ON CLONING HUMAN BEINGS

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ABSTRACT

The purpose of this paper is to show that arguments for and against cloning fail to make their case because of one or both of the following reasons: 1) they take for granted customary beliefs and assumptions that are far from being unquestionable; 2) they tend to ignore the context in which human cloning is developed. I will analyze some of the assumptions underlying the main arguments that have been offered for and against cloning. Once these assumptions are critically analyzed, arguments both rejecting and supporting human cloning seem to lose weight. I will first briefly present the main arguments that have been proposed against cloning and I will argue that they fail to establish their case. In the next section I will evaluate some of the positive arguments that have been offered supporting such technology. This analysis will show that the case for cloning also fails. Finally, I will maintain that because critics and especially supporters of this technology neglect the context in which human cloning is developed and might be implemented, their arguments are far from compelling.

INTRODUCTION

We live in the era of new biotechnological advances. Discussion of the social, legal, ethical, and scientific aspects of genetic therapy, in vitro fertilization, genetically engineered food, or cloning, appear everywhere, from prestigious scientific journals, to television programs, to the tabloids. In a world where the Human Genome Project hoards millions in public and private monies and thousands of scientists, where infertility seems rampant, and where the search for the perfect human baby occupies people’s imagination,
one might expect to find this focus on biotechnology quite normal and welcomed.

Not only have these discussions captured the public imagination and the interests of scientists, they seem also to have swept many of the members of the bioethics profession away from more mundane issues, such as questions of access to health care, or just distribution of medical resources. Lately, especially since the birth of Dolly, the cloning of human beings seems to be the new kid on the block.¹

The purpose of this paper is to show that arguments for and against human cloning⁴ fail to make their case because of one or both of the following reasons: 1) they take for granted customary beliefs and assumptions that are far from being unquestionable; 2) they tend to ignore the context in which human cloning is developed. In what follows I will analyze some of the assumptions underlying the main arguments that have been offered for and against cloning. Once these assumptions are critically analyzed, arguments both rejecting and supporting human cloning seem to lose weight. I will first briefly present the main arguments that have been proposed against cloning and I will argue that they fail to establish their case. In the next section I will evaluate some of the positive arguments that have been offered supporting such technology. This analysis will show that the case for cloning also fails. Finally, I will maintain that because critics and especially supporters of this technology neglect the context in which human cloning is developed and might be implemented, their arguments are far from compelling.


⁴ I will deal in this paper only with cloning techniques, i.e., nuclear somatic transfer, intended to create a complete human being. Thus, the arguments offered here do not apply to molecular cloning or cellular cloning.
CRITICIZING CLONING: PROBLEMATIC ASSUMPTIONS

Most of the arguments that have been offered against cloning can be classified into three major groups: risks of physical harms to the clone; risks of psychological harms to the clone; and harms to society. I will address these arguments in order.

Risks of Physical Harms to the Clone

Those who reject cloning often maintain that cloning is morally impermissible because the procedure has not been proven safe. They usually argue that the technique that produced the sheep Dolly was successful in only one of 277 attempts. Thus, this procedure could produce severe developmental abnormalities in any resulting child. It is difficult for this argument to support a total and final ban on cloning. In order to do so, we need to assume that it would be wrong to try to clone humans, unless we can guarantee a healthy baby the first time. The reason for this is that experimentation on humans without their consent is unethical.

Although this argument has more merit than some critics have conceded, still it cannot support a total ban on cloning humans. Of course, proponents of this argument do not need to require the consent of the unborn child. We can obtain the consent of the parents as we do in any other case that involves medical experimentation on children. Now, it is reasonable to argue that, at this point, parents cannot give fully informed consent because they do not have information on the hazards and benefits of cloning. Animal studies are still scarce and the ones that have been done do not show that cloning would be reasonably safe to try on human beings. Lack of, or faulty, information may seriously hinder people’s abilities to make informed choices. Obviously, if parents cannot give explicit informed consent, then we cannot assert that they have consented on behalf of their unborn children.

