Persons and their copies

David McCarthy University of Melbourne and The Murdoch Institute, Royal Children's Hospital, Melbourne, Australia

Abstract
Is cloning human beings morally wrong? The basis for the one serious objection to cloning is that, because of what a clone is, clones would have much worse lives than non-clones. I sketch a fragment of moral theory to make sense of the objection. I then outline several ways in which it might be claimed that, because of what a clone is, clones would have much worse lives than non-clones. In particular, I look at various ideas connected with autonomy. I conclude that there is no basis to the claim that, because of what a clone is, clones would have much worse lives than non-clones. I therefore reject the claim that cloning human beings is morally wrong.

(Keywords: Cloning; persons; harm; autonomy; genetics)

Suppose we accept this objection’s description of the outcome as bad. Does it follow that cloning is morally wrong? No. Consider this case. Ten lost walkers are desperately thirsty. They will soon be rescued, but need a tenth of a pint of water to keep going. They come across a pint of water. It is clearly permissible for each to drink some water, but it is not permissible for any to drink all of the water. Similarly, we can say that even if it is not permissible to make thousands of genetic copies of a single person, that does not show that it is not permissible to make one genetic copy of a person. Although this kind of case can involve quite complex coordination problems, these are fairly well understood, and we can safely reject the multiple case objection. If there is a serious objection to cloning, it must be:

The single case objection: Other things being equal, it is morally wrong to clone one person, just once, because of what a clone is.

I say “other things being equal” to allow for the possibility that, by cloning one person, we could somehow save the entire human race. The single case objection really says that cloning is a wrong-making feature of action, which can be overridden by right-making features of action. From now on, I ignore this complication.

I say “because of what a clone is” to emphasise the irrelevance of the following objection to cloning, which is that cloning is likely to be very expensive, and that the resources needed could be better used elsewhere. One woman is currently offering five million dollars to anyone who will clone her dog. We should think poorly of this decision, and not well of spending the same amount of money to clone a human being. But the objection is not really about cloning, it is about a frivolous use of resources. When people have strong moral reactions against cloning, those reactions are largely independent of this sort of objection. They have much more to do with what a clone is, namely a genetic copy of another person. I will often use phrases like “the mere fact of being a clone” and “what a clone is” to separate intrinsic from extrinsic facts about clones. It is intrinsic facts that concern us.

By “cloning” I mean taking genetic material from a human being and putting it into a human egg which then develops as other fertilised eggs develop, into an embryo, a fetus, an infant, a young child, and so forth. The clone will be genetically the same - the same genotype - as the original human being. To what extent it will be the same in other ways - the same phenotype - depends upon its environment, the environment of the original, and the relation between environment, genotype, and phenotype. Being a clone is like having an older identical twin who may be a little older or very much older, living or dead, who may have lived in a similar environment or one very different.

Many people believe that it is morally wrong to clone. This paper examines that claim.

I
In this section I try to develop the one serious objection to cloning. Consider:

The multiple case objection: If it is not morally wrong to clone, then it is morally acceptable to make hundreds, or thousands, of genetic copies of a single person, all living at the same time. This is a bad outcome (lesser species diversity, difficulties for the clones, and so on), hence it is morally wrong to clone.
There are some poor reasons for accepting the single case objection. One is that cloning is unnatural (whatever that means), and therefore wrong. Similar claims have also been made about various sexual activities, about marriage between members of different racial groups, and so on. This objection is worth bringing into the open only to be dismissed. Another reason is an objection from eugenics, which I take to be the attempt to "enhance" the human race by controlling its genetic makeup. Virtually any reproductive decision has some effect on the genetic makeup of the human race, possibly to "enhance" it. I will therefore take an objection to eugenics to be an objection to controlling the genetic makeup of the human race in order to "enhance" the human race. Thus understood, eugenics and cloning are somewhat unrelated: there could be eugenic policies which have nothing to do with cloning: sperm banks of Nobel prize winners, immigration or economic policies to discourage a particular race or socio-economic group from reproducing; and there could be cloning which had nothing to do with eugenics: a woman simply wants to raise a genetic copy of herself because she wants to avoid the complications of raising a child with the genetic contribution of someone else. I think it very implausible that an agent's reasons for action have anything to do with the permissibility of his or her actions, but put this aside. At most, an objection to eugenics is an objection to cloning for certain reasons, and it is the reasons, not the cloning, which are said to objectionable, so I will not consider this objection any further.

