Human cloning and child welfare

Justine Burley and John Harris *University of Manchester*

Abstract

In this paper we discuss an objection to human cloning which appeals to the welfare of the child. This objection varies according to the sort of harm it is expected the clone will suffer. The three formulations of it that we will consider are:

1. Clones will be harmed by the fearful or prejudicial attitudes people may have about or towards them (H1);
2. Clones will be harmed by the demands and expectations of parents or genotype donors (H2);
3. Clones will be harmed by their own awareness of their origins, for example the knowledge that the genetic donor is a stranger (H3).

We will show why these three versions of the child welfare objection do not necessarily supply compelling reasons to ban human reproductive cloning. The claim that we will develop and defend in the course of our discussion is that even if it is the case that a cloned child will suffer harms of the type H1-H3, it is none the less permissible to conceive by cloning so long as these cloning-induced welfare deficits are not such as to blight the existence of the resultant child, whoever this may be.

(*Journal of Medical Ethics* 1999;25:108-113)

Keywords: Cloning; reproductive cloning; child welfare; the non-identity problem

Introduction

Debate over the moral permissibility of human cloning was much enlivened by the news that the first mammal, Dolly the sheep, had been successfully created from the transfer of an already differentiated adult cell nucleus into an enucleated egg,¹ a technique popularly referred to as cloning. Now that doubts about Dolly's genetic origins have, for the most part, been dispelled,² and that three other species, including the mouse,³ have been cloned, the prospect that a human may also be cloned appears ever more likely.⁴

There is a broad, albeit loose, consensus among members of the lay public, various legislative bodies, and the scientific community that human reproductive⁵ cloning should be banned because there is something deeply immoral about it *in principle* (ie, something above and beyond the fact

that it would be wholly unacceptable to attempt it in humans until it appears reasonably safe).⁶ Precisely what this is, however, continues to elude even the most committed of critics.⁶ These opponents are not short of reasons for their anti-human cloning stance, indeed, such reasons, more often than not couched in mysterious appeals to human rights and human dignity, flow freely.⁷ But none of the objections to the practice of human cloning have so far proved sound or convincing. In this paper we address one of the few intelligible (as opposed to persuasive) objections to human cloning that have been advanced: the objection which appeals to the welfare of the child. The form of this objection varies according to the sort of harm it is anticipated the clone will suffer. The three formulations of it that we will consider are:

1. Clones will be harmed by the fearful or prejudicial attitudes people may have about or towards them. (H1);
2. Clones will be harmed by the demands and expectations of parents or genotype donors (H2);
3. Clones will be harmed by their own awareness of their origins, for example the knowledge that the genetic donor is a stranger. (H3).

Below we aim to show why these three versions of the child welfare objection do *not* supply compelling reasons to ban human reproductive cloning. The claim that we will develop and defend in the course of our discussion is that even if it is the case that a cloned child will suffer harms of the type H1-H3, it is none the less permissible to conceive by cloning so long as these cloning-induced welfare deficits are not such as to blight the existence of the resultant child, whoever this may be.

Our article is divided into four main parts. We begin by outlining what Derek Parfit has called the "non-identity problem".⁸ As we will demonstrate, this problem, when explored and understood properly, shows that those who object to human cloning on the grounds that it would have compromising effects on a *particular* child's welfare are making an error in reasoning. We then go on to outline Derek Parfit's principled solution to the non-identity problem and, in the ensuing

three sections, we will argue against each of the three objections to human cloning from child welfare identified above, in turn, by reference to this solution. Once it is seen that Parfit's principle in unqualified form is what informs these objections it becomes clear that people who object to human cloning for reasons of child welfare are impaled on the horns of a dilemma: either they must concede that their position entails a whole host of morally unpalatable restrictions on both artificial and natural procreation or they must accept that their arguments are insufficient to support the view that human cloning is immoral in any strong sense and so should be prohibited.

I. Child welfare and the non-identity problem

One of the chief philosophical problems raised by human cloning is the question of how we should respond to the interests of people not yet in existence. Objections to human cloning from child welfare are objections relating to harms future clones might come to suffer and they may all be captured by the claim: a child who is cloned would, *for that reason or for reasons related but not intrinsic to it*, suffer a deficit in wellbeing relative to someone conceived through natural means.

