

The news from the sheepyards of Scotland of Dolly's creation has reinvigorated the cloning debate. For the first time a clone, a genetic duplicate, was made from an adult somatic cell. Until this experiment of Wilmut and his colleagues, it was commonly held that the genetic matter of an adult differentiated somatic cell could not be reactivated so to allow for the development to term of a viable mammal. Wilmut's technical success means that the prospect of cloning an adult human being is no longer just idle speculation. It is now a real pressing moral issue.

Most discussions of Cloning tend to dwell on the most awful imaginable scenarios rather than the more attractive ones. Admittedly, it is a lot easier to imagine the former than the latter. Dan Brock probably speaks for the majority when he says "I believe it is reasonable to conclude at this time that human cloning doesn't seem to promise great benefits or meet great human needs." However, I disagree with this assessment because there seem to be cases in which the human needs are quite compelling and, as a result of this, it would be quite callous to deny certain infertile couples the option of cloning. In addition, I believe a rather useful principle can be found for distinguishing legitimate from illegitimate cases of cloning. After surveying the different types of cases, I will present this principle as a guideline for legislative and institutional policy.

My hope is that this guideline will be received by most of the opponents of cloning as a welcome compromise because it rules out the more repugnant cases while allowing the few that are more appealing. We do not have to accept Leon Kass' claim that "the only safe trench we can dig across the slippery slope ...is to insist upon the inviolable distinction between animal and human cloning." The opponents of cloning can also take some consolation in the fact that a principled line in the sand has been drawn, one not based on just the "yuk factor," its more sophisticated cousin "the wisdom of repugnance," iv or a dubious adherence to doing only what is "natural," the latter stance

making them appear as Christian Scientist fellow travelers. By accepting such a line they can retrench in a way that prevents the scenarios of their nightmares while having satisfied most, if not all, of the demands of their more reasonable opponents.

In the first section of this paper, I will survey a number of cloning possibilities that make people instinctively recoil. Afterwards, I will describe other scenarios, rather poignant ones, in which cloning appears a quite humane and defensible solution to people's distress. Emerging from this survey will be a trait which all the favorable cases of cloning possess and all of the intuitively repugnant cases lack. This will supply us with the promised principle. But the existence of this principle does not rule out that certain unattractive features of the various unwelcome types of cloning, such as the disruption of traditional family roles and obligations, will show up in *all* cases of cloning. So the last part of this paper will be an investigation of to what extent, if any, these disagreeable attributes are found in the cases of cloning permitted by the guiding principle. My conclusion will be that these characteristics are absent or are manifest only to a much lesser degree in the advocated cases of cloning. The reader will see that most of the objections to cloning that its opponents put forth are not applicable to the type of cloning advocated in this paper. Thus their call for a permanent total ban on cloning is undermined.

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Virtually everyone is turned off by the prospect of human cloning motivated only by the arrogance and narcissism of the person to be cloned. Narcissism is clearly not a good reason to bring a child into the world. This is true whether people's narcissism takes the form of a sincere belief that the world is just better with more copies of themselves in it or just that they are flattered by the fact that there will be little duplicates of themselves and women willing to carry and give birth to them.

Any cloned children raised by such narcissists will probably be given little room to develop in ways that do not mirror their creator's self image. Vi Its also likely that they would not be loved for the right reasons. The love narcissists have for their children is more the expression of self love than the admirable love that reaches out to someone different and loves them despite of or even for their differences.

The arrogant beliefs of narcissists that a world with more people like them is a better world revives our old fears of eugenics. Few people are receptive to plans to clone the best and the brightest because they are the best and the brightest. Perhaps an even scarier development is the selling of genomes. Someone could buy in a legal market the genes of a Lucianno Pavarrotti or Michael Jordan or Albert Einstein if these celebrities or their legal heirs so consented. And those of us who have watched perhaps too much television or read too many science fiction books are quick to imagine the illicit cloning of unwitting people. These "drive-by clonings" would be done with cells that the talented had unwittingly "shed" during the ordinary course of their life. These talented people would be ignorant of those who were financially profiting or otherwise benefitting from their genetic material. And as disturbing as a genetic market would be, a more frightening form of commodification would be organ farming. This nightmare would involve people making clones of themselves in order to be supplied someday with desperately needed organs. Viii Even if such organ farming did not cause the death of the organ source, such a solely instrumental use of a human being is loathsome.