3 See, for example, D.W. Brock. 1998. Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con. In Clones and Clones, op. cit. note 1; Pence, Cloning, op. cit. note 1, ch. 9; and NBAC, op. cit. note 1.
However, there are no good reasons to presuppose that this lack of information will continue forever. At some point, it could be possible for parents to have enough information to allow them to give a freely informed consent. If this is so, then the argument about risks to the child is only an argument for caution. Most reasonable people would agree that at this point, given the knowledge, or the lack of it, that we have on this technique, it would be unethical to try to clone a human being. However, if safety is what we want, we can certainly propose that more research on animals be done, and more investigation completed to establish its safety and effectiveness for humans, before we proceed to use this technique on human beings. Thus, opposition to cloning on the basis of safety fails as an argument against cloning per se.

Risks of Psychological Harms to the Clone

Opposition to cloning is also backed up by arguing that this practice can produce serious psychological harms to the cloned child, such as a possible loss of a sense of individuality or unique identity. The argument, however, seems to presuppose that human individuality or identity is determined by the uniqueness of our genome. This assumption can only be grounded on the crudest genetic determinism. According to genetic determinism, individuals’ genetic endowments completely determine who they will be. As a Nobel Laureate put it, soon we will be able to pull a CD with our own mapped genome and say ‘here is a human being; It is me’. However, there is no evidence whatsoever that would support this kind of genetic determinism. Whether a particular trait will be present depends not just on genes but also on biological and environmental factors. Thus, in spite of having practically the same genes, identical twins certainly have unique and distinct personal identities. They develop different interests, relationships; they make different choices. Their individuality

6 Obviously, experimentation on animals may also need to be justified.
does not seem to be threatened by the fact that they do not have unique genetic endowments.

Other scholars have argued that the psychological harm to the clone results from the violation of what Hans Jonas has called ‘a right to ignorance’, or what Joel Feinberg has called ‘a right to an open future’. Jonas argues that human cloning, in which there is an important time gap between the beginning of the lives of the earlier and later twin, differs essentially from the simultaneous beginning of naturally occurring identical twins. According to Jonas, later twins created by cloning know, or at least they believe they know, too much about themselves. This is so, because there is already in the world another person, who from the same genetic starting point, has made the life choices that are still in the later twin’s future. The later twin may feel that her life has already been lived, that her fate has already been determined.

Similarly, Joel Feinberg has argued that a child has a right to an open future. This requires, he says, that others raising a child do not so much close off the future possibilities that the child would otherwise have as to eliminate a reasonable range of opportunities for the child to construct his or her own life. Thus, creating a later twin could violate this right because she will believe that her future has already been set for her by the choices the earlier twin made.

As in the case of the arguments about a lack of individuality, these appeals to a right to ignorance or to an open future rest on the questionable assumption that one’s genetic endowments completely determine one’s entire life path. But, as was said earlier, such an assumption is false because it ignores that genotypes have a range of phenotypic expression, overlooks the importance of the environment, and disregards the significance of one’s choices in building a unique and distinctive life. But if the assumption of genetic determinism is rejected, then we have no more reasons to say that a later clone would violate a right to ignorance or to an open future than we have reasons to say that such rights would be violated by an older sibling. After all, brothers and sisters share 50% of their genes. And it may certainly be the case that the life choices of an older sibling influence the kind of choices the younger one will make. If the

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older sister finds her career choices offered her a meaningful life, then the younger sister might decide to follow her steps; if, on the other hand, the older sibling finds her life wanting because of her decisions, the younger sister may choose to follow some different path. In any case, we do not think that parents violate their younger children’s right to an open future or to ignorance when they decide to bring them into the world.

It is true, however, that the falsity of the belief in genetic determinism only shows that a right to ignorance, or a right to an open future, is not being violated by cloning humans. The falsity of this belief, nevertheless, does not show that the possible psychological harms to the clone are non-existent, especially if the belief in genetic determinism is widespread. Two problems, however, make this argument against cloning not very compelling. First, psychological risks of this kind are presently only speculative, given that we have no experience with human cloning. Second, banning particular practices on the grounds that people’s false beliefs can produce individual harms is highly questionable. The argument seems to presuppose that we have to grant weight to shared false beliefs instead of, for example, trying to eliminate those beliefs by educating people.

