as it has led to much less a priori reaction of antagonistic and quasi universal dismay.

It is first appropriate in this introduction to dismiss instantly the often used rationalising «nature» counter argument about the natural occurrence of identical twins («Why do we object to cloning humans, as we do not object to the natural existence of spontaneous identical twins?») It is always surprising to see this argument, that if it is not natural, therefore it is wrong, in any bioethical analysis concerning the therapeutic and medical applications of science. Humans differ from other animals by their organisation and integration into a social system, and scientists, doctors and carers of many qualifications commit themselves to a lifelong confrontation with the «natural» events of illness and suffering, thus constantly reversing and tampering with nature.

So what arguments, based on both our personal and social responsibility, shall we retain to analyse the international upheaval of the last two years? To return to the four-year old statement by Robertson, the word «deliberate» is essential in another sense: the objections to cloning cannot be an ontological argument, ontology being the study of the existence itself, in opposition to the nature of things. Interestingly, the introduction of the report by the Group of Advisers to the EU (GAIEB) (1997) states exactly this notion: «as there is no discrimination against twins per se it follows that there are no per se objections to genetically identical human beings». This makes it clear that one must find other arguments than the noumenon («thing in itself») of cloning (its «real existence») to offer as moral objection in order to counter human reproductive cloning. It is to the planning of creating copies of individuals, that objections have been raised the world over, and we shall endeavour here to analyse these other arguments.

The world over, the ethical, societal and legal issues at stake, which go far beyond human reproduction in general, have crystallised some of the essential questions at societal and even political level, let alone scientific and ethical level, asked at the end of this century. I am referring especially to the nature, scientific as well as psychological, of the meaning of our genetic background in a contemporary world which has seen too many historical catastrophes or «disasters», to quote Blanchot (1997), based on assumed differences between human beings, whether supposedly genetic or epigenetic. The consequences of the specific «disaster» which led to the elimination of the stranger seen as the «untermensch» are the several International Declarations of Human Rights revolving around the respect for the dignity of human beings (Jonas, 1995). It is interesting to note that this notion of dignity has been used and analysed one way or another to firmly base the arguments offered against reproductive cloning, together with others like unicity and respect, whilst also evoking the dangers of eugenics and instrumentalisation. I shall therefore try to shed some

light on the different interpretations of these terms in the several national and international responses to this scientific achievement. In the first part, I shall discuss the personal and singular arguments (respect for the dignity and unicity of a person) which are in the introduction of the first international statement in the field of bioethics, the Universal declaration on the Human Genome and Human Rights adopted in November 1997 by UNESCO, including a specific article taking the replication of identical human beings as an example of violation of dignity. In the second part, these notions will be placed in a societal context, as both instrumentalisation and eugenics imply the move from the particular, the singular, the person to first a relation which is dualistic (one person using another as a mere instrument against the Kantian imperative), ie the relation with the other, sometimes the user and the used (instrumentalisation), or this of the couple and their procreative responsibility, both very much anchored in societal context as the first engendered nucleus of this society.

## **Part I. The Person as a Subject: a Singular or Unique Problem of Identity and Dignity**

The terms identity, unicity, respect and dignity have been used in several reports in order to condemn human reproductive cloning, and must be further analysed in order to assess the validity of all the objections offered. It is useful to do this in the context of an overview of the comments and responses of 1997.

Interestingly, the above-mentioned UNESCO declaration on the genome places firmly the dignity of man within the context of uniqueness, whilst the CCNE (French National Ethics Committee) (1997) report to the French President starts with the caveat that personal (including psychological) identity and genetic identity are not to be confused, but stresses that the technique would totally disrupt the relation or balance between genetic and personal identity. The argument of dignity is underlined, using the Kantian categorical precept («to treat each and everyone as an end to themselves and not as mere means to an end»), the use of which led to a hot-blooded debate in the letters pages of *Nature* between A Kahn and J Harris, when the latter stated that this notion of dignity was too loose to make ethical sense. This notion of dignity, though complex, is well analysed in the CCNE report which stresses the relationship between unicity and dignity, and also criticises at the same time the importance of the genetic as determinant of the person at the end of the century. Of course we know that a clone obtained by somatic cell nuclear transfer would not be totally identical to the adult donor of the nucleus, because of the recipient cytoplasm bearing the maternal mitochondria, but more importantly, the same argument can be used against reproductive cloning by embryo splitting and transfer in different surrogate mothers or at different times. To quote the report: «it can be stated with complete confidence: the notion that perfect genetic similarity would in itself lead to perfect psychic similarity is devoid of any scientific foundation. Not even biological identity in an individual can be equated to his nuclear genetic identity, because of the role played by cytoplasmic (mitochondrial) heredity, and more so because