Less farfetched but still disconcerting would be the sexism that could be furthered by cloning technology. Cultures or isolated individuals that favor male offspring would have the means to do so in a manner which would not only send the wrong message about a woman's worth, but it could

eventually skew the population, drastically reducing the proportion of marriageable women.

Another undesirable type of cloning would involve the perverse or, at best, confused attempt of obtaining an immortality of sorts by cloning oneself. While we do talk about living on through our children, it is just metaphorical. Producing identical clones rather than biological children does not render this metaphorical sense of immortality a literal one. Perhaps as twisted or irrational would be the belief that one could replace a lost loved one with a clone. Abandoned lovers, widowed lovers and those who suffer from unrequited love, may in their desperation, try to recreate the objects of their desires. Even if they are not deluding themselves about the identity of these substitute objects of affection, such a practice is still pathetic and distasteful.

Many of the opponents of cloning are repulsed by the the prospect of children being created and raised by siblings rather than their true genetic parents. The bioethicist James Nelson imagines clones seeking out their genetic parents and pursuing a child-parent relationship despite the fact that the child's origins are the result of their older siblings' doing and not the parents who perhaps didn't want any more children. It would be very unfair to place the genetic parent in such a situation. And it would be awful for the cloned child who seeks out but is not welcomed by such a parent.

Along similar lines, Leon Kass writes of how cloning will disrupt traditional roles and duties:

In the case of self-cloning, the "offspring" is, in addition, one's twin; and so the dreaded result of incest - to be parent of one's sibling - is here brought about deliberately, albeit without any acts of coitus. Moreover, all other relationships will be confounded. What will father, grandfather, aunt, cousin, sister mean? Who will bear what ties and what burdens? What sort of social identity will someone have with one whole side - "father's" or "mother's" necessarily excluded? It is no answer to say that our society, with its high incidence of divorce, remarriage, adoption, extramarital childbearing and the rest, already confounds lineage and confuses kinship and responsibility for children (and everyone else), unless one also wants to argue that this is, for children, a preferable state of affairs."

Kass also expresses the fear that asexual reproduction will give rise to an increase in the number of single parents as people raise their own clones. Kass complains:

In the case of cloning, however there is but one "parent." The usually sad situation of the "single parent child" is here deliberately planned, and with a vengeance...asexual reproduction, which produces single parent offspring, is a radical departure from the natural human way... xi

There is also the worry that the cloned child shall be the responsibility of an older sibling who will lack the devotion to the well-being of the child that parents normally have. Just because those who cloned themselves are genetically identical to their younger siblings, it would be a mistake to think that this means that they will care as much about the clones as most parents do for their children. Siblings have not historically been molded by the same evolutionary pressures as their parents, so they are not endowed with the concern and affection for each other that their parents innately possess towards them.

With a little imagination, the reader could add to this list of unsavory cloning scenarios. In fact, I will mention a few more possible problems posed by cloning after presenting my alternative principle which sanctions the more attractive uses of cloning while prohibiting the distasteful scenarios. I will mention four types of scenarios in which cloning is an appealing option. The first, which I also find the most compelling of the set, would involve couples who have become "infertile as couples" through menopause or abnormality, who then lose their only child - or perhaps all their children. Not only is it extremely distressing for parents to have their children precede them to the grave, but to have the family lineage cease just adds to the pain. I imagine that the number of parents who lose all their children prior to the birth of any grandchildren is not insignificant. And of course, in times of war or epidemic, this number would sadly escalate. And, even if in normal times, the

numbers are not large, the suffering of those few in such predicaments warrant a sympathetic societal response. However, if such infertile parents were allowed to clone their lost child, this would lessen their grief. And if the child had yet to reach what was deemed a mature age, his consent would not be required. But if the deceased child had reached such an age, then perhaps his consent would have to have been acquired through some process analogous to that for organ donation. Where there is not a record of the mature child's view on his posthumous cloning by his parents, maybe the default position should be the parents can choose to clone their deceased child. In any event, the details need not be worked out here.

