

No end in sight to cloning debate

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Britain's recent decision to take up cloning for research purposes¹ has also sparked a new round of debate in Germany about embryo protection and stem cell research. How will this change in the situation affect the talks on an international ban on cloning which have been rekindled at the United Nations within these days? As it turns out, there is no universal consensus on banning all cloning. There is no end in sight to the cloning debate.

Since the birth of Dolly, the cloned sheep, in 1996, it has become clear that, in principle, it is also possible to clone human beings. The debate surrounding "baby cloning" has ensued ever since: time and time again, Italian gynaecologist Severino Antinori, his US colleague, Panayiotis Zavos, and members of the Raël sect, through their company Clonaid, have succeeded in grabbing the headlines by announcing their intention to clone babies or even by announcing that they have already managed to do so. Reputable scientists such as Ian Wilmut, the 'creator' of Dolly, the cloned sheep, have frequently condemned their creed as being 'inhumane' and 'criminal'. By contrast, Wilmut has been and still is in favour of allowing cloned embryos to be used to produce embryonic stem cell lines in order to develop cell replacement therapies. His canvassing has obviously borne fruit: In the meantime, Great Britain has permitted cloning for research purposes, a practice which has prevailed now since August 2004. Ever since 1990, lawmakers in Great Britain have allowed research to be performed

¹ We have opted to use the terms "cloning for research purposes" and "cloning for reproduction purposes" instead of the established terms "therapeutic cloning" and "reproductive cloning" so as not to create the impression that the debate today is already focusing on developed therapeutic options. Cf. Mieth, Dietmar (2001), *Die Diktatur der Gene. Biotechnik zwischen Machbarkeit und Menschenwürde*. Herder, Freiburg i.Br.

using human embryos until the 14th day of development as a means to improve methods of treatment in reproductive medicine. December 1998 saw the publication of a set of recommendations by the Human Fertilisation and Embryology Authority and the Human Genetics Advisory Commission according to which the use of cloning should be permitted for research purposes but not for reproduction. In December 2000, the British parliament reached a decision to allow embryonic stem cell research and cloning for research purposes. Cloning for reproductive purposes was banned under the same law.

In contrast, Germany's Embryo Protection Act, which was passed in 1990, forbids any usage of embryos for research purposes. In addition, the cloning of embryos for no matter what purpose generally represents an infringement of the cloning ban established through the country's Embryo Protection Act (§6).

However, the latest decision by the British government to begin performing cloning for research purposes has also sparked a resurgence in Germany in the debate on embryo protection and cloning.

Four years ago, German Chancellor Gerhard Schröder came out against a "policy of ideological blinkers and universal bans": "For Germany to cut off its nose to spite its own face when it comes to producing under license and application solutions in the day and age of the Single Market and Internet would merely lead to us importing what is banned in our country but permitted in our neighbouring countries."² This free trade logic, whereby, in each case, the most liberal national regulation prevails as the international standard, is supported by the latest claims made by Economics Minister Wolfgang Clement, who would like to tear down the "ethical borders" between countries which have been erected by virtue of different national regulations and, by doing so, promote large-scale stem cell research even in Germany.³

In doing so, the issue at stake is the two-year old Stem Cell Act that permits both the import to Germany of stem cells and the performance of research work using such stem cell lines which already existed prior to the legislation being passed,

² The article appeared in "*Die Woche*" on 20 December 2000.

³ *Aus Brüssel kommen zu viele schädliche Gesetze*". Interview with Wolfgang Clement and the Dutch Economics Minister, Laurens Jan Brinkhorst, in the *Süddeutsche Zeitung* on 25/26.09.2004.

but which, pursuant to the Embryo Protection Act, forbids the creation of embryos for research purposes. As a consequence, cloning for research purposes as a possible means of creating stem cells has once again become a matter for debate in Germany. At present, those against cloning for research purposes still outnumber those in favour. After long and drawn out deliberations, the National Council of Ethics, for example, recently reached a mutual agreement that “cloning for research purposes should not be permitted in Germany at the present time.”⁴ This underscores the legal situation in Germany for the time being – yet makes no reference to human dignity being placed above research and application interests at every stage of human life. Time will tell how long the fundamental “No” pronounced by the Federal Minister for Research and the President of the German Research Association in February of this year on the subject of cloning for research purposes will endure in the light of the experiments that have been conducted by a South Korean research group.