How might what a clone is make cloning morally wrong? Consider:

The first woman's choice: A woman will choose between one of two options: she will either have a non-cloned child, or a cloned child.

This woman faces a different person choice: if she makes one choice, one person will exist; if she makes the other choice, a different person will exist. The advantage of considering this case is that it is also what Parfit calls a same number choice, and, because of Parfit's work, is relatively well understood.1 No matter which of the options the woman chooses, the same number of people will exist. Suppose we instead looked at a case where a woman will either have no child or will clone a child. This is a different number choice, and the moral theory surrounding these choices is much less clear. Until the last section of this paper, I therefore focus on same number choices, and when I discuss cloning, I will have the first woman's choice in mind.

One way the first woman's choosing to clone might be a serious wrong arises if we accept: "Each person has strong rights of ownership over his or her body, and to take material from someone's body without his or her permission and use that to create a clone is seriously to wrong that person."

This may be true, but we can suppose that, in the cases we consider, the original person has without coercion, in conditions of good information and full rationality, given his or her consent to have material taken from his or her body and made into a clone. It is very hard to believe that this person has been wronged, but I will return to this issue.

How else might the first woman be wrong to clone? Consider a version of one of Parfit's cases, another same number, different person choice.

The second woman's choice: A woman will choose between one of two options: she can either conceive a child now, but the child would suffer from a disease or disability throughout its life. Although the child's life would be worth living, its life would be worse than normal. Or she can wait for two months before she conceives, and that child would then have a normal life.

How should we react to this case? We may plausibly claim that the woman would be morally wrong not to wait two months if the child's life would be sufficiently worse than normal. Everyone, I believe, ought to accept some version of this claim. If the child would be so disease-ridden that its life would be barely worth living, the woman would be morally wrong not to wait two months. Now different people will interpret "sufficiently worse" differently. Some will, in theory, interpret "sufficiently worse" as "worse". This means that if the first child would be slightly more prone to headaches than normal, it would be morally wrong of the woman not to wait. In practice, few of us accept a morality which is so stringent. We can better capture our intuitions if we accept something like:

S: Suppose we have a choice of whether to make one person exist or another person exist. No one else will be affected. The first person's life would be normal, while the second person's would be much worse than normal, although worth living. It would then be morally wrong to make the second person exist.

S is only meant to be a rough approximation of a complex set of truths. Later on, I will offer interpretations of "normal" and "worse than normal".
But $S$ is well suited to our purposes: it is surely roughly true, and also matches what many people believe about cloning. Those who believe cloning is morally wrong do not, I believe, think that the level of wrongdoing involved in cloning is analogous to the second woman bringing a child into the world which will be prone to headaches slightly more often than normal. We do more justice to the force of their belief if we accept that the level of wrongdoing involved in cloning is analogous to the second woman bringing a child into the world which would be much worse off than normal. Furthermore, $S$ is by far the most plausible kind of principle one could try to use to argue that cloning is morally wrong.

Using $S$ in this way clearly depends on showing that a clone’s life would be much worse than a normal life. Perhaps, because of technological limitations in the cloning process, clones will inevitably suffer from a serious disease throughout their lives, which would make their lives, although worth living, much worse than normal. This, in conjunction with $S$, would entail that cloning is morally wrong. But aside from the fact that this possibility is unlikely, it points to a fairly extrinsic proposition about clones. Only intrinsic facts can support, via $S$, the single case objection. It is these we must look for.

II

One famous genetic scientist recently said that cloning is morally wrong because clones are not autonomous. This suggests an argument: “To be autonomous is to have something which is central to living a good human life. If clones are not autonomous, then they have lives which are much worse than normal. By $S$, it follows that cloning is morally wrong.”

