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#### Template

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#### «Η κλωνοποίηση και το δικαίωμα στο ανοικτό μέλλον»

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#### Βιβλιογραφία

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#### Πρότυπο κείμενο

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# "Clones, Prototypes and the Right to Uniqueness"

ABSTRACT: Human cloning until recently has been considered to belong to the domain of science fiction; now it has become a tangible possibility, a hopeful as well as a fearsome one. One of the fears that necessarily come along with it is about the peril cloning might represent for human uniqueness, since the clones are expected to be identical to their prototypes; this would unavoidably compromise the clone's right to a unique identity. In this paper I will discuss whether and in what degree cloning seems likely to compromise either the clone's or the prototype's right to a unique identity; I will argue that it represents no actual threat for anybody's uniqueness, therefore this argument is futile. I will also argue that the so-called right to a unique identity itself is not as indisputable as to become the basis of a strong moral argument against cloning.

KEYWORDS: human cloning, rights, identity, uniqueness, individuality.

The possibility of creating human beings by means of transferring the nucleus of a somatic cell to an enucleated ovum is very likely to allow in the near future for the production of humans identical to already existing ones, or to ones that once existed, but now do not<sup>2</sup>. These genetically manufactured humans are usually being referred to as *clones*, and the persons from whom the somatic cell nuclei have been extracted are being called *prototypes*. In my opinion both terms are undue and misleading; I will use them henceforward, however, for reasons of compliance with the established terminology. The fact that the clones and their prototypes will allegedly be identical to each other is considered by some bioethicists to constitute a major threat to some moral rights of the clones, rights that non-clones are free to

<sup>&</sup>lt;sup>2</sup> National Bioethics Advisory Commission, *Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission* (Rockville-Maryland, June 1997), 13.

enjoy, such as the right to ignorance<sup>3</sup>, or that to an open future etc<sup>4</sup>. There is a particular right, however, that is considered to be not just threatened, but *a priori* and inescapably violated by the very fact that a person is being born as a clone. This is the right to a unique identity, to individuality, or to uniqueness, a right that a clone will be in no position to enjoy or even claim due to his or her very particular nature and the way he or she has come into existence<sup>5</sup>. In this short paper I will support the view that this objection is grounded neither on fact nor on reason. In particular, I will argue that: [a] cloning does not actually compromise neither the prototype's nor the clone's unique identity, [b] the right to a unique identity is not as indisputable as to bolster any moral argument.

As for my first claim, namely that cloning poses no threat to anyone's uniqueness, I cannot resist the temptation of starting with an argument that might sound like a sophism: if the term *clone* by definition describes a potential person that would be the exact copy of another individual, the prototype, and if the prototype is a unique individual, then the clone should be a unique individual as well, otherwise he or she could not be an exact copy. Hence, either the clone – as an exact copy of a unique individual – is a unique individual too, so no one's uniqueness is at stake, or the clone is not an exact copy of the prototype – since he or she lacks at least one property or quality the prototype possesses –, so again no one's individuality is being compromised. This sounds like a witticism, of course, since common belief holds on the one hand that exact duplication is achievable, and on the other that the property or quality of uniqueness is *exactly what is being destroyed* by duplication.

To Leibniz, however, my sophism would rather seem as a synopsis of his view that there can be no exact duplicates in nature, either natural or artificial. To him, "... it is not true that two substances can resemble each other completely and differ only in number"<sup>6</sup>, or, as he explains elsewhere, "in nature, there cannot be two individual things that differ in number alone. For it certainly must be possible to explain why they are different, and that explanation must derive from some difference they contain... for never do we find two eggs or two leaves or two blades of grass in a garden that are perfectly similar. And thus, perfect similarity is found only in incomplete and abstract notions, where things are considered only in a certain respect"<sup>7</sup>. This is Leibniz's law for the identity of the indiscernibles, according to which if two beings have every quality of theirs in common, they *cannot be two*, but

<sup>&</sup>lt;sup>3</sup> See Sören Holm, "A Life in the Shadow: One Reason Why We Should Not Clone Humans", *Cambridge Quarterly of Healthcare Ethics* 7 (1998): 160-162. Also Hans Jonas, "Lasst uns einen Menschen klonieren: Von der Eugenik zu der Gentechnologie", in *Technik, Medizin und Ethik – Praxis des Prinzips der Verantwortung*, edited by Hans Jonas (Frankfurt am Main: Suhrkamp, 1987), 190 and Tuija Takala, "The Right to Genetic Ignorance Confirmed", *Bioethics* 13.3/4 (1999): 288-293, 289, as well as Juha Raikka, "Freedom and the right (not) to know", *Bioethics* 12.1 (1998): 49-63, 50-51.