Two objectives, one approach

Normally, an embryo is created by merging an egg cell and a sperm cell. The nucleus of the fertilised egg cell contains all of the genes – in equal portions from both the mother and the father – which the human being needs in order to develop. The different somatic cells that are derived from the fertilised egg cell vary in that only those genes that are needed at the time are “active” and are read. However, the nuclei of the somatic cells, in fact, contain the entire genetic material, and this is put to use by researchers in the cloning process. With cloning, the nucleus is removed from a somatic cell and planted into an unfertilised egg cell from which the nucleus has previously been removed. The egg cells containing the new genetic material can split in the laboratory and develop into embryos. It would appear that messengers in the cytoplasm of the egg cell cause those genes to be “activated” that control the development and those genes to be “deactivated” which determine the metabolic processes in specialised tissue. Very little is known about what actually happens during this

⁴ National Council of Ethics: Statement on “Cloning for Reproduction Purposes and Cloning for Biomedical Research”, Berlin 13.09.2004, p. 70.

type of “reprogramming”. Up to this step, cloning for research purposes and cloning for reproductive purposes do not differ from one another.

Cloning for reproductive purposes

Once the cloned embryo is transferred to the uterus of a woman, it is possible for it to develop into a child. This child would then be the genetic twin of the human being from whom the nucleus of the cloned egg cell originated. The cloned child would therefore have only one biological parent. Despite numerous press releases to the contrary, a cloned baby has yet to be born – that is, proof of such a birth is still outstanding at least. However, the technology to do so is available, even though we are aware from animal testing that only a small percentage of cloning experiments produce animals capable of staying alive. The majority of cloned embryos perish at an early stage in their development. The few animals that are actually born are usually seriously ill and, among other things, are too big for their age and suffer from heart and lung defects, arthritis, obesity and cancer. Prior to the first cloned sheep being born, 276 other experiments had failed.⁵ This means that cloning experiments are “trial and error” experiments with an uncertain outcome; achieving success is the exception whilst failure is the rule. This also explains why renowned scientists throughout the world are in agreement that cloning for reproduction purposes is not justifiable, at least at today’s level of research.

Cloning for research purposes

In contrast, cloning for research purposes in order to develop new therapies or medically relevant applications is perceived by many in the international scientific community as a great opportunity. In terms of technology, this process is commensurate with producing embryonic stem cell lines, with the exception that cloned embryos are used and not “normal” embryos that have been created in the laboratory: The cloned embryos are left to develop for a few days in the

⁵ Cf. also the article entitled “*Klonen von Tieren*” published by the Committee for Education, Research and Technology Impact Assessment of the German Bundestag, 14th legislative period, of 2 August 2000. Publication 14/3968.

laboratory until such time as the actual embryonic state forms inside a hollow ball of cells (blastocysts). These embryonic stem cells are then removed and cultured separately. Under the appropriate culturing conditions, it should be possible to grow a variety of tissue such as muscle and nerve tissue from the cloned embryonic stem cells in the same way as this is achieved using “normal” embryonic stem cells. The idea behind this is that pathologically damaged tissue may be regenerated using the body’s own matter. For example, myocardial muscle tissue could replace damaged coronary tissue, or nerve tissue could be used to help patients suffering from Parkinson’s disease.

In February, the journal “Science” published a story that a team of South Korean researchers had become the first to succeed in cloning a human embryo and obtaining viable stem cells for development. The researchers removed a total of 242 egg cells from 16 women who had been recruited for the purposes of conducting the cloning experiments. From these egg cells, 30 five-day-old embryos (blastocysts) materialised from which 20 stem cells were removed, which ultimately resulted in one single stem cell line being obtained. In turn, this stem cell line developed further into precursor cells for various types of tissue.⁶ This is regarded as being the first step towards therapy development. According to stem cell researcher Rudolf Jaenisch, there are still “many years of research work ahead before there can be any talk of transferring stem cells to human beings”.⁷

At this juncture, some might question the benefits of such an approach as opposed to “normal” embryonic stem cell research. The answer is simple: If the initial cell comes from the patient, it can be assumed that the patient’s immune system will not perceive the therapeutic cells as “foreign” and reject them. Yet, there are alternatives to this procedure: A third research approach exists that is less dubious in ethical terms: adult stem cell research, through which the stem cells in the patient’s own body are utilised for therapy development. Here, too, there are no indications the patient’s body would reject the cells. It is fair to say

⁶ Science, 12 March 2004.