Less likely to occur than the premature death of an only child, but still compelling, would be a case where an ill child a bone marrow transplant. I am just going to assume that the reader wouldn't think it wrong for the parents to conceive another child through normal sexual procreation in order to save the afflicted one, as long as the parents would also love and cherish this additional child. Now suppose that the parents were infertile because of advanced age or some form of abnormality, such that cloning the ill child would in the absence of an available donor be their only recourse. And even if the couple is fertile, the chances of a genetic tissue match makes cloning the preferable option.

Cloning also appears as a sympathetic solution to a third scenario. This involves parents who are at a high risk for passing on a deadly or debilitating disease. Imagine that before they become aware of this, they conceived a child who fortunately wins the genetic lottery, beating the odds by being born healthy. Another possibility is that they are likely to pass on a disease like hemophilia to male offprsing and thus would like to clone their only daughter. Should this family be condemned to a Chinese-style communist one child family? This hardly seems fair. Most Americans desire, even

feel entitled to at least a two-child family. Cloning would permit the family plagued by unwelcome genes to still reach an acceptable sized family.

There is a fourth scenario, which is basically a combination of the first and third. This would involve a couple, who after having one child, lose the capacity to produce viable eggs or sperm, yet wants to enlarge their family. Allowing them to clone their only child will enable them to have another child to whom they are *both* genetically related - which would not be the case with a gamete donor or adoption.

I hope that the reader is sympathetic to the plight of those in the four types of cases just surveyed. What is it that these cases have in common that the earlier repugnant cases lacked? The four positive cases all mirror normal procreation. That is, a new child is being deliberately created and brought into the world by the decision of two willing partners (the parents), from each of whom the child gets half of his or her DNA. Both normal sexual procreation and the advocated form of cloning meet this criterion. The four types of cases of preferred cloning only differ from normal sexual procreation in that the parents make the decision to reuse the DNA they earlier decided to fuse in order to create the first child. But none of the repugnant cases involves the cloning decision being made by the parents of the clone or, if they do, the parents' practice is distasteful for adults other than the genetic parents of the being cloned are taking possession of the clone, perhaps because they purchased the genetic material from which the clone emerges. What also distinguishes the two categories of cloning is that the favored form involves infertility or, at least, the inability to have healthy babies. We are sympathetic to those who want to do what the vast majority of other couples do: combine their genetic material with a loved one and create a new life.

So our short survey suggests some necessary conditions for cloning: 1) people should not be

allowed to clone themselves; 2) people should not take possession of the "product" of a cloning process unless they are the genetic parents of the clone; 3) the genetic parents of the clone should themselves be unable or just unlikely to conceive a healthy child; 4) and both genetic parents should freely enter into the discussion to initiate the cloning process. Combining these necessary conditions, we can formulate the promised principle as the following: A clone may be created only by a pair of people who, unable to conceive together a healthy offspring in any other way, freely decide to create and rear a child that will recieve half of his (or her) genetic material from each of them.

This principle would make the pair who intiate the cloning the parents of the resulting clone and not older siblings of the clone. Such a "pro-family" and "pro-parent" form of cloning which relieves the distress of infertility is probably the only feasible form of cloning given the present political environment.\* It is this principle that allows us to build a barrier on the slippery slope of cloning. Others might want to avoid the slippery slope by never approaching the cloning hill but I think they do this without having an argument against the cases of cloning that elicit our sympathy. Their only argument against the relief cloning provides in such cases is that permitting cloning there increases the likelihood of the occurrence of the unattractive cases surveyed above. But I believe it is better to have a well delineated and principled line upon which to base our policies even if this takes us somewhat down the feared slope - provided that we avoid those areas that are *inherently* wrong, i.e. morally flawed even if we slide no further. The recommended principle does just that. All the distasteful cases fail to involve the genetic parents of the clone freely initiating the process and taking possession of the resulting clone when there is no other safe way for them to have more healthy children. In fact, many of the cases mentioned do not even involve the consent of the clone's parents since the decision is being made by their children to clone themselves and take control of

their resulting sibling(s). xvii Not only could people be made into parents without their choosing to become so, but they may not even be aware that they have become parents.