<sup>&</sup>lt;sup>4</sup> See Helga Kuhse, "Should Cloning Be Banned for the Sake of the Child?", *Poiesis and Praxis* 1 (2001): 17-33, 20. Also Dena Davis, "Genetic Dilemmas and the Childs Right to an Open Future", *Hastings Center Report* 27.2 (1997): 7-15, 9. For the right to an open future see Joel Feinberg, *Freedom and Fulfillment: Philosophical Essays* (Princeton, NJ: Princeton University Press, 1994), 76 ff.

<sup>&</sup>lt;sup>5</sup> The European Parliament, "Resolution on Cloning", *Official Journal* C 034 02/02/1998, p. 0164: "The European Parliament, [...] 1. Stresses that each individual has a right to his or her own genetic identity and that human cloning is, and must continue to be, prohibited; 2. Calls for an explicit worldwide ban on the cloning of human beings; 3. Urges the Member States to ban the cloning of human beings at all stages of formation and development, regardless of the method used [...]".

<sup>&</sup>lt;sup>6</sup> Gottfried W. F. von Leibniz, "Discourse on Metaphysics", *Philosophical Essays*, translated by Roger Ariew & Daniel Garber (Indianapolis: Hackett, 1989), 41-42.

<sup>&</sup>lt;sup>7</sup> Ibid., "Primary Truths", 32.

are actually *one*. Tagging along after Leibniz John McTaggart derived his own law for the dissimilarity of the diverse by applying the rule of contraposition to Leibniz's maxim: if two beings are numerically distinct, then they should also be qualitative distinct, to wit there must be at least one quality that one of these two beings has, but the other lacks<sup>8</sup>. As McTaggart puts it, diversity implies dissimilarity, and two things cannot be exactly equal, or have the same nature. If Leibniz's and McTaggart's views were applied to cloning, we could only agree that since the clone and his or her prototype will be numerically distinct from each other<sup>9</sup>, there should be *at least one* quality they will not have in common, therefore they will necessarily be also qualitative discernible. It seems that in the charming and orderly arranged world of propositional logic – or, better, of metaphysics based on logic – my initial claim that cloning threatens nobody's uniqueness wouldn't that easy be rejected as a witticism.

Our world, however, is not that of propositional logic, therefore arguments like the one I just presented are not expected to serve as a satisfactory response to moral objections. They surely didn't convince the members of the European Parliament, who declared that each individual has a right to his or her own genetic identity and that human cloning is, and must continue to be, prohibited<sup>10</sup>, or bioethicists like Arthur Caplan, among others, who argued regarding cloning that "one of the things we treasure about ourselves is our individuality.... You begin to worry that when you deliberately set out to make copies of something, you lessen its worth"<sup>11</sup>. It seems that we think of our uniqueness so highly, that much greater effort is required to appease the fear that it might be compromised due to cloning. But in which way could human uniqueness be threatened by virtue of cloning?

As I see things, individuals in general are different or similar to each other with regard to [a] their genome, [b] their phenotype and, [c] their character and personality. When we say that an individual is unique, we assume that it features at least one – even a slight – difference to every other of its kind concerning one of these three above mentioned categories. It follows that, if an individual is identical to any other of its kind, it has to be such with regard to *every single one* of its properties or attributes at the same time. Cloning, therefore, would be a threat to an individual's unique identity, if and only if it proved capable of providing scientists with the means to produce at least *two* individuals with exactly the same genes, looks and character at the same time. This, however, doesn't seem to be a part of the actual powers of cloning.

Cloning concerning humans so far seems to be attainable primarily – if not solely – by means of nuclear transfer, a process that could be roughly outlined as extracting the nucleus of a somatic cell taken from the prototype and transferring it to an enucleated ovum in order to produce a clone; this method allegedly guarantees that the clone will be an exact genetic copy of the somatic cell donor<sup>12</sup>. This is not exactly accurate, however. As far as genomic identification is concerned, it is true that the clone's gene-set is expected to be almost fully determined by the genetic information

<sup>&</sup>lt;sup>8</sup> John McTaggart, *The Nature of Existence* (Cambridge: Cambridge University Press, 1988), vol. 1, § 94.

