Human Cloning

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Cloning

We live in a brave new world in which reproductive technologies are ravaging as well as replenishing families. Increasingly common are variations of the situation in which "baby's mother is also grandma-and-sister."\(^1\) Sometimes extreme measures are necessary in order to have the kind of child we want.

This new eugenics is simply the latest version of the age-old quest to make human beings—in fact, humanity as a whole—the way we want them to be: perfect. It includes our efforts to be rid of unwanted human beings through abortion and euthanasia. It more recently is focusing on our growing ability to understand and manipulate our genetic code, which directs the formation of many aspects of who we are, for better and for worse.

We aspire to complete control over the code, though at this point relatively little is possible. This backdrop can help us understand the great fascination with human cloning today. It promises to give us a substantial measure of power over the genetic makeup of our offspring. We cannot control their code exactly, but the first major step in that direction is hugely appealing: You can have a child whose genetic code is exactly like your own. And you didn't turn out so badly, did you?

Admittedly, in our most honest moments we would improve a few things about ourselves. So the larger agenda here remains complete genetic control. But human cloning represents one concrete step in that direction, and the forces pushing us from behind to take that step are tremendous. These forces are energized, as we will see, by the very ways we look at life and justify our actions. But before examining such forces, we need a clearer view of human cloning itself.
The Rising Prospect of Human Cloning

It was no longer ago than 1997 when the president of the United States first challenged the nation and charged his National Bioethics Advisory Commission\(^2\) to give careful thought to how the United States should proceed regarding human cloning. Attention to this issue was spurred by the reported cloning of a large mammal--a sheep--in a new way. The method involved not merely splitting an early-stage embryo to produce identical twins. Rather, it entailed producing a nearly exact genetic replica of an already existing adult.

The technique is called nuclear transfer or nuclear transplantation because it involves transferring the nucleus (and thus most of the genetic material) from a cell of an existing being to an egg cell in order to replace the egg cell's nucleus. Stimulated to divide by the application of electrical energy, this egg--now embryo--is guided by its new genetic material to develop as a being who is genetically almost identical to the being from which the nucleus was taken. This process was reportedly carried out in a sheep to produce the sheep clone named Dolly\(^3\) but attention quickly shifted to the prospects for cloning human beings (by which I will mean here and throughout, cloning by nuclear transfer).

Quickly people began to see opportunities for profit and notoriety. By 1998, for example, scientist Richard Seed had announced intentions to set up a Human Clone Clinic--first in Chicago, then in ten to twenty locations nationally, then in five to six locations internationally.\(^4\) While the U.S. federal government was pondering how to respond to such initiatives, some of the states began passing legislation to outlaw human cloning research, and nineteen European nations acted quickly to sign a ban on human cloning itself.\(^5\) However, the European ban only blocks the actual implantation, nurture, and birth of human clones, and not also cloning research on human embryos that are never implanted. Such research has been slowed in the United States since the president and then Congress withheld federal government funds from research that subjects embryos to risk for non-therapeutic purposes.\(^6\) Moreover, a United Nations declaration co-sponsored by eighty-six countries in late 1998 signaled a broad worldwide opposition to research that would lead to human cloning.\(^7\)

Yet there are signs of this protection for embryos weakening in the face of the huge benefits promised by stem cell research. Stem cells can treat many illnesses and can have the capacity to develop into badly needed body parts such as tissues and organs. One way to obtain stem cells is to divide an early stage embryo into its component cells--thereby destroying the embryonic human being. Under President Clinton, the National Institutes of Health decided that as long as private sources destroyed the embryos and produced the stem cells, the federal government would fund research on those cells.\(^8\) During 2001, President Bush prohibited federally-funded research on embryonic stem cells produced after the date his prohibition was announced. In 2002, his newly-formed Council on Bioethics raised serious questions about even this form of embryonic stem cell research, through the Council was divided on this matter.\(^9\) These developments underscore that there are a number of technological developments that are closely interrelated and yet have somewhat different ethical considerations involved. While embryo and stem cell research are very important issues, they are distinct ethically from the question of reproducing human beings through cloning. Reproduction by cloning is the specific focus of this
While no scientifically verifiable birth of a human clone has yet been reported, the technology and scientific understanding are already in place to make such an event plausible at any time now. There is an urgent need to think through the relevant ethical issues. To begin with, is it acceptable to refer to human beings produced by cloning technology as "clones"? It would seem so, as long as there does not become a stigma attached to that term that is not attached to more cumbersome expressions like "a person who is the result of cloning" or "someone created through the use of somatic cell nuclear transfer." We call someone from Italy an Italian, no disrespect intended. So it can be that a person "from cloning" is a clone. We must be ready to abandon this term, however, if it becomes a label that no longer meets certain ethical criteria.