⁷ Spiegel online, 12 February 2004.

that, to date, cloning for research purposes is no more than a scientific model and that nobody can currently say whether, when or for what diseases it may ever be possible to develop therapies. Even more speculative again is the issue of what prospects for success exist and what risks are involved for patients with respect to these therapies. In experiments, animals that have received preparations developed from cloned stem cells develop tumours. As a result, the initial applications of cloning technology can be expected to emerge more in pharmacological testing, where tissue cultures grown from stem cells are tested for individual reactions to active substances. The latest research findings indicate that it may well be possible to use cloning technology to grow egg and germ cells.

One approach – two different evaluations

Regardless of whether the objective is medically assisted reproduction or research,

the basic technology, that of human cloning, remains the same. However, the ethical discussions surrounding cloning for research purposes and cloning for reproduction purposes differ significantly. While those researchers seeking to clone babies are virtually unanimously perceived as charlatans or criminals, cloning for research purposes is seen as a highly contentious but, at the same time, distinguished research field.

Cloning for reproduction purposes

Severino Antinori and Panayiotis Zavos maintain that cloning can help childless parents have their own offspring. Yet, for this purpose, which is one of the main objections against cloning due to the risks involved and the few chances for success, two other, far less dubious approaches, that of in-vitro fertilisation or even adoption, are available,. Cloned babies would in all probability be born with severely impaired health. It is also conceivable that they would inherit the “genetic age” of their twin and live a correspondingly shorter life. No matter how great the desire may be to have one’s own biological child, cloning for

reproduction purposes – given the level of knowledge currently available in natural science and medicine – cannot be justified on scientific or ethical grounds. On this much, there is a consensus. However, supposing the success rates improved significantly, the development of cloned babies could be controlled more adequately and the risks reduced appreciably, do the same objections then continue to exist? “Nothing does more for success than a healthy child,” remarked Robert Edwards, the creator of the first in-vitro “test-tube baby”, Louise, in 1978, in summarising the incorporation into society of modern reproduction medicine.

The arguments against cloning for reproduction purposes must be of a fundamental nature or they will not withstand the interaction of technological progress and freedom of consumption. Cloning a baby would be linked to creating a human being that is genetically identical with another human being and, at the very least, be very similar to that human being. The main argument in favour of cloning for reproduction purposes is a very liberal understanding that people should have the freedom to reproduce. Some argue in the name of freedom to reproduce that it is only decent and proper to allow parents who have lost a child to want to recreate this child through cloning. Yet, not even the desires of one parent wanting to reproduce an original copy of him- or herself or the desires of some women not to be dependent on men willing to reproduce are in any way considered to be totally absurd by all ethicists. “What is wrong with that?” asks philosopher Johann Ach, for example.⁸ Outright advocates are hard to find, on the other hand.

Certainly, a cloned child would face exceptionally high levels of expectation, which, whilst not completely preventing the child from developing its own personality, most certainly would have a serious impact on it. The child’s right to mental integrity would be at fundamental risk as a consequence. In contrast to harmful forms of upbringing, to which a person can at least behave reflexively,

⁸ Ach, Johann (1998), Hello Dolly? Biotechnology, biomorals and bioethics. In: Ach, Johann/Brudermüller, Gerd/Runtenberg, Christa (Editor), Hello Dolly? Über das Klonen. Suhrkamp, Frankfurt a.M., p. 123-155. Similar: Brock, Dan W. (2003), Reproduktives Klonen beim Menschen: Einige moralische Fragestellungen. In: Klonen in biomedizinischer Forschung und Reproduktion. Wissenschaftliche Aspekte – Ethische, rechtliche und gesellschaftliche Grenzen. Editor Ludger Honnefelder, Dirk Lanzerath, Bonn, p.197-207.

determining the genetic constitution of a child would irreversibly deprive that child of all opportunities to act.