of epigenesis in development. Thus it would be absurd to consider that an adult and his clonal duplicate who must necessarily be born much later, and is bound to have a different life history, could be to any degree presented as two copies of a single and identical person. To believe such a thing would be to fall victim to the reductive illusion which is borne by the dismal confusion between identity in the physical sense of sameness (*idem*) and in the moral sense of selfless (*ipse*). We note that the Latin *ipse* is very much nearer to the notion of identity (oneself), and that *idem* is relating to the notion of identical, at least as seen by others. The report continues: «nevertheless, although to possess the same genome in no way leads two individuals to own the same psyche, reproductive cloning would still inaugurate a fundamental upheaval of the relationship between genetic identity and personal identity in its biological and cultural dimensions. The uniqueness of each human being, which upholds human autonomy and dignity, is immediately expressed by the unique appearance of body and countenance which is the result of the singularity of each genome. One can well imagine the kind of social reality brought about by a production of clones, no longer the fruit of chance and exception, and no longer necessarily coexisting in time. These human beings, individuals in terms of their psyche in spite of their genetic similitude, would be seen in both the literal and the figurative senses of the word, as identical copies of each other and of the cloned individual of which they would truly be a copy. Unlike Dolly, human clones would know they are clones and would know that others see them as clones». Thus, the «predetermination of all the genetic characteristics of a future human being» is «judged ... an offence against the human condition».

The first problem, therefore, seems to be one of lack of liberty for the future person induced by an increase in genetic determinism, and begs two questions. The first concerns autonomy, a principle described in the CCNE report as «support(ed) by the unicity and dignity of the person». One of our duties is to respect the autonomy of subjects. The autonomous human being (which may be defined as «submitted to his/her own laws») may only be threatened in this very quality by facing his/her relatively identical clones.

The second question challenges the assertion that sexual reproduction guarantees freedom, although cloning does not for the potential person thus conceived. This is obviously absurd, for all the argument discussed above, and we have therefore to conclude that even if it were a necessary condition, it is far from sufficient. In the words of the CCNE report, «reproductive cloning would ... inaugurate a new mode of filiation, ... an individual born by cloning would be both a descendant and a twin of an adult. The very concept of filiation could become meaningless.» Here we see interpersonal relationship assuming its symbolic societal meaning (in terms of «civic identity»), and the law intervene as a symbol of what society feels is appropriate at any moment in historical development (hopefully democratically). But more importantly, if there is a link between differences and discrimination of the different potential person, in this case the clone, more phenotypically similar to another than other members of society, less similar to other members of his/her society because the law cannot easily recognise his/her status, can we not argue that the best way to counteract discrimination is to accept differences as a valuable

addition to the rich tapestry of life rather than fear its consequences? Thus, the CCNE concludes we may recognise « that a person's singularity and autonomy, ...are..the two essential elements of the human condition and dignity». I feel that the contrary is more pertinent, which is that it is the recognition and the acceptance of the difference, the tolerance of our differences is what gives us dignity as individuals. Indeed if dignity has to be defined in any essential manner, as it must be if enshrined in international declarations, it is the unique quality of all human beings, also recognised in their differences, even if there is a degree of sameness, which gives us dignity.

