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STUDENT PAPER

On Ruth Macklin's "Cloning and Public Policy"

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INTRODUCTION

This paper will be a critique of Ruth Macklin's argument against the decision of The National Bioethics Advisory Committee (NBAC) and the President's Council on Bioethics' (PCBE) to ban research and practice of human cloning. Active discussions on banning cloning occurred in the wake of Dolly the sheep's cloning in 1997, the world's first successful large animal nuclear transfer. On November 6, 1998, a University of Wisconsin team led by James Thomson and Jeffrey Jones had achieved isolation of human embryonic stem cells.¹ This discovery sparked the immediate formation of national cloning legislation. In 2001 the United Kingdom permitted research on cloned embryos up to fourteen days old while the United States cloning legislation stalled in Congress due to a disagreement on two types of bans. The first was a ban on all human cloning including the creation of cloned embryos for research and the second was a ban on so-called reproductive cloning, which is made effective by "criminalizing the act of implantation" of a cloned human embryo or mandating its destruction.² The U.S. policy was influenced by the views of the National Bioethics Advisory Commission (the NBAC), Bill Clinton administration's bioethics advisory board, and of the President's Council on Bioethics (the PCBE), established in 2001 by George Bush administration which replaced the NBAC, as both councils conducted exhaustive research investigation and concluded that reproductive cloning was ethically unjustifiable and thus legally not be permitted. However, ironically, the liberal NBAC opposed the therapeutic cloning while the conservative PCBE was in favor of supporting it within a regulated setting. Focusing on reproductive cloning, the bioethicist, Ruth Macklin, places herself in opposition to the views of both presidential advisory boards and argue that they have provided irrational arguments and insufficient reasons for its suggestion. Macklin adds that their views are grounded in "deep-seated emotion."³ I will evaluate each camp's view and argument, and conclude that the opposing sides are representative of different values of our society, that is, the secular atheist and conservative theological values, and that Macklin's claim to accuse the conservative position of being irrational is not justifiable because the same measure she adopts here can be used to judge her argument to be irrational.

REPRODUCTIVE CLONING VS. THERAPEUTIC CLONING

There are two types of cloning, that is, reproductive cloning and therapeutic cloning. Reproductive cloning refers to the creation of "a genetic duplicate of an organism" which may be a plant, animal, or human being. The technique used in reproductive cloning is

¹ Thomson et al., "Embryonic Stem Cell Lines Derived from Human Blastocysts." *Science* 282 no. 5391 (1998): 1145-1147, doi:10.1126/science.282.5391.1145

² *Ibid.* 32, 290.

³ Ruth Macklin, "Cloning and Public Policy" in *A Companion to Genetics*, eds. Burley and Harris (Malden, MA: Blackwell, 2004), 208.

called Somatic Cell Nuclear Transfer.⁴ This process begins with removal of a nucleus, which contains the genetic material, from virtually any cell of the body (a somatic cell), and its transfer by injection into an unfertilized egg from which the nucleus has also been removed.⁵ Other organelles are not transferred, such as the mitochondrion of the donor cell, because of the many genetic diseases associated with mitochondria.⁶ The newly reconstituted entity then starts dividing. After 4-5 days in culture, embryonic stem cells can then be removed and used to create many embryonic stem cells in culture using either chemicals or a mild electrical shock. These embryonic stem cell lines are genetically identical to the cell from which the DNA was originally removed.⁷ This form of cloning also referred to as “cloning-to-produce-children” according to Leon Kass because the technique will be used to produce children when employed to benefit human society.⁸

Therapeutic cloning is similar to reproductive cloning. But in this procedure, stem cells are removed from the dividing embryo, thus allowing that embryo to die. The next step is to remove cells from a patient who requires medical treatment. Next, this somatic cell is stripped of its nucleus, which is then injected into an empty donor egg. The same chemicals or electric current used in reproductive cloning procedure are used to cause the cells within the donor egg to divide, resulting in the production of embryonic stem cells. These stem cells are removed from the embryo and used to treat a patient. Cells can be removed from the skin, heart muscle, spinal cord, kidney, and many other organs. This allows for a multitude of treatments for patients who suffer organ failure, burns, myocardial infarction, neurodegenerative disorders, kidney disease, liver failures, and some forms of leukemia.⁹ Kass calls this type of cloning “cloning-for-biomedical-research” as opposed to “cloning-to-produce-children.”