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So we have seen what property all the distasteful cases lack. But this does not rule out that many of the disagreeable attributes of the repugnant cases are shared by our three more attractive types of scenarios. Fortunately, this is not the case - or, at least, the distasteful features in question are not shared to the same extent by the endorsed types of cases. So we will be able to disarm the opponents of cloning by pointing out to them that their general objections to cloning either do not apply to the cases of cloning championed in this essay, or do so only to a much lesser degree than they envisioned.

Many of the opponents of cloning, such as Kass, are repulsed by the prospect of children being created and raised by siblings rather than genetic parents. We have mentioned the fears of the bioethicist James Nelson who imagines clones seeking out their genetic parents and pursuing a child-parent relationship despite the fact that the child's origins are the result of his or her older sibling's doing and not the parents who perhaps did not want any more children. Eviii But given the necessary conditions for cloning that I put forth, these objections are not telling. The only clones made are by infertile parents, or more accurately, those who cannot have healthy children through sexual reproduction. Thus traditional family roles, loyalties and obligations remain the same.

Nor do we need to share Kass' fear of asexual reproduction giving rise to an increase in the number of single parents as people raise their own clones. We can avoid this because the advocated principle stipulates that only the genetic parents of the possible clone can make the cloning decision. Since people would not be allowed to clone themselves, no child will be raised by a single parent

except in the case of an untimely death. And not allowing a person to decide by his or herself to clone themselves avoids not only the distasteful cases of narcissistic and arrogant cloning surveyed, but frees us from the worry that the cloned child shall be the responsibility of an older sibling who will lack the devotion to the well-being of the child that parents normally have.

Frequently, those dissenting from the prospects of cloning stress the threat that cloning poses to our genetic diversity. They imagine a world where instead of combining our genes through sex and thus hedging our bets against disease, we are making ourselves more susceptible to widespread disease by not being diverse enough to always have some people who are immune to a threatening virus, bacteria, or other disease. So ironically, cloning those deemed the fittest will lead to a species that is less fit. But since the most common type of case I mentioned was essentially a scenario in which the deceased were replaced, cloning isn't much of a threat to our diversity. Anyway, this threat is probably exagerated for if we can trust the polls, there are only a small number of people, six percent of respondents, with a favorable view towards cloning themselves.\*

Like the threat to genetic diversity, the threat of gender bias is also overestimated where the recommended condition on cloning is institutionalized. This is because the permitted cases involve mostly replacement or life saving measures. Parents can't start a family or add to it by cloning the husband, thus ensuring they will be only raising males. Nor can they clone their first child, a male, if they are fertile as a couple and able to conceive a child which may by chance turn out to be female. So although parents will have a choice whether to replace or save a child of a certain sex, they wouldn't have the choice of what sex their initial children are.

Erich and Richard Posner point out that marriage, or at least the practice of planned procreation amongst consenting adults, often prevents the least desireable from reproducing. xxi

Extreme narcissists and the disturbed are unlikely to find anyone willing to have a child with them. The Posners fear that such flawed people will be able to bypass this barrier with the aid of cloning technologies. If these unwelcome traits are innate then they will proliferate. But even if these traits are not hereditary, people possessing them and raising a clone by themselves are likely to raise a troubled child. However, But if the recommended principle guides legislation and institutional policies, no such person would be allowed to clone themselves solely by their own decision. They would each need to convince a partner that s/he would be a fit parent.