<sup>&</sup>lt;sup>9</sup> Kathinka Evers, "The Identity of Clones", *Journal of Medicine and Philosophy* 24.1 (1999): 67-76, 69.

<sup>&</sup>lt;sup>10</sup> See supra note 4.

<sup>&</sup>lt;sup>11</sup> Quoted in Ruth Macklin, "Splitting Embryos on the Slippery Slope: Ethics and Public Policy", *Kennedy Institute of Ethics Journal* 4.3 (1994): 209-225, 215.

<sup>&</sup>lt;sup>12</sup> National Bioethics Advisory Commission, *Cloning Human Beings: Report and Recommendations* (Rockville, Maryland, 1997), 14.

that is being contained in the nucleus of the donor's somatic cell. The nucleus, though, has to be implanted into an enucleated ovum, and the ovum will necessarily convey its own genetic information to the clone contributing thus to the clone's genome. The cytoplasm, actually, which belongs to the ovum, passes on to the new organism the mitochondrial DNA<sup>13</sup>, which is a tiny 0, 05 % of the individual's overall genetic information<sup>14</sup>. This might seem like a negligible proportion, but in genetics such genomic dissimilarities are of enormous significance and result in huge differences, especially if we consider that between humans and apes stands only a fragile 2 % of genetic difference, which, nevertheless, results in two totally different species. A clone, of course, could only share the genetic information of his or her prototype's nuclear DNA; his or her mitochondrial DNA, nevertheless, would be necessarily different, since the enucleated ovum that would be used in the procedure of his or her cloning could never be identical to the ovum that produced the prototype. In other words, even if our purpose was to duplicate the exact Mozart's genome, for example, in order to succeed in this we would need to be in possession not only of one of Mozart's somatic cells, but also of an ovum extracted from his mother's oocvtes<sup>15</sup>. But not just any ovum would suffice; the only ovum that would allow an exact genomic duplication of Mozart would be the one that had been once fertilized to produce Mozart, since the genetic information contained in two different ova is not stable, even if both have been retrieved from the very same oocyte<sup>16</sup>. In the light of all these some feel safe even to argue that a clone should reasonably be expected to have more genetic differences to the prototype than identical twins actually have to each other<sup>17</sup>. If these empirical data are correct, they seem to prove beyond any reasonable doubt that exact genomic replication far exceeds the powers of genetic engineering: even if the genomic difference between the clone and the prototype would be as slight as 0, 05 %, the clone would still be genetically *different* to the prototype although very similar; in any case, these two beings would not be *identical*. Given all these, genetic uniqueness seems not to be at stake in the case of human reproductive cloning.

Let us, however, assume for the sake of the discussion that the advances in genetics in the near future are likely to allow geneticists to overcome the obstacles posed by the mitochondrial DNA, and that exact duplication of the human genome would become achievable. In my view the prospect of producing two individuals with exactly the same genome wouldn't be that objectionable or that fearsome if it didn't necessarily lead to identical phenotypes. But does it? Geneticists so far conclude that our phenotype, to wit the way we actually are and look, is not determined solely by our genes<sup>18</sup>. Aside from the gene-set there are numerous other variables that affect gene expression and have a major impact on our phenotype. Such factors are, among others, the intrauterine environment<sup>19</sup>, the stages of placentation and embryo-maternal

<sup>&</sup>lt;sup>13</sup> Helga Kuhse, "Should Cloning Be Banned for the Sake of the Child?", *Poiesis and Praxis* 1 (2001): 17-33, 21.

<sup>&</sup>lt;sup>14</sup> Françoise Baylis, "Human Cloning: Three Mistakes and an Alternative", *Journal of Medicine and Philosophy* 27.3 (2002): 319-337, 324-325.

<sup>&</sup>lt;sup>15</sup> Leon Eisenberg, "The Outcome as Cause: Predestination and Human Cloning", *The Journal of Medicine and Philosophy* 1.4 (1976): 318-331, 326.

<sup>&</sup>lt;sup>16</sup> Bernard E. Rollin, "Keeping up with the Cloneses: Issues in Human Cloning", *The Journal of Ethics* 3.1 (1999): 51-71, 63.