THE PRESIDENT’S COUNCIL ON BIOETHICS ON REPRODUCTIVE CLONING

The NBAC does not find both therapeutic and reproductive cloning morally acceptable. The commission states, “[A] morally more acceptable and potentially feasible approach is to direct differentiation along a specific path to produce specific tissues (e.g., muscle or nerve) for therapeutic transplantation rather than to produce an entire individual. Given current uncertainties about the feasibility of it, much research would be needed in animal systems before it would be scientifically sound, and therefore potentially morally acceptable, to go forward with this approach.”¹⁰

On the other hand, the PCBE gives much more thorough reasonings than the NBAC about the issue. While the PCBE narrowly supports therapeutic cloning, the council produces an exhaustive ethical reasoning why reproductive cloning should be banned, which I will introduce here. First of all, the PCBE suggests that “reproductive cloning” should be called “cloning-to-produce children” and argues that this form of cloning is unethical and thereby must not be legalized. The council, instead, states that “the nation should affirm and support the responsible effort to find treatments and cures that might help ameliorate or thwart diseases and disabilities that shorten life, limit activity (often severely), and cause great suffering for the afflicted and their families”¹¹ The council provided the following set of reasons to rationalize their decision.

The first set of reasons concerns the “ethics of research on human subjects” internationally shared and recognized, the content of which are detailed in the Nuremberg Code of 1947, the Helsinki Declaration of 1964, and the U.S.’s Belmont Report of 1978.¹² According to the ethical code on human experimentation, cloning-to-produce children would produce the following three problems: 1) problems of safety, 2) a special problem of consent, and 3) problems of exploitation of women and the just distribution of risk.

The first is the problem of safety that affects more than one player on this issue. The council mentions that cloning-to-produce children is not now safe in the sense that there are risks to the cloned-child-to-be, and to the egg donor and the birth mother.¹³ Risks to the child have been expected due to the results of animal experimentation. Only a small percentage of implantations resulted in live births, and of the ones that did survive, serious though nonfatal abnormalities occurred. The supposed risks to the

⁴ National Stem Cell Foundation of Australia, “Fact Sheet 4: Therapeutic Cloning (Somatic Cell Nuclear Transfer),” July 2010, accessed May 2017, [http://www.stemcellfoundation.net.au/docs/fact-sheets/fact-sheet-4---therapeutic-cloning-\(somatic-cell-nuclear-transfer\).pdf?sfvrsn=5](http://www.stemcellfoundation.net.au/docs/fact-sheets/fact-sheet-4---therapeutic-cloning-(somatic-cell-nuclear-transfer).pdf?sfvrsn=5).

⁵ Ibid.

⁶ Ibid.

⁷ The President’s Council on Bioethics (the PCBE), *Human Cloning and Human Dignity: An Ethical Inquiry* (Washington, DC: the Government Printing Office, 2002), 87; see also The NBAC, *Cloning Human Beings* (Rockville, Maryland: Government Printing Office, 1997). The NBAC, *Ethical Issues in Human Stem Cell Research* (Bethesda, Maryland: Government Printing Office, 1999).

⁸ Ibid.

⁹ “Fact Sheet 4.”

¹⁰ Ibid.

¹¹ Ibid.

¹² *Human Cloning and Human Dignity*, 99.

¹³ Ibid.

egg donor and the birth mother are based upon animal experimentation as well, and include risks to her future reproductive health caused by the “hormonal treatments required for egg retrieval and general health risks resulting from the necessary superovulation.”¹⁴

The second is a special problem of consent. Consent from the child-to-be, is of course, impossible to obtain. One may say that no one consents to his or her own birth and thus that this cannot be the problem.¹⁵ However, when taking into account that an attempt to clone a human person would potentially expose the child-to-be to great risks of harm, the consent from the child-to-be becomes a special kind of problem. As the council states:

Given the risks, and the fact that consent cannot be obtained, the ethically correct choice may be to avoid the experiment. The fact that those engaged in cloning cannot ask an unconceived child for permission places a burden on the cloners, not on the child. Given that anyone considering creating a cloned child must know that he or she is putting a newly created human life at exceptional risk, the burden on the would-be cloners seems clear: they must make a compelling case why the procedure should not be avoided altogether.¹⁶

The third is the problem of exploitation of women and just distribution of risk. Since the widespread use of the techniques of cloning requires a large number of eggs (animal models suggest that several hundred eggs may be required before one attempt at cloning can be successful), the donors would require hormonal treatments to induce superovulation. This process may be very stressful for the donor, and when financial incentives are offered, they might “lead poor women especially to place themselves at risk in this way (and might also compromise the voluntariness of their “choice” to make donations).”¹⁷ Therefore, research on cloning-to-produce-children could impose disproportionate burdens on women, particularly low-income women.¹⁸

The second set of reasons is related to the “human context” which is different from ethics of human experimentation. The problem of human context is the problem with the nature of procreation and child rearing. The council states that according to natural law, a child is not made, but begotten.¹⁹ Kass then mentions, “the man and woman in no way produce or choose a *particular* child, as they might buy a particular car.”²⁰ The following argument in support of natural law is that procreation can be assisted by in vitro fertilization (IVF), but it is still by means of sexual reproduction. Thus, the child born under these circumstances (IVF) is born “with a certain genetic independence of their parents.”²¹ On the other hand, a cloned child is not developed through the same natural means. Kass emphasizes that a naturally “begotten child comes into the world just as its parents once did, and is, therefore, their equal in dignity and humanity.”²² Therefore, when discussing human and family interaction between cloned persons, and persons who had been “begotten” through sexual reproduction, there are many differences that must be considered. The “character of human procreation and [child-rearing] matters deeply” and “affect human life in endless subtle ways, and they shape families and communities.”²³

The third set of reasons proposed in this document includes the problems of identity, manufacture, eugenics, and family society. We will begin with the first problem, the problem of identity and individuality. A cloned individual may find difficulty in circumstances where his or her own identity is compared to the person from whom he or she is cloned. The psychological effects that cloning may have on an individual may be overlooked when reaching for the end result which is the successful creation of a living human being. However, Kass mentions that what truly “matters is the cloned individual’s perception of the significance of the ‘precedent life’ and the way that perception cramps and limits a sense of self and independence.”²⁴ The second problem concerns the concept of “manufacture.” Manufacture is the problem of transforming human procreation into human manufacture (or mass production). Through the use of pre-selected genetic design or pattern, cloned children would be the first human beings whose entire genetic makeup is selected in advance.²⁵ The council states that these children “might come to be considered more like products of a designed manufacturing process than “gifts” whom their parents are prepared to accept as they are”; thus, leading to “increased commercialization and industrialization of human procreation.”²⁶ Here, what matters is “human dignity” at stake. When

¹⁴ Ibid., 86.

¹⁵ Ibid.

¹⁶ Ibid., 95.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid., 97

²¹ Ibid.

²² Ibid.

²³ Ibid., 100.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

referring to other forms of sexual reproduction such as IVF reproduction, “children emerge out of the same mysterious process from which their parents came, and are therefore not mere creatures of their parents.”²⁷

The third problem is the prospect of a new eugenics. Kass mentions that “cloning, if successful, might serve the ends of privately pursued eugenic enhancement, either by avoiding the genetic defects that may arise when human reproduction is left to chance, or by preserving and perpetuating outstanding genetic traits, including the possibility, someday in the future, of using cloning to perpetuate genetically engineered enhancements.”²⁸

The fourth problem refers to the possibility of troubled family relations. “By confounding and transgressing the natural boundaries between generations, cloning could strain the social ties between them.”²⁹ Genetic relation to only one parent might produce special difficulties for family life. Forcing genetic linkage across or within generations may cause a confusing family dynamic and possibly lasting psychosocial effects as a result.

The fifth problem proposed by the PCBE is the effect on society that may result from human cloning. Kass explains, “cloning-to-produce-children would affect not only the direct participants but also the entire society that allows or supports this activity.”³⁰ “Even if practiced on a small scale, it could affect the way society looks at children and set a precedent for future nontherapeutic interventions into the human genetic endowment or novel forms of control by one generation over the next. In the absence of wisdom regarding these matters, prudence dictates caution and restraint.”³¹ This potential problem provided by Kass displays how each ethical decision that is made, and everything we determine morally acceptable, may have a confounding effect on a separate aspect of life.