Typical in discussions of this claim is the notion that the harms and benefits which concern us, occur to the same child. However, as exploration of the non-identity problem will now make clear, claims of this kind cannot explain what it is that might be thought problematic about a decision which results in a clone being harmed in any way at all.

To give shape to the non-identity problem we will now consider the following two cases. The first is Parfit's and involves a 14-year-old prospective mother:

This girl chooses to have a child. Because she is so young, she gives her child a bad start in life. Though this will have bad effects throughout the child's life, his or her life will, predictably, be worth living. If this girl had waited for several years, she would have had a different child, to whom she would have given a better start in life.⁹

Our analogue to this case is:

A woman chooses to have a child through cloning. Because she chooses to conceive in this way, she gives the child a bad start in life. Though this will have bad effects throughout the child's life, his or her life will, predictably, be worth living. If this woman had chosen to procreate by alternative

means, she would have had a different child, to whom she would have given a better start in life.

In both cases, two courses of action are open to the prospective mother. In criticising these women's pursuit of the first option available (ie conception at 14 and reproductive cloning respectively) people might claim that each mother's decisions will probably be worse for *her child*.¹⁰ However, as Parfit notes, while people can make this claim about the decisions taken it does not *explain* what they believe is objectionable about them. It fails to explain this because neither decision can be worse for the particular children born; *the alternative for both of them was never to have existed at all*. If the 14-year-old waits to conceive, a completely different child will be born. Likewise, if the woman chooses not to clone and instead conceives by natural procreative means the child born will be a completely different one. Thus claims about the badness of pursuing the first option in both of the above cases cannot be claims about why *these* children have been harmed. It is better for *these* children that they live than not live at all.

Parfit's solution to the non-identity problem is to posit claim "Q", which says that: "If in either of two possible outcomes the same number of people would ever live, it would be worse if those who live are worse off, or have a lower quality of life, than those who would have lived."¹¹ This claim, unlike the claim about the welfare of a particular child, can explain the goodness and badness of the procreative decisions that might be taken by the two women in the above cases because it avoids the problem of non-identity.

With respect to the two cases we have been examining Q implies that the 14-year-old girl should wait and that the woman should not use cloning technology. This is not necessarily Parfit's last word on the matter. He does qualify Q: he argues that some things may matter more than sub-optimal outcomes.¹² For example, a society might believe that the pursuit of equality is more valuable than promoting economic growth. Parfit, then, is a pluralist. He believes that Q is a helpful principle with which to evaluate moral judgments, but he does not think that this principle should necessarily be used to the exclusion of all others. It is, however, something very like Parfit's principle in its unqualified form (henceforth Q(U)) to which those who object to human cloning from child welfare are appealing, ie, the idea that the principle factor that should weigh in decision making about who should be brought into existence is the question of who will enjoy the highest level of welfare. We will now make explicit why we believe that this approach is gravely

mistaken through an examination of objections 1–3 as stated above.

II. Cloning, societal prejudice

The first objection to human cloning from child welfare we will address says that human cloning should be disallowed because clones will be harmed by the fearful and/or prejudicial attitudes other people have about or towards them (H1).¹³ The chairman of the Human Fertilisation and Embryology Authority (HFEA), Ruth Deech, offers paradigmatic examples of this objection in a recent comment on the subject:

“Would cloned children be the butt of jibes and/or be discriminated against? Would they become a sub-caste who would have to keep to each other? Would they be exploited? Would they become media objects (not an unlikely scenario given that Louise Brown, the first test-tube baby, is still in the media some 20 years after her conception)?”¹⁴

Deech’s objection here gives primacy to the well-being of future clones. Cloning is thought undesirable because of H1 type harms that they might suffer. Her view appears to be informed by Q(U), according to which, the decision to clone should not be taken as any resulting child, other things being equal, would have a worse life than a child produced by natural means.

