Never let me clone?

Countering an ethical argument against the reproductive cloning of humans

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In the March 2006 issue of *EMBO reports*, Christof Tannert, a bioethicist at the Max Delbrück Research Centre in Berlin, Germany, presented a moral argument against human reproductive cloning on the basis of Immanuel Kant's categorical imperative (Tannert, 2006). In this article, I address some problems with Tannert's views and show that our concerns about this prospective procedure should prompt us to scrutinize carefully the conventional procreative practices and attitudes. Indeed, if we set aside objections that are grounded in genetic determinism, many of the offensive features of human cloning are identical to problems with procreation by more conventional means, including both old-fashioned procreation and assisted reproductive technologies (ARTs). Oddly enough, many see only cloning as problematic, whereas identical problems with everyday procreation continue to go unnoticed.

In his article, Tannert endeavours to provide us with a sound argument that human reproductive cloning "violates our basic moral principles". He grounds his argument in Immanuel Kant's central moral principle of respect for all humanity, which the great philosopher formulated as: "Act so that you treat humanity, whether in your own person or in the person of any other, always at the same time as an end, never as a means only" (Kant, 1785). In essence, Kant's principle prohibits using rational creatures—humans—as mere instruments to attain one's own selfish goals. Tannert claims that human reproductive cloning—through somatic cell nuclear transfer or embryo splitting—is immoral because it violates this principle by using a human—the clone—for egoistical purposes. However, as I demonstrate, this assertion is problematic. Although treating people created by cloning

as mere means—for example, as organ banks—would be morally unacceptable, it is misleading to identify cloning itself as the core problem. Furthermore, although Kant's respect for humanity is of great practical value, it does not provide us with adequate guidance with regard to cloning. His moral principle clearly applies to existing people, but it falls short in helping us to determine whether a particular means of creating people is morally permissible. As Deborah Johnson explained in another context, often "moral concepts and principles are ambiguous in their application to new technology" (Johnson, 2005).

If we ever hope to figure out why the prospect of human cloning, especially reproductive cloning, is so unsettling, we must first remove any marginal problems that infiltrate the arguments in this debate, including Tannert's. First, despite his explicit rejection of genetic determinism, Tannert ends up appealing to it. Second, he assumes that only selfishness and egoism could motivate someone to pursue reproductive cloning. Third, he makes the assumption that a cloned person would inevitably be treated as a mere means. Fourth, his appeal to Kant's moral principle fails to clarify where the line should be drawn with respect to research cloning.

When engaging in discussions about cloning, genetic engineering or procreation, there is a strong and prevalent tendency for arguments to become entangled in genetic determinism. Also known as genetic reductionism or biological determinism, it holds that the physical and mental traits and behaviour of an individual are ultimately determined by his or her genotype. This myopic view fails to acknowledge

that the physical and social environment of an organism also has an important role in controlling whether and how genes interact with each other and with the organism's environment. Genetic determinism has dangerous implications as it might encourage its believers to neglect obligations towards fellow humans. For example, an employer might conclude that he or she has no obligation to reduce the levels of toxic substances in the workplace, because an employee's risk of developing, say, cancer is solely a function of their genes. That is, embracing genetic determinism encourages the view that individuals, not environmental or socio-economic conditions, are to blame (Proctor, 1998; de Melo-Martin, 2005).

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One corollary of genetic determinism is the mistaken view that genetic identity is equivalent to personal identity. Yet one of Tannert's major arguments against cloning is that genetic identity carries great weight; he claims that it is wrong to "impose the genetic identity of any individual on another" (Tannert, 2006). But it is not clear that cloning restricts the autonomy of the clone any more than would reproducing with one particular individual rather than another or, in the case of ARTs, with gametes from one donor rather than another. In both cases, we place limits on the possible genetic outcome of the offspring, but in neither case is it clear

whether or precisely how these limitations have an impact on its autonomy. In an article on the pros and cons of human reproductive cloning, Dan Brock reminds us that the idea of a unique identity “pre-dates the development of modern genetics” (Brock, 1998). Along these lines, Brock also questions the dubious concept of a “right to a unique genotype” and suggests that the concept is incoherent, not legitimate, and not to be taken seriously (Brock, 1998). To place so much weight on genetic identity is, in effect, to invoke genetic determinism. Tannert’s claim that cloning is wrong because it “imposes an arbitrary restriction on the clone’s individuality and/or external determination of a future person—and therefore violates its autonomy” goes against his preceding rejection of genetic determinism. If identical twins are autonomous agents despite their shared genetic identity, there is no good reason to think that a clone would lack the capacity for autonomous decision-making.