Harms to Society

Several commentators have argued that cloning humans can also produce social harms. Among these harms I will discuss those created by threatening the stability of the family, and those produced by diminishing our respect for human life.

Appeals to harm to the family are not specific to arguments against cloning. These concerns appeared with the development and use of other reproductive technologies such as in vitro fertilization. Proponents of this type of argument maintain that because cloning allows for the cloned child to be born from a single parent or to have up to seven parents, these kinds of arrangements will threaten the stability of the family. Cloning seems also to promote confusion about who is the mother, the father, the grandparents, or the siblings. For example, if a woman clones herself, it is unclear whether she is mother, or sister, or both. It is also unclear whether the grandfather of the child can be said to be the child’s father. This line of argumentation is however problematic for several reasons. First, it seems to assume

11 Annas, op. cit. note 4; and NBAC, op. cit. note 2.
that by ‘family’ we can only mean a nuclear family composed of a male, a female and their genetic offspring. Only if we assign priority to genetic relations will we have confusion about whether someone is a sister or a mother. Obviously, if we value highly the social dimensions of parenting these kinds of misunderstanding will likely diminish if not disappear. Second, the argument assumes that the concept of family is constant, unchanging. Third, it appears to presuppose, that our present conception of the family is the best form of human social organization to nurture healthy individuals and to guarantee productive societies. All of these assumptions are problematic for at least two reasons. First, they ignore historical and anthropological evidence that humans have successfully adopted many different kinds of family arrangements. Second, they fail to offer any compelling normative arguments that show that societies built of nuclear families as generally understood are better off than societies with other kinds of family arrangements. This is not to say that conceiving families as mainly characterized by genetic relations has no advantages for human beings. My point is that even if this conception of ‘family’ is a good one, that in itself makes it neither the only one, nor the best.

Critics of cloning humans also argue that this practice can diminish our respect for human life. This is so, they claim, because cloning allows us to see human beings as replaceable. The problem with this argument is that again it presupposes that genes determine the individuality of persons. Only if this was the case could we say that a later clone is ‘replacing’ another person. But, as I have said before, there is no evidence to support this kind of genetic determinism.

Another reason why cloning might threaten the worth of persons is because this practice invites us to see people as made to


Opponents of cloning claim that people might produce children with genomes that are of special interest to those doing the cloning. Children thus created would be valued as means and not ends in themselves. This argument is problematic because it seems to wrongly assume that valuing people as ends is incompatible with valuing their instrumental value. Obviously, we can value Michael Jordan for his instrumental value on a basketball team without diminishing him as a person. The argument is also questionable because it presupposes that cloning people with particular abilities or traits would guarantee that the clones would also have those same abilities or traits. For example, there is no assurance that a clone of Michael Jordan would be an exceptional basketball player. Michael Jordan’s abilities as a basketball player depended not only on his genes, but also on the environment in which he developed and on the life choices he made.

Although the arguments I have presented here are not the only ones that critics of human cloning have presented, I think they are the strongest ones. If my analysis of these arguments is correct, then the case against cloning fails. This means neither that these arguments are completely without merit, nor that at some point other possible arguments that would make the practice of cloning impermissible could exist. However, unless we assume anything we can do we must do, absent good reasons not to, then the lack of compelling arguments against cloning is not by itself sufficient reason to proceed with this practice. If this is so, then we need positive arguments in support of cloning human beings.

DEFENDING CLONING: QUESTIONABLE ASSUMPTIONS

Proponents of human cloning often use the three following arguments to make their case. First, they claim that this new technology will be an important response to infertility and will allow humans who cannot at present have genetic offspring the opportunity to do so. Second, they argue that cloning will be an important tool in our ongoing battle with genetic diseases. Third, they maintain that cloning will allow some individuals to clone dead

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14 Kass, op. cit. note 7; and NBAC, op. cit. note 1.
15 Brock, op. cit. note 3, pp. 158–60.