Why Clone Human Beings?

In order to address the ethics of human cloning itself, we need to understand why people would want to do it in the first place. People often respond to the prospect of human cloning in two ways. They are squeamish about the idea—a squeamishness Leon Kass has argued we should take very seriously. They also find something alluring about the idea. Such fascination is captured in a variety of films, including "The Boys from Brazil" (portraying the attempt to clone Adolf Hitler), "Bladerunner" (questioning whether a clone would be more like a person or a machine), and "Multiplicity" (presenting a man's attempt to have enough time for his family, job, and other pursuits by producing several live adult replicas of himself). Popular discussions center on the wonderful prospects of creating multiple Mother Teresas, Michael Jordans, or other notable figures.

The greatest problem with creative media-driven discussions like this is that they often reflect a misunderstanding of the science and people involved. The film "Multiplicity" presents human replicas, not clones in the form that we are discussing them here. When an adult is cloned (e.g., the adult sheep from which Dolly was cloned), an embryo is created, not another adult. Although the embryo's cells contain the same genetic code as the cells of the adult being cloned, the embryo must go through many years of development in an environment that is significantly different from that in which the adult developed. Because both our environment and our genetics substantially influence who we are, the embryo will not become the same person as the adult. In fact, because we also have a spiritual capacity to evaluate and alter either or both our environment and our genetics, human clones are bound to be quite different from the adults who provide their genetic code.

If this popular fascination with hero-duplication is not well founded, are there any more thoughtful ethical justifications for human cloning? Many have been put forward, and they cluster into three types: utility justifications, autonomy justifications, and destiny justifications. The first two types reflect ways of looking at the world that are highly influential in the United States and elsewhere today, so we must examine them carefully. They can readily be critiqued on their own terms. The third, while also influential, helpfully opens the door to theological reflection as well. I will begin by explaining the first two justifications. In the following sections I will then assess the first two
justifications and carefully examine the third.

**Utility**

Utility justifications defend a practice based on its usefulness, or benefit. As long as it will produce a net increase in human well-being, it is warranted. People are well acquainted with the notion of assessing costs and benefits, and it is common to hear the argument that something will produce so much benefit that efforts to block it must surely be misguided.

Utility justifications are common in discussions of human cloning. Typical examples include:

1. By having clones, people can, in some measure, have more of themselves in the world and thereby make a bigger impact.
2. Parents can replace a dying child with a genetically identical new one.
3. Parents can produce a clone of a sick child to provide bone marrow or other lifesaving bodily elements that can be provided with relatively modest risk to the clone.
4. Parents, both of whom have a lethal recessive gene, can produce a child by cloning rather than risk the one-in-four chance that their child will face an early death.
5. Clones could be produced to provide organs for transplants admittedly, transplants that could jeopardize or even end a clone's life.
6. Other clones could be produced with unusually high or low mental capacities that would suit them well to do socially needed tasks, for example, challenging problem solving or menial labor.

**Autonomy**

The second type of justification appeals to the idea of autonomy, an increasingly popular appeal in this postmodern age, in which people's personal experiences and values play a most important role in determining what is right and true for them. According to this justification, we ought to respect people's autonomy as a matter of principle. People's beliefs and values are too diverse to adopt any particular set of them as normative for everyone. Society should do everything possible to enhance the ability of individuals and groups to pursue what they deem most important.

