

## Cloning, Identity, and Human Dignity: A Response to Kass and Callahan

### Introduction

The general public still seems to regard human reproductive cloning as something that occurs only in the realm of science fiction. The portrayal of cloning in movies, television, and even in journalism has spanned from comedic to dangerous. Human clones have often been depicted in movies as nothing but carbon copies of their genetic predecessor with no minds of their own (e.g., *Multiplicity* and *Star Wars: Attack of the Clones*), as products of scientific experiments that have gone horribly wrong, resulting in deformed quasi-humans (*Alien Resurrection*) or murderous children (*Godsend*), as persons created simply for spare parts for their genetic predecessor (*The Island*), or as deliberate recreations of famous persons from the past who are expected to act just like their predecessor (*The Boys from Brazil*). Even when depicting nonhuman cloning, films (such as *Jurassic Park*) tend to portray products of cloning as menacing, modern-day Frankensteinian monsters of sorts, which serve to teach humans a lesson about the dangers of "playing God."

As philosopher Patrick Hopkins has pointed out, media conceptions about what human cloning entails, and the type of offspring that will arise from cloning, employs the tacit premise that clones are nothing but copies. The predominate belief that fuels this conception is that genetic determinism is true, i.e., that one's genes are the sole determining factor of one's behavior and physical appearance; essentially, that our fates are determined solely by our genetic constitution. If one believes that genetic determinism is true, then it follows that she believes that a cloned person would be psychologically identical with his genetic predecessor because they are (almost) genetically identical.

In this paper, I will present difficulties with two prominent arguments against human reproductive cloning that, to some capacity, assume that some version of genetic determinism is true. First is the argument that a cloned child's right to an open future would be violated, since she will forever live in the shadows of his genetic predecessor and, therefore, be deprived of the opportunity to live his life according to his own desires. Second is the argument that cloning deprives the resulting children of their right to a

unique genetic identity, and that a cloned child's dignity is compromised as a result of his being a genetic duplicate. Yet, although these arguments themselves fail to illustrate that reproductive cloning is morally remiss, it is unwise to ignore the role that nature has in shaping our personalities. Although proponents of these objections against cloning ignore the role of nurture in shaping individuality and identity, we ought not to make the same mistake on the other side. Twin studies illustrate that there is a strong genetic component to our identity as well, and this ought to be taken into account when discussing the issue of reproductive cloning and whether genetic duplication compromises individuality. In the end, however, the main issue is whether human cloning compromises human *dignity*. I will argue that it does not, for the source of human dignity is not reducible to our particular DNA sequence.

### **Cloning and the Right to an Open Future**

Somatic Cell Nuclear Transfer (hereon in "SCNT") is the process of creating an embryo by transferring the nucleus of a somatic cell into an enucleated ovum. Using such a method for human reproduction entails transferring the embryo into a uterus and allowing it to gestate as would a naturally fertilized embryo. The cloned embryo would possess identical chromosomal DNA as its genetic predecessor, but, because of the use of a different ovum, their mitochondrial DNA (the genetic material inhabiting the cytoplasm of the enucleated ovum) would differ, and, consequently, they would not be 100% genetically identical (unlike monozygotic multiples who, because they are derived from the same ovum, share identical chromosomal and mitochondrial DNA). In addition to their slight genetic difference, the cloned embryo would likely be gestated in a different uterine environment and this could influence the embryo in various ways that would distinguish it from its genetic predecessor. For example, a cloned entity's phenotype (its appearance) may look very different than that of his genetic predecessor. Prior to implantation, an embryo can undergo epigenetic reprogramming, where nongenetic (environmental) factors influence genes to manifest themselves differently. The result is that the genes behave in ways that may lead to a difference in appearance. This is most likely what accounts for the vast differences in phenotype between CC the cat (short for "Copy Cat" – the first cloned cat) and Rainbow, her genetic ancestor. Whereas Rainbow,