Should we accept that clones are not autonomous?

In discussions of ethics, there are two distinct senses of “autonomous”. In Kantian ethics, to be autonomous is to have the capacity to act from reasons. In a more ordinary sense of autonomy, to be autonomous is to be autonomous in the Kantian sense, but in addition, to act from reasons that are, in a sense, one’s own. To illustrate: a slave is autonomous in the Kantian sense, but the reasons for which he acts are, in a sense, externally imposed, hence he is not autonomous in the more ordinary sense. Or again: to be autonomous in the Kantian sense depends only on one’s psychology; to be autonomous in the ordinary sense depends, in addition, on living in a “friendly” environment in which the relevant part of one’s psychology functions freely. ³

If clones are not autonomous in the Kantian sense, then we might plausibly claim that they lead seriously impoverished lives. There are interesting questions about why we should think this. But I will leave this issue unresolved because the claim that clones are not autonomous in the Kantian sense is plainly false. We are ignoring as too extrinsic the possibility that, because of imperfections in the cloning process, clones will not be biologically well-functioning. Assuming, then, that clones are biologically well-functioning, they are autonomous in the Kantian sense: the mental supervenes on the physical.

As an aside, if we are sympathetic to a broadly Kantian moral theory, this will undercut another possible objection to cloning. One might imagine that clones are created in order to provide the organs their originals need for transplant, and that because they are created for this reason, they lack an important kind of moral protection, and will have much worse lives as a result. But on Kantian moral theory, our moral status is based entirely on our being autonomous (in the Kantian sense). Clones therefore have exactly the same kind of moral status and enjoy the same moral protections as non-clones. It is no more permissible to take an adult clone’s organs for transplant to the original than it is to take a non-cloned adult’s organs for one of its parents or siblings.

Even if Kantian moral theory is incorrect, we can generalise this result. Our moral status surely has to do with some feature we possess as persons. A clone is a person, and shares all those features with persons who are not clones. On any plausible moral theory, therefore, a clone has the same moral status and protections as non-clones.

There is another objection to cloning. It is often said, with a nod to Kant, that it is wrong to use people. If this is interpreted as claiming that it is wrong to harm people, extended in a way to cover different person choices, it is covered by $S$ (and is a poor interpretation of Kant). If it is interpreted with more fidelity to Kant, it means something like: it is wrong to interfere with the rational agency of others, as one might by coercion or making a deceitful promise. But in this sense it is irrelevant: there is no sense in which in making a clone you are interfering with the rational agency of the clone in creating the clone. And once a clone is created, the fact that the clone is autonomous entails that the injunction will apply in the same way to the way the clone is treated as to the way non-clones are treated.

I return to autonomy. We provide a more sympathetic interpretation of the scientist’s claim if we understand it in the more ordinary sense of autonomy. Perhaps, because of what clones are,
there is some reason why their ability to be autonomous in this sense is diminished. More precisely, perhaps there is something to do with what clones are and something to do with ordinary autonomy which would make a clone much worse off than normal.

We need to ask what “worse off” means. Different moral theories regard different senses of “worse off” as relevant to questions about moral rightness and wrongness. On broadly utilitarian theories, “worse off” is interpreted in terms of levels of happiness or desire satisfaction. Kantian theories are more complicated. These interpret “worse off” in terms of the level of all-purpose goods that an agent has, where all-purpose goods are what are useful and generally needed to be able to form, revise, and pursue a conception of the good. Here is the link with the more ordinary sense of autonomy: an agent who is able to form, revise, and pursue a conception of the good from among a wide range of alternatives is fully autonomous in the more ordinary sense.

We cannot settle which moral theory is correct here, so I will adopt the theory which seems to make strongest sense of the intuitive objections to cloning many people feel. The scientist expressed an objection in terms of autonomy. It is also common to hear objections expressed in terms of limitations on choice and freedom. These have a broadly Kantian feel, so from now on I will adopt the Kantian understanding of “worse off”. I will similarly understand a normal life to correspond to the range of conceptions of the good that a typical member of our species can form, revise, and pursue with reasonable expectation of success given a reasonable level of all-purpose goods. Thus our main question becomes: is there anything about being a clone that significantly undermines a clone’s ability to form, revise and pursue a conception of the good? If there is, we can plausibly claim, via S, that cloning is morally wrong. If there isn’t, we can plausibly claim that cloning is not morally wrong.