MACKLIN’S ARGUMENT

Ruth Macklin’s argument, which may be referred to as the “argument from rationality,” is targeted toward the views of NBAC and particularly of PCBE. First of all, Macklin finds faults with the PCBE’s terminology as well as his immediate concerns regarding the process of reproductive cloning. On the PCBE’s view that reproductive cloning will become more of a “manufacturing” process, thereby making children the products of such a manufacture, not “begotten,” Macklin criticizes that this view implies the Judeo-Christian view shared by most conservative bioethicists which comprise of the members of the PCBE, the view which favors concepts such as “human dignity” and “natural law.” Macklin argues that these notions are strategically utilized by Kass and his council, in order to formulate an argument against cloning grounded in the concept of Playing-God, which she finds irrational. She also criticizes that the use of “this rather archaic biblical term [begotten]” is irrelevant.³²

About the point where in the process of cloning a human embryo is removed and altered for individual benefit, Macklin argues that this is a problem only because the council believes that there is a breach in the natural order of procreation. Macklin then moves to the council’s focus on the “serious issues of identity and individuality.”³³ Macklin takes these terms very literally, then proceeds to explain that there should be no reason why the cloned individual should not have his or her own identity. Macklin disregards any possibility of a cloned child having negative feelings toward his or her identity or self-worth that may be exacerbated do to his or her circumstances.³⁴

Macklin proceeds to criticize the decisions made by the council as she allegedly provides a “rational” approach to public policy, as opposed to the council’s reasoning she finds “questionable at best, and irrational at worst.”³⁵ She says that the council’s use of the term “dignity” as a justifying reason to oppose anything is irrational because dignity is a “fuzzy concept.” She argues that terms such as “fuzzy” and “flimsy” are far less descriptive than one would hope to see when forming an “argument from rationality.”³⁶ She adds that “appeals to dignity are often used to substitute for empirical evidence that is lacking or sound arguments that cannot be mustered.”³⁷ She refers to the caution of potential harm to human dignity as a “flimsy basis on which to erect barriers to scientific research and its applications, and to enact prohibitionist legislation.”³⁸

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid., 111.

³⁰ Ibid.

³¹ Ibid.

³² Macklin, “Cloning and Public Policy,” 209.

³³ Ibid., 210.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid., 211.

³⁷ Ibid.

³⁸ Ibid.

Macklin then touches upon the concept of potential harm to society due to reproductive cloning proposed by the council. She responds that it is “certainly possible that there may be no substantial benefits to society that would result if human cloning were to become a reality. Yet this would constitute a good argument for banning cloning only if considerable harms are a likely consequence.”³⁹ Macklin believes that it would be much more “rational” to experiment with human cloning in order to allow for such potential harm to come to fruition before banning the practice completely.

To conclude her argument, Macklin explains that “adequate animal work” must first be done in order for human cloning to “remain in a research for an indefinitely long time.”⁴⁰ She also calls for a revision of ethical review committees for monitoring research efforts. Meanwhile, Macklin stipulates that human cloning must be shielded from market forces in both the research phase and in any future applications.⁴¹ She states that there is a more realistic fear that may arise in commercial applications of cloning which can lead to the misleading or exploitation of infertile couples.⁴² From a legal and ethical standpoint, Macklin suggests that “everything that is now unethical or illegal regarding the treatment of human beings would apply as well to clones.”⁴³ Finally, Macklin states that her approach to this issue is “a rational approach to the perfection of techniques that produced the first successful cloning of a mammal.”⁴⁴ Macklin concludes that her recommendations here on cloning and public policy are “much better than the reaction generated by panic and obscure appeals to human dignity.”⁴⁵

ETHICAL ANALYSIS

As she argues, Macklin believes her view is rationally superior to the PCBE’s argument and suggests that human cloning, of any kind, should be legalized with some thorough investigations and cautions. It becomes clear in the ethical analysis that Macklin’s belief is that an isolated sense of individual’s autonomy commonly praised in secular culture is more important than the theological values that the conservative members of our society believe, where the PCBE believes the other way around. From the council’s perspective, it is in the cloned-child’s best interest and in the best interest of human dignity to prohibit cloning to be performed on human persons because, though human cloning may prove to be a great scientific development to benefit individuals in the society, it is more important to protect human dignity that all human persons possess and the Playing-God concern. However, from Macklin’s perspective, what is at stake is to protect what individuals want in the society. However, the problem is her use of the term “rationality.”