At the junction, however, between the societal and the psychological, mention must also be made of the arguments used by the writer and psychoanalyst Kristeva (1991). She argued that we cannot respect and accept strangers if we have not accepted our own part of strangeness, in other words, the stranger within ourselves. In the same analytical vein, the «fantasy of immortality, or the desire for genetic perpetuation at any cost by those who cannot procreate» seem more narcissistic ventures than the often unconscious choice of a reproduction partner. Finally, surmising the psychological doubts of the appropriateness of reproductive cloning concerns, what would happen when there is no sperm to fecundate the egg and make an embryo, but a somatic cell nucleus inserted instead into an enucleated oocyte, for instance a somatic cell from the (sterile, azoospermic) father, from the point of view of the building of the sexual identity of the child? The child may probably be told the usual «seed» (male and female gametes) story (Weil, 1997), and finally make the same sense out of it for his or her sexual identity, but what if this is used by two women in a lesbian couple, an assisted reproductive equation forbidden by French law but not in other legislations, like the English Act, or the lack of legislation in Belgium and Greece for instance?

It seems fair to be wary of the experiment from the point of view of identity in the broad sense. What fantasies would be built by the child in case of cloning from somatic cell remains to be seen, as the asexual quality of the act would then be a reality rather than a fairy tale concerning «seeds». In the US report (1997) commissioned by President Clinton, «fears about harms to the children who may be created in this manner, particularly psychological harms associated with a possibly diminished sense of individuality and personal autonomy» belong to the same analysis.

It now becomes apparent that the notion of unicity, whilst necessary, is not sufficient to justify the quasi universal rejection of the planned replication of human beings, and that its links to the notion of dignity are weak, even if the question of possible discrimination is essential to consider. This is why we must now go from the personal to the societal, add the consideration of the social dimension of the individual, and analyse the two main objections made by several reports, the other dangers of instrumentalisation and eugenics .

## **Part II. Societal Aspects: from the Person as a Subject to the Person as an Object; Eugenics, Instrumentalisation, and the Role of Legislation**

We have seen that the notion of autonomy and respect are used as tools to object to reproductive cloning, but treating the person as an object is a concern present in both the US report, and the European report from the EU experts. This notion of instrumentalisation has already been discussed in the first part, with regards to its connection to the respect of autonomy. One may regard, however, eugenics as an extreme form of instrumentalisation, not between one person to another, but between one group of persons and another group, considered inferior in their differences.

The US Nat Bioethics Commission report on Cloning Human beings first states that there should be a balance between the values that society wishes to reflect and the freedom of individual choices and liberties to be limited. It then underlines the threat to individuality, an argument already analysed in the first part, and the danger of «making rather than begetting children», inconsistent with ideal parenting where parents (should) “embrace both similarities and differences”. The European report from GAIEB (group of advisers to the EU on the ethical implications of biotechnology), after concisely and clearly distinguishing between cloning by embryo splitting and cloning by nuclear replacement and concluding that human reproductive cloning is first unacceptable on the grounds of risks (responsibility is underlined), also mentions the dangers of instrumentalisation and eugenics as objections to the method. One should remark that the grounds of safety are important but would not be relevant any more should the technique indeed prove to be eventually safe for the future child, before further discussing the matter of eugenics.

Amongst the “potential harm to important social values”, the NBAC report qualifies eugenics as “a path which humanity has treaded before for its everlasting shame”, but it does not make an analysis of the notion of eugenics, nor does the European report.

Although Engelhardt has a very liberal discourse, and argues that positive eugenics is totally within the principles of autonomy and beneficence when he states: “if there is nothing sacred about human nature, there is no reason why, with proper reasons and proper caution, it should not be radically changed”, the US report alludes to the disasters of our century when people were treated as disposable objects or “untermenschen” because they did not fit either pseudo medical or a social construct of normality. It also states that a eugenic programme “would propagate dogma about the sort of people who are desirable and those who are dispensable”.

National instruments may be used in legal terms against a disapproved practice. France, for instance, specifically bans eugenic practices in the 1994 Bioethics laws, and is a symbol of the strong feelings associated with the history of eugenics. Similarly, some countries have opted to define and ban cloning in their national laws by reference to a given technique (embryo splitting or nuclear transfer), others have avoided this difficulty by banning cloning whatever process is used. Some ban cloning regardless of the purpose pursued. In other cases, it is cloning with the

intention to create identical individuals which is prohibited and not cloning as a procedure likely to be used, for example, in the development of diagnosis techniques. The attached table is a useful reminder of the comparative national instruments already in place (Lebris and Hirtle, 1997) (Table 1, pp. 116-118).

