Santa Clara University
School of Law

Santa Clara Journal of International Law

Volume 4 | Issue 2 Article 3

2006

Human Clones and International Human Rights

Kerry MacIntosh

HUMAN CLONES AND INTERNATIONAL HUMAN RIGHTS

Kerry Lynn Macintosh*

For several years, the United Nations (U.N.) has struggled with the question of whether and how to regulate human cloning. Despite widespread agreement that reproductive cloning should be banned, member states are divided on the question of whether research cloning should be allowed to continue. Some believe that stem cells harvested from cloned embryos could be used for medical research and therapies.[1] Others argue that it is immoral to create embryos that have no chance at life, solely to harvest their cells for the benefit of others.[2]

Unable to bridge this ideological divide, the Sixth Committee (Legal) of the General Assembly abandoned the effort to draft an international convention against human cloning, and established a Working Group to draft a non-binding declaration instead.[3]

During this process, Honduras proposed the United Nations Declaration on Human Cloning (Declaration). The proposal called upon member states to "prohibit all forms of human cloning inasmuch as they are incompatible with human dignity and the protection of human life."[4] In other words, the Declaration condemned both research and reproductive cloning.[5]

On February 18, 2005, the Sixth Committee voted 71 to 35 with 43

---

* Professor of Law, Santa Clara University. I am deeply grateful for the advice I have received from Professors June Carbone, Dinah Shelton, Barbara Stark, and Beth Van Schaack. Their expertise in the field of international human rights has helped me enormously.

1 In accordance with this view Belgium proposed an international convention against reproductive cloning only. Twenty-two other U.N. members joined Belgium, including China, France, Greece, Japan and the United Kingdom. *See* U.N. GAOR, 59th Sess., 516th mtg. at 3–5, U.N. Doc. A/59/516 (Nov. 19, 2004).

2 Consistent with this view, Costa Rica proposed an international convention against all human cloning. Sixty-one other members of the U.N. joined Costa Rica, including Australia, the United States, and many countries in Latin America and Africa. *See id.* at 1-3

3 *See id.* at 7.

4 U.N. Gen. Assembly, Sixth Comm., Working Group Established Pursuant to Gen. Assembly Decision 59/547 to Finalize the Text of a United Nations Declaration on Human Cloning, *Report of the Working Group Established Pursuant to General Assembly Decision 59/547 to Finalize the Text of a United Nations Declaration on Human Cloning*, Annex I, subsec. b, U.N. Doc. A/C.6/59/L.27/Rev.1 (Feb. 23, 2005).

5 Thus, the Declaration went farther than the earlier Universal Declaration on the Human Genome and Human Rights, which provided: "Practices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted." UNESCO Gen. Conf. Res. 29 C/Res. 16, art. 11, *reprinted in* Records of the General Conference, UNESCO, 29th Sess., 29C/Res. 19, at 41 (1997); adopted by the U.N. General Assembly in the Universal Declaration on the Human Genome and Human Rights, G.A. Res. 53/152, U.N. GAOR, 53d Sess., 152d mtg., U.N. Doc. A/RES/53/152 (Mar. 10, 1999).

abstentions to recommend to the General Assembly the adoption of the Declaration.[6] This outcome was a big disappointment to advocates of research cloning. Belgium immediately declared that it did not feel bound by the decision, and the United Kingdom declared that research cloning would continue to be permitted there.[7]

Despite such protests, on March 8, 2005, the General Assembly voted 84 to 34 with 37 abstentions[8] to approve the Declaration.[9] The United States and Australia were among those countries voting in favor of the Declaration.

The Declaration seems likely to provoke debate on a number of points. First, it does not define human dignity or explain why both research and reproductive cloning are incompatible with human dignity.[10] This offers scholars, politicians, and others a golden opportunity to offer their own interpretations.

Second, international human rights treaties and prior declarations have been carefully worded to avoid any explicit recognition that unborn children have a right to life.[11] The Declaration, by contrast, characterizes

6 *See* U.N. GAOR, 59th Sess., 516th mtg. at 5, U.N. Doc. A/59/516/Add.1 (Feb. 24, 2005).

7 *See* Associated Press, *U.N. Committee Adopts Cloning Resolution*, Fox News, Feb. 19, 2005, http://www.foxnews.com/printer_friendly_story/0,3566,148134,00.html.

8 *See* Press Release, General Assembly, General Assembly Adopts United Nations Declaration on Human Cloning by Vote of 84-34-37, U.N. Doc. GA/10333 (Mar. 8, 2005), *available at* http://www.un.org/News/Press/docs/2005/ga10333.doc.htm [hereinafter U.N. Press Release].

9 *See* G.A. Res. 59/280, Annex, U.N. GAOR, 59th Sess., 280th mtg., U.N. Doc. A/RES/59/280 (Mar. 23, 2005).

10 After voting on the Declaration, many U.N. representatives made public statements but did not elaborate on the relationship between cloning and human dignity. *See* U.N. Press Release, *supra* note 9. Unfortunately, documents leading up to the approval of the Declaration are not particularly illuminating. Committee reports during the abortive effort to produce an international convention reflect a consensus that reproductive cloning raises moral, religious, ethical and scientific concerns, and has far-reaching implications for human dignity. However, the reports do not lay out arguments or specific facts in support of this consensus. See U.N. Gen. Assembly, Sixth Comm., Working Group on an International Convention Against the Reproductive Cloning of Human Beings, *Report of the Working Group on an International Convention Against the Reproductive Cloning of Human Beings*, Annex II, U.N. Doc. A/C.6/57/L.4 (Sept. 30, 2002); U.N. Gen. Assembly, Ad Hoc Committee on an International Convention against the Reproductive Cloning of Human Beings, *Report of the Ad Hoc Committee on an International Convention against the Reproductive Cloning of Human Beings*, ¶ 11, U.N. GAOR, 57th Sess., Supp. No. 51, U.N. Doc. A/57/51 (Feb. 25, 2002). Perhaps U.N. diplomats framed cloning in terms of human dignity because that concept is broad enough to encompass a wide range of arguments against both reproductive and research cloning. *See, e.g.*, WHO.int, A Dozen Questions (and Answers) on Human Cloning, http://www.who.int/ethics/topics/cloning/en/ (last visited May 9, 2005) (listing a hodge-podge of anti-cloning arguments under the heading of dignity).

11 *See* Philip Alston, *The Unborn Child and Abortion under the Draft Convention on the Rights of the Child*, 12 Hum. Rts. Q. 156, 161, 178 (1990); Dinah Shelton, *International Law on Protection of the Fetus*, in Abortion and Protection of the Human Fetus 1, 14 (Stanislaw J. Frankowski & George F. Cole eds., 1987). For example, in the "Baby Boy" case, the Inter-American Commission on Human Rights found that legalized abortion did not violate the right to life guaranteed in the American Declaration of Rights and Duties of Man (ADRDM). The Commission reasoned that the drafters had rejected language that would have explicitly extended the right to life to the unborn. The Commission also rejected the

experimentation on cloned embryos as incompatible with the protection of human life. In so doing, it implicitly challenges the non-status of the unborn in international human rights law.[12]

Third, the Declaration seems to assume that laws against cloning can actually stop cloning. If this assumption is correct, no human clones will be born. However, if the laws cannot stop cloning, human clones are destined to be born in any event. What impact will anti-cloning laws have on those human clones?

This essay examines this third and most crucial question. It is my thesis that anti-cloning laws are counterproductive. They will serve primarily to stigmatize human clones as duplicative, defective, and unworthy of existence, based on their immutable genetic characteristics. This is not only unjust, but runs counter to the fundamental principle of non-discrimination in international human rights law.