Consider the first case. It is very hard to believe that a clone can be any worse off than normal in this case: the fact that he or she is a clone in no way impacts upon his or her experiences. But there is a point here that is easy to miss. Many of us believe that there can be such things as unexperienced harms. Consider, for example, betrayal. We can plausibly claim that being seriously betrayed makes one’s life much worse even if one never finds out about it. Someone might then claim that the mere fact of being a clone can make you much worse off even if the fact that you are a clone in no way impacts upon your experiences.

This claim is hard to believe. Although unlikely, it is in fact possible that you are genetically identical to someone long dead. Now imagine that scientists discover that five hundred years ago, someone genetically identical to you existed. How do you react to this? Perhaps it feels a little eerie; perhaps it makes you more curious about what life was like then. But I suspect that discovering this fact will quickly fade from significance; your life will quickly return to normal. It would be strongly irrational for you to judge that this fact by itself makes you worse off.

Any plausibility to the claim that the mere fact of being a clone makes you worse off must come from the suspicion that the Kantian understanding of “worse off” leaves something important out. It might be claimed that part of a good life is leading a life that is, in some sense original. Thus we might imagine the following argument: “Since the original and the clone are genetically identical, they will lead identical lives, or, at least, the clone will lead a less original life. Since originality is an important part of a good life, although the clone does not know it, his or her life is much worse than normal.”

We need to ask: (1) Is having an original conception of the good an important part of a good life? (2) Does the mere fact of genetic identity make it likely that a clone will lead an unoriginal life?

Consider first (2). Which conception of the good an individual pursues is highly sensitive to the particular path through the particular environment the individual’s life takes. Differences in environments are likely to make a big difference: consider differences between different societies at different times in terms of: the state of the arts, the sciences, the economy, the level of technological development, the physical environment, the political environment, and so on. Differences in path will also make a big difference: consider the social and economic positions one is born into, the education one is lucky enough to get, and so on. Even minute differences in path also make a huge

III

By “the original” I will mean the person of whom the clone is a genetic copy. There are two main types of case to consider. In one, the clone does not have any information about the original, nor does anyone else, and the clone does not even know he or she is a clone. In the other, the clone has maximally but realistically rich information about the original. I will explain what this means later. There are intermediate cases, but by considering these two extreme cases we can cover the main points.
difference: consider the chance events that change our lives: you meet your future spouse by accident in an airport, a career change starts with an overheard conversation. We and our environment are not like ants and their environment. This means that, even if you are genetically identical to someone else, you will in fact have a different conception of the good. At one level of description, most of us have quite similar conceptions of the good: we are particularly devoted to a very small number of people, we have a broader circle of good friends, we like to spend time pursuing our hobbies, and so on. If this kind of unoriginality undermines having a good life, it is undermining for all of us, not just clones. And the fact I just pointed to means that, at the level at which our conceptions of the good are different, a clone will in fact also have a conception of the good very different from the original's.

Consider now (1). I can think of two kinds of scenarios in which something like originality seems important. Suppose you are a mathematician or a composer. There is some sense in which your life is more valuable if your work is original. And if you identify with being a mathematician or composer, then you will better live up to the ideal of a person you value if you manage to prove important new theorems, or invent new and interesting musical forms. But these kinds of occupations are the exception rather than the rule. Consider someone whose conception of the good revolves around being a school teacher, sailing, solving crossword puzzles, and family. Now there is nothing markedly original in that, and this person may even welcome the community of interests this leads to. It is an implausible and unpleasantly elitist view that says that, because of this lack of originality, this is a less good life.