International instruments, however, are necessarily general in scope and often purely declamatory. Such an instance is the added protocol to the Council of Europe Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the application of Biology and Medicine (Convention on Human Rights and Biomedicine).

On 12th January 1998 in Paris, several members of the Council of Europe signed the additional protocol to the Bioethics convention "on the Prohibition of Cloning Human beings". In his address the Director of European Affairs referred to the "horror story" of the previous week, that of Dr Seed from Chicago claiming that he was ready to clone human beings in the coming months. It was made clear that this addition rules out any exception, even in the case of a completely sterile couple. In the words of the Secretary General to the Council of Europe, human dignity would be imperiled by the instrumentalisation of human being through cloning, and a naturally occurring genetic recombination is likely to create more freedom for a human being than a predetermined genetic make up, thus to preserve the freedom is in the interest of human rights.

This is not the place to enlarge further on this complex subject, including the differences between positive and negative eugenics, but it is obviously to the early 20th century brand of radical eugenics (Weil, 1997) that both reports allude, and which is chastised by several international instruments.

## **Conclusion: the Value of Education and the Duty to Inform**

Both the US and European reports stress the importance of educating the public in order to enable a more democratic process of decision making. The conclusion of the NABC report states: "While we have been able to agree on this and certain other recommended actions, we feel quite strongly that most of the legal and moral issues raised can only be resolved, even temporarily, by a great deal more widespread deliberation and education" and the GAIEB report states that "further efforts must be made to inform the public to improve public awareness of potential risks and benefits of such technologies, and to foster informed opinion. The European Commission is "invited to stimulate the debate involving public, consumers, patients, environment and animal protection associations, and a well structured public debate should be set up at European level." As for the Council of Europe Bioethics Convention, it expresses the need for international cooperation "so that all humanity may enjoy the benefits of biology and medicine".

Whether any other matter related to human reproduction will lead to similar public debate and political activities remains to be seen; but it is reassuring to see the words "*responsibilities and duties*" stressed at international level. This may optimistically be seen as a landmark in the

opportunity to communicate with the public at large about science in general, and reproductive science in particular.

Part of this educational process is to explain the difference between reproductive cloning (which may imperil human dignity through instrumentalisation of human beings), and cloning cells and tissues. The GAIEB report reiterates this in its summary: "as far as the human applications are concerned, it distinguishes between reproductive and non reproductive (research), and also nuclear and replacement and embryo splitting. Limited at the in vitro phase, i.e. as a research tool, as in the possible development of stem cells cultures for repairing organs. As all research, the objective is essential in analysing the ethical quality". It stresses that where allowed, cloning should have the objective either to throw light on the cause of human disease or contribute to the alleviation of suffering; and the embryo should not be replaced in a uterus. Finally, it concludes with a clear condemnation of reproductive cloning, and calls for full information of the public and stimulation of debate.

One would think it very unlikely that many fertility patients would request such a technique for reproductive purposes. The concerns, not only about the safety of the technique which one day may be resolved, but especially for the psychological welfare of the future child are enough to make any prospective parents with a sense of responsibility weary of treading this path. For my part, I welcome the media and political attention to our special field with the firm belief that it can only in the end benefit our patients by informing the public at large of their plight and the need for society's support and acknowledgement.

The recently published five-year moratorium declared by our European Society for Human Reproduction and Embryology on cloning human beings is a befitting conclusion to this saga on the European side; although it is extremely doubtful that cloning will not continue to make headlines for quite some time yet. For instance, in the UK, a public consultation document has recently been published by the HGAC and HFEA, and doubtless its conclusions will be scrutinised at international as well as national level.

The dilemma and concerns about the meaning of our genes and means of transmitting them between generations by more or less natural or therapeutic means will continue, as well as the weight of epigenesis, but first and foremost we must reflect constantly about our duty to the vulnerable child-to-be, and future generations.