Another argument that is purported relates to the fact that the cloning of human beings would endanger the biological integrity of all humanity.⁹ This position must be seen against the background of “consumer eugenics” in the USA, where advertising has already begun saying that “designer babies” can be created by selecting their sex as well as other traits that are in demand. Cloning for reproductive purposes would propel this trend and could lead to a divide emerging between the “GenRich” and the “Naturals”.¹⁰ On the other hand, given the experience that has been made with eugenics, it is problematical to speak of a presumed danger to the inherited genes rather than highlighting human dignity and the possible infringements thereof.

Jürgen Habermas introduced another far-reaching argument against cloning into the debate when he maintained that the lack of availability of our biological origin which - depending on our cultural or religious background, we define as chance, createdness or natural adaptation – is part of our fundamental self-image: we would no longer perceive ourselves “as autonomous beings having equal rights and abiding by moral reasons”.¹¹ He goes on to argue that liberal eugenics geared to individual preferences will cause the morality of human rights subjects to slide - with unforeseeable consequences for our social interaction.

Cloning for research purposes

The ethical debate on cloning for research purposes is far more concise. The issue here is whether there is any ethical justification for creating cloned human embryos and using them for research.

Those in favour of cloning for research purposes justify this, first and foremost, by the hope and expectation that new therapies can be developed for curing

⁹ Hayes, Richard (2003), The new human genetic technologies: a threshold challenge for humanity. Lecture held at the University of California at Berkeley Energy and Resources Colloquium. 24 September 2003.

¹⁰ Hayes, Richard (2002), The Science and Politics of Genetically Modified Humans, World Watch. Special Issue Beyond Cloning, July/August 2002, p. 11-12.

¹¹ Habermas, Jürgen (2001), Die Zukunft der menschlichen Natur. Auf dem Weg zu einer liberalen Eugenik? Suhrkamp, Frankfurt a.M., p. 115.

people suffering from critical illnesses. In the ethical discussion, there is full consensus that great importance must be attached to medical progress. One bone of contention, however, is the matter of how achievable the hoped for therapeutic goals (“Alzheimer therapy”) actually are and whether adult stem cell research is being neglected as a potentially equally effective or even the better option. At the same time, criticism is being voiced as to whether this type of customised therapy, whereby separate stem cell lines would need to be developed for each individual patient, will not result in significant equality issues emerging as these would barely be fundable by public health systems, even in rich countries.¹² On an international scale, these doubts are reinforced by the fact that a move towards customised cloning-based therapy will inevitably cause the focus on research and the range of therapies at international level to shift away from people in the poorest countries in the world, where Aids, malaria and famine prevent them from growing so old, so that they would never be able to benefit from any form of treatment against Alzheimer’s.¹³

Furthermore, it has yet to be decided where the enormous number of eggs should come from that are needed in cloning for research purposes and which would certainly be required for any future therapeutic applications that may result. Even today, in countries where the practice is permissible, there is a shortage of eggs being “donated” for the treatment of couples who are childless through no fault of their own, in spite of appeals having been made to the altruism of young women and despite various incentive schemes. The fact that acquiring eggs for the woman in question is associated with enormous stress and health risks due to the need to undergo hormone treatment and invasive surgery raises the issue of the ethical justification of using eggs for other women.¹⁴ Consequently, there would appear to be good reason to question the “solution”

¹² Françoise Baylis, “Canada bans human cloning”, Hastings Center Report, May-June 2004, p. 5.