1. No Matter What the U.N. Does, Research Cloning Will Continue.

My analysis begins with research cloning; any industry that involves the creation of cloned human embryos is a likely forerunner of reproductive cloning.

There is strong political support for research cloning among three groups. First, scientists claim that stem cells derived from cloned embryos could provide medical therapies that match a patient's own genetic structure. This holds out the tantalizing prospect that research cloning could lead to cures for Alzheimer's disease, cancer, diabetes, multiple sclerosis, and spinal cord injuries, among others. Of course, at this early stage, there is no proof that research cloning will produce such wonder therapies, but, so long as there is a chance of alleviating human suffering, research cloning will find a constituency among medical specialists and their patients.

Second, a broader group of scientists and secular humanists considers scientific knowledge to be an important good. These individuals are attracted to the possibility that research cloning will add to human knowledge. Lastly, venture capitalists and entrepreneurs are interested in research cloning. If the technology can produce viable medical therapies, they can make enormous amounts of money.

The U.N. Declaration on Human Cloning stands against these political forces. Its purpose is persuasion: national governments can take the

claim that the ADRDM must be interpreted as barring abortion when considered in light of its related treaty, the American Convention on Human Rights. The Convention included language protecting the right to life "in general" from the moment of conception, but this was a compromise designed to accommodate existing laws that permitted legalized abortion. See White v. United States, Case 2141, Inter-Am. C.H.R., Resolution No. 23/81, OEA/Ser. L/V/II.54, doc. 9 rev. 1 (1981).

12 *Cf.* JOHN CHARLES KUNICH, THE NAKED CLONE: HOW CLONING BANS THREATEN OUR PERSONAL RIGHTS 136 (2003) (arguing that research cloning reopens the question of when life begins for purposes of the U.S. Constitution).

Declaration home and tell lawmakers that the international community wants them to enact laws against all cloning.[13]

However, the Declaration was not supported by a true majority of the 191 member states of the General Assembly. Thirty-six members were absent and did not vote. Of the members who did vote, nearly as many abstained or voted against the Declaration as voted in favor. Dissenters included many European and Asian countries that have the technology to engage in research cloning. This striking lack of consensus undermines the value of the Declaration in international law[14] and undercuts its ability to influence national legislative debates on cloning.

More importantly, since the Declaration is non-binding, if dissenting member states refuse to ban all cloning, the U.N. will not impose sanctions against them. Thus, the Declaration cannot stop research cloning.

Some might argue that the Declaration is still very important, for it can serve as the first step towards an international treaty against all human cloning. Judging by recent efforts, however, the successful drafting of a treaty may be years or even decades away. By the time the U.N. manages to draft a treaty, many member states will have established research cloning industries and refuse to sign. Other states may sign the treaty but not ratify, particularly if no reservations are permitted. Finally, unless the treaty includes strong enforcement provisions, even states that ratify may not have an incentive to enact national implementing legislation that will offend some political constituencies.

In sum, a treaty may never exist, but even if it does, there will be no meaningful international restrictions on research cloning in much of the world.

2. The Growth of the Research Cloning Industry Greatly Increases the Likelihood that Reproductive Cloning Will Be Perfected and Human Clones Born.

While the U.N. hesitates, the business of research cloning continues apace. In 2004, South Korean scientists shocked the world by asserting that they had cloned human blastocysts, that is, advanced embryos containing hundreds of cells.[15] Using innovative protocols, the South Koreans claimed to have produced blastocysts from eggs at rates of up to 29 percent.[16] They also said they had harvested and cultured a line of embryonic stem cells

13 The Declaration calls upon member states immediately to adopt and implement national legislation to effectuate its principles. *See* G.A. Res. 59/280, supra note 10, para. e.
14 *Cf.* Texaco Overseas Petroleum Co. v. Libyan Arab Republic, 17 I.L.M. 1 (1978) (Int'l Arbitral Award of Jan. 19, 1997) (arbitrator gave no weight to certain provisions in the Charter of Economic Rights and Duties of States because industrialized countries with market economies had abstained or voted against them).
15 *See* Woo Suk Hwang et al., *Evidence of a Pluripotent Human Embryonic Stem Cell Line Derived from a Cloned Blastocyst*, 303 SCIENCE 1669 (2004).
16 *See id.* at 1670.

from one of 30 blastocysts.[17] The stem cell line had a normal karyotype (that is, a complete diploid set of chromosomes).

Unfortunately, as this essay goes to press, the authenticity of the 2004 South Korean experiment has been called into doubt.[18] However, research cloning is progressing in the United States, despite the opposition of President George Bush and the American delegation to the U.N. American researchers were among the first to succeed in cloning early human embryos,[19] and politicians in several states have rushed to create a legislative framework that promotes their efforts.

For example, in 1997, the California State Legislature enacted a law that placed a five year ban on reproductive cloning only. In 2002, the Legislature voted to make the ban on reproductive cloning permanent.[20] In a nod to the state's wealthy and powerful biotechnology lobby, however, the Legislature did not ban research cloning. Connecticut, Massachusetts, New Jersey, Rhode Island, and Virginia have similar laws that ban reproductive cloning but permit research cloning.[21]

In 2004, California voters approved a referendum that established a new state agency: The California Institute for Regenerative Medicine (CIRM).[22] The purpose of CIRM is to regulate and fund stem cell research, including research on cloned human embryos. The referendum also authorized issuance of general obligation bonds to finance this research, up to 3 billion dollars, subject to an annual limit of 350 million dollars. Research scientists and biotechnology entrepreneurs and investors are sure to be attracted by this taxpayer-funded pot of gold.

Technically, CIRM is prohibited from funding reproductive cloning research. Of course, few mainstream scientists are interested in reproductive cloning in any event. To protect their own research interests, they routinely denounce reproductive cloning, asserting that it is inefficient and unsafe.

Politicians have taken up the same cry, frequently justifying proposed laws against cloning on safety grounds. The U.N. Declaration on Human Cloning is consistent with this trend; it expresses concern about the serious medical and physical dangers that human cloning implies for the individuals involved,[23] and calls on member states to prohibit all forms

17 *See id.*

18 In early 2005, Hwang Woo Suk claimed he had created 11 stem cell lines that matched patient DNA. Subsequent tests showed this claim was false. Results from independent tests of Hwang's 2004 experiment are pending. *See* Rick Weiss, *None of Stem Cell Lines Scientist Said He Created Exists*, S.F. CHRON., Dec. 30, 2005, at A16.

19 *See* Jose B. Cibelli et al., *The First Human Cloned Embryo*, 286 SCI. AM. 44 (2002) (reporting the first creation of a cloned human embryo that grew to six cells).

20 *See* CAL. BUS. & PROF. CODE § 2260.5 (West 2003) and §§ 16004, 16105 (West 2004); CAL. HEALTH & SAFETY CODE §§ 24185, 24186, 24187 (West 2004).

21 *See* Conn. Public Act 05-149 (2005); 2005 Mass. Adv. Legis. Serv. 27 (Law. Co-op.); N.J. STAT. ANN. § 2C:11A-1 (West 2004); R.I. GEN. LAWS §§ 23-16.4 to -4 (2003); VA. CODE ANN. §§ 32.1-162.21, 32.1-162.22 (Michie 2003).