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loved ones. If these arguments are successful, then not only do we lack compelling arguments against cloning, but we have some reasons to go forward with it. In what follows, however, I will show that these arguments fail. I will discuss these arguments in order.

**Solving Infertility**

Those who support cloning often defend this practice by arguing that it would benefit infertile couples. For example, human cloning would allow people who suffer from total germ cell failure to have children genetically related to them.

Estimates on the number of people who suffer from infertility vary significantly depending on the definition of infertility. Under one of the most accepted definitions, failure to conceive after twelve months of unprotected intercourse, infertility affects between 7 and 10% of couples with women of childbearing age. Obviously, the larger the number of people who need cloning as the only means to overcome their infertility, the more acceptable cloning appears.

Given the importance that most people attach to having children, and given the serious psychological problems that this impairment might cause to people suffering it, concerns to relieve infertility are certainly admirable. However, in maintaining that cloning of human beings should be permitted because it can solve the problems of infertile people, several assumptions are taken for granted. First, proponents of this argument seem to assume that if something solves infertility, then we should accept it. Second, they also assume that infertility is a medical problem in need of a technological solution. In what follows I will evaluate these two assumptions.

In a world with limited resources and where numerous diseases and impairments affect people, one must ask, what is it about infertility that attracts so much attention? Certainly, the inability to conceive can be stressful, and painful, but this is the case with many other diseases that have not drawn such interest. In spite of supporting cloning as a way to solve infertility, proponents of this argument have neglected to give reasons why solving infertility is a good reason to accept a new technology. In order to

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understand the importance of this question we need to pay attention to the context in which these arguments appear. Certainly, if we live in a world where most major causes of stress and pain (even if only medical ones) are solved, one might think that if a new technology appears that can solve infertility, then we should support its development. But unfortunately, we are far from living in such a world. First, our resources are limited. Second, human beings are affected by a significant number of diseases, disabilities, and impairments. Some of them are life-threatening, or diminish our life opportunities considerably. Some of them do not. In this context, priorities need to be set, and good reasons must be offered for those priorities. Infertility is not a life-threatening condition, nor does it seem to significantly reduce our equal opportunities. If this is so, arguments that support cloning on grounds that it will help infertile people are incomplete. They must give good reasons why if something relieves infertility, then it is good and we should do it. Until these reasons are presented, such arguments fail to make their case for cloning.

Another assumption taken for granted by proponents of cloning as a way to solve infertility is that infertility is a medical problem in need of a technological solution. In framing the problem in this way, however, they might be undermining their own attempts to fight infertility. This is so, because in emphasizing technological solutions to the problem of infertility, supporters of cloning might be drawing attention away from the fact that many of the causes of infertility could be prevented. Sexual, contraceptive, and medical practices, occupational health hazards, environmental pollution, and food additives constitute some examples of preventable causes of infertility. Sexually transmitted diseases (STDs) such as chlamydia, gonorrhea, and syphilis are responsible for 20% of the cases of infertility. Thousands of women each year have to deal with procreation problems due to pelvic inflammatory disease (PID) caused by STDs. Hormonal

contraceptives such as depo-provera, as well as others such as intra-
uterine devices, increase the risk of PID and infertility. Also, according to some professionals, iatrogenic or doctor-induced infertility is common. Problems such as infections after childbirth and postoperative infections can cause reproductive difficulties. Likewise social practices such as delaying childbearing may be responsible for reproductive difficulties. Some evidence also suggests environmental pollutants and chemicals can damage the reproductive capability of both women and men. Drugs such as DES can also cause infertility.

Among the poor, inadequate nutrition, poor health, and limited access to health care also contribute to reproductive problems. For example, infertility is higher in poor and minority communities. Black women have an infertility rate one and one-half times higher than that of white women. Some of the contributing factors are a higher incidence of STDs, greater use of intrauterine devices, environmental factors (such as occupational hazards affecting reproduction), lack of access to medical treatment, nutritional deficiencies, and complications or infections following childbirth or abortion.