¹³ Chan, Chee-Khoon (2003), Commodification and Market Driven Biomedical Research. Lecture held at the Berlin Conference entitled “Within and Beyond the Limits of Human Nature”, 13 – 15 October 2003. www.biopolitics-berlin.org

¹⁴ Cf. with these arguments: Schneider, Ingrid (2001), Embryonic stem cell research – ethical and socio-political criticism. In: Graumann, Sigrid (Editor), Die Gen-Kontroverse. Grundpositionen. Herder, Freiburg i.Br., p. 128-147. And: Kollek, Regine (2001), Falsche Rechtfertigungen und vernachlässigte Alternativen. Also in: Graumann (Editor), p. 148-156.

that England's "Centre for Life" at the University of Newcastle claims to have found for acquiring eggs. This Centre, which also houses a reproduction clinic and a centre for stem cell research, was granted permission in August of this year by the relevant authority, the HFEA, to clone human embryos. The stem cell researchers intend to acquire the egg cells needed to do so from women who are receiving assistance at the reproduction clinic in bearing a child. No information is available as to whether a price reduction will be granted for in-vitro fertilisation if additional egg cells are "donated". By all accounts, the only egg cells that are to be used are those that cannot be fertilised and are therefore "superfluous". Yet doubts need to be raised here: After all, why of all egg cells should those with limited functionality be suited to the extraordinarily exhausting cloning process? A therapeutic application of cloning would almost inextricably be linked to developing egg cell markets whereby it would be virtually impossible to exclude the exploitation of underprivileged women.¹⁵ This argument against cloning for research purposes could potentially be invalidated, if there were a means of producing egg cells without the need for donating egg cells, for example by making them from stem cells. This hope was raised when a research team headed by Karin Hübner and Hans Schöler and based at the University of Pennsylvania, USA, succeeded in developing egg-cell-like structures from mouse stem cells. However, it is still uncertain whether this experiment can be transferred to human stem cells and whether artificially produced egg cells really do offer the same potential as "real" egg cells.¹⁶

Still, the main contentious issue surrounding the ethical debate is the question of whether the cloning of embryos violates human dignity. As the Dolly experiment has made apparent, cloned embryos have the potential, under the right conditions – i.e. in a woman's uterus – to develop into a child. From an ethical point of view, they would consequently have to be treated in the same way as "normal" embryos. For advocates of the standpoint that assumes that, from the

¹⁵ Cf. here Schneider, Ingrid (2003), *Gesellschaftliche Umgangsweisen mit Keimzellen: Regulation zwischen Gabe, Verkauf und Unveräußerlichkeit*. In: Graumann, Sigrid/Schneider, Ingrid (Editor), *Verkörperter Technik – entkörperter Frau. Biopolitik und Geschlecht*. Campus, Frankfurt a.M., p. 66-80.

¹⁶ Science 23 May 2003.

moment it comes into being, a human life is afforded human dignity and an innate right to life itself, the creation of embryos with the specific aim of using them is fundamentally ethically unacceptable no matter how the embryos themselves came into being. Certainly, there are good reasons for sharing this standpoint: It assumes that human dignity and the universal application of all rights founded upon human dignity are inseparable and bestows the same moral status on pre-birth life that applies to post-birth life. The opposing standpoint places a dependency of the moral status of human life on empirical qualities. To do so, references are often made to biological criteria such as the loss of the ability to have twins, nidation, the formation of the nervous system, the full development of organs or a person's ability to live. In doing so, it should be considered that, whilst biology can provide information about the individual phases in the development of the human organism, it cannot do the same about its ethical valuation. Others make the moral status of a human being dependent on ethically relevant criteria such as the ability to suffer, self-esteem, rationality or ability to act. However, such criteria for attributing human dignity – to the extent that we can actually refer to this as being human dignity – are, to an increasing degree, becoming more or less arbitrary and also result in morally questionable consequences. Not only embryos but also all other human beings that do not conform with the respective criteria, such as infants, the severely mentally handicapped, comatose or demented people, could then be attributed little or no human dignity.

It would appear that inseparability of human dignity cannot be renounced without having to accept certain dubious moral consequences. Should a possible conditional or layered attribution of human dignity be accomplished in society and politics, it is to be feared that the way people see themselves will fundamentally change. Not only pre-birth life but also other people, who have not been given the respective traits or abilities, would then no longer be protected under the banner of human dignity. For this reason, we should always bear in mind that human dignity is not something that is acquired and also not something that can be taken away.