The second area in which originality seems to be important is this. Consider a small, isolated community in which everyone has the same conception of the good, the same beliefs, and so on. We would need to know more, but we are inclined to judge that these people's lives are impoverished. But this judgment is best explained in terms of the lack of originality being evidence that these people's capacities to form, revise, and pursue a conception of the good are not well developed, perhaps because of poverty, lack of information, lack of freedom, or some form of social oppression. We could plausibly judge that, because of this, these people have lives which are much worse than normal. But the relevance of the lack of originality is evidential: it is evidence for the presence of a different factor which makes these people have lives which are much worse than normal. As the example of the schoolteacher shows, lack of originality does not by itself entail having a life worse than normal.

There is also an important difference between members of the isolated community and the original and the clone. Members of the community live together, and we can reasonably claim that the conception of the good the members hold is not the result of the free exercise of their evaluative capacities. But in this section, I am assuming that the clone has no knowledge of the original, and hence, no significant interaction. I argued earlier that the clone will, in fact, have a conception of the good which is different from the original's. But even if they turn out to be the same, because of the clone's lack of knowledge, this will not undermine the claim that the clone's conception of the good is the product of the free exercise of the clone's evaluative capacities. And if it is claimed that this scenario would provide evidence for some kind of biological determinism, this would apply to all of us, not just clones: in whatever ways clones are or are not free to make choices, so are non-clones. Overall, we should reject the claim that the mere fact that a clone is genetically identical to the original makes the clone worse off than normal.

IV

I now turn to the second main case. This is where the clone has maximally but realistically rich information about the original. I say "realistically" because it would be unfair, in assessing the first woman's choice, to make the two cases asymmetrical with respect to the quality of information. We should not consider the case where the information available to the clone about the original vastly exceeds the kind of knowledge we ordinarily have of others. Perhaps (although it is unlikely) there is some principle for predicting a person's behaviour such that, if we had access to the principle, or the results of the principle, it would undermine what, as persons, we value deeply: our capacity to make free choices, and so on. But this applies just as much to non-clones as clones. So the important case is one in which the clone and others have the kind of ordinary information about the original as, say, we have of our parents or our friends. This would include information about how the original's appearance changes over time, information about the original's susceptibility to diseases, information about the original's character, talents, lack of talent, tastes, lifestyle, values and choices. The important question is whether the availability of this information to the clone would undermine the clone's ability to form, revise, and pursue a conception of the good.
Suppose it is claimed that the possession by a clone of this information undermines the clone’s ability to lead a good life. What might be the basis for this claim? One possibility is that it will be revealed to the clone that he or she will or is likely to die prematurely or suffer from a horrible disease. But this establishes, at most, that cloning certain sorts of people would be morally wrong. And this sort of case can equally occur in the (now) normal creation of new persons. Thus I will assume that the original led a normal life. Once we make this assumption, the basis of the claim seems to be this: “Once the clone knows about the original’s life, the clone’s limitations will be revealed, the kind of life the clone will lead will be revealed, and this will result in a much worse life than a normal life in which this information is unrevealed.” We might even use this objection to give another interpretation of the scientist’s objection: “The fact that the clone now knows what kind of life he or she will lead significantly undermines the clone’s autonomy. Hence the clone is much worse off than normal.”

As in the last section, we can approach this claim by asking two questions: (3) Is there much difference, with respect to revealed limitations, between us and clones? (4) Does any such difference in revealed information undermine a clone’s ability to lead a normal life?

Consider first (3). There are two reasons, from opposite directions, for answering “Not much”. The first is that the information about the original is actually information about the original in the original’s environment. To get from there to information about the clone in the clone’s environment, we would have to unscramble the information we began with to get information merely about the genotype, and then use this information to get information about that genotype in the new environment. (As I claimed in the previous section, the new environment will in fact be importantly different from the original environment.) Our ability to do this is, at present, extremely limited, and it seems likely that advances in this ability will be more or less equally applicable to going straight from information about a genotype to information about the genotype in a particular environment; in other words, the kind of increase in ability that will reveal limitations about clones will also reveal limitations about the rest of us. The second reason is that the rest of us already know a lot about our limitations: we know a lot about what we are going to look like as we get older, we know a lot about our talents and lack thereof, we know a lot about our character, we know a lot about the values and choices that are likely to stick with us, and so on.