If our concern is with solving infertility, it is certainly the case that other means to relieve the problem might be more effective. Given the low success rates of other reproductive technologies, there is no evidence that cloning will work much better (or that it will work worse). Thus, stressing the importance of developing cloning as a solution to infertility might promote public policies that would result in funds being dedicated mainly to technological solutions rather than also to preventive measures such as stricter controls for environmental pollutants and chemicals, more research funding for safer contraceptives, and educational

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26 de Melo-Martín, op. cit. note 18.
programs to prevent STDs and for treating them before they cause reproductive difficulties.

Similarly, if we take for granted the assumption that infertility is mainly a medical problem in need of a technological solution, then we might be blinded to the possibility of analyzing infertility as a partly socially generated problem. In doing so, we might restrict possible solutions to reproductive difficulties. It is arguable that there are social factors that make involuntary childlessness a serious problem. Thus, changing those factors could also have a positive effect on the problem of infertility by dissolving it, or making it less onerous. Some of these social elements are pronatalistic pressures on women to reproduce, the strong emphasis of our culture on having genetically related children, and the inextricable ties between womanhood and motherhood. By neglecting these considerations, proponents of cloning as a way to solve infertility have also missed the opportunity to see other solutions to the problem such as implementing social policies that could help to modify the view of motherhood as the primary role of women, encourage an understanding of maternity as a possible but not as a necessary choice, facilitate adoption, or promote different forms of mothering.

Someone might object that those who support cloning because it might help infertile people, might also defend other ways to solve the problem. What is significant, however, is that although many proponents of the infertility argument spend considerable time reflecting on the problem of infertility, they rarely acknowledge non-technological solutions as a way to solve reproductive difficulties. In fact, I am arguing that advocating these kinds of social solutions would undercut the need for a technological fix such as the cloning of human beings.

Another objection against my analysis of this argument for cloning is that solutions to infertility of the kind I propose here would require unattainable institutional changes. Certainly, some alternatives to the problem of infertility would likely require social transformations such as changes in attitudes toward women and motherhood or alterations in family structures. Prevention would also involve educative programs, social services, legislative changes in occupational health and safety, and environmental legislation. These changes are difficult

27 Pence, Cloning, op. cit. note 1, and Robertson, op. cit. note 15.
28 de Melo-Martín, op. cit. note 18.
because of economic pressures and the extensive time period required to obtain results.

Although this criticism raises important concerns, it is incorrect for several reasons. First, if we discard policy options before we adequately evaluate them, it is difficult to see how we can talk about ‘unattainable’ institutional changes. To affirm that alternatives to the problem of infertility such as prevention require unfeasible changes without giving some evidence for such an argument is then problematic. Moreover, if we only take into account policy options that are highly feasible under the technological status quo, then our evaluations erroneously encourage a self-fulfilling prophecy sanctioning current conditions, regardless of their worth.

Certainly, the argument that the cloning of humans is permissible because it might benefit the infertile could have more strength if the amount of people who will be helped by this technique were significant. However, as even proponents of this argument recognize, there are no reasons to believe that the number of people using this technology will be large. Thus, unless we want to argue that the good of relieving the suffering of those who cannot have their own children and who have access to expensive technologies such as cloning outweighs the good of justly allocating scarce medical resources, then the development and use of cloning as a solution to infertility is not morally warranted.

Another objection against my analysis is that as long as people who desire to solve their infertility problems by cloning do so with their own money they should be allowed to use their resources as they see fit. Thus, assuming that there is no harm to others, society should not interfere with these people’s choices.

This argument, however, presupposes that it is feasible to conduct research on human cloning without making use of any public resources whatsoever. But, even in countries such as the United States, where public money for cloning and associated techniques could be limited, societal interdependencies and professional contracts have created and enhanced doctors’ abilities to use this technique. They would employ tools and technologies developed in part through societal resources. Also, public money supports physicians through learning, because virtually no student, even in private schools, pays for the full costs of education; taxes or donations usually supplement that cost.