a calico, is stocky and has patches of tan, orange, and white throughout her body, CC barely resembles a calico at all. Not only is CC lanky and thin, she has a grey coat over a white body and is lacking the patches of orange or tan typical to calicos. There are behavioral differences between Rainbow and CC as well; whereas Rainbow is described as a shy, reticent, and a more “hands-off” kind of cat, CC is described as more playful, inquisitive, and affectionate (Hays, 2003). It is this fact about CC and Rainbow that allows us to begin the pertinent discussion at hand: would the fact that a clone is a genetic copy of another person mean that her individuality or identity is lost? If CC can be different than Rainbow in terms of appearance and personality, wouldn't the same thing go for a cloned child?

Bioethicist Leon Kass is one of the most outspoken critiques of human reproductive cloning. In his widely reprinted article “The Wisdom of Repugnance,” he presents the following argument against human cloning:

Cloning creates serious issues of identity and individuality... The cloned individual will be saddled with a genotype that has already lived. He will not be fully a surprise to the world. People are likely always to compare his performances in life with that of his alter ego... one must also expect parental and other efforts to shape this new life after the original — or at least to view the child with the original version always firmly in mind (Kass, 1997).

Here, Kass is relying on Joel Feinberg's claim that children have a right to an open future. Buchanan *et. al.*, also argue that cloned children are in danger of experiencing closed futures and describe the parental responsibility to ensure an open future as follows:

The idea is that parents have a responsibility to help their children during their growth to adulthood to develop capacities for practical judgment and autonomous choice, and to develop as well at least a reasonable range of the skills and capacities necessary to provide them the choice of a reasonable array of different life plans available to members of their society. [...] it would be wrong for parents to close off most opportunities that would otherwise be available to their children in order to impose their own particular conception of the good life. (Buchanan *et. al.*, 1999).

Kass' argument that procreating via cloning deprives children of open futures, or infringes on parental responsibilities to provide open futures, can be read in two ways; he does not make clear which one he intends.

1. The actual replication of identity perspective: “Cloning creates serious issues of identity and individuality... The cloned individual will be saddled with a genotype that has already lived. He will not be fully a surprise to the world.” – The cloned child will be, not just a genetic duplicate, but also a *psychological* duplicate of his genetic ancestor. He is destined to repeat the behavior, thoughts, and actions of his genetic ancestor and so he will not be a surprise to the world.

2. The perceived replication of identity perspective “People are likely always to compare his performances in life with that of his alter ego... one must also expect parental and other efforts to shape this new life after the original — or at least to view the child with the original version always firmly in mind.” – The cloned child will want to be different than his genetic predecessor but, because of parental and societal pressure, his life will be shaped not by his own desires, but by those expectations.

If the first interpretation is what Kass means, then what he is arguing is that cloning *simpliciter* necessarily creates a duplicate, both genetically and psychologically. The cloned child is destined to *be* like his genetic predecessor in every way and would not, therefore, be his own individual. Other parts of Kass’ writing suggest that this is what he has in mind. At one point he writes, in reference to the suggestion that no one be cloned without the permission of the donor, “What harm is done the donor if the genotype is “not me.”? ... If the clone of Mel Gibson would not *be* Mel Gibson, why should Mel Gibson have grounds to object that someone had been made his clone?” Kass ignores that there can be other reasons to ask for a donor’s permission that does not require an identity relation. But here, he seems to make it clear that cloning results in the *actual* replication of identity.

If the second interpretation is what Kass means, then what he is arguing is that cloning *simpliciter* does not create a duplicate, but many people, because of their misconceptions about cloning (probably because they have read people like Kass), will think the child is a duplicate and will treat him as such. Because of the tension that will exist between him wanting to exercise his individuality and what others expect from him, this will create psychological and emotional problems for him and severely limit the opportunities afforded to him for his future. Some parts of Kass’ writing suggest that THIS is what he has in mind. He writes that children are not supposed to “live our lives for us, *or anyone else’s lives but their own.*” This implies that a cloned child will be capable of living his own life, but that it is parental and social expectations about the

nature of human clones that will lead them to want the cloned child to live the life of the genetic predecessor.