22 CIRM Home Page, http://www.cirm.ca.gov (last visited Sept. 23, 2005).

23 *See* G.A. Res. 59/280, *supra* note 10, Annex, at 2.

of human cloning on the ground that they are incompatible with the "protection of human life".[24]

Safety concerns have some basis at present. In adult cell cloning experiments performed on animals through 2001, the percentage of live births to embryos transferred ranged from 0.32 to 11 percent.[25] The vast majority of failures occur at the earliest stages, when eggs do not develop into embryos, or embryos do not produce a pregnancy.[26] Once a pregnancy is established, some fetuses do miscarry, posing risks to surrogate mothers.[27] Of cloned animals that make it to birth, a few die, and others suffer from physical abnormalities.

The reasons for cloning failures are unclear. More than one factor may be involved, and some factors may not be inherent in cloning. For example, large offspring syndrome (LOS) involves fetal overgrowth, abnormal placentas, fluid accumulation, and cardiovascular abnormalities. LOS has been observed, not only in animal clones, but also in animals conceived through routine in vitro fertilization. Scientists believe that LOS results when embryos are damaged during laboratory culture.[28] The syndrome does not occur in human in vitro fertilization, causing some researchers to conclude that it will not occur in human cloning.[29]

Other scientists theorize that cloning failures can be traced to so-called reprogramming errors. To explain in simple terms, each cell in the body of an adult animal includes the entire genetic "blueprint" for that animal. Each cell has taken on a specialized function that involves the expression of just a few genes. Skin cells express the genes necessary to create and maintain skin. Heart cells express the genes necessary to create and maintain a heart. For reproductive cloning to work, when the nucleus of a specialized adult cell is inserted into an egg, the egg must "reprogram" the nucleus so that it returns to an embryonic pattern of expression. If some of the genes required for proper embryonic development are not expressed properly, the clone cannot develop or may be unhealthy once born.[30]

But reprogramming errors threaten research cloning, too. Epigenetic abnormalities in cloned embryos could lead to unreliable experimental data and dangerous flaws in medical therapies derived from those embryos. Abnormal expression of certain genes can even cause tumors.[31]

24 *Id.* para. b. This language is also broad enough to condemn research cloning, which involves the deliberate creation and destruction of human embryos.

25 *See* COMM. ON SCI., ENG'G, & PUB. POLICY, NAT'L ACADS., SCIENTIFIC AND MEDICAL ASPECTS OF HUMAN REPRODUCTIVE CLONING 114-19 app. b, tbl.1 (2002) [hereinafter NAS Report].

26 *See id.*

27 *See id.* at 40.

28 *See id.* at 41.

29 *See* J. Keith Killian et al., *Divergent Evolution in M6P/IGF2R Imprinting from the Jurassic to the Quaternary*, 10 HUM. MOLECULAR GENETICS 1721 (2001).

30 *See* NAS Report, *supra* note 26, at 43; Konrad Hochedlinger & Rudolf Jaenisch, *Nuclear Transplantation, Embryonic Stem Cells, and the Potential for Cell Therapy*, 349 NEW ENG. J. MED. 275, 276-77 (2003).

31 *See* Susan M. Rhind et al., *Human Cloning: Can It Be Made Safe?*, 4 NATURE REVS. GENETICS 855, 862 (2003).

Some research scientists have tried to minimize these risks, arguing that competent cells are selected for the culture. In other words, the process of deriving stem cell lines from embryos tends to weed out cells with epigenetic abnormalities, which simply die in the Petri dish.[32] That may be true sometimes, but selection does not guarantee that therapies derived from cloned embryos will be safe.

Therefore, other research scientists, including Dr. Ian Wilmut, advocate a new approach to cloning experiments. They reason that clones may suffer from epigenetic abnormalities for a variety of reasons, some of which are not intrinsic to cloning. Scientists need to design controlled studies that can "disentangle" factors such as donor cell type, culture media, embryo manipulation, and nuclear transfer protocols from factors that are specific to cloning as such.[33] This will enable scientists to develop new protocols and strategies for the creation of cloned embryos without epigenetic defects.

Note the irony: To learn how to make medical therapies from stem cells, scientists must first learn how to create healthy human embryos at the blastocyst stage, when stem cells can be harvested. However, the creation of healthy human embryos is the first and most crucial step in reproductive cloning. This is because human embryos ordinarily implant in the lining of the uterus shortly after they grow into blastocysts.[34] If scientists engaged in research cloning can learn to create embryos without epigenetic abnormalities, they will eliminate the main scientific barrier to safe reproductive cloning. At that point, the first live birth of a human clone will be just a uterine transfer and nine months away.

3. Human Clones Will Not Be Copies.

Looking to the future, if reproductive cloning becomes possible and reasonably safe, and human clones are born, what will they be like?

Regrettably, the public, media, and politicians are full of wrong answers to this key question. Many people believe that cloning technology can be used to make duplicates of existing or dead persons.

This "identity fallacy" manifests itself throughout the cloning debate. Some arguments are obviously absurd. For example, it is not possible to replicate Adolf Hitler, Osama bin Laden, or any other dangerous megalomaniac.[35]

However, cloning opponents often advance other arguments that are grounded in the identity fallacy.[36] Although it is hard to identify the policy

32 *See* Hochedlinger & Jaenisch, *supra* note 31, at 281.

33 *See* Rhind, *supra* note 32, at 859-61.

34 *See* SHERMAN J. SILBER, HOW TO GET PREGNANT WITH THE NEW TECHNOLOGY 80-81 (Warner Books 1991).

35 *See, e.g.*, NAT'L BIOETHICS ADVISORY COMM'N, CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION 69 (1997) [hereinafter NBAC REPORT].

36 *See, e.g.*, CAL. ADVISORY COMM. ON HUMAN CLONING, CLONING CALIFORNIANS?: REPORT OF THE CALIFORNIA ADVISORY COMMITTEE ON HUMAN CLONING 24-27 (2002); PRESIDENT'S COUNCIL ON BIOETHICS, HUMAN CLONING AND HUMAN DIGNITY: AN ETHICAL INQUIRY 102-04, 111

origins of the U.N. Declaration on Human Cloning with any precision, here are some arguments that might underlie its conclusion that reproductive cloning is contrary to human dignity:

- Human clones will lack individuality and will suffer psychological damage as a result of being cloned.
- Human clones will not have an open future. They will be doomed to relive the lives of their DNA donors.
- Parents[37] of human clones will hold unreasonable expectations for them.
- Families of human clones will transgress generational boundaries and become dysfunctional. Mothers will give birth to daughters who are sisters; fathers will sexually abuse daughters who are duplicates of their wives.
- Existing persons will be cloned involuntarily and lose their individuality as a result.
- Cloning will be used to copy individuals who have superior physical or mental traits. Cloning will crush the spirit of egalitarianism and usher in a new era of eugenics that will rival the Nazi drive to produce Aryan supermen.

Space constraints preclude a thorough critique of the foregoing arguments in this essay. In a nutshell, however, the arguments fail because the identity fallacy is scientifically false.

Nature produces her own clones every day, using a rather primitive method. If a single fertilized egg splits in two, identical twins are conceived. Due to their origin in a single fertilized egg, the twins share the same nuclear and mitochondrial DNA.[38] They also are gestated in the same womb (though micro-environments within the womb can vary), and ordinarily are raised in the same family following birth. Despite these common genetic, biological, and environmental influences, each member of an identical twin pair is a unique individual. Indeed, twin researchers have found that the heritability of intelligence, cognitive skills, and personality traits is only about 50 percent.[39]

(2002) [hereinafter COUNCIL REPORT].