Another problem is that some of the people that others find to be the most fit and thus deserving of cloning, may be ethically unfit. These fears, fueled by popular novels and science fiction scenarios, are often expressed in warnings about the possibility of cloning thirty Stalins or thirty Hitlers. \*\*xxiii\*\* But calls for a legislative ban on cloning would not have any effect on the likelihood of authoritarian leaders cloning themselves in other countries. \*\*xxiiv\*\* The reason for this has nothing to do with my recommended principle, it is just that since the cloning technology coming out of the sheepyards of Scotland surprised observers as being technologically simple and thus readily available, future Stalins and Hitlers in foreign countries would be immune to our legal prohibitions and technological embargoes. \*\*xxiv\*\* Any despot of a somewhat scientifically advanced country will have the means to duplicate himself. \*\*xxvi\*\*

The cases permitted by the championed principle will also not increase the practice of surrogate motherhood as much as would not having the case without the recommended policy. Without the suggested policy, more men would seek out surrogate women to gestate their clones. The proposed principle's insistence on one infertile couple making the clone, does not as drastically increase the use of surrogates because many of the involved women can still carry a child, even if

they are the infertile members of their respective couples. XXVIII At any rate, the harms of surrogacy are less in cases of cloning than in non-cloning cases. This is because women carrying clones merely rent their wombs rather than do this *and* sell their eggs. Thus neither they nor anyone else will feel that surrogacy involves them in the sale of their own flesh and blood babies. And the children of such surrogates will not feel abandoned because the respective woman who carried each of them is not his/her genetic mother.

Even the sting from the charge of unnaturalness is somewhat less in the recommended cases of cloning because they involve, as we noted earlier, doing in a round about way what "normal" parents have always done. That is, both processes involve new children being created only by the consent of those who provided the genetic material forming the child's DNA. Natural or biological family structures would not be threatened and parents would not be surprised that they have become parents again as would be the case in "drive-by clonings" or clonings initiated solely by older siblings of the resulting clone. Moreover, it is good to keep in mind that twinning is natural on most interpretations, and, genetically speaking, a clone would just be a younger twin. This may make cloning seem less of a monstrous perversion of nature. Looked at in this way, cloning does not entail any Frankenstein-like projects which usher into existence creatures unlike any with which we are presently familiar. It is just the *process* of creating a clone and not the *product* that is unfamiliar and unnatural. Although I cannot go into it here in any detail, the word "natural" is not very useful as an ethical guide. For instance, a blanket prohibiton on the unnatural would eliminate virtually all of modern lifesaving medicine.

An objection related to the charge about the "unnaturalness" of new reproductive technologies was expressed in an editorial in *The National Review*. The editor(s) wrote: "All

creatures must be respected in themselves, rather than as things that are 'made,' or 'manufactured' to order..."xxviii But this phrase of the editors, "made to order" is misleading - or at least doesn't apply to the types of cloning advocated in this paper. To make something to order suggests that we are designing children, specifiying what traits we want them to have. This would be the case if we were engaged in some kind of gene therapy or gene splicing, trying to enhance the appearance or abilities of the child we would be raising, or just cloning a child from a long list of available genomes. But the forms of cloning advocated in this paper are merely a couple's request for another copy of something they originally accepted without being designed with any specified features. People are only asking for a second copy, whatever properties the first had. The parents I envision permitted to clone their deceased child just want a healthy, living child; its actual height, countenance, mathematical intelligence and other distinguishing traits are irrelevant. If their original child, now deceased, had been genetically different, they would still be just as happy with a healthy clone possessing these differences. The irrelevance of the details of the child is what differentiates these parents from those who only want a child made to order with certain traits such as great intelligence or athletic abilities.

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Despite my support of limited cloning, a caveat is in order. Permitting even limited cloning should be delayed until further research has taken place. The reason is that cloning technology may be dangerous. The transfer of the nucleus of adult somatic cells may make the clone more likely to suffer cancer or other diseases that appear more frequently with age. \*\*xix\* Also, the success rate of the sheep embryos with the transplanted somatic cell nuclei appears to be far below the spontaneous abortion rate. \*\*xx\* The rates for spontaneous abortions of clones should be brought in line with those

for natural abortions (miscarriages) that occur with in vitro fertilization treatments (IVF). I am just assuming without argument that IVF treatments are morally defensible. XXXXII We should perhaps demand of scientists implanting cloned embryos that their procedures work as well as IVF procedures because the loss of a human being, even one that does not yet meet most criteria for personhood, is not a matter that should be treated lightly. But I suggest that when these technical challenges are met, we allow our natural compassion for infertile and childless couples to lead us to put aside our often science-fiction inspired fears and allow such people to deliberately do what others have been unintentionally doing, that is, bring twins - which are clones - into the world. XXXIII

i.Wilmut, I., et al (1997) "Viable Offspring Derived from Fetal and Adult Mammal Cells." *Nature*. 385. Pp. 810-813.

