The Top Ten Myths about Human Cloning by Gregory E. Pence

1. Cloning Xeroxes a person.

Cloning merely re-creates the genes of the ancestor, not what he has learned or experienced. Technically, it re-creates the genotype, not the phenotype. (Even at that, only 99% of those genes get re-created because 1% of such a child's genes would come from those in the egg - mitochondrial DNA). Conventional wisdom holds that about half of who we are comes from our genes, the other half, from the environment.

Cloning cannot re-create what in us came from the environment; it also cannot re-create memories. The false belief that cloning recreates a person stems in part from the common, current false belief in simplistic, genetic reductionism, i. e., that a person really is just determined by his genes. No reputable geneticist or psychologist believes this.

2. Human cloning is replication or making children into commodities.

Opponents of cloning often use these words to beg the question, to assume that children created by parents by a new method would not be loved. Similar things were said about "test tube" babies, who turned out to be some of the most-wanted, most-loved babies ever created in human history.

Indeed, the opposite is true: evolution has created us with sex drives such that, if we do not carefully use contraception, children occur. Because children get created this way without being wanted, sexual reproduction is more likely to create unwanted, and hence possibly unloved, children than human cloning.

Lawyers opposing cloning have a special reason for using these pejorative words. If cloning is just a new form of human reproduction, then it is Constitutionally protected from interference by the state. Several Supreme Court decisions declare that all forms of human reproduction, including the right not to reproduce, cannot be abridged by government.

Use of words such as "replication" and "commodification" also assumes artificial wombs or commercial motives; about these fallacies, see below.

3. Human cloning reduces biological diversity.

Population genetics says otherwise. Six billion people now exist, soon to be eight billion, and most of them reproduce. Cloning requires in vitro fertilization, which is expensive and inefficient, with only a 20% success rate. Since 1978, at most a half million babies have been produced this way, or at most, one out of 12,000 babies.

Over decades and with such great numbers, populations follow the Law of Regression to the Mean. This means that, even if someone tried to create a superior race by cloning, it would fail, because cloned people would have children with non-cloned people, and resulting genetic hybrids would soon be normalized.

Cloning is simply a tool. It could be used with the motive of creating uniformity (but would fail, because of above), or it be used for the opposite reason, to try to increase diversity (which would also fail, for the same reason).

4. People created by cloning would be less ensouled than normal humans, or would be subhuman.

A human who had the same number of chromosomes as a child created sexually, who was gestated by a woman, and who talked, felt, and spoke as any other human, would ethically be human and a person. It is by now a principle of ethics that the origins of a person, be it from mixed-race parents, unmarried parents, in vitro fertilization, or a gay male couple hiring a surrogate mother, do not affect the

personhood of the child born. The same would be true of a child created by cloning (who, of course, has to be gestated for nine months by a woman).

Every deviation from normal reproduction has always been faced with this fear. Children greeted by sperm donation, in vitro fertilization, and surrogate motherhood were predicted to be less-than-human, but were not.

A variation predicts that while, in fact, they will not be less-than-human, people will treat them this way and hence, such children will harmed. This objection reifies prejudice and makes it an ethical justification, which it is wrong to do. The correct response to prejudice is to expose it for what it is, combat it with reason and with evidence, not validate it as an ethical reason.

5. People created by cloning could be used for spare organs for normal humans.

Nothing could be done to a person created by cloning that right now could not be done to your brother or to a person's twin. The U. S. Constitution strongly implies that once a human fetus is outside the womb and alive, he has rights. Decisions backing this up give him rights to inherit property, rights not to suffer discrimination because of disability, and rights to U. S. citizenship.

A variation of this myth assumes that a dictator could make cloned humans into special SWAT teams or suicidal bombers. But nothing about originating people this way gives anyone any special power over the resulting humans, who would have free will. Besides, if a dictator wants to create such assassins, he need not wait for cloning but can take orphans and try to indoctrinate them now in isolated camps.

6. All people created from the same genotype would be raised in batches and share secret empathy or communication.

Pure science fiction. If I wanted to recreate the genotype of my funny Uncle Harry, why would my wife want to gestate 5 or 6 other babies at the same time? Indeed, we now know that the womb cannot support more than 2-3 fetuses without creating a likely disability in one. Guidelines now call for no more than two embryos to be introduced by in vitro fertilization, which of course is required to use cloning.

Such assumptions about cloned humans being created in batches are linked to nightmarish science fiction scenarios where humane society has been destroyed and where industrialized machines have taken over human reproduction. But this is just someone's nightmare, not facts upon which to base state and federal laws.

7. Scientists who work on human cloning are evil or motivated by bad motives.

The stuff of Hollywood and scary writers. Scientists are just people. Most of them have kids of their own and care a lot for kids. No one wants to bring a handicapped child into the world. Movies and novels never portray life scientists with sympathy. This anti-science prejudice started with Mary Shelley's Frankenstein and continues with nefarious scientists working for the Government on The X Files.

People who call themselves scientists and grandstand for television, such as Richard Seed and Brigette Boisselier of the Raelians, are not real scientists but people who use the aura of science to gain attention. Real scientists don't spend all their time flying around the world to be on TV but stay at home in their clinics doing their work.

8. Babies created by cloning could be grown in artificial wombs.

Nope, sorry. Medicine has been trying for fifty years to create an artificial womb, but has never come close to succeeding. Indeed, controversial experiments in 1973 on live-born fetuses in studying artificial wombs effectively shut down such research.

Finally, if anything like such wombs existed, we could save premature babies who haven't developed lung function, but unfortunately, we still can't - premature babies who can't breathe at all die. Thus, any human baby still needs a human woman to gestate him for at least six months, and to be healthy, nine months. This puts the lie to many science fiction stories and to many predictions about cloning and industrial reproduction.

9. Only selfish people want to create a child by cloning.

First, this assumes that ordinary people don't create children for selfish reasons, such as a desire to have someone take care of them in old age, a desire to see part of themselves continue after death, and/or the desire to leave their estate to someone. Many people are hypocritical or deceived about why they came to have children. Very few people just decide that they want to bring more joy into the world, and hence create a child to raise and support for life as an end-in-himself. Let's be honest here. Second, a couple using cloning need not create a copy of one of them. As said above, Uncle Harry could be a prime candidate.

On the other hand, if a couple chooses a famous person, critics accuse them of creating designer babies. Either way, they can't win: if they re-create one of their genotypes, they are narcissistic; if they choose someone else's genes, they're guilty of creating designer babies.

In general, why should a couple using cloning have a higher justification required of them than a couple using sexual reproduction? If we ask: what counts as a good reason for creating a child, then why should cloning have any special test that is not required for sexual reproduction? Indeed, and more generally, what right does government have to require, or judge, any couple's reasons for having a child, even if they are seen by others to be selfish?

Couples desiring to use cloning should not bear an undue burden of justification.

10. Human cloning is inherently evil: it can only be used for bad purposes by bad people.

No, it's just a tool, just another way to create a family. A long legacy in science fiction novels and movies make the word "cloning" so fraught with bad connotations that it can hardly be used in any discussion that purports to be impartial. It is like discussing equal rights for women by starting to discuss whether "the chicks" would fare better with equal rights. To most people, "cloning" implies selfish parents, crazy scientists, and out-of- control technology, so a fair discussion using this word isn't possible. Perhaps the phrase, "somatic cell nuclear transplantation" is better, even if it's a scientific mouthful. So if we shouldn't call a person created by cloning, a "clone," what should we call him? Answer: a person.

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