37 When it comes to cloning and human clones, it is important to define what one means by the term "parent". In this essay, I use the term to refer to any person who uses cloning to produce a child, so long as he or she plans to raise the child as his or her own. This broad usage is appropriate for two reasons. First, a person who decides to have and raise a child is playing the social role of parent. Second, as I explain in section 5 below, cloning is likely to emerge as an assisted reproductive technology that helps the infertile and others have genetic offspring. At least one and often both members of a marriage or partnership are likely to qualify as biological and legal parents of their cloned offspring. For a more thorough discussion of this point, *see* KERRY LYNN MACINTOSH, ILLEGAL BEINGS: HUMAN CLONES AND THE LAW 236 n.2 (2005).

38 Every human egg contains mitochondria, that is, tiny structures that produce energy within human cells. *See* BRUCE ALBERTS ET AL., MOLECULAR BIOLOGY OF THE CELL 30 (4th ed. 2002). Mitochondria have their own DNA, which is inherited down the maternal line.

39 *See* Nancy L. Segal, *Human Cloning: Insights from Twins and Twin Research*, 53 HASTINGS L.J. 1073, 1076 (2002).

Scientists clone differently. To create embryos, they take nuclear DNA from the cells of an adult (DNA donor), and inject it into donated eggs that have had their own chromosomes (but not mitochondria) removed beforehand. One or more embryos must then be inserted into the uterus of a woman for nine months of gestation and eventual birth.

These scientific facts establish two important points. First, a human clone cannot emerge from the womb as an adult; he or she will be a baby. Second, the creation processes for identical twins and human clones differ significantly, with the following results.

Unlike identical twins, human clones and their DNA donors will share the same chromosomes, but not the same mitochondria. Since mitochondria process energy, this could lead to differences in muscle, heart, eye, brain, or other body systems that use a lot of energy.[40] Human clones also will be gestated in different uteri than their DNA donors, leading to differences in how their common genes are expressed.[41] Finally, human clones will grow up in different families, eras, and cultures than their DNA donors, contributing to the development of different psychological traits, tastes, and values. As a result, human clones will differ from their DNA donors even more than identical twins differ from each other.[42] In some cases, they may not even look the same as their DNA donors.[43]

In sum, there is no scientific basis for the identity fallacy or any of the arguments that flow from it. Cloning will not flood the world with evil dictators, pathetic copies, duplicate wives, or arrogant supermen,[44] simply because it *cannot*. Human clones will be individuals, and their parents, friends, and society will have no rational reason to treat them as anything less.

Some might concede this point, yet argue that cloning must be banned because people are *not* rational. According to this point of view, no matter what the truth is, people will *think* human clones are copies, leading to unreasonable expectations, psychological damage, and discrimination.

40 *See* NAS REPORT, *supra* note 26, at 26.

41 *See* DAVID S. MOORE, THE DEPENDENT GENE: THE FALLACY OF "NATURE VS. NURTURE" 117-28 (2001).

42 *See*, e.g., KUNICH, *supra* note 13, at 124.

43 Differences could be particularly marked in the case of a female baby. As the baby developed in the womb, each cell would randomly switch off one of her two X chromosomes. This X inactivation would not be influenced by whatever happened to the DNA donor when she was a developing embryo. *See* MACINTOSH, *supra* note 38, at 24-25; *see also* Tae Young Shin et al., A CAT CLONED BY NUCLEAR TRANSPLANTATION, 415 NATURE 859 (2002) (reporting the birth of the first cloned kitten, Cc, who had different fur patterns than her DNA donor).

44 Concerns about the eugenic potential of cloning are misplaced for an additional reason. Even if a superior genome could be replicated in the bodies of human clones, these individuals would be vastly outnumbered by the teeming hordes of ordinary people born through sexual reproduction. *See* GREGORY PENCE, WHO'S AFRAID OF HUMAN CLONING? 130 (1998). Regression to the mean would be inevitable – defeating the eugenic program – unless governments across the globe enacted coercive laws requiring asexual reproduction in preference to sexual reproduction. That is the stuff of science fiction novels, not serious public policy debate.

Human clones may indeed become victims of misunderstanding, since ignorance surrounding cloning runs very deep. Nevertheless, enacting anti-cloning laws is a counterproductive strategy.

To explain why, I offer here a brief historical analogy. For centuries, there were laws in the United States that made it a crime for a person of one race to marry a member of another race.[45] These laws sought to prevent the existence of mixed-race children,[46] who the white majority believed to be physically and mentally inferior.[47] Some proponents of the laws even argued that mixed-race children should not be born because they would suffer from social stigma.[48]

The California Supreme Court was the first to issue a decision invalidating such laws.[49] It rejected the argument that mixed-race children should not exist because they would suffer from the stigma of inferiority: "If they do, the fault lies not with their parents, but with the prejudices in the community and the laws that perpetuate those prejudices by giving legal force to the belief that certain races are inferior."[50]

Now, consider the argument that human clones should not exist because bigots might treat them like copies. This reasoning improperly uses prejudice to justify more prejudice[51] in the form of anti-cloning laws that give legal force to the belief that human clones are copies. Since human clones are likely to be born, no matter what laws say, it is important to choose a more effective means of combating the identity fallacy and its ill effects; scientific education would be a good start.

4. Human Clones Will Not Be Manufactured Products

Given the emphasis on human dignity in the Declaration, there is another anti-cloning argument that deserves special mention here.

The United States was a strong supporter of the Declaration. Three years before the Declaration was approved, the President's Council on Bioethics issued a report strongly condemning reproductive cloning. The report suggested that children who are "begotten" (that is, conceived through sexual reproduction) are gifts from God; as such, they stand as the equal of their parents in dignity and humanity. By contrast, cloning is a human project that treats children as manmade objects designed to genetic order. This violates human dignity.[52]

Thus framed, human dignity is a religious or moral argument which

45 *See* Harvey M. Applebaum, *Miscegenation Statutes: A Constitutional and Social Problem*, 53 GEO. L.J. 49, 50 (1964).
46 *See id.* at 64.
47 *See, e.g.*, Scott v. State, 39 Ga. 321, 324 (1869).
48 *See, e.g.*, State v. Brown, 108 So. 2d 233, 234 (La. 1959).
49 *See* Perez v. Sharp, 198 P.2d 17 (Cal. 1948). Nearly 20 years later, the U.S. Supreme Court held that anti-miscegenation laws violated the equal protection and due process rights of interracial couples. See Loving v. Virginia, 388 U.S. 1 (1967).
50 *Perez*, 198 P.2d at 26.
51 *See* PENCE, *supra* note 45, at 46.
52 *See* COUNCIL REPORT, *supra* note 37, at 8-10, 104-07.

is not capable of scientific proof.[53] However, this argument can also be interpreted as a warning against bad consequences: cloning will encourage parents to view their children as manmade products.

This warning runs counter to available evidence. Opponents of in vitro fertilization argued that it would objectify children, yet "test tube babies" function well and are not different psychologically from children who were adopted or conceived through sexual intercourse.[54]

Nevertheless, the President's Council on Bioethics has argued that cloning objectifies human beings to a much greater degree than other reproductive technologies, because it begins with a specific end product in mind and is tailored to produce that product.[55] As if this were not enough, cloning, even if practiced on a small scale, allegedly involves a paradigm shift from procreation to manufacturing, which threatens to impair the dignity of humankind as a whole.[56]

Such arguments rest on the premise that cloning can deliver a specific end product. In fact, as explained in section 3 above, cloning cannot do so, since human clones are not copies. No one has any scientifically valid reason to view cloned children as products, or to consider humankind objectified in some grander sense. Such perspectives are attributable not to cloning, but to abject ignorance of what cloning can accomplish, and perhaps even to the ill-conceived dignity argument itself.

