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Hearing on "The Science and Ethics of Human Cloning"

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Mr. Chairman and Members of the Committee. My name is Leon R. Kass, and I appear before you as Chairman of the President's Council on Bioethics. On behalf of the Council, I wish to thank you for this opportunity to present the Council's findings and recommendations on the vexing subject of human cloning. I am also Hertog Fellow in Social Thought at the American Enterprise Institute and the Addie Clark Harding Professor (on leave) in the Committee on Social Thought and the College at the University of Chicago. In my own scholarship, I have been thinking and writing about the ethics of human cloning for thirty-five years. Thus, speaking personally, I would like to thank you, Senator Brownback, for your vision in recognizing the momentous choice now before us and for your courage and leadership in seeking effective means to protect us from a dangerous assault on human dignity.

For the first six months of last year, the President's Council on Bioethics met to consider the moral, biomedical, and human significance of human cloning, in order to advise President Bush on the subject. The Council's report, *Human Cloning and Human Dignity: An Ethical Inquiry*,^{*} was issued in July, 2002; I am submitting the Executive Summary of the report as part of my written testimony.

I want to summarize the contents of the report in five points. First, the Council sought to examine the subject of human cloning in full by considering the human goods that cloning might serve or endanger—not just whether the technique is feasible or safe. We sought also to assess the impact of growing biotechnical powers over human life and their effect on human procreation, on the goals and limits of biomedical science, and on the meaning of the activity of healing. It is of prime importance to put cloning in its proper place, both humanly speaking and also in the context of other biotechnical powers now gathering for manipulating the human body and mind.

^{*} U. S. Government Printing Office, 299 pp., 2002. A commercial paperback edition, *Human Cloning and Human Dignity: The Report of the President 's Council on Bioethics*, 350 pp., was published in 2002 by Public Affairs.

Second, the Council worked to develop fair and accurate terminology. Human cloning is a subject that has been bedeviled by confusing speech and manipulative speech. Our goal was to clarify the terminology that confounds this discussion, beginning with the idea of human cloning itself. Whatever the purpose for which human cloning is undertaken, the act that produces the genetic replica is the very first step in the process, the creation of an embryonic clone. Accordingly, the Council has insisted that what we mean by "human cloning" is the production of cloned human embryos, the earliest stage of developing human life. This act of cloning may be undertaken with the intention of either transferring these embryos to a uterus in order to initiate a pregnancy or taking them apart in order to obtain stem cells for research.

In popular discussion, the first use has been called "reproductive cloning" or just "cloning." The second has come to be called "therapeutic cloning," "research cloning," or "nuclear transfer for stem cell research." The Council, instead, chose to call these uses respectively "cloning-to-produce-children" or "cloning-for-biomedical-research." These terms are accurate. And they allow us to debate the moral questions without euphemistic distortion or Orwellian speech. Whether one favors or opposes cloning to produce children; whether one favors or opposes cloning for biomedical research, the Council insists that we must acknowledge that both uses of cloning begin with the same act, the production of cloned human embryos.^{*}

The third point concerns the ethics of cloning-to-produce-children. Regarding cloning-toproduce-children, the Council is in agreement with majority opinion both in America and the Congress. The Council was unanimous, in fact, that cloning-to-produce-children should be opposed, both morally and legally. Not only is the technique demonstrably unsafe, but it can never be safely and ethically attempted. And the Council opposes this practice not only because it's unsafe, but because it would imperil the freedom and dignity of the cloned child, the cloning

^{*} Despite efforts to obscure this fact, this is true for what scientists have preferred to call "nuclear transfer to produce stem cells." The act of nuclear transfer does not directly produce stem cells. It produces, as a primary product, a cloned human embryo, which, once grown to the blastocyst stage (about 5-6 days), may then be dissected for its stem cells. It is not true, as Stanford University originally claimed when it recently announced its intention to do "nuclear transfer to produce stem cells" (= "cloning for biomedical research"), that the President 's Council endorses this terminology or, moreover, approves the use of human cloning for this purpose.

parents, and the entire society. In its report, the Council also argues that by enabling parents for the first time to predetermine the entire genetic makeup of their children, we would be taking a major step toward turning procreation into manufacture. Cloning-to-produce-children would also confound family relations and personal identity, create new stresses between parents and offspring, and might open the door to a new eugenics where parents or society could replicate the genomes of individuals whom they deem to be superior.