<sup>&</sup>lt;sup>17</sup> Martin LaBar, "The Pros and Cons of Human Cloning", *Thought* 59 (1984): 319-333, 325.

<sup>&</sup>lt;sup>18</sup> Gregory E. Pence, *Who's Afraid of Human Cloning?* (New York: Rowman & Littlefield Publishers, 1998), 14.

<sup>&</sup>lt;sup>19</sup> Françoise Baylis, "Human Cloning: Three Mistakes and an Alternative", *Journal of Medicine and Philosophy* 27.3 (2002): 319-337, 324-325.

circulation<sup>20</sup>, the spontaneous mutations genes constantly undergo<sup>21</sup>, etc. Even monozygotic twins, who share an as similar as possible gene-set and uterine environment, are not phenotypically identical to each other, and sometimes they differ greatly. Given all these, we are allowed to assume that not only will a clone be different from his or her prototype with regard to his or her phenotype, but also that multiple clones of the same prototype might differ to each other in some degree, as well<sup>22</sup>. Even if this wasn't the case, however, and a clone actually looked exactly the same as his or her prototype, I don't see why this should be considered of major moral significance concerning either the clone's or the prototype's right to a unique identity. If physical similarity or identification could actually infringe one's uniqueness, we should assume the same with regard to monozygotic twins. Nevertheless, according to the majority of people – philosophers included! – monozygotic twins are perfectly unique individuals: they are being treated as such, and nobody seriously maintains that their right to a unique identity has been violated by the fact that they have been born as twins. To quote John Harris, "artificial clones do not raise any difficulties not raised by the phenomenon of natural twins"<sup>23</sup>. We do not feel apprehensive when natural twins are born, why should we when twins are deliberately created? One could object, of course, that natural twins just occur as a natural phenomenon, while clones will be created by choice, and moral evaluation is applicable only to deliberate human deeds. This objection would stand in the case monozygotic twins were born only due to spontaneous natural genetic procedures. This is not the case, however. Many people undergo fertility enhancement therapies perfectly aware of the fact that these techniques more than often result in multiple pregnancy. Nobody, however, assumes that this deliberate choice of theirs to undergo fertility enhancement therapies is morally objectionable due to the risk of giving birth to monozygotic twins<sup>24</sup>. Since in the case of natural clones we do not tend to assume that something morally wrong has happened, I don't see why we should think the contrary in the case of artificial clones -a fortiori since that they are likely to be much less similar to their prototypes than monozygotic twins are to their brothers or sisters for the reasons I previously explained.

So far I have argued that the exact duplication of the human genome and phenotype is not in the powers of human reproductive cloning, and it seems highly unlikely that it ever is. Therefore either the clone's or the prototype's right to a unique identity is being at stake due to human reproductive cloning, at least as far as genomic and phenotypic uniqueness is concerned. At this point I could rest my case, since it is more than obvious that two persons that would be genetically unlike (even slightly) and would also look different (even slightly) would necessarily count as *unique individuals*, even if they shared exactly the same character and personality traits. Nevertheless, I would like to add a few words concerning the alleged danger of duplicating the personality of a human being by means of cloning. Such a belief could

<sup>&</sup>lt;sup>20</sup> Leon Eisenberg, "The Outcome as Cause: Predestination and Human Cloning", *The Journal of Medicine and Philosophy* 1.4 (1976): 318-331, 324.

<sup>&</sup>lt;sup>21</sup> See Lansing M. Prescott, John P. Harley & Donald A. Klein, *Microbiology*, 5<sup>th</sup> edition (New York: McGraw-Hill, 2002), 226 ff.

<sup>&</sup>lt;sup>22</sup> Bernard E. Rollin, "Keeping up with the Cloneses: Issues in Human Cloning", *The Journal of Ethics* 3.1 (1999): 51-71, 63.
<sup>23</sup> John Harris, "Goodbye Dolly?" The Ethics of Human Cloning", *Journal of Medical Ethics* 23

 <sup>&</sup>lt;sup>23</sup> John Harris, "Goodbye Dolly?" The Ethics of Human Cloning", *Journal of Medical Ethics* 23 (1997): 353-360, 353.
 <sup>24</sup> Dan Brock, "Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con", in *Cloning*

<sup>&</sup>lt;sup>24</sup> Dan Brock, "Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con", in *Cloning and the Future of the Human Embryo Research*, edited by Paul Lauritzen, 93-113 (New York: Oxford University Press, 2001), 103.