5. If Reproductive Cloning Can Be Perfected, there Will Be a Demand for the Technology. Reproductive Cloning Cannot Be Stopped.

If reproductive cloning cannot manufacture specific end products, why would anyone want to use it? Where is the demand for the technology?

The answer is simple. Since all cloning can do is produce babies, asexual reproduction is a new assisted reproductive technology that can be used to conceive genetic offspring. It will appeal to three categories of persons for whom sexual reproduction is not possible or practical.

Some men and women lack functional sperm or eggs, making sexual reproduction with their partners impossible. To take advantage of reproductive technologies ranging from artificial insemination to in vitro fertilization these disabled individuals must use sperm or eggs donated by third parties. Cloning will offer them an opportunity to conceive and bear their own genetic offspring instead.[57]

Other men and women are fertile and healthy, but carry unexpressed

53 *See* NBAC Report, *supra* note 36, at 49.
54 *See* Susan Golombok et al., *The European Study of Assisted Reproduction Families: The Transition to Adolescence*, 17 Hum. Reprod. 830 (2002).
55 *See* Council Report, *supra* note 37, at 106.
56 *See id.* at 107.
57 *See, e.g.*, Mark D. Eibert, *Human Cloning: Myths, Medical Benefits and Constitutional Rights*, 53 Hastings L.J. 1097, 1101 (2002).

genetic disorders in their chromosomes. Sexual reproduction is a gamble for them; it could produce a child with a new genome in which the disease is expressed. Asexual reproduction will enable these carriers to sidestep the risk, and have a child with a genome that has already been proven not to express the disease.[58]

Finally, gay and lesbian couples cannot reproduce sexually without using sperm or eggs donated by third parties. Some of these couples may prefer to reproduce without having to use genes that come from individuals who are not a part of their families. Cloning will give them the chance to do so.[59]

Laws against reproductive cloning can reduce but not eliminate this demand for two reasons. The first is the ease of international travel. For years, infertile men and women have traveled to other countries to obtain egg donation, cytoplasm transfer, and other controversial fertility services and treatments that are restricted or forbidden in their homelands.[60] This history suggests that men and women who are interested in reproductive cloning will simply pack their bags and travel to jurisdictions where the technology is safe and legal. Once conception has occurred, cloning patients can come home pregnant and tell family and friends that they succeeded due to prayer, luck, or stress reduction.

Granted, nations can craft their anti-cloning laws in an attempt to block such travel. For example, although the United States does not yet have a federal law against cloning, the proposal that has achieved the most political success in recent years prohibits importing the product of cloning.[61] This presumably includes not only stem cell treatments derived from cloned embryos, but also cloned fetuses and newborns.

However, detecting violations of such laws will be a challenge. A pregnancy initiated through cloning will proceed like any other pregnancy. Moreover, newborns that strongly resemble one parent are common. Thus, absent widespread and intrusive genetic testing, authorities cannot be sure which pregnancies and newborns resulted from cloning, making enforcement difficult and incomplete.

If reproductive cloning were banned worldwide, the ability to clone abroad legally would be eliminated. However, a worldwide ban does not seem probable at this time. The inability of the U.N. to regulate cloning in any meaningful fashion increases the odds that motivated individuals will travel to get the cloning technology they need.

58 *See, e.g.*, John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371, 1379 (1998).

59 *See* id. at 1380.

60 *See, e.g.*, Debora Spar, *Reproductive Tourism and the Regulatory Map*, 352 NEW ENG. J. MED. 531 (2005).

61 *See* H.R. 1357, 109th Cong. § 2 (2005). The House of Representatives passed a nearly identical bill in 2003 by a strong vote of 249 to 155. See H.R. 534, 108th Cong. § 2 (2003); Edward Epstein, *House Passes Bill to Prohibit Human Cloning*, S.F. CHRON., Feb. 28, 2003, at A3. A companion bill failed to clear the Senate, due to opposition from senators who support research cloning.

The second reason laws will fail to stop reproductive cloning is that a black market is likely to emerge. Research cloning experiments will train scientists and laboratory assistants to create healthy cloned embryos. Publications will make the information available to a wide audience, including fertility doctors. This increases the odds that providers will offer reproductive cloning to those able to pay a price that corresponds to the legal risks involved.

Given the debate over the morality of research cloning, it is even possible that cloning opponents will engage in reproductive cloning. Today, those who consider themselves pro-life supporters protest in front of abortion clinics; tomorrow, they may rescue cloned embryos from destruction and implant them in the wombs of volunteers who wish to serve as adoptive parents.[62]

6. Human Clones Will Be Entitled to the Same International Human Rights as Other Human Beings.

If reproductive cloning becomes scientifically possible, and cannot be stopped by law, it follows that human clones will be born around the world. The next task of this essay is to determine what international human rights these individuals will enjoy.

The U.N. Charter is a logical starting point. Pursuant to this multilateral treaty, the U.N. is bound to promote "universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion."[63] Nations that are members of the U.N. are obligated to take action to achieve those goals.[64]

The Charter does not define human rights and fundamental freedoms. However, shortly after the U.N. was formed, the General Assembly adopted the Universal Declaration of Human Rights (UDHR).[65] The UDHR commands more respect than the average non-binding declaration. Some international lawyers view it as an authoritative interpretation of the Charter, such that member states have the obligation to promote respect for and observance of the rights stated therein.[66]

In addition, there are two international treaties that create binding legal obligations for those member states that have signed and ratified them. Together with the U.N. Charter and the UDHR, the *International*

62 Services already exist to locate adoptive parents for surplus embryos created and frozen in the course of in vitro fertilization. For example, Nightlight Christian Adoptions offers a Snowflakes Embryo Adoption Program. Snowflakes Embryo Adoption Program Home Page, http://www.nightlight.org/snowflakeslanding.asp (last visited Sept. 24, 2005).

63 U.N. Charter art. 55, para. c.

64 *See id.* art. 56.

65 Universal Declaration of Human Rights, G.A. Res. 217A, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 12, 1948).

66 *See, e.g.*, Filartiga v. Pena-Irala, 630 F.2d 876, 883 (2d Cir. 1980); Thomas Buergenthal, *International Human Rights Law and Institutions: Accomplishments and Prospects*, 63 WASH. L. REV. 1, 9 (1988).

Covenant on Civil and Political Rights (ICCPR)[67] and the *International Covenant on Economic, Social and Cultural Rights*[68] round out an international bill of rights.

Let us consider how some basic provisions in this international bill of rights might apply to human clones born in defiance of anti-cloning laws.

Cloning transmits nuclear DNA. If a DNA donor is human, his or her clone must be human also.[69] Article 1 of the UDHR proclaims that all "human beings" are born free and equal in dignity and rights. Thus, human clones are equal in dignity and rights to humans born through sexual reproduction.[70]

The UDHR and the ICCPR build on equality by enshrining a principle of non-discrimination. Legal experts believe non-discrimination holds a particularly high status in international law.[71]

The language of both documents is similar.[72] As a treaty, the ICCPR arguably carries greater weight than the UDHR. Thus, for purposes of discussion, this essay focuses on the ICCPR, which states in article 2:

> Each State Party to the present Covenant undertakes to respect and to ensure to *all individuals* within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any

67 International Covenant on Civil and Political Rights, *opened for signature* Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR]. The United States signed and ratified the ICCPR but declared that the treaty was not self executing. The ICCPR has no legal effect in the United States because implementing legislation has never been introduced. See Barbara Stark, *Baby Girls from China in New York: A Thrice-Told Tale*, UTAH L. REV. 1231, 1236 n.21 (2003).