Neither one of these interpretations result in a successful argument against cloning. Let us consider the first reading of Kass' objection. Jones, the successful doctor, has wanted to be a physician since his childhood. From the time he was a boy, he was dissecting insects, playing with his doctor kit, and grew up with a keen interest in biology. His interests were fully fostered by his parents, and they let him guide the way towards his career path with their full support. Jones, we would argue, had an open future at his disposal and he chose early on what he wanted to do with that future; his parents dutifully fulfilled their responsibilities towards cultivating that choice. The first interpretation of Kass' argument assumes a rather robust version of genetic determinism (the clone will be a duplicate of his ancestor in every way because of their shared genetic information), and so what we can conclude is that Jones illustrated a strong disposition towards being a doctor because it was in his genes to do so. But, as it is assumed, Jones' desire to be a doctor was an accurate representation of his wishes for his life, regardless of how he came to acquire that desire, respecting that decision fulfills our obligation for respecting his right to decide the course of his life.

Now take Jones' cloned son JJ (Jones Jr.). Because he is "saddled" with his father's genotype, it was no surprise to Jones and his wife that JJ was dissecting insects at a young age and expressing a keen interest in biology. They are, of course, prepared for this, and have filled JJ's life with books and tools to foster his love for biology. Because genetic determinism is true (according to the first reading of Kass' objection), JJ is simply acting the way his genes have destined him to act; his desire to be a physician like his dad is an expected outcome of his genetic constitution but still an accurate representation of his will and his desire for his life (every bit as much as Jones' was). His parents fostering that desire in JJ is no different than Jones' parents fostering his desire: in both cases, the boys expressed the desire to be what their genes had destined them to be. If the first interpretation of Kass is correct, JJ was destined to be a doctor, like his genetically identical father. He would have had no other desires for any other career, and so there was no thwarting of his future plans on behalf of his parents. JJ's right to an open future was not violated; he simply never wanted to be anything else, which, of course, his

parents fully expected. But there seems to be no harm here done onto JJ and nothing is being deprived from him. There is no counteracting of his will; no one is forcing him to be a doctor based on his genetic lineage. Kass' concern, that a child would be pressed to ignore his own wishes for his life in order to fulfill his parents' expectations (something that already occurs with naturally created children) is not happening to JJ. The same would hold true for any other cloned child if genetic determinism is true: because the child's psychological, as well as physical, attributes are the sole product of his genome, the array of possible life plans open to the child will be just as expansive as the array of possible life plans that was open to his genetic predecessor, who was equally determined by his genome.

It seems, then, that the most charitable reading of Kass' objection is the second one. Consider Kate, who possessed a love for music since childhood and has grown up to be a concert pianist. Her cloned daughter, Katie, is fully expected to follow in mom's footsteps and she is saturated from her infancy with music and instruments. When Katie rejects playing with these instruments and, instead, illustrates a desire to study mathematics, her parents refuse to support this endeavor, banning all math books from the house and forcing Katie to take piano lessons. They even refuse to pay for college unless Katie studies music. "You will be what we expect you to be; what you were destined to be", Kate repeats. Clearly, Kate is violating Katie's right to an open future and ignoring her daughter's wishes as to where she wants her life to go. Kate is certainly "shaping" Katie's life after the "original"; Katie is being viewed "with the original version always firmly in mind." In this case, we have a genuine tension between a child struggling for individuality and to have her voice be heard, only to have that voice silenced by the expectations of her family.