At a conference on cloning organised by the Federal Ministry for Research in Berlin in May 2003, biologist Rudolf Jaenisch presented the view that cloned embryos should not be afforded the right to live since the majority of them were damaged and could not develop into “normal” human beings anyway.¹⁷ Whilst it is true that cloning for reproduction purposes should be rejected on the grounds of the principle of non-impairment, it is not tenable to deny damaged embryos the right to live when it is granted to undamaged embryos. Doing so would infringe the right of equality that is founded in human dignity. Certain members of the National Council of Ethics have attempted to counter this argument by propounding a kind of “clean-up of terminology”: Cloned embryos, they argue, are not natural human beings; in contrast to embryos that result from natural or artificial insemination, they are entities *sui generis* and have no claim to human dignity.¹⁸

As the debate on stem cell legislation has shown, the “standpoint supporting the protection of life” linked to ensuring human dignity which has been outlined here is still the position most widely supported by politicians in Germany. However, in political circles at international level, it is a position that is not shared by many advocates who come from a different cultural or religious background, as can be deduced by the draft for a European Constitution and the talks on a UN Cloning Convention.

EU Constitution and UN Cloning Convention

Does the interpretation of the guaranteed right to human dignity, as stated in Sect. 1 of the German Basic Law, go too far? The German Minister of Justice posed this question in a speech which she gave in October 2003 entitled “From

¹⁷ Jaenisch, Rudolf (2003), Die Biologie des Kerntransfers und das Potential geklonter embryonaler Stammzellen: Implikationen für die Transplantationstherapie. In: Klonen in biomedizinischer Forschung und Reproduktion. Wissenschaftliche Aspekte – Ethische, rechtliche und gesellschaftliche Grenzen. Published by Ludger Honnefelder, Dirk Lanzerath, Bonn, p.221-249.

¹⁸ National Council of Ethics: Statement on Cloning, p. 46; Jens Reich: „Empirische Totipotenz und metaphysische Gattungszugehörigkeit bei der moralischen Beurteilung des vorgeburtlichen Lebens“. Zeitschrift für medizinische Ethik (50) 2004, p.115-130, especially the conclusions on p. 130: “Therapeutic cloning does not use any human beings in the normative sense of the word and can thus not be categorically prohibited.”

Procreation to Production? Bioethical Issues pertaining to Constitutional Law and Legal Policy". In the final analysis, she speaks out in favour of carefully breaking into embryo research, but against cloning for reproduction and research purposes. At European level, this is an issue which needs to be tackled urgently. In this context, it is worth mentioning that the draft of the European Constitution is the first document of its kind to contain a fundamental rights charter which places "the human being" – and not only the homo oeconomicus – at the heart of European unification and thus, with the German Basic Law clearly echoing in the background, attaches the highest priority to respecting human dignity¹⁹. However, it is striking that, against the background of these values, the constitutional draft prohibits cloning for reproduction purposes but does not prohibit cloning for research purposes. Just like in the additional protocol to the "Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine" on banning the cloning of human beings²⁰, which the Council of Europe passed in 1997, the definition as to from what point onwards life needs to be protected and thus a decision on the admissibility of cloning for research purposes has been transferred to the responsibility of national statutes. However, it is encouraging to note that it has been possible to include the respect for and the protection of human dignity into the European Constitution. German politicians must now push to incorporate the human rights concept which applies in Germany into the next draft stages of European constitution and must strive to achieve a degree of harmonisation that tallies with the German perception of "high level".

The fact that cloning has two objectives, but only one approach, has also dominated the UN talks on a cloning convention over the past two years.

In February 2003, the German Parliament voted overwhelmingly that "every artificial production of human embryos by way of cloning" is irreconcilable with

¹⁹ Draft for a Constitution for Europe, submitted to the European Council on 20 June 2003: Preamble Part I ("individual at the heart of its activities"), Sec. I-2 ("respect for human dignity"), Preamble Part II ("human dignity"), Sect. II-1 ("Human dignity is inviolable. It must be respected and protected.")

²⁰ Sect. 1 of this additional protocol: "Any intervention seeking to create a human being genetically identical to another human being, whether living or dead, is prohibited."

the universally accepted concept of human dignity.²¹ The German government was called upon to work towards implementing a comprehensive, worldwide ban on all forms of cloning.