68 *International Covenant on Economic, Social and Cultural Rights*, opened for signature Dec. 16, 1966, 993 U.N.T.S. 3 [hereinafter ICESCR].

69 Article 1 of the Universal Declaration on the Human Genome and Human Rights reinforces this conclusion; it provides that "[t]he human genome underlies the fundamental unity of all members of the human family." Universal Declaration on the Human Genome and Human Rights, *supra* note 6, art. 1. Those who bear an entirely human genome should, at a minimum, qualify for status as human beings. Thus, human clones present an easy case. I do not mean to imply that genetics should be the sole or determining factor in more difficult cases, such as human/animal hybrids. In such a case, a richer analysis that also considered developmental and cultural factors would be necessary.

70 Similarly, the Universal Declaration on the Human Genome and Human Rights provides that "[e]veryone has a right to respect for their dignity and for their rights regardless of their genetic characteristics." *Id.* art. 2(a). This indicates human clones are entitled to respect for their dignity and rights even though they share nuclear DNA with another person. *See* KUNICH, *supra* note 13, at 64.

71 *See* Dinah Shelton, *Human Rights and the Hierarchy of International Law Sources and Norms: Hierarchy of Norms and Human Rights: Of Trumps and Winners*, 65 SASK. L. REV. 299, 310-11 (2002); *see also* Bertrand G. Ramcharan, *Equality and Nondiscrimination*, *in* THE INTERNATIONAL BILL OF RIGHTS, THE COVENANT ON CIVIL AND POLITICAL RIGHTS 246, 247 (Louis Henkin ed., 1981) (equality and non-discrimination are bedrock principles in the international law of human rights).

72 The UDHR provides: "Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." *See* Universal Declaration of Human Rights, *supra* note 66, art. 2.

> kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, *birth or other status*.[73]

"All individuals" must include human clones, because human clones are human beings. Therefore, states must not deprive a human clone of ICCPR rights because he or she is black, or female, or Jewish—and so on.

More significantly, states must not deprive a human clone of ICCPR rights because he or she is a human clone.

I reach this conclusion for two reasons. First, article 2 prohibits distinctions based on birth. Presumably, this language protects the rights of children born to parents who are not married to each other.[74] However, the word "birth" is broad enough also to protect the rights of human clones born to parents who have reproduced asexually.

Second, article 2 prohibits distinctions based on "other status". In other words, distinctions must not be made on the basis of a status that is comparable to any of the enumerated statuses.[75]

Race is the first status listed in article 2. Race is an immutable characteristic which the individual does not choose and cannot change. Since a person is not responsible for his or her race, it is unjust to deprive him or her of rights based on that status.

Moreover, race does not impair one's ability to contribute to, or participate in, human society. Race does not undermine the intrinsic worthiness of an individual, or eliminate his or her claim to membership in the human family. If the purpose of the ICCPR (and UDHR) is to guarantee certain rights to human beings, it makes sense that rights cannot be denied on the basis of the irrelevant status of race.

Reasoning by analogy, the defining biological characteristic of a human clone is that he or she shares nuclear DNA with another person. DNA is not chosen and cannot be changed; it is acquired upon conception and is immutable. It would be unjust to deprive human clones of human rights based on their genetic status.

Further, status as a human clone does not affect one's ability to contribute to, or participate in, human society. As explained in section 3 above, human clones are not the soulless copies of science fiction, but individuals who are fully human in every respect. Nor does status as a human clone undermine the intrinsic worthiness of an individual, or eliminate his or her claim to membership in the human family. If the purpose of the ICCPR (and UDHR) is to guarantee certain rights to human beings, it makes sense that rights cannot be denied on the basis of the irrelevant fact that one person shares nuclear DNA with another.

---

73 *See* ICCPR, *supra* note 68, art. 2, § 1 (emphasis added).

74 *Cf.* Marckx v. Belgium, 31 Eur. Ct. H.R. (ser. A) (1979) (legal distinctions made between legitimate and illegitimate children violate the *Convention for the Protection of Human Rights and Fundamental Freedoms*, which guarantees rights without discrimination grounded on birth).

75 *See* Ramcharan, *supra* note 72, at 256.

I conclude that the basic principle of non-discrimination entitles human clones to all the rights and freedoms enumerated in the ICCPR and UDHR, without distinction based on their birth via asexual reproduction or status as human clones.[76]

7. Anti-Cloning Laws Violate the Principle that Laws Should Not Be Discriminatory.

For purposes of this essay, the most significant right to which human clones are entitled is set forth in article 26 of the ICCPR, which provides:

> All persons are equal before the law and are entitled without any discrimination to the equal protection of the law. In this respect, the law shall prohibit any discrimination and guarantee to all persons equal and effective protection against discrimination on any ground such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.[77]

Unlike article 2, which prohibits discrimination only with respect to rights enumerated in the ICCPR, article 26 has a broader scope.[78] As the Human Rights Committee has noted:

> In the view of the Committee, article 26 does not merely duplicate the guarantee already provided for in article 2 but provides in itself an autonomous right. It prohibits discrimination in law or in fact in any field regulated and protected by public authorities. Article 26 is therefore concerned with the obligations imposed on States parties in regard to their legislation and the application thereof. *Thus, when legislation is adopted by a State party, it must comply with the requirement of article 26 that its content should not be discriminatory.* In other words, the application of the principle of non-discrimination contained in article 26 is not limited to those rights which are provided for in the Covenant.[79]

---

76 These rights and freedoms should help to protect human clones from the sort of abuse frequently depicted in science fiction. For example, Article 8, § 1, of the ICCPR and Article 4 of the Universal Declaration of Human Rights provide that no one shall be held in slavery or servitude. Similarly, Article 6 of the ICCPR and Article 3 of the Universal Declaration of Human Rights recognize that every human being has the right to life. Therefore, scenarios in which human clones are enslaved or killed for their vital organs are unrealistic. *See, e.g.*, THE ISLAND (Dreamworks 2005).

77 *See* ICCPR, *supra* note 68, art. 26.

78 Article 26 of the ICCPR differs from article 7 of the Universal Declaration of Human Rights, which provides: "All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination *in violation of this Declaration* and against any incitement to such discrimination." Some might read the emphasized clause in the second sentence of article 7 as limiting the principle of non-discrimination to rights enumerated in the Universal Declaration of Human Rights. *See, e.g.*, Karl Josef Partsch, *Fundamental Principles of Human Rights: Self-Determination, Equality and Non-Discrimination, in* 1 THE INTERNATIONAL DIMENSIONS OF HUMAN RIGHTS 61, 71 (Karel Vasak & Philip Alston eds., 1982). However, such a reading would render article 7 redundant with article 2 of the Universal Declaration of Human Rights. The first sentence of article 7 is broader; the language assures entitlement without discrimination to equal protection of the law. This language could be read consistently with article 26 of the ICCPR as prohibiting discriminatory laws in general.

79 Human Rights Committee, *Report of the Human Rights Committee, General Comment No. 18: Non-discrimination*, Annex VI, para. 12, U.N. GAOR, 45th Sess., Supp. No. 40, U.N.

Thus, article 26 prohibits laws that discriminate on the base of race and other enumerated grounds. For the reasons given above, this includes laws that discriminate against human clones on account of their birth via asexual reproduction or status as human clones.

Article 26 does not define the concept of "discrimination". However, the Human Rights Committee has offered a helpful interpretation:

> [T]he term "discrimination" as used in the Covenant should be understood to imply *any distinction, exclusion, restriction or preference* which is based on any ground such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, *and which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise by all persons, on an equal footing, of all rights and freedoms*.[80]

Let us apply this concept to the topic at hand. To start with the most obvious example, states must not enact laws that exclude human clones from schools, parks, transportation, and other public facilities. Such exclusion would harm the dignity of human clones and would serve no legitimate governmental purpose.