## References

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**Table 1**  
**ETHICAL AND LEGAL FRAMEWORK OF HUMAN CLONING**

Conspectus

Sonia Le Bris and Marie Hirtle

Document prepared for the Group of Advisers on the Ethics of Biotechnology of the  
European Commission: June 1997

<b>Countries</b>	<b>Legal Enforcement</b>	<b>Prohibition embryo's cloning</b>	<b>Prohibition oocytes cloning</b>	<b>Sanctions</b>
UNESCO Draft Universal Declaration on the Human Genome	declaratory	yes	yes	political
World Health Organisation Resolution on Human Cloning	declaratory	yes, explicitly	yes, explicitly	political
Council of Europe Convention on Human Rights and Biomedicine, 1997	binding	yes, implicitly	yes, explicitly	political
Council of Europe Recommendation 1046, 1986	declaratory	yes, explicitly	—	na
Council of Europe Recommendation 1240, 1994	declaratory	yes, explicitly	yes, explicitly	na
European Parliament Resolution 16 March 1989	declaratory	yes, explicitly	yes, explicitly	na
European Parliament Resolution 28 October 1993	declaratory	yes, explicitly	yes, explicitly	na
European Parliament Resolution 12 March 1997	declaratory	yes, explicitly	yes, explicitly	na
European Parliament Decision Num. 1110-94/EC	binding	yes, explicitly	yes, explicitly	economic
Australia Victoria Infertility Treatment Act, 1995	binding	yes, explicitly	yes, explicitly	criminal
Australia National Health and Medical Research Council, Ethical Guidelines on ART 1996	binding for addressees	yes, explicitly	yes, explicitly	economic

Countries	Legal Enforcement	Prohibition embryo cloning	Prohibition oocyte cloning	Sanctions
Austria Federal Law regulated medically assisted procreation, 1992	binding	yes, explicitly	yes, explicitly	criminal
Belgium	—	—	—	—
Brazil Federal Medical Council 1992	declaratory	?	?	?
Canada Bill C-47 1996	binding if adopted	yes, explicitly	yes, explicitly	criminal
Denmark Law No 503 24 June 1992	binding	yes, explicitly	yes, explicitly	criminal
France Laws No 94-653 July 1994	binding	yes, explicitly	yes, explicitly	criminal
Germany Law on embryo's protection 1990	binding	yes, explicitly	yes, explicitly	criminal
Greece	—	—	—	—
Ireland	—	—	—	—
Italy	—	—	—	—
Luxembourg	—	—	—	—
Norway Law No. 56 on the medical use of biotechnology 1995	binding	yes, explicitly	na	ns
Netherlands Health Council, Heredity: Science and Society, 1989	declaratory	?	na	na
Netherlands Letter from the Health Ministry to the Parliament, 15 march 1995	declaratory	yes, explicitly	?	?
Portugal National Ethics Committee: Opinion on embryo research, 1995	declaratory	yes, implicitly	ns	ns
Slovakia Law on Health Care, 1994	binding	yes, implicitly	ns	ns

Countries	Legal Enforcement	Prohibition embryo cloning	Prohibition oocyte cloning	Sanctions
South Africa Law on Human Tissues 1983	binding	yes, explicitly	yes, explicitly	criminal
Spain Law No 35/1988 on Assisted Reproduction Procedures	binding	yes, explicitly	yes, explicitly	criminal
Sweden Law No 115 14 March 1991	binding	yes, implicitly	yes, implicitly	criminal
Switzerland Federal Constitution	binding	yes, implicitly	yes, explicitly	criminal
Switzerland Federal Bill on Medically Assisted Procreation, 1997	binding if adopted	yes, explicitly	yes, explicitly	criminal
United Kingdom Human Fertilization and Embryology Act, 1990	binding	yes, explicitly	?	criminal
Human Fertilization and Embryology Act, 1990		explicitly		
USA NIH Human Embryo research panel	declaratory	partially	?	economic
USA NBA Report on cloning, 1997	declaratory	partially	partially	na

For this table, prohibition of cloning = prohibition or impossibility to conceive or create identical human beings or to implant them in utero.

Yes Explicitly = prohibition is directly enunciated.

Yes Implicitly = cloning seems to be prohibited by interpretation of the provisions on uses of gametes, zygotes or embryos in general.

na = Not applicable

ns = Not specified

— = No information

? = Ambiguities

All this information is provided with the best understanding of the authors at June 1997.