stand only in the light of the strictest genetic determinism, which is a view that assumes that the character and the personality of humans is being determined only by the genomic heritage a person is endowed with, to wit by genetic information contained into one's DNA, and that neither the environment in which one grows, nor chance or free will have a part in the formation of one's personality. I totally disagree with genetic determinism, but this is not the time to argue in detail against it. I will only suggest that appealing to genetic determinism in order to argue that cloning is morally unjustifiable because it violates someone's moral right to his or her unique identity, in my view seems to be neither a clever nor an effective choice. This is because, if both personality and character are being determined only by a given geneset, one's deeds are not for one to decide about; they are rather inevitable events to which one is being nolents volents dragged by one's own inherent genetic disposition. If this is so, debates on moral issues - including the one concerning the right to a unique identity in relation to human reproductive cloning – are only in vain: people will eventually do what their genes compel them to do; therefore all arguments for or against cloning (the one that focuses on genetic determinism all the same) couldn't be of any real significance. Nevertheless, those that oppose cloning on grounds of genetic determinism seem to hold that their arguments concerning the alleged violation of the clone's right to a unique personality is of some significance for the debate, at least as long as they claim that their views should be taken into account. But not both can stand at the same time; either genetic determinism is true and moral debates are nothing more than just shadow play, or moral discussions have decisive impact on the choices of moral agents and genetic determinism is false. If genetic determinism may apply to clones, it should equally apply to bioethicists as well.

In this paper I invested all my efforts in arguing that human reproductive cloning puts neither the clone's nor the prototype's uniqueness at stake, hence the socalled right to a unique identity is irrelevant to the debate concerning human reproductive cloning. I would like to conclude with some further thoughts on the applicability of such a right in the case of human cloning. As I see it, a moral right outlines some kind of permission or freedom that all moral agents should enjoy concerning their choices; in other words, if a person is being acknowledged the moral right to something, then this person is free to opt – or not to opt – for this something. This *something* on the one hand has to be considered of such high moral significance as to have a moral right exclusively tailored to its protection (a right to chewing gum, for example, would be nonsensical), and on the other hand it should be in actual peril of being deprived from its claimant or holder due to other moral agents' acts or omissions. When it comes to the so-called right to a unique identity, in my view not all the above requirements are actually being met. To begin with, not every moral agent can claim the so-called right to a unique identity: naturally born twins surely cannot. As a matter of fact, this right seems to have been tailored exclusively for clones. If this is the case, then we should have to accept two distinct categories of rights holders, one of non-clones (with lesser moral rights, since non-clones would not be allowed the right to a unique identity), and another one of clones (who would be acknowledged all the rights of the former plus the one to a unique identity). Even if this was possible, I cannot see how it could be morally defended. As for the second requirement, to argue that one has the right to be born a unique individual can only imply that one would be severely damaged or harmed if he or she was born identical to somebody else. But this is not always – or, according to some, it can never be<sup>25</sup> – the case. Anyone who experiences the misfortune of having been born with spina bifida, cystic fibrosis or hydrocephalus would eagerly give away his or her right to a unique identity for a chance to be identical to a person with better prospects in life. Uniqueness seems to have been a bit overestimated as a property and, anyway, clones could think of it as less valuable to them than we do. As for the third requirement, the one that focuses on the potential peril that cloning could represent for either the clone's or the prototype's uniqueness, I have already at length argued that such a view cannot easily be defended.

The moral debate concerning cloning – and, in particular, human cloning – is probably the most challenging in our times, and this is not without a good reason: in its core lurk miracles and hopes, power and dreams, high stakes and equally high risks. As it is with every moral issue of such significance human cloning has fervent advocates as well as dedicated opponents, and both come with sharp arrows in their quivers. In this paper I endeavored to determine the sharpness of one of these arrows, and I found it faulty. I argued that cloning does not compromise either the clone's or the prototype's right to a unique identity primarily because the exact duplication of the human genome, phenotype and personality is beyond the powers of today's genetics. I also suggested that the right to a unique identity is not as indisputable as to bolster any moral argument. But this issue is just a part of a debate that is expected to last long and be a challenging one.

## Literature

Adams Robert M., "Existence, Self-Interest, and the Problem of Evil", Noûs 13 (1979): 53-65.