The fourth point concerns the ethics of cloning-for-biomedical-research. Here the Council, like the nation, was divided. On the one hand, we acknowledge that the research offers the prospect, though speculative at the moment, of gaining valuable knowledge and treatments for many diseases. On the other hand, this practice would require the exploitation and destruction of nascent human life created solely for the purpose of research.

Individual Council members weighed these moral concerns differently. Yet all members of the Council—and I am delighted about this—agreed that each side in this debate has something vital to defend, not only for itself but for all of us. Each side understood that we cannot afford to be casual about human suffering, to be cavalier regarding how we treat nascent human life, or to be indifferent about how we decide among the alternatives. Each side recognized that we must face up to the moral burden of either approving or disapproving this research: namely, on the one hand, that some who might be healed more rapidly might not be; and on the other hand, that we will become a society that creates and uses some lives in the service of others.

Finally, the Council offered two policy recommendations, a majority recommendation and a minority recommendation, each of them distinct from the most prominent legislative proposals considered in the last Congress. Both recommendations called for a permanent ban on cloning-to-produce-children, thus giving public force to the nation's strong ethical verdict against this practice. Where the Council differed was on how to approach cloning-forbiomedical-research.

A minority of the Council recommended that we proceed with such potentially valuable research, but only once significant regulations are in place, including federal licensing of all cloning research, oversight that (among other things) would keep track of the uses and fates of all cloned embryos produced, and strict limits on how long cloned embryos may be allowed to develop outside the body.

A majority of the Council, myself included, recommended that no human cloning of any kind be permitted at this time. We proposed that Congress enact a ban on all attempts—both publicly and privately funded—at cloning-to-produce-children, and a four-year federal moratorium on human-cloning-for-biomedical-research, beginning with the act of the production of cloned human embryos.

We argued for this moratorium on a number of grounds. It would give us more time to debate whether we should cross this crucial moral boundary—that of creating human life solely as a resource for research. A moratorium would allow time for other areas of stem cell research, both adult and embryonic, to proceed. It would allow time for those who believe cloning-for-biomedical-research can never be ethically pursued to make their case, and for those who disagree to design a responsible system of regulation and public oversight.^{*} And, perhaps most important, a moratorium on all cloning offers the only effective way to prevent cloning-to-produce-children while the deliberation continues and while no regulatory system is in place.

A national moratorium on cloning-for-biomedical-research would also allow the debate on the question of research on cloned embryos to be taken up in the larger context, where it belongs, in the context of embryo research generally, and in the context of the future possibilities of genetic engineering of human life. Pending such debate, the majority of the Council held that no law should now be enacted that approves or authorizes any human cloning.

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^{*} The Council majority also believed, that, in the absence of a ban or temporary moratorium, scientists and industrial researchers who want no restriction or regulation of their activities, would have no incentive whatsoever to design a regulatory scheme of the sort favored by the Council's minority.

To this point, I have summarized the report of the Council, emphasizing what I take to be its major achievements and conclusions. In what follows, I wish to elaborate the ethical objections to human cloning-to-produce-children. I do so because some people think that, beyond the issue of safety, the popular opposition to cloning children rests wholly on irrational feelings such as repugnance, while others, ignoring what it might mean to be a cloned child, focus exclusively on the desires and putative rights of the adults who would wish to practice cloning. Though all the points that follow are made in the Council report, I will be speaking here in my own name and formulating the arguments in my own manner.

In order of increasing seriousness, I offer four objections to human cloning-to-producechildren: (1) it involves unethical experimentation; (2) it threatens identity and individuality; (3) it turns procreation into manufacture; and (4) it means despotism over children and perversion of parenthood.