29 Pence, Cloning, op. cit. note 1, p. 145.
30 de Melo-Martín, op. cit. note 18.
Furthermore, this objection seems to assume a notion of health care as a business concerned with responding to individuals’ desires, as long as they have income available, rather than focused on maximizing public health. It also seems to presuppose a very minimal notion of community, where individuals’ main obligations are to their own interests.

In summary, if other means of solving infertility, both through prevention and treatment, are available, and if it is likely that cloning humans will not be used by a large number of people as a way to solve reproductive difficulties, it is hard to see the strength of an argument that uses infertility as one of the main reasons to support cloning.

**Fighting Genetic Disease**

According to some scholars, the strongest argument for originating a child by NST is that the parents of the child might give him or her a wonderful genetic legacy. Thus, couples at high risk of having offspring with a genetic disease such as cystic fibrosis or Huntington’s disease for example, can decide to originate a child by cloning in order to avoid the risks of transmitting the genetic disease.

Supporters of cloning have presented this argument in what I will call the strong and the moderate form. In the strong form, cloning appears as the solution to most of our deadly diseases. Some authors have argued that over 70% of deaths from heart diseases, cancers, and strokes may be from preventable, genetic causes. To these we must also add deaths caused by other genetic diseases such as Huntington’s, sickle cell anemia, Tay-Sachs, or muscular dystrophy. Given the existence of all these preventable genetic diseases, originating children by cloning might save the lives of a considerable amount of people by allowing parents to clone a child using genetic material from the non-affected parent, or from some other ‘healthy’ relative. Moreover, the argument goes, not only are people permitted to use cloning in order to create children with as much natural talent as possible, with the best genes, and with the best chance at a long, healthy life, they are obligated to do so. This is the case,

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32 Pence, *Cloning*, op. cit. note 1, p. 103.

33 Pence, *Cloning*, op. cit. note 1, p. 114.
because it is wrong to choose lives for future people that make them much worse off than they otherwise could have been.

There are several problems with this argument. First, at present there is no scientific evidence showing that the majority of the deaths from cancers, strokes, or heart diseases are from preventable, genetic causes. This is not to say that genetics does not play a role in these diseases at all, but that such a role is not as essential as the argument makes it appear. That is, this argument disregards the fact that, although there are cases in which having a particular gene is sufficient to have a particular disease, these cases are rare. In most cases, particular genes may be necessary for a disease to be present, but such genes are not sufficient. In such instances, other biological or environmental factors must also be present for the disease to be expressed. For example, we know that particular genes are present in phenylketonuria (PKU), an accumulation of phenylalanine that results in mental retardation. However, although the existence of the particular genes helps us to identify the affected individuals, having the genes is not sufficient to have the disease. Thus, a low-phenylalanine diet prevents the expression of this disease.

Second, arguing that we are morally obligated to create children with as much natural talent as possible, with the best genes, and with the best chance at a long, healthy life presupposes that the concepts of ‘talent’, ‘the best genes’, and ‘health’ have fixed meaning and are clearly unproblematic. However, as the numerous articles and monographs discussing these concepts show, such an assumption is highly questionable. Moreover, this alleged obligation might enter into conflict with the desire to have genetically related children. Thus, assuming that what ‘best genes’ or ‘health’ means is clear to everyone, it is certainly the case that some children would be better off if their parents, instead of cloning themselves, would request the help of some other individuals who have better genetic endowments. This, of course, would prevent the parents from having children genetically related to them. I guess, those who propose this argument can also indicate whether this moral obligation to improve our children’s genes is or is not outweighed by our desire to have genetically related children.