Again, there are many forms that autonomy justifications can take. However, three stand out as particularly influential in discussions of human cloning:

1. "Personal freedom." There is a strong commitment in many countries, the United States in particular, to respecting people's freedom. This commitment is rooted in a variety of religious and secular traditions. Respect for people entails allowing them to make important life decisions that flow from their own personal values, beliefs, and goals, rather than
2. "Reproductive choice." Reproductive decisions are especially private and personal matters. They have huge implications for one's future responsibilities and well being. Social intrusion in this realm is particularly odious.

3. "Scientific inquiry." A high value has long been placed on protecting the freedom of scientific inquiry. More knowledge and better understanding enhance our capacity to make good decisions and accomplish great things in the world.

Utility and autonomy are important ethical justifications. However, they do not provide a sufficient ethical basis for human cloning. We will examine them here carefully in turn.

**Understanding Utility**

While the concern for utility is admirable, there are many serious problems with this type of justification. Most significantly, it is "unworkable" and it is "dangerous." It is unworkable because knowing how much utility cloning or any other practice has, with a reasonable level of precision, is simply impossible. We cannot know all of the ways that a practice will affect all people in the world infinitely into the future. For example, it is impossible to quantify accurately the satisfaction of every parent in future centuries who will choose cloning rather than traditional sexual reproduction in order to spare their children from newly discovered genetic problems that are now unknown. In fact, as sheep cloner Ian Wilmut was widely quoted as observing, shortly after announcing his cloning of Dolly, "Most of the things cloning will be used for have yet to be imagined." The difficulty of comparing the significance of every foreseeable consequence on the same scale of value--including comparing each person's subjective experiences with everyone else's--only adds to the unworkability.

What happens in real life is that decision makers intuitively compare only those consequences they are most aware of and concerned about. Such an approach is an open invitation to bias and discrimination, intended and unintended. Even more dangerous is the absence of limits to what can be justified. There are no built-in protections for weak individuals or minority groups, including clones. People can be subjected to anything, the worst possible oppression or even death, if it is beneficial to the majority. Situations such as Nazi Germany and American slavery can be justified using this way of thinking.

When utility is our basis for justifying what is allowed in society, people are used, fundamentally, as mere means to achieve the ends of society or of particular people. It may be appropriate to use plants and animals in this way, within limits. Accordingly, most people do not find it objectionable to clone animals and plants to achieve products that will fulfill a purpose--better milk, better grain, and so forth. However, it is demeaning to "use" people in this way.

This demeaning is what bothers us about the prospect of producing a large group of human clones with low intelligence so that society can have a source of cheap menial labor. It is also what is problematic about producing clones to provide spare parts, such as vital transplantable organs for other people. Both actions fail to respect the equal and great dignity of all people by...
making some, in effect, the slaves of others. Even cloning a child who dies to remove the parents' grief forces the clone to have a certain genetic makeup in order to be the parents' child, thereby permanently subjecting the clone to the parents' will. The irony of this last situation, though, is that the clone will not become the same child as was lost--both the child and the clone being the product of far more than their genetics. The clone will be demeaned by not being fully respected and accepted as a unique person, and the parents will fail to regain their lost child in the process.

To summarize: The utility justification is a substantially inadequate basis for defending a practice like cloning. In other words, showing that a good benefit, even a great benefit, will result is not a sufficient argument to justify an action. Although it is easy to forget this basic point when enticed by the promise of a wonderful benefit, we intuitively know it is true. We recognize that we could, for example, cut up one person, take her or his various organs for transplant, and save many lives as a result. But we do not go around doing that. We realize that if the action we take to achieve the benefit is itself horrendous, beneficial results are not enough to justify it.

As significant a critique as this is of a utility justification for human cloning, there is more to say. For even if it were an adequate type of justification, which it is not, it is far from clear that it would justify human cloning. To justify human cloning on the basis of utility, all the consequences of allowing this practice have to be considered, not only the benefits generated by the exceptional situations commonly cited in its defense. What are some of the consequences we need to be concerned about? There is only space here to note two of the many that weigh heavily against human cloning.