This, I suspect, is what Kass is really worried about. Yet notice that this version of the objection, if successful, *defeats* Kass' concern against cloning. In order for this tension to arise (rather than the placid life that Jones enjoys with his cloned child) it must be the case that cloning does *not* create a psychological duplicate out of a genetic duplicate. Here, it seems as if Kass really does *not* believe in genetic determinism after all, even though some of his writing suggests otherwise. The fact that Katie wants to be acknowledged as her own individual, the fact that she wants to study math instead of

music, the reason why the whole tension arises in the first place, is because Katie *is* her own person, with her own mind, and her own likes, dislikes, and goals for the future. Cloning itself, therefore, does *not* violate Katie's individuality; it is her mother's *misconceptions* concerning what a cloned child ought to be like that is responsible for violating Katie's right to her open future. If the reason people treat cloned children unfavorably is due to their misconceptions about cloning, then the proper response is not to ban cloning at the expense of compromising procreative liberty (for those unable to have a child in any other way), but rather work to rectify these prejudices and misconceptions (Burley and Harris, 1999).

In other words, neither interpretation of the objection from the Right to an Open Future successfully implicates cloning as the culprit for depriving a cloned child of his individuality. If the first interpretation is correct, the cloned child is simply destined to repeat his genetic predecessor's life path and, therefore, there is no deprivation involved in fully expecting, and fostering, the road down that path. The child would simply be expressing what is in his genes to desire for his future life (indeed, ironically enough, it could be argued that trying to lead him down a different path than his genetic predecessor is what constitutes closing his future, since then the child would be encouraged to not follow what he wants to follow). The second interpretation is probably what Kass, and those who worry that cloning would entail a violation of a child's right to an open future, have in mind. In this case, it is precisely because genetic duplication does *not* result in a psychological duplication after all that we have a tension between what the cloned child wants for his life and what others want for him. The culprit here is not cloning, but rather people's misconceptions about cloning; misconceptions that Kass himself is fueling with objections of this sort.

### **Cloning and the Right to a Unique Genetic Identity**

I have argued that the objection from a Right to an Open Future fails as a reason against cloning. Another argument is that cloning violates our right to a unique genetic identity. If indeed there is such a right, using cloning to bring a child into existence seems to indeed violate it, since one would be deliberately creating a person who is a genetic duplicate of a pre-existing person (though it seems as if *both* the genetic predecessor and

the cloned child would be harmed if this objection is successful, since neither of them would have a unique genetic identity once the clone is born). The European Parliament, in their 1998 Resolution on Cloning, called for a ban on human reproductive cloning and voiced their worry that cloning would violate cloned children's right to "protection of their health and of their genetic identity." Indeed, some members of the European Parliament illustrated their opinions about human cloning by donning identical white plain masks during their meeting.

Daniel Callahan has also argued that there is a right to unique genetic identity, and that cloning violates this right.

For all of its haphazard qualities, there is one enormous advantage in the current random genetic lottery: Save for the occasional natural twinning, it gives each of us our own unique identity. There is no one else in the world like us. This is a precious gift of nature. It allows us to become our own person, to have some of our parents' genetic traits, but to have even more of our own. Nature does not make us in our parents' image: It makes us in our own unrepeatable image. Cloning would deprive the products of an engineered conception of that gift. They would be the manufactured product of their parents' desire (Callahan, 1993).

Callahan's last comment can be quickly refuted. Any planned pregnancy produces a child that is a "product of their parents' desire." Some would say this is a superior reason for coming into existence than being an unplanned accident. If Callahan's concern is that children born of artificial reproductive technologies would somehow be lacking in parental affection or respect, there have been studies that ought to put Callahan's mind at ease. One study found that children born from IVF and DI (donor insemination) are fairing as well as children born via natural conception. More importantly, the study found that "the quality of parenting in families with a child conceived by assisted conception is superior to that shown by families with a naturally conceived child, even when gamete donation is used in the child's conception" (Golombok *et. al.*, 1995, 295; also see Golombok, 2003 and Golombok *et. al.*, 2001).