Some authors, who support cloning on the grounds that it will help parents to avoid the risks of transmitting genetic diseases to

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34 This is the case especially for males, given that females can use their own eggs and thus contribute some (the mitochondrial DNA) to the genetic material of the child.
their children, propose a more moderate version of this argument. They maintain that cloning can be very helpful in those cases where the existence of a particular gene guarantees the existence of a deadly disease. This moderate form of the argument is immune to the two prior criticisms. However, it shares with the strong version the following problem. It seems to assume that cloning is the best way to avoid hereditary diseases. If other techniques exist that can help us with this endeavor, those who support cloning on this ground need to prove not only that this technology is good but also, that it is better than other techniques. At present, there are certainly other techniques that can be used to avoid the risk of transmitting particular genetic diseases. Parents can decide to use sperm or egg donors (although these methods might be unappealing to those who value a genetic connection to their children); also available to them is pre-implantation diagnosis (PID) of embryos created by IVF. Certainly, IVF and PID are expensive and not very successful procedures, but at present there is no reason to believe that cloning would be either cheaper or more successful. Genetic therapy can also be helpful in the fight against genetic disease, and although it is not very developed, it is no worse off than cloning humans.

Another problem for the moderate version of this argument is that it is unclear that using cloning to prevent genetic disease will help a large number of people. As I said earlier, the cases in which the existence of a particular gene guarantees that a particular disease will appear are rare. In these cases, parents also have other options, such as pre-implantation diagnosis or gamete donation. Given the availability of other techniques, and given the fact that we live in a world with limited resources, this argument fails to make a strong case for cloning.

**Cloning of Loved Ones**

Some authors also support human cloning by arguing that this technique would enable some individuals to clone a person who has special meaning to them. For example, parents might decide to clone their dying children, or other family members. In some cases the examples offered here are highly imaginative. There are several problems with supporting human cloning on

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35 Robertson, *op. cit.* note 15.
37 Pence, *Cloning, op. cit.* note 1, p. 60.
this ground. First, although it might be possible that given the chance some people might use cloning for these purposes, there are no reasons to believe that many people would do so. And given, again, a world with limited resources and with other more pressing needs, to support the development and use of a quite likely very expensive technology to help a small number of people seems questionable.

Second, and more importantly, it is unclear what kind of desire we are trying to grant in these cases. There are at least two possibilities. Maybe what people who want to clone dead loved ones desire is to replace those who die with a new copy of the first person. That is, they want to have a baby who would share with the dead one some specific trait, such as strength or interest in music. Or maybe cloning that loved one is a way to accept the loss and move on with their lives.

If what supporters of this argument want is to grant the first kind of desire, then their argument is questionable because it either is grounded on a crude form of genetic determinism for which there is no scientific evidence, or it promotes the granting of desires based on false beliefs. Now, most of those who offer this argument would likely reject the idea that a clone of a loved one will be his or her replacement. They will probably agree that the new cloned child will be a different person with just the same genes. The personalities, interests, traits of the new cloned baby might be very different. But, if supporters of this argument recognize the problems with a crude genetic determinism, and if they still defend the practice of cloning in these cases, then they are endorsing the satisfaction of desires that are based of false beliefs.

On the other hand, people might desire to clone dead loved ones as a way to move on with their lives. We recognize that the pain of losing a loved person, especially because of a premature death, might be unbearable. Thus, attempts to palliate such suffering are laudable. However, it is unclear why encouraging human cloning is better than promoting the support of other siblings, friends, or better than having another child by usual means.

Debates about human cloning make it difficult to believe that one of the jobs of philosophers is, as the mythical gadfly, to awaken people from their complacent dreams. Both those who criticize and those who defend cloning do so in many cases without questioning some of the customary beliefs and assumptions that most people in our society take for granted. Thus, when you read the bibliography against human cloning, you might come to think
that genetic determinism has been established beyond any scientific doubt, that the concepts of ‘natural’, or ‘normal’ are beyond discussion; that anything that puts into question our conception of the nuclear family needs to be rejected, as if our conception of ‘the family’ is not in itself seriously problematic; or that twins suffer irreversible psychological problems because they lack ‘individuality’. But, when you read the bibliography supporting the still not possible practice of cloning human beings, things do not get much better. Here you would think that being infertile is one of the most serious menaces to happiness; that the best way to solve infertility problems is through medical technologies; that the right to procreate is one of the most endangered human rights in our communities; and that cloning people is going to make the world a significantly much better place.