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Tannert finds it particularly problematic that a clone, unlike offspring created through the combination of genetic material from two individuals, is “the result of deliberate human decision and action... and is therefore, through this arbitrariness, an artefact”. Although a great deal of procreation occurs ‘accidentally’, it is still the result of some deliberate human action, be it intercourse or several visits to an ART clinic. It is not clear why cloning should be considered either more or less arbitrary than decisions to procreate through more conventional means. The emphasis on the means of procreation also detracts from the more important criterion for determining the moral permissibility of procreation, namely, how offspring will fare once they are born. Merely creating people by cloning need not restrict their autonomy any more than procreation through intercourse or ARTs. Granted, as has been shown by cloning experiments with animals, creating humans by cloning at this stage is likely to be disastrous for the clone;

it might be impossible to advance to a point at which cloning techniques do not present an unacceptable risk for individual clones, women, their fetuses and/or newborns. But if these risks of physical harm were eliminated, it is uncertain whether cloning would constrain autonomy any more than any other means of procreation.

Tannert claims that cloning is wrong because “it only fulfils the selfish interest of a creator”, but cloning need not be motivated by either selfishness or the desire to replicate a particular genotype. Although cloning, by definition, means the replication of an existing genotype, the motives to do so can vary. Along these lines, Dena Davis draws a distinction between duplicative and logistical cloning: in the case of duplicative cloning, “it is the genetic replication itself that is the attraction,” whereas the primary motive in cases of logistical cloning is to have a child (Davis, 2001). However, the motives for duplicative cloning are usually on the basis of gross misconceptions about cloning, which abound in films, television programmes—including those that claim to be news programmes—and science-fiction novels (Maio, 2006). There is a nearly universal agreement that duplicative cloning would be downright ludicrous as well as immoral, and only those in a state of intractable ignorance would want to pursue it. As shown in Kazuo Ishiguro’s novel *Never Let Me Go*, even fictional characters no longer buy into genetic determinism. For example, the narrator Kathy H, herself a clone, makes the following observation: “Our models were an irrelevance, a technical necessity for bringing us into the world... It was up to each of us to make our own lives... It is daft to assume you’ll have the same life as your model” (Ishiguro, 2005).

Logistical cloning, which would be a means to circumvent obstacles to procreation that cannot be overcome by alternative methods, might therefore be morally permissible in some rare cases. If both partners were sterile, cloning would be the only means for them to have a genetically related child. A woman might want to create a genetically related child without having sex or using donated sperm. She might find the practice of buying gametes morally objectionable as it allows individuals to procreate without fulfilling any obligations towards the

child. Moreover, she might not want to incur risks by using sperm from an anonymous donor; he might have failed to disclose important details about his medical history, or he might pursue his desire to have a role in the child’s life and thereby cause legal problems and/or emotional upheaval for the child. Another case in which logistical cloning might be legitimate would be if the man is sterile, the couple believes the use of third-party gametes to be morally objectionable and both partners want a genetic connection to the child. Logistical cloning, assuming it could be done without exposing women or children to any greater risk than that by other means of procreation, might be morally defensible in such cases.

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If we accept such arguments for logistical cloning, then cloning does not necessarily mean “using one person—the clone—as the means to fulfil the desires of another person: the clone generator”, as Tannert claims. If fulfilling the desires of the procreator to have a child constitutes an immoral use of another person, we must also concede that a great deal of ‘natural’ procreation is immoral for the same reason. It is not at all uncommon for individuals or couples to create children to fulfil several desires: to pass on one’s genes; to ensure that there will be enough people to work the farm, carry on the family business, or care for the procreators in their old age; to produce a ‘saviour sibling’ to save the life of an existing child; to make money, as in cases of full surrogacy; or simply to satisfy an inexplicable but intense desire to have a child. Cases of creating a child for its own sake are more the exception than the rule, if they exist at all.

The most likely reason for creating a child by cloning would be to carry on the family line. Although I find it mysterious that genetic connections are so highly prized—often more than social relationships among individuals—there is no denying the importance accorded to genetic ties. One of the reasons why ARTs are in such high demand is that people want a child who is genetically related to at least

one member of the couple. Considering the prevailing attitude about the importance of genetic links, it should come as no surprise that some individuals might be interested in cloning themselves or a beloved family member, living or deceased.

There is probably no decision of similar magnitude that is more arbitrary than the one to have a child. On the face of it, rationality and procreation seem to be extremely odd bedfellows; indeed, it is often the absence of rationality that leads to conception. Although we might prefer individuals to be more thoughtful about their procreative decisions, they are rarely criticized when such careful deliberation is absent or when their decisions are obviously problematic.