But, it is utterly crucial that we do not lose sight of the reason why in this case the clone’s life would be the worse one, namely, that other members of society are prejudiced against him or her. Q(U) as applied by Deech entails morally repugnant conclusions. Deech’s deployment of Q(U) reasoning does not show that parents who chose to clone would be acting immorally. The source of the harm is not the clone’s parents, it is not they who do something wrong by cloning the child, rather it is other members of society who commit a moral wrong. Think of inter-racial marriage in a society hostile to mixed-race unions.

The following example involving Tom, Dick and Harry illustrates our point here. Suppose that a woman called Jane can conceive a child with either Tom, Dick or Harry, and that for her (not others) the only relevant difference between these men is that Tom, predictably, will be the better father; if either Dick or Harry were, predictably, the better father, she would choose one of them as her mate instead. Deech is committed to saying that Jane ought to choose Tom, as, if chosen, the resulting child will, other things being equal, have a higher level of wellbeing than any child parented by Dick or Harry. Let us more fully describe this scenario. Assume that the reasons Tom will be the

“better” father is that the society in which all four of these individuals live is predominately populated by white people, a fair number of whom are racist and that of Tom, Dick and Harry, only Tom is white. He is the “better” father because, in this racist society his skin colour and cultural background afford him better employment and other life-enhancing opportunities and therefore he is better able to provide for any child that he and Jane (also white) conceive. Moreover, it is the case that if Jane selects Tom, they will not have a mixed-race child (as would occur were she to pair up with Dick or Harry instead), and therefore because of the prevailing climate of racial prejudice any child born to Jane and Tom will lead a better life than any child born to Jane and Dick or Jane and Harry.

Q(U) recommends Jane’s choice of Tom because the children Jane might have with Dick or Harry would lead worse lives *because of the prejudice of others*. However, to reject cloning on the grounds of this variant of the objection from child welfare is morally discreditable. It is true that we could prevent this sort of harm being done to a future child by avoiding human cloning altogether. But we should not prevent human cloning in the face of this sort of sub-optimality rather we should concentrate on combating the prejudices and attitudes that are the source of harm to the clone. Those who embrace liberty and respect autonomy will prefer this approach and reject assaults on human freedom and dignity of the kind Deech suggests would be perpetrated on clones. Plainly, it is inappropriate to countenance any diminution in reproductive autonomy where attempts to diminish prejudice and tyranny are all the more consonant with human dignity.

III. Cloning, “life in the shadow”

It has been claimed by a number of critics that a clone might be harmed because of the expectations and demands of his or her parents or genetic donor (H2) and therefore reproductive cloning should be proscribed. Søren Holm, for example, argues that one reason that we have not to clone a human is that the clone will be living “*life in the shadow*” of the person from whose genes he or she was cloned—the clone would not have a life that was fully his or her own.¹⁵ Holm’s argument may be stated in brief as follows: people are wedded to a belief in genetic essentialism (ie they misunderstand the relationship between genetics and personality), for that reason a clone’s parent(s) may treat him or her such that the clone will not lead an autonomous life, he or she will always be *living in the shadow* of another (ie the genetic donor)—incessantly compared to the

donor—therefore human cloning should not be allowed.¹⁶ It is unclear from what Holm has said what, specifically, he believes the relationship between autonomy and wellbeing to be. If, like prominent liberal thinkers such as Ronald Dworkin, he thinks that autonomy is *part* of wellbeing then his objection to human cloning is an objection about the welfare of the child. If, on the other hand, he, like Kant, understands autonomy as an independent principle then the objection is not, *per se*, one about the welfare of the child. We shall respond to Holm as though he is advancing the former sort of objection.¹⁷