Prior to the talks commencing, the German and French governments had elaborated a joint strategy paper. Based on the assumption that it would be almost impossible to convince all countries to implement a “total ban”, a compromise strategy was developed: The concept of this strategy was to implement a ban on cloning for reproductive purposes and to oblige the signatory states to pass national regulations on cloning for research purposes. The Franco-German partners hoped to reach a consensus as a result. It was expected that states which had yet to pass any regulations would implement comprehensive bans due to the ensuing debate in their own country. Among other things, this strategy focused on those states that, whilst advocating a total ban at the UN, have no national regulations in place as yet.²² This also includes the United States that officially supports a total ban on the one hand, but tolerates extremely unregulated domestic research practices on the other. Both internally and externally, the United States has been accused of pursuing a dual strategy in certain instances: that of resolutely calling for a total ban as a response to the demands made by influential Christian-conservative circles on the one hand, while, at the same time, flirting with their equally influential corporate free-market friends by blocking an agreement based on consensus and thus avoiding pressure to have to pass national regulations.²³ The example of the USA also illustrates just how deceiving the impression given by nationally uniform positions can be. Consequently, it is generally considered that, in the majority of countries

²¹ Bundestags Drucksache (printed matter) 15/463 of 18.02.2003

²² Compare the overview in the Policy Paper of the Center for Genetics and Society “National Policies Governing New Technologies of Human Genetic Modification: A preliminary survey” (<http://www.genetics-and-society.org/policies/survey.html>)

²³ In the USA, there are no statutory limitations for biomedical research activities – public research funding is the steering tool: The National Institutes of Health (NIH) are allowed to grant research funds for conducting research on already produced embryonic stem cell lines. Research projects with embryos specifically produced for research purposes, the planting of human cells into animal egg cells as well as “therapeutic cloning” and “reproductive” cloning may not be funded. No comparable restrictions for the private economy. In some US states, there are even legislative initiatives aimed at allowing cloning for research purposes.

- at least in those states where an open discourse on cloning is actually taking place – the debate is extremely heated.

During the talks, two “blocs” formed, one led by Costa Rica and the other by Belgium. Costa Rica called for a ban on both cloning for research purposes and cloning for reproduction purposes. Ultimately, this motion would have been backed by no less than 56 states, among them Spain, Italy and the United States. The German Foreign Office opted not to join this bloc, but stuck to the consensus strategy agreed with France.

To everyone’s surprise, Belgium adopted the contents of the Franco-German paper in its formulation of a counter-motion. This motion sought to ban cloning for reproductive purposes but to cede cloning for research purposes to national regulations. The motion would have been backed by Great Britain, China and 30 other states. Although it clearly followed the Franco-German strategy paper, the German Foreign Office did not want to support this motion either. One reason for not doing so was that the obligation to regulate cloning for research purposes was formulated too weakly. However, another reason for the German Foreign Office assuming this posture may be that, if it were to have come down to a crucial vote, the Franco-German objective of reaching a consensus with the community of states would have failed.

In the end, the call for a vote was vetoed by Germany. The talks in the General Assembly were initially suspended for a period of two years on the proposal of the group of Islamic countries led by Iran; the task of drafting a convention was transferred to a working group. Meanwhile, the situation has changed again: Talks on drafting a convention are set to recommence in the General Assembly in October 2004.

And what lies ahead?

Germany’s behaviour during the UN talks has triggered a nationwide debate as to whether or not the government line has undermined Parliament’s mission. Given the standpoint upheld by the majority of members of the German

Parliament, it is not to be expected that the values will be reversed or that the legal position in Germany will be liberalised overnight. Therefore, it seems rather unlikely that, by pursuing such a strategy, the German government had intended to keep the back door open for cloning for research purposes, not even for German researchers, simply because potential German researchers would hardly benefit from a liberal international regulation on cloning for research purposes.