Fortunately, this kind of discrimination is unlikely to occur because it would be very difficult to implement. Unlike race, status as a human clone is not readily apparent, and cannot be verified absent genetic testing. It would not be an easy thing to identify a human clone and eject him or her from a train or school.

However, it does not follow that human clones will be safe from discriminatory laws. *Those who are born will be victimized by the very same anti-cloning laws that sought to prevent their existence in the first place.*

At first glance, this claim may seem extraordinary or even absurd. On their face, anti-cloning laws prohibit only the use of an unpopular technology; the laws do not mention human clones explicitly.

Surely, however, the ICCPR must prohibit laws that are facially neutral but discriminatory in effect and purpose.[81] Otherwise, states could find devious ways of eviscerating the protection against discriminatory laws that Article 26 is intended to provide. Therefore, it is necessary to examine anti-cloning laws for evidence of discriminatory effect and purpose.

a) Anti-cloning Laws Have a Discriminatory Effect. Consider the legal status of sexual reproduction. Though the law occasionally prohibits sexual intercourse in certain contexts, it does not prohibit sexual reproduction as such. Indeed, the right to procreate and found a family has been identified as a fundamental human right.[82] As a result of this

Doc. A/45/40 (Oct. 4, 1990) (emphasis added), *reprinted in Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies*, U.N. Doc. HRI/GEN/1/Rev. 7, at 146, 148 (May 12, 2004) [hereinafter *General Comment No. 18*].

80 *See* id. para. 7 (emphasis added), *reprinted in* U.N. Doc. HRI/GEN/1/Rev. 7, at 147.

81 *Cf.* JOHN E. NOWAK & RONALD D. ROTUNDA, CONSTITUTIONAL LAW § 14.4, at 621 (5th ed. 1995) (facially neutral laws violate the U.S. Constitution when designed to discriminate against minority groups).

82 *See, e.g.*, ICCPR, *supra* note 68, art. 23, § 2; see also Skinner v. Okla. *ex rel.* Williamson, 316 U.S. 535, 541 (1942).

laissez faire attitude, humans born through sexual reproduction steadily increase in number. They do not suffer legal burdens on account of their origin in sexual reproduction.

By contrast, anti-cloning laws ban asexual reproduction outright. To the extent they can be enforced, the laws will reduce the number of human clones who are conceived, gestated, and born. For purposes of this essay, I will assume that embryonic human clones do not qualify as "persons" entitled to protection against discrimination.[83] However, cloned babies and children born in defiance of cloning bans are entitled to such protection. Thus, it is important to identify the burdens that anti-cloning laws will impose on them from the moment of their birth. Due to space constraints, I describe only two of these burdens here.

Whenever parents are imprisoned for the crime of cloning, their cloned babies and children will suffer. Torn away from those who loved and wanted them the most, and cut off from financial support, the innocent will be forced to depend on the not so tender mercies of the foster care system. This is a cost that is seldom mentioned or recognized in the cloning debate.

Some parents will evade detection and conviction. However, anti-cloning laws will impose a second burden on cloned children that is just as harmful as parental loss: legal stigma.

Laws have an expressive function; that is, through their various prescriptions and prohibitions, laws articulate the values of the democratic society that enacts them. To identify the values that anti-cloning laws express, we must look to the policy arguments used to justify their enactment.

When closely examined, many of these arguments turn out to have little to do with cloning *qua* cloning. Instead, the arguments focus on human clones, claiming that this class of human being must not be allowed to exist because its members have bad traits that endanger their own happiness and the happiness of others.

Chief among these bigoted arguments is the identity fallacy and its claim that human clones are copies. Variations on the fallacy stereotype human clones as lacking in individuality, autonomy, and emotional balance. Fear of eugenic cloning further stereotypes human clones as superior, arrogant, and dangerous.

Anti-cloning laws based on identity arguments reinforce these ugly stereotypes. Moreover, since individuality is an essential human trait, the laws also stigmatize human clones as less than human.

Exaggerated safety arguments against cloning are no less problematic.[84]

83 *Cf.* Shelton, *supra* note 12, at 10 (article 6 of the ICCPR provides a right to life without taking a textual position on when life begins).

84 For a more complete account of how safety arguments have been exaggerated and influenced by considerations that have nothing to do with science, *see* MACINTOSH, *supra* note 38, at 44-69.

Ignoring the constant improvements in cloning technology, opponents insist that human clones will necessarily suffer from terrible birth defects. Anti-cloning laws based on such safety arguments stigmatize human clones as sick and deformed.

Finally, the structure of anti-cloning laws is stigmatizing, in and of itself. Most laws are written as flat bans with no sunset clause, no provision for periodic legislative review, and no exceptions. Criminal and civil penalties are severe.[85] This draconian approach expresses the ugly idea that human clones are a disaster in the making that must be stopped at all costs.

Legal stigma is not a trivial burden. Because laws reflect the will of the electorate, the ideas they express are particularly powerful. Once the laws mark them as duplicative, dangerous, and deformed, human clones will be at increased risk of emotional distress, ostracism, discrimination in housing and employment, and victimization at the hands of vigilantes.[86]

b) Anti-cloning Laws Have a Discriminatory Purpose. Anti-cloning laws reflect not only a discriminatory effect, but also a discriminatory purpose.

As the identity and safety arguments reveal, many people have prejudged human clones as duplicative, dangerous, and deformed. But those who want to stop human clones have limited options. As explained above in section 6, once human clones come into existence, they will be entitled to the same human rights as other human beings. No democratic government could openly conduct a pogrom against them without generating a strong international protest.

Instead, anti-cloning laws attempt to solve the "problem" through a program of *existential segregation*: that is, they criminalize cloning technology in an effort to prevent human clones from coming into existence in the first place.

Granted, this is not traditional apartheid—no human clones are being excluded from schools, transportation, or other public facilities. Nevertheless, existential segregation is discrimination, repackaged in a clever new form. It eliminates the need for apartheid by attempting to stop the unpopular class at its inception.

Some readers might disagree with my argument that anti-cloning laws deliberately discriminate against human clones. They might argue that lawmakers intend only to exclude human clones from life, and not to harm them once they are born. This objection rings hollow, however. Human clones will suffer legal burdens that flow directly from the laws that target them for non-existence prior to birth. If lawmakers are willing to inflict such burdens as part of their program of existential segregation, it is appropriate to ascribe those burdens to their original discriminatory intent.

Other readers might assert that lawmakers want to stop cloning for reasons that have nothing to do with the traits of human clones. They

85 *See id.* at 76-88.
86 *See id.* at 122-23.

might argue that it is the *act* of cloning that is wrong, because it usurps God's domain (creation), treats humans as objects of manufacture, and endangers the health of egg donors and gestational mothers.

All of these same arguments have been raised against in vitro fertilization. Opponents on the right and left have complained for decades that in vitro fertilization is an act of hubris that offends God, objectifies children and endangers egg donors and gestational mothers. Yet, in vitro fertilization is uncontroversial and remains legal.