Note that the claim on which Holm's argument is premised (he calls it the "true" premise) is that the public harbour misunderstandings about genetic essentialism, *ie*, they make a factual error. It is this crucial factual premise in Holm's argument which undermines its major normative force. Holm concedes that were the public to be disabused of its views about genetic essentialism the life-in-the-shadow argument would fall flat.¹⁷ But, he insists, such a change in public understanding about genetics is unlikely.¹⁷ Apart from the fact that we do not share Holm's dim view of what the lay public is likely to understand about genetics, the life-in-the-shadow argument is lacking in a different important way. It is morally problematic to limit human freedom on the basis of false beliefs of this character. Were we to apply the logic of Holm's argument to other factual errors parents might make or false beliefs they might have which would affect the wellbeing of possible children it would have pernicious implications. For example, parents might falsely believe that certain physical deformities implied intellectual impairment and this would lead them to treat children so deformed in a way which undermined their autonomy. Should such people be denied the freedom to procreate whenever it was known that they might conceive such a child? Likewise, parents might believe that female children were less intelligent than males and, in grooming them for marriage from birth, deny them an autonomous existence. Should such parents only be allowed to have male offspring? Holm's argument against human cloning appears also to commit him to restrictive procreative policies like these which undoubtedly would adversely impact, for the most part, on people who are ill-educated/ill-informed (or genetically unlucky). If human cloning is banned because future people might suffer harms caused by the mistaken beliefs of parents about genetics then it follows that so too might natural procreation whenever prospective parents do not possess adequate factual information to ensure any future child's wellbeing in other ways.

We reject this conclusion and propose that the preferable strategy for dealing with the problem Holm highlights is one which involves educating people about genetics.

Holm rightly signals that the moral basis for arguments about respect for autonomy is a claim about the fundamental importance or value of having control over the pursuit of one's own projects, plans and attachments. The ideal of autonomy is used by liberal theorists to defend a particular role for the state, namely, the creation and maintenance of the social, economic and political conditions under which people may learn about different aspects and ways of life, reflect critically on them, and embrace a set of values and aims which they believe give life meaning. While it may be true that the autonomy of a clone who lived her life in the shadow of another would be adversely affected this is not sufficient to curtail a would-be cloner's reproductive freedom. Holm fails adequately to appreciate that the liberal ideal of autonomy to which he appeals requires, amongst other things, that compelling reasons (construed as reasons which squarely locate a deeply immoral outcome) must be given to limit individual freedom. Holm champions impediments to autonomous living as a sufficient reason to ban cloning but he is surely mistaken.¹⁸ In failing to distinguish between his idea of a clone living a life in the shadow and the degree of the harm which that entails from other acts of procreation involving equally, if not more severe, autonomy-affecting consequences, Holm invites highly illiberal restrictions on procreation. Freedom is costly—affording it to individuals will, in many cases, produce suboptimal outcomes but unless these outcomes involve a moral wrong so serious that freedom must be sacrificed to prevent it, the liberal view insists that freedom prevail and that other means be found to combat any resulting harms.

Holm's objection to human cloning is more sophisticated than the one we considered in II above. It implies that parents who elect to clone, who do not understand the distinction between genotype and phenotype, are committing a moral wrong of some kind. But how serious is this moral wrong? What Q(U) reasoning in this case shows is that this principle is useful conditionally on the severity of the harm inflicted. We maintain that unless it is shown convincingly that "living in the shadow" is somehow both horrendous and more autonomy-compromising than the plethora of other widely accepted and permitted upbringings a child might be "forced" to undergo, the liberal principle of freedom in matters relating to procreation overrides the concern about

autonomy-related welfare deficits that will be suffered by clones.

IV. Cloning and awareness of origins

The final objection to human cloning from child welfare we shall explore concerns instances of psychological harms caused by a clone's own awareness of his or her genetic origins (H3). According to this objection, a clone who knew his or her genetic donor was, for example, a randomly chosen stranger, or a distant, much older relative, or even someone now deceased, would be psychologically damaged by that information.¹⁴ Is this plausible? We doubt that knowledge of peculiar genetic origins would *necessarily* be harmful. Indeed, it might even be beneficial in certain cases. In making this claim we have in mind children who are the product of in vitro fertilisation, (which need not always involve the genetic material of both the parents) who report that they feel "special" (as opposed to alienated) for having been brought into being in this way. Presumably this has much to do with the extent to which they feel loved by the parents they do have, as well as societal acceptance of IVF as a procreative method.