Macklin believes that her argument is rational and the council’s argument is irrational. However, when discussing in a moral debate, it is difficult to identify what makes an argument “rational” because the moral debate is not based on quantifiable data or statistics. Rather, moral reasoning is structured in a fashion that allows one to come to conclusion after a certain array of structured premises that provide justifications for the given view or recommendation the arguer wishes to make with regard to a given subject. Depending upon the evaluators’ moral values, one argument may seem working or not working unless the argument makes apparent logical contradictions. Macklin’s view is representative of the secular atheist moral value, immediately rendering the Playing-God concern a non-issue for her own community’s moral value. Consequently, the claims that Macklin makes in her argument conform to the moral values of the secular community while devaluing the theistic community’s moral value that the conservative council supports. Although the council’s argument does not pertain to the moral values that Macklin possesses, it is a far-fetched claim to say that the council’s view is “irrational.” Otherwise, her argument can be judged by the same criterion that she uses. The conservative, theistic community may judge her argument to be irrational simply because her view is contrary to the conservative position. The members of the PCBE may respond to Macklin’s view like this. Macklin’s argument is out of common moral sense because her premises do not endorse the very basic sense of “human dignity” that the Western society has held on to for more than two thousand years. Bioethical reasoning without the sense of human dignity will be placing human beings on the equal plain with non-human animals such as pigs and dogs. Therefore, her argument is irrational.

CONCLUSION

³⁹ Ibid., 211.

⁴⁰ Ibid., 213.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid., 214.

⁴⁴ Ibid.

⁴⁵ Ibid.

Evaluating a bioethical argument by reference to a “rational standard” is problematic. When an individual provides reasoning built upon the moral foundations of his or her community, then the argument may seem perfectly rational to that specific community. However, if the argument does not pertain to another community, then the given argument may seem unreasonable or poorly constructed to the opposing community. In our case, Ruth Macklin did not favor the theistic concern provided by the council. Thus, Macklin felt that the council’s reasoning “irrational.” However, this is an unfair and unjustifiable name calling which exposes her argument to the same criticism by her counterpart conservative scholars.

REFERENCES

- Campbell, Courtney. *Cloning Human Being: Religious Perspectives on Human Cloning*. (Commissioned Paper)
<https://bioethicsarchive.georgetown.edu/nbac/pubs/cloning2/cc4.pdf>
- Macklin, Ruth. “Cloning and Public Policy” In *A Companion to Genetics*. Eds. Burley, J., and Harris, J. (Malden, MA: Blackwell, 2004).
- National Stem Cell Foundation of Australia. “Fact Sheet 4: Therapeutic Cloning (Somatic Cell Nuclear Transfer).” July 2010. Accessed May 2017, [http://www.stemcellfoundation.net.au/docs/fact-sheets/fact-sheet-4---therapeutic-cloning-\(somatic-cell-nuclear-transfer\).pdf?sfvrsn=5](http://www.stemcellfoundation.net.au/docs/fact-sheets/fact-sheet-4---therapeutic-cloning-(somatic-cell-nuclear-transfer).pdf?sfvrsn=5).
- The National Bioethics Advisory Commission. *Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission*. (Rockville, Maryland: Government Printing Office, 1997)
- The President’s Council on Bioethics. *Human Cloning and Human Dignity: An Ethical Inquiry* (Washington, DC: the Government Printing Office, 2002)
- Thompson, J., Itskovitz-Eldor, J., Shapiro, S., Waknitz, M., Swiergiel, J., Marshall, V., and Jones, J. “Embryonic Stem Cell Lines Derived from Human Blastocysts.” *Science* 282 no. 5391 (Nov. 6, 1998): 1145-1147. doi:10.1126/science.282.5391.1145.