Even if individuals do not put a great deal of thought into procreative decisions, they might speculate about the possible outcomes of their actions and recognize that these possibilities are limited. These limitations are also arbitrary, insofar as they are the direct consequence of choosing one particular person over the three billion other people around the world with whom one might have chosen to mate. In some cases, these limitations can be disconcerting for the prospective parents or other family members, including existing children. If we want to construct a morally sound objection to cloning, we must confront widely accepted procreative practices and subject them to scrutiny, lest our objections to reproductive cloning ring hollow. Ultimately, it seems that we must choose between rejecting many of our procreative practices as morally problematic or conceding that reproductive cloning is acceptable.

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Ultimately, the means of procreation are morally irrelevant unless they present a significant risk to offspring or parents, particularly the mother. This is true of cloning at present, and it is for this reason that we should refrain from creating offspring in this manner. But this is not to claim that cloning is morally impermissible because

it involves using another as a mere means; instead the claim is that it would be wrong to create a person by cloning because that person would probably be born in what Joel Feinberg calls a “harmful condition” (Feinberg, 1984).

As logistical reproductive cloning would not automatically violate a person’s right to self-determination or cut off a child’s prospect of future autonomy, it is erroneous to conclude that cloning always constitutes using another person—the clone—as a mere means. Setting aside circumstances under which conception is likely to pose a risk to the offspring—for example, if either parent carries a devastating hereditary disease—there is nothing intrinsically wrong with bringing a person into existence by one means instead of another. It is important to place greater emphasis on the actual treatment of the offspring and not how he or she came to be; if cloning is the problem, then not only reproductive cloning but also research cloning is problematic. The latter could also be construed as being used for self-interested or selfish motives, such as to advance the researcher’s career. But

there is a more pressing problem related to research cloning, to which I will now turn.

When we talk about reproductive cloning, we generally assume that the clone will be “live and viable” (Gogarty, 2003), and ideally, if clones were to be created, we would want them to be live, viable and in good health. But how should we deal with cloned humans that are beyond the pre-embryo stage but unlikely to become “live and viable” offspring? These latter beings are no more ‘people’ than are pre-embryos or embryos, and we therefore do not violate their autonomy. If the entities in question are non-sentient non-people and lack the capacity to become people who will experience pain or suffering as a result of having been used in cloning research, an appeal to well-established principles, such as the principle of respect for people

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or the principle of non-maleficence, is of no help.

Although legally, in some countries, the limit until which human embryos can be destroyed to harvest stem cells is drawn at 14 days, it does not follow from Tannert's argument that researchers are morally required to stop there. In fact, given the significance Tannert places on implanting an embryo in a woman's uterus, combined with his claim that an artificial uterus would deprive an embryo of "an essential condition for becoming a human", the implication is that research on embryos or fetuses beyond 14 days would be justifiable. Clearly, if such a being is missing a necessary condition for becoming a person, it cannot become a person; hence, a being that develops to 40 weeks or beyond by ectogenesis would not be protected by Kant's principle of respect for people. Undoubtedly, using cloned embryos and fetuses in research would provide us with more and better information about the efficacy and safety of cloning, and Tannert's view gives us no reason to refrain from doing so. In the end, his view about research cloning could be construed as too permissive, and his argument provides a great deal of ammunition for those who advocate a ban on all types of cloning, including therapeutic cloning.

Although it might seem obvious, many do not distinguish between cloning and its product, which, in the case of logistical cloning, is a child who would be nurtured, educated and loved by its parents. There is no good reason to think that it would be morally permissible to treat clones differently to the way we treat other offspring or adults. To discriminate against people because of the manner in which they were conceived would be as unacceptable as discrimination on the basis of skin colour or sex. Although such prejudices do persist, discrimination against people created

through ARTs is, to my knowledge, non-existent. Various new methods of ART have been invented during the past 28 years, and it seems unlikely that adding a new one to the repertoire will lead to an upsurge in discrimination against offspring created by cloning. Although there are concerns about treating offspring as objects instead of humans, this is relevant not only for offspring created through ARTs—which in the future might include cloning—but also for offspring conceived in the old-fashioned way. Thus, our focus should be on obligations towards those whom we create, not on how they were created.

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We should refrain from making assumptions that the means by which one was conceived or the conditions into which one is born entail anything about what sort of people they will become or how we should treat them. As humans, we should make use of our unique capacity for moral agency, in particular our capacity to have and fulfil obligations. As Kant put it, the very act of bringing another person into existence means that parents have an obligation "to make their children—as far as their power goes—as contented with the condition thus acquired" (Kant, 1790). Treating clones as inferior to other humans is still safely in the realm of fiction, and it should stay that way. Fortunately, it is well within our grasp to ensure that it does.

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