ii.Brock, Dan. "Cloning Human Beings: An Assessment of the Issues: Pro and Con." reprinted in *Clones and Clones: Facts and Fantasies about Human Cloning*. Eds. Cass Sunstein and Martha Nussbaum. (New York: W.W. Norton and Company, 1998.) p. 151.

iii. Kass, Leon R. "Why We Should Ban the Cloning of Humans: The Wisdom of Repugnance." *The New Republic.* June 2, 1997.

iv. Kass claims that "repugnance is the emotional expression of deep wisdom, beyond reason's ability to fully articulate it...the repugnance of human cloning belongs to this category." *IBID*.

v.For further distinctions between types of narcissims, and a milder form which is less objectionable, see my discussion of what I have labeled "benevolent narcissism" in my essay "The Limits of Liberal Tolerance: the Rights of Gays and Lesbians to Adopt" in *The International Journal of Applied Philosophy* vol 9. Winter/Spring. 1995 no. 2.

vi.As Kass rhetorically asks about parental pressure shaping the cloned child after the original: "Why else did they clone the star basketball player, mathematician and beauty queen - or even dear old dad - in the first place?" "The Wisdom of Repugnance." *Op cit*.

vii. "Drive-by cloning" was a phrase coined by a *U.S. News and World Report* writer in the . 5/10/97 issue.

viii. The bioethicist Ruth Macklin does not see this as any more of a threat than people killing their twins for their organs. *US News and World Report*. March 10, 1996.

ix.IBID.

x.Kass, Leon R. "Why We Should Ban the Cloning of Humans: The Wisdom of Repugnance." *Op cit.* 

xi.IBID.

xii.What I mean by "infertile as couples" is that two people cannot have children with each other. It remains possible that one of the spouses (or lovers) is biologically capable of having children with someone outside of the marriage (or relationship).

xiii.Of course, this would not be an option if the cancer was likely to be genetically determined for then the cloned donor would someday be likely to face such an infliction. To save his or her life, we would be forced into a very vicious cycle of creating donor "cures" who themselves would have to be cloned to be cured.

xiv.Perhaps I should write "ideal" rather than "normal" sexual reproduction for many conceptions are due to mistakes, deceit or coercion.

xv. The prospective parents who are at a risk of passing on their genetic disease are not technically infertile, they just do not have much of a chance of having healthy children.

xvi. There may be other cases in which cloning is appealing, perhaps even justified, but not by the

advocated principle which allows us to clearly distinguish the three attractive types of cases from the repugnant cases. Philosophers could invent a hypothetical situation not permitted by the formulated principle in which cloning would surely be chosen if the other alternative was species extinction. Less obviously justifiable cases of cloning which fall outside our principle would include scenarios where sibling-initiated rather than parental-initiated cloning is needed to prevent race, tribe or family extinction. But a principle that excludes these is not that regrettable for a man who cloned himself would need a surrogate womb and if he can obtain the latter he could also probably have obtained a surrogate egg and thus preserve his family bloodline without cloning. And a young woman with the same motivation could bear a child with a donated seed just as well as she could clone and carry a baby copy of herself. If she could not sustain a pregnancy, it would be regrettable but perhaps it is worth maintaining the prohibition against cloning oneself on the basis that it is the only principled way to avoid a slippery slope. Some readers may also be sympathetic to homosexual couples or childless heterosexual pairs suffering from one partner's infertility who do not want to go outside their relationship for gamete donation. Perhaps it is because I am not very sympathetic to such wishes to "stay in house," that I don't care to make an exception to a principle that works so well in dividing attractive from repugnant cases of cloning. Part of my lack of sympathy stems from the belief that motivating the couples' wishes not to involve anyone else are fears that a child will seek its missing parent or the absent genetic parent will seek it out. But this desire on part of the child or parent could exist anyway in the cloning situation since it is the parents of the adult who is cloned that are the resulting clone's real biological parents. And as Nelson mentioned above, the child may want a

relationship with them yet they, unlike the gamete donor, did not even want a child "out there in the world" even if they were uninvolved in raising it.

xvii. This control includes the older sibling disposing of his or her younger sibling as he or she sees fit.

xviii. IBID.

xix. There might be an increase in single parents if we allow the following type of cloning.