To discover why lawmakers treat cloning so differently, one must subtract out the arguments that the two technologies have in common, and look for a factor that is unique to cloning. What remains is the identity fallacy. Any law based on the identity fallacy is based on false and prejudiced beliefs about human clones and is discriminatory.

c) Discrimination Against Human Clones Is Not Justified. Although article 26 of the ICCPR prohibits discriminatory laws, the Human Rights Committee has explained that this does not require the elimination of all legal distinctions:

> Finally, the Committee observes that not every differentiation of treatment will constitute discrimination, if the criteria for such differentiation are reasonable and objective and if the aim is to achieve a purpose which is legitimate under the Covenant.[87]

There are few, if any, legitimate reasons for the frantic drive to legislate human clones into nonexistence. As explained in section 3 above, human clones can never be copies of anyone, good or bad. This single scientific fact holds the power to invalidate each and every argument that is traceable to the identity fallacy. This includes the fear that cloning might be used for eugenic purposes, thereby condemning us all to relive the horrors of the Nazi era.

The argument that cloning is a form of manufacturing human life fails to the extent that it is rooted in the identity fallacy.[88] If cloning cannot produce copies, it cannot produce designer products; there is no scientifically valid reason for parents to view their cloned children as products or for the rest of us to believe that our humanity has been diminished.

What about safety concerns? States have a legitimate interest in protecting the health of mothers and children.[89] However, it is important

87 *General Comment No. 18*, *supra* note 80, para. 13.

88 Some might counter that the injury to human dignity lies in the act of employing human rather than divine means to achieve conception. This is a religious argument; in the United States, it would not be recognized as a legitimate governmental interest. *See* Lawrence v. Texas, 539 U.S. 558, 578 (2003).

89 Indeed, some might argue that states have a treaty obligation to ban cloning in order to protect the health of mothers and newborns. They might point to the ICESCR, which recognizes a right of everyone to the enjoyment of the highest attainable standard of physical and mental health, and requires states to reduce the rate of stillbirths and infant mortality and ensure the healthy development of the child. *See* ICESCR, *supra* note 69, art. 12, §§ 1 and 2(a). However, any such argument would be flawed. Let us begin with mothers. Women (and men) have a right under article 23, § 2 of the ICCPR

to remember that human reproduction is inherently inefficient and risky.

In sexual reproduction, 75 percent of all conceptions fail to implant or spontaneously abort.[90] Late term miscarriages, stillbirths, neonatal deaths, and maternal deaths occur.[91] Birth defects in newborns are common, ranging from 4 to 12 percent of births, depending on the age of the mother.[92] Many of these tragic outcomes happen because sexual reproduction is a cruel gamble; it produces many failed genomes for every successful one.

By contrast, cloning uses genomes that already have proven their ability to create healthy babies. Coupled with scientific advances, this fact suggests that outcomes could one day move into the same range that is tolerated for sexual reproduction.

Yet, most anti-cloning laws are flat bans that do not provide for periodic legislative review so that safety improvements can be taken into account. Given the prospects for improvement, such laws are a disproportionate means to the end of safety.[93]

Moreover, when there are legitimate concerns about the safety of new medical technologies, governments usually respond with temporary regulations, and not with blanket prohibitions. The fact that cloning has

to found a family. For those unable to reproduce sexually, cloning provides an alternative means of founding a family. Women will not be getting pregnant by accident; they will have considered and assumed the risks of gestating clones. Therefore, even if cloning is hazardous, it seems unreasonable to deny women the right to make their own decisions regarding a matter that involves not just their health, but also their reproductive freedom. Banning cloning to protect the right to health of newborns is even more problematic. The right to health is not a right to be healthy. *See* U.N. ESCOR, Comm. on Econ., Cultural, and Soc. Rts., *General Comment No. 14: The Right to the Highest Attainable Standard of Health*, ¶ 8, 22d Sess., U.N. Doc. E/C.12/2000/4 (2000), *reprinted in Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies*, U.N. Doc. HRI/GEN/1/Rev. 7, at 86, 88 (May 12, 2004). This is good, for a right to be healthy could be used to justify eugenics laws designed to prevent the birth of physically or mentally flawed offspring.

90 *See* LEE M. SILVER, REMAKING EDEN: CLONING AND BEYOND IN A BRAVE NEW WORLD 43 (1997).

91 *See* MACINTOSH, *supra* note 38, at 65.

92 *See* Lee Silver, *Public Policy Crafted in Response to Public Ignorance is Bad Public Policy*, 53 HASTINGS L.J. 1037, 1043 (2002).

93 In an effort to render safety a permanent barrier, the President's Council on Bioethics has argued that there is no ethical way to make reproductive cloning safe through experimentation because the cloned child cannot consent to his participation. *See* COUNCIL REPORT, *supra* note 37, at 91-94. This argument glosses over important questions. Ethics guidelines for medical research typically protect "human subjects": that is, living individuals, rather than embryos or fetuses. *See* Basic HHS Policy for Protection of Human Research Subjects, 45 C.F.R. § 46.102(f) (2005). By the time a cloned child is born and becomes a human subject entitled to protection under the guidelines, the "experiment" is already complete. Nor is it clear that reproduction qualifies as "research" subject to ethical guidelines. If it does, sexual reproduction also must be unethical, since the outcome is uncertain for the baby involved. Perhaps parents can be said to consent on behalf of their child, but that principle applies to cloning also. Finally, even if initial attempts at reproductive cloning can be classified as unethical, the realities of cloning make them likely to occur somewhere in the world. Once those initial efforts prove cloning safe, a cloning ban cannot be justified on safety grounds.

been treated so differently indicates that something other than safety lies at the heart of opposition to cloning. A leading culprit is the identity fallacy and the instinctive revulsion it inspires toward human clones. We must not allow safety to be used as an excuse for discrimination against the members of an unpopular class in violation of article 26.

To summarize this section, anti-cloning laws are inconsistent with the fundamental principle of non-discrimination enshrined in the international bill of rights. Far from being necessary to protect human dignity, the laws are a greater affront to human dignity than is cloning itself, for they discriminate against human clones based on their genetic characteristics.[94]

8. Conclusion

During the 20th century, many states enacted laws that relegated racial minorities and other unpopular groups to separate public facilities, or worse, concentration camps. The U.N. has devoted much of its work to ensuring that such inequities never happen again. Toward that end, the international bill of rights has enshrined the principle of non-discrimination.

The 21st century presents new challenges. Researchers are working to perfect embryo cloning, and there are people who need cloning to reproduce. Taken together, these facts suggest that human clones will be born in the near future.

If the non-discrimination principle is to retain its vitality in the new millennium, it must be interpreted to prohibit laws that attempt to exclude the members of an unpopular class from existence—at least, whenever scientific and social realities indicate that some members of the class are bound to be born despite the laws. Laws that seek to implement existential segregation are profoundly stigmatizing and impair the recognition, enjoyment or exercise by all persons, on an equal footing, of all rights and freedoms.[95]

Therefore, the U.N. has made a serious error in calling upon member states to ban cloning. To protect the principle of non-discrimination against further erosion, the U.N. should immediately rescind its Declaration.

If member states disapprove of cloning, they should consider alternative strategies. For example, the U.N. could work to educate the public about what cloning can and cannot do. Honest information about current safety risks could help discourage the infertile and other prospective parents from cloning prematurely. As for the rest of the public, debunking the identity fallacy should be enough to ensure that the vast majority lose interest in cloning altogether.

94 *See Universal Declaration on the Human Genome and Human Rights, supra* note 6, art. 2(b); *see also* Oscar Schachter, *Human Dignity as a Normative Concept*, 77 AM. J. INT'L L. 848, 852 (1983) (dissemination of negative stereotypes of groups offends human dignity).
95 *See General Comment No. 18, supra* note 80, para. 7.

Education is important for another reason. Unlike stigmatising laws, education holds the power to shatter demeaning and dehumanizing stereotypes about human clones. This is important, for if human clones are destined to exist, human dignity requires that we welcome them as equal members of our human family.