First, as suggested earlier, to allow cloning is to open the door to a much more frightening enterprise: genetically engineering people without their consent, not for their own benefit, but for the benefit of particular people or society at large. Cloning entails producing a person with a certain genetic code because of the attractiveness or usefulness of a person with that code. In this sense, cloning is just the tip of a much larger genetic iceberg. We are developing the genetic understanding and capability to shape the human genetic code in many ways. If we allow cloning, we legitimize in principle the entire enterprise of designing children to suit parental or social purposes. As one researcher at the U.S. Council on Foreign Relations has commented, Dolly is best understood as a drop in a towering wave (of genetic research) that is about to crash over us. The personal and social destructiveness of large-scale eugenic efforts (including but by no means limited to Nazi Germany's) has been substantial, but at least it has been restricted to date by our limited genetic understanding and technology. Today the stakes are much higher.
The second of the many additional considerations that must be included in any honest utilitarian calculus involves the allocation of limited resources. To spend resources on the development and practice of human cloning is to not spend them on other endeavors that would be more beneficial to society. For many years now there have been extensive discussions about the expense of health care and the large number of people (tens of millions), even in the United States, that do not have health insurance.\textsuperscript{13} It has also long been established that such lack of insurance means that a significant number of people are going without necessary health care and are suffering or dying as a result.\textsuperscript{14} Another way of observing similar pressing needs in health care is to survey the specific areas that could most benefit from additional funds.\textsuperscript{15} In most of these areas, inadequate funding yields serious health consequences because there is no alternative way to produce the basic health result at issue.

Not only are the benefits of human cloning less significant than those that could be achieved by expending the same funds on other health care initiatives, but there are alternative ways of bringing children into the world that can yield at least one major benefit of cloning children themselves. If there were enough resources available to fund every technology needed or wanted by anyone, the situation would be different. But researching and practicing human cloning will result in serious suffering and even loss of life because other pressing health care needs cannot be met.

An open door to unethical genetic engineering technologies and a misallocation of limited resources, then, are among the numerous consequences of human cloning that would likely more than outweigh the benefits the practice would achieve. As previously argued, we would do better to avoid attempting to justify human cloning simply based on its consequences. But if we are tempted to do so, we must be honest and include all the consequences and not be swayed by exceptional cases that seem so appealing because of the special benefits they would achieve.

**Assessing Autonomy**

Many people today are less persuaded by utility justifications than they are by appeals to autonomy. While the concern for freedom and responsibility for one’s own life in this way of thinking is admirable, autonomy justifications are as deeply flawed as utility justifications. More specifically, they are *selfish* and they are *dangerous*.

The very term by which this type of justification is named underscores its selfishness. The word autonomy comes from two Greek words, *auto* (meaning "self") and *nomos* (meaning "law"). In the context of ethics, appeals to autonomy literally signify that the self is its own ethical law that it generates its own standards of right and wrong. There is no encouragement in this way of looking at the world to consider the well-being of others, for that is irrelevant as long as it does not matter to me. Although in theory I should respect the autonomy of others as I live out my own autonomy, in practice an autonomous mindset predisposes me to be unconcerned about how my actions will affect others.
As long as the people making autonomous choices happen to have good moral character that predisposes them to be concerned about the well-being of everyone else, there will not be serious problems. In the United States to date, the substantial influence of Christianity—with its mandate to love others sacrificially—has prompted people to use their autonomous choices to further the interests of others alongside of their own. As Christian influences in public life, from public policy to public education, continue to be eradicated in the name of separation of church and state, the self-centeredness of an autonomy outlook will become increasingly evident. Consciously or unconsciously, selfish and other base motives arise within us continually, and without countervailing influences, there is nothing in an autonomy outlook to ensure that the well-being of others will be protected.