Consider now (4). I believe we should also answer “Not much” to this question. Even if the clone already knows a lot about the original, the clone is still free to decide how to live his or her life. That is simply part of the basic conception of the kind of freedom persons possess. Clones have it just as much as non-clones. And in the conception of a good life introduced earlier, it is this capacity which is basic. This capacity is of central importance to us, and we cannot decide that clones do not have it without abandoning our view that we have it; and that, I take it, we will not.

One respect in which this capacity comes into play will be in how the clone decides to handle the information about the original. The clone might seek out environments and lifestyles very different from the original’s, like young adults who want to be different from their parents; or the clone might identify with the great work the original did and carry on with it. The information the clone has about the original is one respect in which the clone faces an environment different from the environment of the original. I strongly suspect that this difference means that the clone cannot lead the same life. There will be other important environmental differences between the original and the clone, and thus if we individuate conceptions of the good so that different non-cloned people have different conceptions of the good, not only will living the same life as the original be, at most, one option the clone can take among many, but it will in fact not be an option at all. Thus I believe that not only will the differences in revealed limitations between us and clones be relatively minor, I also believe that such differences are irrelevant to a clone’s capacity to lead a good life, that clones are not “predestined” to lead the same life as the original, and that clones could, in fact, not lead that life.

We should also consider the possibility of possession by others of information about the original’s life, and the effects this may have on the clone. Clones enjoy the same moral protections as non-clones; the fact that they are genetic copies does not by itself undermine their capacity to lead a good life; and neither does possession by the clone of information about the original. It follows from this that the appropriate attitude of others towards clones should be no different from their attitude towards the rest of us. But “ought” does not imply “is”, so perhaps others will have inappropriate attitudes, and perhaps this would make a clone’s life much worse than normal. But this is too extrinsic a fact, if it is a fact, to provide a reason for the claim that cloning is morally wrong because of what clones are.
Let me finally return to the issue of whether people can be wronged by making clones of them. If we make a clone, there is this symmetry: the original is just as much genetically identical to the clone as the clone is to the original. With respect to the first main objection to cloning, that the mere fact of being genetically identical to someone can be associated with an unexperienced harm, the original and the clone are in symmetrical positions. But we saw that this is a poor objection. With respect to the second main objection, based on the availability of information, the positions are not symmetrical: by and large, relevant information about the clone will not be available to the original. Now perhaps the clone’s promise as a violinist will reveal to the original that, had she started to play the violin at an early age, she could have been a good violinist. But it is hard to believe that this makes her life significantly worse than normal: regrets, choices between options which are not jointly realisable, are part of the human condition. (It is also possible that the original will be glad that, between them, she and the clone will have been able to realise more of their shared talents.) At any rate, if, in full awareness of these sorts of possibilities, someone consents to be cloned, it is very hard to believe that person has been wronged.

V

Let us now consider different number choices which involve cloning. I noted earlier that the moral theory surrounding different number choices is far from clear. But we can draw this conclusion. Our arguments strongly suggest that the fact that one of the first woman’s choices involves cloning by itself makes no moral difference to her choice. Even if the moral theory concerning different number choices is unclear, we can safely conclude that the fact that some of these choices may involve cloning by itself makes no moral difference to the choice. Whatever the correct theory of different number choices is, this will be true.

Acknowledgement
I would like to thank Tony Hope, Jeff McMahan and Julian Savulescu for help with this paper.

David McCarthy, PhD, is a Lecturer in the Department of Philosophy and the Centre for the Study of Health and Society, University of Melbourne, and a Research Associate in the Murdoch Institute, Royal Children’s Hospital, Melbourne. Address for readers’ correspondence: Department of Philosophy, University of Melbourne, Parkville 3052, Australia.

References
Persons and their copies.

D McCarthy

*J Med Ethics* 1999 25: 98-104
doi: 10.1136/jme.25.2.98

Updated information and services can be found at:
http://jme.bmj.com/content/25/2/98

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/