In retrospect, the question remains as to whether the German strategy was the right one. In the end, the strategy averted a crucial vote but at the same time has led to a situation where no regulations on cloning could be passed at all. The signal that could have been sent would have favoured a total ban, including in the United States, even though it would not have been supported by all states. Critics of cloning for research purposes in these countries would have been greatly encouraged by this.

On the other hand, a ban on cloning not reached by consensus within the community of states could not prevent Antinoris and Zavos from continuing their efforts in the countries that do not support the convention. The latter argument speaks for the Franco-German initiative to agree upon a ban on cloning embryos for reproduction. However, this would send a signal that cloning for research purposes could be assessed in various ways depending on cultural and religious values.

The negotiations on an international convention on cloning have highlighted yet another problem: Many delegations are obviously focusing more strongly on their national discussions and interests than on the need for international regulations. Due to the fact that biomedical research is not bound to national territories and can make use of “insular solutions” at any time, there is a clear lack of international civil-society-driven discourse which international regulation initiatives could and should refer to.

In concrete terms: No civil-society-driven discourse is taking place outside or independently of the scientific community. Indeed, statements made by the international scientific community this year clearly point to its intention to exert

influence where it can: At the end of August, the InterAcademy Panel, an umbrella organisation for the national Academies of Science, submitted a declaration signed by 67 of its 90 members calling for a UN convention to ban cloning for reproduction purposes and to permit cloning for research purposes.²⁴ However, there is still no sign of an international debate led by civil-society which critically highlights the research side.

A first small step towards initiating such an international civil-society discourse was taken by the Heinrich Boell Foundation in cooperation with the Centre for Genetics and Society in California and the “Institut Mensch, Ethik und Wissenschaft” (Berlin) which jointly held a conference in Berlin in October 2003 entitled “Within and Beyond the Limits of Human Nature”.²⁵ Around 90 representatives from NGOs and the scientific community from 70 organisations based in 30 countries spanning every continent above all discussed strategic issues relating to an international network: How can civil-society groups set up effective networks which bring together the viewpoints of NGOs from North and South and which take into account existing differing areas of interest, such as the environment, human rights, women and women’s health, health, disabled people’s rights and secular and religious orientation, etc.? How can the issues of reproductive technology, its exploration and marketing be combined with criticism of the global inequality found in health care systems? How can international civil society productively handle the tension that arises from rejecting prenatal diagnosis techniques and embryonic research on the one hand, and defending the rights of women to have an abortion on the other hand? Is it possible to use the numerous civil society activities that oppose genetically modified plants and food to criticise “the making of human beings”? Are there any parallels between liberal-secular arguments against “consumer eugenics” and the religious-conservative commitment to protecting life? The importance of not perceiving the social impact of applying new forms of human genetic engineering in an isolated manner has been exposed. The consequences of new technology, and the need

²⁴<http://www4.nationalacademies.org/iap/iaphome.nsf/weblinks/WWW-5RHFLT?OpenDocument>

²⁵ The conference is documented under: <http://www.biopolitics-berlin2003.org/>.

and basis for national and international regulations only really become apparent when analysed against the background of marketing health care systems, in the context of the issue of social justice and as part of global intellectual property regimes. In spite of different standpoints on individual topics, there have been and still are opportunities to achieve future global cooperation – with regard to both cloning and other areas of biomedical research²⁶ But we have little time to waste.

²⁶ Since the Berlin Conference these issues were discussed by the Heinrich-Boell-Foundation and members of the network in a series of international workshops, meetings and conferences: At several conferences in Brasil (see „Biopolíticas: <http://www.boell-latinoamerica.org>), at the major biopolitical conference “Privatization of Nature and Knowledge. Under the BIOS Sign: Technology, Ethics, Diversity and Rights“ Oktober 2004 in Mexiko (see: http://www.boell-latinoamerica.org/download_es/ProgramaBiopoliticaexternoactualizado2309.doc), at the 7th World Conference of Bioethics, Sidney/Australia, a biopolitical workshop in South Africa, whose aim is to organise a major biopolitical conference for Southern Africa, as well as at numerous activities in Europe (European Social Forum, October 2004), Intervention at the meeting of the International Bioethics Committee of UNESCO in May 2004 and biopolitical meetings on the contemporary understanding of human dignity in Germany.