When autonomy rules, then, scientists, family members, and others are predisposed to act on the basis of their own autonomous perspectives, and the risk to others is real. Herein lies the danger of autonomy-based thinking, a danger that is similar to that attending a utility-oriented outlook. Protecting people's choices is fine as long as all people are in a comparable position to make those choices. But if some people are in a very weak position economically or socially or physically, they may not be able to avail themselves of the same opportunities, even if under more equitable circumstances they would surely want to do so. In an autonomy-based approach, there is no commitment to justice, caring, or any other ethical standards that would safeguard those least able to stand up for themselves.

An autonomy justification is simply an insufficient basis for justifying a practice like human cloning. In other words, showing that a freedom would otherwise be curtailed is not a sufficient argument to justify an action. We have learned this lesson the hard way, by allowing scientific inquiry to proceed unfettered. The Nuremberg Code resulted from research atrocities that were allowed to occur because it was not recognized that there are other ethical considerations that can be more important than scientific and personal freedom (autonomy).

While the autonomy justification itself is flawed, there is more to say about it as a basis for defending human cloning. For even if it were an adequate type of ethical justification—which it is not—it is far from clear that it would actually justify the practice. An honest, complete autonomy-based evaluation of human cloning would have to consider the autonomy of all persons involved, including the people produced through cloning, and not just the autonomy of researchers and people desiring to have clones. Of the many considerations that would need to be taken into account if the autonomy of the clones were taken seriously, space will only permit the examination of two here.

First, human cloning involves a grave risk to the clone's life. There is no plausible way to undertake human cloning at this point without a major loss of human life. In the process of cloning the sheep Dolly, 276 failed attempts occurred, including the death of several so-called "defective" clones. An alternative process used to clone monkeys added the necessary destruction of embryonic life to these other risks. It involved transferring the genetic material from each of the cells in an eight-celled embryo to other egg cells in order to attempt to produce eight so-called clones (or, more properly, identical siblings). Subsequent mammal cloning has continued the large-scale fatalities and deformities that unavoidably accompany cloning research. Were these experimental technologies to be applied to human beings, the evidence
and procedures themselves show that many human embryos, fetuses, and infants would be lost—and many others deformed—whatever the process. This tragedy would be compounded by the fact that it is unlikely human cloning research would be limited to a single location. Rather, similar mistakes and loss of human life would be occurring almost simultaneously at various private and public research sites.

Normally, experimentation on human beings is allowed only with their explicit consent. (Needless to say, it is impossible to obtain a clone’s consent to be brought into existence through cloning.) An exception is sometimes granted in the case of a child, including one still in the womb, who has a verifiable medical problem which experimental treatment may be able to cure or help. However, human cloning is not covered by this exception for two reasons. First, there is no existing human being with a medical problem in the situation in which a human cloning experiment would be attempted. Second, even if that were not an obstacle, there is typically no significant therapeutic benefit to the clone in the many scenarios for which cloning has been proposed. For the experiment to be ethical, there would need to be therapeutic benefit to the clone so huge as to outweigh the substantial likelihood of the death or deformity that occurred in the Dolly experiment. To proceed with human cloning at this time, then, would involve a massive assault on the autonomy of all clones produced, whether they lived or died.

There is also a second way that human cloning would conflict with the autonomy of the people most intimately involved in the practice, that is, the clones themselves. Human cloning would radically weaken the family structure and relationships of the clone and therefore be fundamentally at odds with their most basic interests. Consider the confusion that arises over even the most basic relationships involved. Are the children who result from cloning really the siblings or the children of their "parents"—really the children or the grandchildren of their "grandparents"? Genetics suggests one answer and age the other. Regardless of any future legal resolutions of such matters, child clones (not to mention others inside and outside the family) will almost certainly experience confusion. Such confusion will impair their psychological and social well being—in fact, their very sense of identity. A host of legal entanglements, including inheritance issues, will also result.

This situation is problematic enough where a clearly identified family is involved. But during the experimental phase in particular, identifying the parents of clones produced in a laboratory may be even more troublesome. Is the donor of the genetic material automatically the parent? What about the donor of the egg into which the genetic material is inserted? If the genetic material and egg are simply donated anonymously for experimental purposes, does the scientist who manipulates them and produces a child from them become the parent? Who will provide the necessary love and care for the damaged embryo, fetus, or child that results when mistakes are made and it is so much easier just to discard them?