First, any attempt to clone a human being would constitute an unethical experiment upon the resulting child-to-be. As the animal experiments indicate, there are grave risks of mishaps and deformities, even to those clones that are born alive. Conducting the experiments in humans in efforts to make cloning safer would violate the ethical norms for experimenting with human subjects. Shall we just discard the defective children? Moreover, because of what cloning means, one cannot presume a future cloned child's consent to be a clone, even a healthy one. Thus, we cannot ethically even get to know whether or not human cloning is feasible.

Second, cloning creates serious issues of identity and individuality. The clone may experience concerns about his distinctive identity not only because he will be in genotype and appearance identical to another human being, but, in this case, because he may also be twin to the person who is his "father" or "mother"—if one can still call them that. What would be the psychic burdens of being the "child" or "parent" of your twin? What will happen when the adolescent clone of Mommy becomes the spitting image of the woman Daddy once fell in love with? In case of divorce, will Mommy still love the clone of Daddy, even though she can no longer stand the sight of Daddy himself? In addition, unlike "normal" identical twins, a cloned

individual will be saddled with a genotype that has already lived. He will not be fully a surprise to the world: people are likely always to compare his performances in life with that of his alter ego. True, his nurture and circumstance will be different; genotype is not exactly destiny. But one must also expect parental efforts to shape this new life after the original—or at least to view the child with the original version always firmly in mind. For why else did they clone from the star basketball player, mathematician, and beauty queen—or even dear old Dad—in the first place?

Since the birth of Dolly, there has been a fair amount of doublespeak on the matter of genetic identity. Experts have rushed in to reassure the public that the clone would in no way be the same person or have any confusions about his identity: they are pleased to point out, as previously noted, that the clone of Mel Gibson would not be Mel Gibson. Fair enough. But genotype obviously matters plenty. That, after all, is the only reason to clone, whether human beings or sheep. The odds that clones of Shaquille O'Neal would play in the NBA are, I submit, infinitely greater than they are for clones of Danny DeVito.

A cloned child is deliberately deprived of a normal bio-social identity. He or she has (at most) but one biological "parent"; the usually sad situation of the "single-parent child" is here purposely planned, and with a vengeance. In the case of self-cloning, the "offspring" is, in addition, one's twin: The dreaded result of incest—to be parent to one's sibling—is here brought about deliberately, albeit without any act of coitus. Moreover, all other relationships will be confounded: what will father, grandfather, aunt, cousin, or sister mean, and who will bear what ties and burdens? To this it is no answer to say that our society, with its high incidence of broken families and non-marital childbearing, already confuses kinship and responsibility for children, unless one also wants to argue that this, for children, is a preferable state of affairs.

Third, human cloning would represent a giant step toward turning begetting into making, procreation into manufacture (literally, something "handmade"), a process already begun with in vitro fertilization and genetic testing of embryos. With cloning, not only is the process in hand, but the total genetic blueprint of the cloned individual is selected and determined by the human

artisans. To be sure, subsequent development is still according to natural processes; and the resulting children will be recognizably human. But we here would be taking a major step into making man himself simply another one of the man-made things.

How does begetting differ from making? In natural procreation, human beings come together, complementarily male and female, to give existence to another being who is formed, exactly as we were, by what we are—living, hence perishable, hence aspiringly erotic, hence procreative human beings. But in clonal reproduction, and in the more advanced forms of manufacture to which it will lead, we give existence to a being not by what we are but by what we intend and design. As with any product of our making, no matter how excellent, the artificer stands above it, not as an equal but as a superior, transcending it by his will and creative prowess. In human cloning, scientists and prospective "parents" adopt a technocratic attitude toward human children: human children become their artifacts. Such an arrangement is profoundly dehumanizing, no matter how good the product.

Mass-scale cloning of the same individual makes the point vividly; but the violation of human equality, freedom, and dignity is present even in a single planned clone. And procreation dehumanized into manufacture is further degraded by commodification, a virtually inescapable result of allowing baby-making to proceed under the banner of commerce.