- Bayles Michael, "Harm to the Unconceived", Philosophy & Public Affairs 5 (1976): 292–304.
- Baylis Françoise, "Human Cloning: Three Mistakes and an Alternative", *Journal of Medicine and Philosophy* 27.3 (2002): 319-337.

Brock Dan, "Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con", in *Cloning and the Future of the Human Embryo Research*, edited by Paul Lauritzen, 93-113 (New York: Oxford University Press, 2001).

Davis Dena, "Genetic Dilemmas and the Childs Right to an Open Future", *Hastings Center Report* 27.2 (1997): 7-15.

Eisenberg Leon, "The Outcome as Cause: Predestination and Human Cloning", *The Journal of Medicine and Philosophy* 1.4 (1976): 318-331.

Evers Kathinka, "The Identity of Clones", Journal of Medicine and Philosophy 24.1 (1999): 67-76.

Feinberg Joel, Freedom and Fulfillment: Philosophical Essays (Princeton, NJ: Princeton University Press, 1994).

Harris John, "Goodbye Dolly?" The Ethics of Human Cloning", *Journal of Medical Ethics* 23 (1997): 353-360.

Holm Sören, "A Life in the Shadow: One Reason Why We Should Not Clone Humans", *Cambridge Quarterly of Healthcare Ethics* 7 (1998): 160-162.

Jonas Hans, "Lasst uns einen Menschen klonieren: Von der Eugenik zu der Gentechnologie", in *Technik, Medizin und Ethik – Praxis des Prinzips der Verantwortung*, edited by Hans Jonas (Frankfurt am Main: Suhrkamp, 1987).

<sup>&</sup>lt;sup>25</sup> According to Derek Parfit's *non identity* argument, the clone would not be harmed even in the case he or she was born identical to another person, because otherwise the clone would have never been born at all. See Derek Parfit, *Reasons and Persons* (Oxford: Clarendon Press, 1987), 357 ff. Also Michael Bayles, "Harm to the Unconceived", *Philosophy & Public Affairs* 5 (1976): 292–304; Robert M. Adams, "Existence, Self-Interest, and the Problem of Evil," *Noûs* 13 (1979): 53–65; Gregory Kavka, "The Paradox of Future Individuals," *Philosophy & Public Affairs* 11 (1982): 93-112 and M. A. Roberts, "The Non-identity Fallacy: Harm, Probability and Another Look at Parfit's Depletion Example", *Utilitas* 19.3 (2007): 267-311, 268.

Kavka Gregory, "The Paradox of Future Individuals," *Philosophy & Public Affairs* 11 (1982): 93-112. Kuhse Helga, "Should Cloning Be Banned for the Sake of the Child?", *Poiesis and Praxis* 1 (2001): 17-33.

LaBar Martin, "The Pros and Cons of Human Cloning", Thought 59 (1984): 319-333.

Leibniz Gottfried W. F. von, "Discourse on Metaphysics", *Philosophical Essays*, translated by Roger Garber Ariew & Daniel (Indianapolis: Hackett, 1989).

Macklin Ruth, "Splitting Embryos on the Slippery Slope: Ethics and Public Policy", *Kennedy Institute of Ethics Journal* 4.3 (1994): 209-225.

McTaggart John, The Nature of Existence (Cambridge: Cambridge University Press, 1988), vol. 1.

National Bioethics Advisory Commission, Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission (Rockville, Maryland June 1997).

Parfit Derek, Reasons and Persons (Oxford: Clarendon Press, 1987).

Pence Gregory E., *Who's Afraid of Human Cloning?* (New York: Rowman & Littlefield, 1998), 14. Prescott Lansing M., John P. Harley & Donald A. Klein, *Microbiology*, 5<sup>th</sup> edition (New York: McGraw-Hill, 2002).

Raikka Juha, "Freedom and the right (not) to know", Bioethics 12.1 (1998): 49-63.

Roberts M. A., "The Non-identity Fallacy: Harm, Probability and Another Look at Parfit's Depletion Example", *Utilitas* 19.3 (2007): 267-311.

Rollin Bernard E., "Keeping up with the Cloneses: Issues in Human Cloning", *The Journal of Ethics* 3.1 (1999): 51-71.

Takala Tuija, "The Right to Genetic Ignorance Confirmed", *Bioethics* 13.3/4 (1999): 288-293.

The European Parliament, "Resolution on Cloning", Official Journal C 034 02/02/1998.