As the U.S. National Bioethics Advisory Commission's report has observed (echoed more recently by the report of the President's Council on Bioethics), human cloning "invokes images of manufacturing children according to specification. The lack of acceptance this implies for children who fail to develop according to expectations, and the dominance it introduces into the parent-child relationship, is viewed by many as fundamentally at odds with the acceptance, unconditional love, and openness characteristic of good parenting."17 "It just doesn't make sense," to quote Ian Wilmut, who objected strenuously to the notion of cloning humans after he
succeeded in producing the sheep clone Dolly.\textsuperscript{18} He was joined by U.S. President Clinton, who quickly banned the use of federal funds for human cloning research, and by the World Health Organization, who summarily labeled human cloning ethically unacceptable.\textsuperscript{19} Their reaction resonates with many, who typically might want to "have" a clone, but would not want to "be" one. What is the difference? It is the intuitive recognition that while the option of cloning may expand the autonomy of the person producing the clone, it undermines the autonomy of the clone.

So the autonomy justification, like the utility justification, is much more problematic than it might at first appear to be. We would do better not even to attempt to justify human cloning by appealing to this type of justification because of its inherent shortcomings. But if we are to invoke it, we must be honest and pay special attention to the autonomy of the person most intimately involved in the cloning, the clone. Particular appeals to "freedom" or "choice" may seem persuasive. But if only the autonomy of people other than clones is in view, or only one limited aspect of a clone's autonomy, then such appeals must be rejected.

**The Destiny Justification**

As noted near the outset of the chapter, there is a third type of proposed justification for human cloning which moves us more explicitly into the realm of theological reflection: the destiny justification. While other theological arguments against cloning have been advanced in the literature to date,\textsuperscript{20} many of them are somehow related to the matter of destiny. According to this justification, it is part of our God-given destiny to exercise complete control over our reproductive process. In fact, Richard Seed, in one of his first in-depth interviews after announcing his intentions to clone human beings commercially, made this very argument.\textsuperscript{21} No less a theologian, President Clinton offered the opposite view when he issued the ban on human cloning. Rather than seeing cloning as human destiny, he rejected it as "playing God."\textsuperscript{22} Whether or not we think it wise to take our theological cues from either of these individuals, what are we to make of the proposed destiny justification itself? Is human cloning in line with God's purposes for us?

To begin with, there are indeed problems with playing God the way that proponents of human cloning would have us do. For example, God can take utility and autonomy considerations into account in ways that people cannot. God knows the future, including every consequence of every consequence of all our actions, people do not. God loves all persons equally, without bias, and is committed and able to understand and protect the freedom of everyone, people are not. Moreover, there are other ways that the pursuit of utility and autonomy are troubling from a theological perspective.

The utility of human cloning, first of all, is that we can gain some benefit by producing clones. But using other people without their consent for our ends is a violation of their status as beings created in the image of God. People have a God-given dignity that prevents us from using them as mere means to achieve our purposes. Knowing that people are created in the image of God (Gen. 1:26-27), biblical writers in both the Old and New Testaments periodically invoke this truth to argue that human beings should not be demeaned in various ways (e.g., Gen. 9:6; James 3:9).
Since plants and animals are never said to be created in God's image, it is not surprising that they can be treated in ways (including killing) that would never be acceptable if people were in view (cf. Gen. 9:3 with 9:6).

An autonomy-based justification of human cloning is no more acceptable than a utility-based justification from a theological perspective. Some Christian writers, such as Allen Verhey, have helpfully observed that autonomy, understood in a particular way, is a legitimate biblical notion. As he explains, under the sovereignty of God, acknowledging the autonomy of the person can help ensure respect for and proper treatment of people made in God's image. There is a risk here, however, because the popular ethics of autonomy has no place for God in it. It is autonomy "over" God, not autonomy "under" God. The challenge is to affirm the critical importance of respect for human beings, and for their freedom and responsibility to make decisions that profoundly affect their lives, but to recognize that such freedom requires God. More specifically, such freedom requires the framework in which autonomy is under God, not over God, a framework in which respecting freedom is not just wishful or convenient thinking that gives way as soon as individuals or society as a whole have more to gain by disregarding it. It must be rooted in something that unavoidably and unchangeably "is." In other words, it must be rooted in God, in the creation of human beings in the image of God.