Finally, and perhaps most important, the practice of human cloning by nuclear transfer like other anticipated forms of genetically engineering the next generation—would enshrine and aggravate a profound and mischief-making misunderstanding of the meaning of having children and of the parent-child relationship. When a couple normally chooses to procreate, the partners are saying yes to the emergence of new life in its novelty, are saying yes not only to having a child but also to having whatever child this child turns out to be. In accepting our finitude and opening ourselves to our replacement, we tacitly confess the limits of our control. Embracing the future by procreating means precisely that we are relinquishing our grip, in the very activity of taking up our own share in what we hope will be the immortality of human life and the human species. This means that our children are not our children: they are not our property, they are not

our possessions. Neither are they supposed to live our lives for us, nor anyone else's life but their own. To be sure, we seek to guide them on their way, imparting to them not just life, but nurture, love, and a way of life. To be sure, they bear our hopes that they will surpass us in goodness and happiness, enabling us in small measure to transcend our own limitations. But their genetic distinctiveness and independence are the natural foreshadowing of the deep truth that they have their own and never-before-enacted life to live. Though sprung from a past, they take an uncharted course into the future.

Much mischief is already done by parents who try to live vicariously through their children. Children are sometimes compelled to fulfill the broken dreams of unhappy parents. But whereas most parents normally have hopes for their children, cloning parents will have *expectations*. In cloning, such overbearing parents will have taken at the start a decisive step that contradicts the entire meaning of the open and forward-looking nature of parent-child relations. The child is given a genotype that has already lived, with full expectation that this blueprint of a past life ought to be controlling of the life that is to come. A wanted child now means a child who exists precisely to fulfill parental wants. Cloning is thus inherently despotic, for it seeks to make one's children after one's own image (or an image of one's choosing) and their future according to one's will.

For all these reasons, I conclude that human cloning threatens the dignity of human procreation, giving one generation unprecedented control over the next, and marking a major step toward a eugenic world in which children become objects of manipulation and products of will. We rightly worry about this threat when we oppose cloning-to-produce-children, yet the same concerns (even more than concerns about embryo destruction) should lead us also to oppose cloning-for-biomedical-research.

All human cloning must be seen in the context of our growing powers over human reproduction augmented by new knowledge of the human genome. Science already permits us to screen human embryos in vitro for thousands of human genes: not only to find markers for dread diseases, but also soon genes responsible for other human traits; not just sex, height, or skin color

but even intelligence, temperament, or sexual orientation. Genetic selection of embryos is today a growing industry. Some experts hail assisted reproduction as the route to genetically sound babies. While directed genetic change of human embryos (even for therapeutic purposes) may be a long way off, it has been accomplished in primates in the laboratory. It would be naive to believe that cloning children will be confined to infertile couples or that cloning research will be confined to studies of disease.

Viewed in this larger context, the production of cloned embryos for *any* purpose marks a significant leap in transforming procreation into a form of manufacture. The embryo created by cloning would be the first human embryo to have its genetic identity selected in advance, the first embryo whose makeup is not the unpredictable result of uniting sperm and egg. It is precisely this genetic control that makes cloned embryos appealing and useful. But we should not be deceived: saying yes to creating cloned embryos, even for research, means saying yes, at least in principle, to an ever-expanding genetic mastery of one generation over the next. Once cloned human embryos exist in laboratories, the eugenic revolution will have begun. And, of course, it will be virtually impossible to prevent them from being used to produce cloned babies.

Opposition to human cloning-to-produce-children is practically unanimous in America: the vast majority of our fellow citizens, including most scientists, would like to see it banned. Nearly every member of Congress has condemned it. Yet despite this near-unanimity, and despite the fact that bans on all human cloning are being enacted in many nations around the world, we have so far failed to give national public force to the people's strong ethical verdict. The failure of the last Congress to enact a ban on human cloning casts grave doubt on our ability to govern the unethical uses of biotechnology, even when it threatens things we hold dear. If Congress fails again to act this time around, human cloning will happen here, and we will have acquiesced in its arrival. It is my profound hope that Congress will rise to the occasion, and strike a blow in defense of human dignity.