However, let us assume that it would be the case that a clone would be traumatised to some extent by his or her genetic origins. Is this sufficient reason to disallow cloning? If H3 harms are both very great and highly probable then, yes, this is a sufficient reason; but we judge this scenario to be a remote possibility. Consider that there are many possible sources of analogous H3 type traumas a child created by natural means might suffer: the realisation that your parent committed a criminal act earlier in his/her life, or is a drug addict or prostitute, or fought for an army established to advance a dictator's master plan for domination. Our intuition is that it would be far easier to cope with the knowledge that one's nurturing parents so desired a child that they were even prepared to use cloning technology to bring one into existence than to cope with the knowledge of, for example, a parent's collusion with the Nazis' systematic extermination of the Jews or Stalin's political re-education programmes in the Siberian gulags. These examples are admittedly provocative, but they are not isolated ones, and that is the point that merits stressing. If psychological distress about one's genetic origins is sufficient to ban cloning then it follows that people who fall into the aforementioned groups and others ought also to be (or to have been) prevented from procreating.

Thus indiscriminating adherence to Q(U) reasoning invites the response that this objection

from child welfare, like the preceding two, logically entails other draconian restrictions on procreative freedom which the objector would hardly endorse. Even if such critics were prepared to go that far, their view should not be tolerated in any society which aims to promote freedom of the individual. Most people believe, and they do so rightly, that we should be concerned about the sorts of lives that future people will lead, but that at the same time, this concern should not be our sole one. If H3 harms were of exclusive import, we would have grounds for saying that a huge number of people in the world today are morally blameworthy in some strong sense for having brought children into the world.

Conclusion

We argued above that the objections that have been voiced about human cloning and child welfare are misleading. While we are sympathetic to what motivates them—society both does and should have an interest in the wellbeing of future people—we do not believe that the formulations of the anti-cloning arguments from child welfare that we have addressed are persuasive. We conceded that cloned individuals might indeed suffer welfare deficits (relative to a non-clone) but argued that even the likely occurrence of them is not sufficient to warrant state interference with the procreative choices of people who wish to clone their genes (or those of others, providing consent to their use in this way has been given).

Our examination of the objections 1-3 which respectively embody reference to harms H1-H3 are informed, we have suggested, by something very like Parfit's solution to the non-identity problem in unqualified form. Our discussion of these objections confronts those who object to human cloning for reasons of child welfare with a dilemma: either they must endorse the morally discreditable outcomes entailed by the principle guiding their view or they must admit that Q(U) as they have deployed it, does not provide sufficient reasons for branding reproductive cloning immoral either at all or in any strong sense of that term.

Where considerations of the welfare of the child are invoked in reproduction, including in the case of reproductive cloning, we need constantly to bear in mind the following questions and the distinctions they encapsulate: is it clear that the children who may result from cloning will be so adversely affected that it will be seriously wronged by the decision? Or rather is it the case that we have general anxieties about the likely advantages and disadvantages of being cloned, for example, that disincline us to look on it with much favour? Where

it is rational to judge that an individual would not have a worthwhile life if he or she were to be brought into being in particular circumstances, then we have not only powerful reasons not to make such choices ourselves but also powerful moral reasons for preventing others from so doing if we can; by legislation or regulation if necessary. However, where we judge the circumstances of a future person to be less than ideal but not so bad as to deprive that individual of a worthwhile existence, then we lack the moral justification to impose our ideals on others. The difference we are looking for is the difference between considerations which would clearly blight the life of the resulting child, and considerations that would merely make existence suboptimal in some sense. We may be entitled to prevent people from acting in ways which will result in blighted lives. We are surely on less firm, and less clearly morally respectable, grounds when we attempt to impose our ideals and preferences about the specifics of how future lives should go.

Q(U), as we have shown, has troublesome practical implications for a whole range of policies concerning procreation, both natural and artificial. We argued that the reasons why a future clone's, or, for that matter, a future non-clone's life might go badly (relative to someone else), command attention. If we allow considerations like marginalisation, discrimination, impediments to autonomy, etc, to outweigh all other considerations when deliberating over the moral permissibility of human cloning, we, at the same time, court numerous other unacceptably illiberal outcomes. There are, of course, many cases where it is true that the morally superior of two otherwise identical procreative acts will be the one that maximises child welfare. The crucial issue is what follows from this. Many people believe that the child welfare card trumps all, that once they have shown that some procreative choice or technology can lead to suboptimal circumstances for the resulting children this constitutes a knock-down argument against any claimed freedom to procreate in that way or using that technology. This seems to us not only implausible but palpably morally unacceptable.