Imagine that a parent and only child dies in a car crash. Perhaps the surviving spouse ought to be allowed to clone the deceased child even if fertile and thus able to conceive a child with someone else who is not presently a lover. Without such a cloning option, living spouses will never be able to combine part of themselves with their beloved, now unfortunately deceased, and create a new life that lives on past them. There may not be much more important to the surviving spouses than creating a child with their "one true love." But again, as in the case of cloning a child that had reached the age of maturity before dying, we will need to have in place a system of consent perhaps modeled somewhat on that for organ donation. Difficult issues of tacit and counterfactual consent, as well as default positions will have to be broached. But if this form of cloning is compatible with our outline principle, and I think it is, then we have a fourth type of permissible cloning.

xx. "Clone the Clowns." Economist. March 1, 1997. P. 80.

xxi. Posner, Erich and Posner, Richard. "The Demand for Cloning." in Clones and Clones: Facts

and Fantasies about Cloning. p. 248.

xxii.But sperm banks take this natural obstacle away from unbalanced women.

xxiii.For a typical expression of these fears, see the article "Ewegenics" by Jean Bethke Elshtain in *The New Republic*. March 31, 1997

xxiv. But on the lighter side, one of the best ways to ensure that there is never another Nazi Party or Stalinist comunist movement is to allow cloning. Can you imagine thirty megalomaniacal Hitlers trying to share power? Or thirty Stalins?

xxv. However, it could be argued that experimentation in the democratic countries may remove any of the medical or technical problems that may arise from cloning which thus makes it easier for despots abroad to successfully work their nefarious schemes.

xxvi.So it is only scary people within our own borders that we have any power to prevent from cloning thirty copies of themselves. But who is going to get thirty women, or fewer women having more than one pregnancy, to carry their clones to term? In all likelihood, only a mesmerizing cult leader is so capable. Anyway, if such men could obtain the services of thirty women to be impregnated with clones, then they could just as easily convince the same thirty followers to have their children in the "traditional" manner and thus still manage to pass on half their genes. Any thirty women who consented to having children with a cult leader are probably just as mad and evil as he is. So if we take some scientific liberties and assume that evil and madness can be inherited, we have virtually just as much to fear from such men naturally

impregnating thirty women as we do from the implanting of clones in their bellies. Either way, given our assumptions about heredity, we end up with thirty children innately disposed to criminal insanity. This possibility should help us appreciate that the degree to which people are scared by cloning is unwarranted

xxvii.Newspapers have recently reported women carrying children who are past menopause - one youthful looking woman who lied about her age was in her sixties! Arceli Keh, sixty-three years young gave birth in 1997, eclipsed the record set in 1994 by a sixty-two year old Italian woman. *The New York Post.* Friday May 3, 1997 p. 2.

xxviii. The National Review. 3/24/97 p. 16.

xxix. This was noted by the President's National Bioethics Advisory Commission. (United States Government: Washington, D.C., 1997)

xxx.Ian Wilmut's team reported that Dolly was the only success in 277 tries. For the details see Ian Wilmut, et al., "Viable Offspring Derived from Fetal and Adult Mammalian Cells." *Nature*. February 27, 1997 and Gina Kolata's *Clone: The Road to Dolly and the Path Ahead*. (New York: William Morrow and Company, 1990).

xxxi.If IVF treatments are not justifiable, then perhaps the failure rate of implanted clones should not exceed the rate of natural abortions that follow normal conception.

xxxii. I would like to thank an anonymous reviewer, Fritz Allhoff and Saul Hershenov for helpful comments on this paper.