God is the creator, and we worship God as such. Of course, people are creative as well, being the images of God that they are. So what is the difference between God's creation of human beings, as portrayed in the book of Genesis, and human procreation as happens daily all over the world (also mandated by God in Genesis)? Creation is "ex nihilo," out of nothing. That means, in the first sense, that God did not just rearrange already existing materials. God actually brought into being a material universe where nothing even existed before. However, God's creation "ex nihilo" suggests something more. It suggests that there was no agenda outside of God that God was following--nothing outside of God that directed what were acceptable options. When it came to the human portion of creation, God created us to be the way God deemed best.

It is no accident that we call what we do when we have babies "procreation." "Pro" means "for" or "forth." To be sure, we do bring babies "forth." But the deeper meaning here is "for." We bring new human beings into the world "for" someone or something. To be specific, we continue the line of human beings for God, in accordance with God's mandate to humanity at the beginning to "be fruitful and multiply" (Gen. 1:28). We also create for the people whom we help bring into being. We help give them life, and they are the ones most affected by our actions. What is particularly significant about this "procreation," this "creation for," is that by its very nature it is subject to an outside agenda, to God's agenda primarily, and secondarily to the needs of the child being created.

In this light, the human cloning mindset is hugely problematic. With unmitigated pride it claims the right to create rather than procreate. It looks neither to God for the way that he has intended human beings to be procreated and raised by fathers and mothers who are the secondary, that is, genetic source of their life; nor does it look primarily to the needs of the one being procreated. As we have seen, it looks primarily to the cloner's own preferences or to whatever value system one chooses to prioritize (perhaps the "good of society," etc.). In other words, those operating out of the human cloning mindset see themselves as Creator rather than procreator. This is the kind of aspiring to be God for which God has consistently chastised people, and for which God has
ultimately wreaked havoc on many a society and civilization.

Leon Kass has observed that we have traditionally used the word "procreation" for having children because we have viewed the world, and human life in particular, as created by God. We have understood our creative involvement in terms of and in relation to God's creation. Today we increasingly orient more to the material world than to God. We are more impressed with the gross national product than with the original creation. So we more commonly talk in terms of re"production" rather than pro"creation." In the process, we associate people more closely with things, with products, than with the God of creation. No wonder our respect for human life is deteriorating. We become more like that with which we associate. If we continue on this path, if our destiny is to clone ourselves, then our destiny is also, ultimately, to lose all respect for ourselves, to our peril.

Claims about utility, autonomy, or destiny, then, are woefully inadequate to justify human cloning. In fact, a careful look at any of these types of justification shows that they provide compelling reasons instead to reject human cloning. To stand up and say so may become more and more difficult in our "brave new world." As the culture increasingly promotes production and self-assertion, it will take courage to insist in the new context of cloning that there is something more important. But such a brave new word, echoing the Word of old, is one that we must be bold to speak.


6 President Clinton issued his directive to the National Institutes of Health on 2 December 1994, and congressional action (PL104-91/PL104-208) took effect with the fiscal year 1996 budget.


10 Labels "must be precisely and relevantly defined. They must be accurately applied. And they must lead to treatment and serves the welfare of those that are labeled." See Ralph B. Potter, "Labeling the Mentally Retarded: The Just application of Therapy,"


17 National Bioethics Advisory Commission, p. 69.


20 See, for example, the 1998 essays in the journal *Ethics & Medicine*--including those by C. Ben Mitchell (vol. 14:1) and John Grabowski (vol. 14:3). See also the collection of essays in the spring 1998 issue of the *Valparaiso University Law Review* (vol. 32:2), featuring articles by such people as Gilbert Meilaender and Daniel Heimbach.


22 This language was explicitly affirmed in his 1998 State of the Union address.