Acknowledgements

We are grateful to Matthew Clayton, GA Cohen, Julian Savulescu, and two anonymous referees from the *Journal of Medical Ethics* for their helpful comments on an earlier draft of this article.

Justine Burley is Simon Fellow in the Department of Government and a Fellow of the Institute of Medicine, Law and Bioethics, University of Manchester, and Part-time Lecturer in Politics at Exeter College, Oxford. John Harris is Sir David Alliance Professor of Bioethics, and a Director of the Centre for Social Ethics and Policy and of the Institute of Medicine, Law and Bioethics, University of Manchester.

References and notes

- 1 Wilmut I, Schnieke AE, McWhir J, Kind AJ, Campbell KHS. Viable offspring derived from fetal and adult mammalian cells. *Nature* 1987;385:810-13.
- 2 See Ashworth D, Bishop M, Campbell K, Colman A, Kind A, Schnieke A *et al.* DNA microsatellite analysis of Dolly. *Nature* 1998;394: 329 and Signer EN, Dubrova YE, Jeffreys AJ, Wilde C, Finch LMB, Wells M *et al.* DNA fingerprinting Dolly. *Nature* 1998; 394: 330.
- 3 Wakayama T, Perry ACF, Zuccottis M, Johnson KR, Yanagimachi R. Full-term development of mice from enucleated oocytes injected with cumulus cell nuclei. *Nature* 1998;394:369-73. This development in nuclear transfer technology is significant for the case of human cloning because mice possess a reproductive physiology closer to that of human beings than animals like sheep and cows.
- 4 This view is echoed in the opinion section of *Nature* 1998; 394.
- 5 Two main uses of cloning by nuclear transfer have been distinguished: therapeutic and reproductive. Therapeutic cloning is understood as any instance of cell nucleus replacement aimed at creating cell lines and/or for the treatment of disease. Reproductive cloning, by contrast, is any instance of cloning which is not motivated by the desire to avoid disease or disability. We have chosen to concentrate on reproductive uses of nuclear transfer technology because they are more controversial.
- 6 For discussion of why it may be difficult to pinpoint the source of people's discomfort with human cloning see Kass LR. The wisdom of repugnance. *The New Republic* 1997 Jun 2:17-26.
- 7 For a critique of these see Harris J. "Goodbye Dolly?" The ethics of human cloning. *Journal of Medical Ethics* 1997;23:353-60.
- 8 Parfit D. *Reasons and persons*. Oxford: Clarendon Press, 1984: ch 16.
- 9 See reference 8: 358.
- 10 This is Parfit's point made here in the plural. Reference 8: 359.
- 11 See reference 8: 360.
- 12 See Parfit's discussion of Jane's choice: reference 8: 375-7.
- 13 We do not mean by the term prejudicial attitudes here *formal discrimination*, ie, rights violations.
- 14 Deech R. Human cloning and public policy. In: Burley J, ed. *The genetic revolution and human rights*. Oxford: Oxford University Press: ch 4 (in press).
- 15 Holm S. A life in shadows: one reason why we should not clone humans. *Cambridge Quarterly of Healthcare Ethics* 1998;7:160-2. Other formulations of the objection may be found in: Wilmut I. Dolly: the age of biological control. In: Burley J, ed. *The genetic revolution and human rights*: ch 1 (see reference 14), and Klotzco AJ. Voices from Roslin: the creators of Dolly discuss science, ethics and social responsibility. *Cambridge Quarterly of Healthcare Ethics* 1998;7: especially, 137-9.
- 16 See reference 15: Holm S:160.
- 17 Holm's own remarks suggest that this is appropriate. See reference 15: Holm S:162.
- 18 Matthew Clayton has developed an ingenious argument in support of the claim that the very act of choosing the genes of a child, irrespective of the consequences, is, in a non-person-affecting sense, a violation of its autonomy. See Procreative autonomy and genetics. In: Burley J, Harris J, eds. *A companion to genetics*. Oxford: Blackwell, forthcoming 1999.