WHY CLONING?

Taking for granted assumptions that are far from being unquestionable is not the only problem with most of the arguments that have been offered for and against cloning. These arguments are also problematic because critics and, especially supporters of this technology, neglect the context in which human cloning is developed and might be implemented.

Often, philosophers working in bioethics have a tendency to try to make things general, and simpler, by eliminating context. We hear about doctor-patient relationships, but in many cases those relationships are presented in a decontextualized way: no families, no communities, no institutions. We read about autonomy in ways that picture human beings as completely separated from the environment in which they develop. We hear about the wonderful powers of genetic therapy with its ability to eliminate disease and handicaps from our lives, without considering the actual context in which genetic technologies are implemented. Particulars such as race, economic class, and gender often seem to be lost in this ocean of generality and abstraction. But in losing them, we are neglecting the analysis of serious moral problems, and with it the possibility of offering some kind of solution to such problems. For example, if we ignore gender as a category of analysis we might overlook existing inequalities in access to health care affecting women, gender disparities in access to some of the major diagnostic and therapeutic interventions considered appropriate for certain conditions, and the historical exclusion of women from clinical trials and from positions of authority in the medical profession.
This omission of context is also present in many of the evaluations of human cloning. Thus, when one reads analyses of this technology, one has the impression that we live in a society where our most serious and pressing problems are the pleas of infertile people, or the requests of those who want to replace their dead loved ones; a world where genetic disease is the main cause of preventable deaths, where individuality is threatened, where one of the worst things that can happen to children is that their parents have too many expectations because of their genetic make up, and where resources are all but limited. And, probably, in a world where these are our main worries, the kind of debate about human cloning that is occurring now would make perfect sense.

But that is not the world we live in. Ours is an overpopulated world, where thousands of children are in desperate need of good homes; a world where thousands of mothers who are lucky enough to have children of their own lack access to basic health care for their children or are unable to provide nutritious food, or safe water for them. In our world, preventing most cases of premature death requires not genetic therapy but access to simple vaccinations such as those for measles or tuberculosis, or to basic amounts of food, or to promote social structures that prevent traffic accidents, especially among teenagers. Overbearing parents with high expectations for their offspring do not constitute the main threat to the children of our world, but lack of medical care, food, and education do.

I realize that some proponents of human cloning might see my arguments as controversial attempts to change the world, and that they would prefer for human cloning to be evaluated in its own sphere.38 This criticism is, however, seriously problematic because it seems to presuppose that a decontextualized evaluation of human cloning is an adequate one. My point here has been to argue that such is not the case. Also, when we try to analyze human cloning ‘in its own sphere’, we are implicitly and uncritically sanctioning the status quo. Thus, the philosopher has failed in the traditional role of social gadfly.

When we set our discussion of human cloning in this world of ours, that is, when we do not lose sight of the context in which this technology might be developed and implemented, it seems that deciding how cloning might be legitimately used to relieve the pain of those who cannot have their own children, or of those who request human cloning as a way to have genetically related

38 Pence, Cloning, op. cit. note 1, p. 144.
children without genetic diseases, or of those who solicit this new technology in order to cope with the pain of losing a loved one, is not our most pressing moral and public policy concern.

Let me emphasize that this is not an argument that these kinds of pleas be completely ignored. On the contrary, a contextualized analysis of this technology might indicate better ways to bring relief to people suffering from infertility or coping with the death of loved ones. Neither is this an argument that we put an end to any new technologies until more basic problems are solved. We live in a pluralistic society with competing interests that need to be considered. Nor am I defending that we preclude intellectually stimulating discussions about unlikely scenarios emerging from the use of new techniques. We might learn something from them. This is only an argument to not lose sight of the context in which our new technologies appear. After all, we presumably developed them to improve human existence. This in an argument calling attention to the fact that the assessment of new technologies requires not only discussion of risks and benefits, that is discussions of means, but also a discussion of ends.

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