There are three distinct, but intertwining, questions that arise from Callahan's argument. First, we should ask whether there is a right to a unique genetic identity. Second, we should ask whether there is a harm that comes from not being genetically unique; in particular, whether not being genetically unique violates human dignity in any respect. Third, we should ask whether it is genetic uniqueness that grounds our individual



personal identities (as Callahan seems to claim). Luckily, these questions can be easily answered because nature provides us with human genetic replicas: identical multiples.

Callahan brushes off the impact that identical multiples have on his argument; but the impact is great indeed. David Elliot has emphasized this point when he writes:

[Identical multiples] are clearly the most serious threat to human uniqueness that we can find, much more so than would be the case with technologically assisted clones. Monozygotic or 'identical' twins not only share the same nuclear DNA, but have the same mitochondrial DNA as well. They are usually gestated in the same woman at the same time and circumstances in her body, and are standardly raised in the same cultural and familial contexts. So with natural clones (identical twins) both genetic and environmental forces standardly conspire to make them relatively non-unique individuals (Elliot, 1998).

If genetic uniqueness were the basis of our individual personal identity, identical multiples would lack individual identity. But certainly multiples do not lack individual identity; each multiple is his own distinct person, with his own distinct likes and dislikes, and with his own distinct psychological identity. Genetic uniqueness, then, cannot be the basis of our personal identity.

The interesting question, it seems to me, is whether there is a right to a unique genetic identity in the first place, and what role the existence of identical multiples has in helping us answer that question. Philosopher Lee Silver writes that "no such 'right' has been granted by nature—identical twins are born every day as natural clones of each other" (Silver, 1997). But this response is unsatisfactory; by this logic there would be no right to life, since nature often inflicts ailments on humans that results in their death. Moreover, simply because something happens naturally does not entail that artificially bringing about the same state of affairs is permissible. Anencephaly happens naturally, but it does not thereby follow that it would be permissible for parents to intentionally cause anencephaly through, say, genetic manipulation of the embryo. In this situation, the parents have deliberately inflicted harm on their future child; had they left the embryo alone it would have likely grown into a child with his brain intact. Deliberately inflicting harm is morally wrong. One of the purposes of rights is to protect right-bearers from harm. If there is a Right to Unique Genetic Identity, one that nature violates when multiples are formed, and is a right that is morally wrong for parents to intentionally violate via the creation of cloned children (whether through SCNT or artificial embryo

twinning), then we have to identify whether there is some *intrinsic harm* that comes with being an identical multiple. If no such harm can be established, then there is evidence against positing such a right.

Turning to the experiences of multiples can help us answer this question. There does not seem anything *intrinsically* harmful or identity-depriving in being a genetic duplicate. As Elliot writes:

... if cloning is morally objectionable because it would produce non-unique human beings, then it must be the case that identical twins are either 1) less morally valuable or 2) somehow worse off than the rest of us... It is very difficult to accept that twins are deprived of something essentially related to their inherent moral value as persons. And it does not seem any more obvious that in not being biologically unique twins are made worse off. It might be suggested that they are psychologically damaged in some way because of their biological non-uniqueness. But evaluations of the 'similarity' of twins are often psychologically and morally ambivalent. In many cases this similarity can be an advantage in that they can share an enviable sense of empathy and human relatedness. Given this ambivalence, it is not clear how one could strongly maintain that non-uniqueness is objectionable, something to be avoided as a matter of moral principle. (Elliot, 1998).

Parents of monozygotic multiples are often advised to not dress their children in identical outfits past a certain age. Despite the protests of some parents, it is school policy at some institutions to place multiples in separate classrooms. Emphasis is often placed on parental practices that help to foster the individual uniqueness of identical multiples. This, of course, means that there *is* individual uniqueness amongst identical multiples (if there weren't, there would be nothing to foster), even though they are genetically identical and their nurture is almost identical as well. The fact that (1) no one denies that identical multiples are individuals and (2) there is no visible or obvious evidence that being a genetic duplicate carries with it intrinsic harm, it is difficult to assess the origins of, and the motivation to posit, a right to unique genetic identity.

### **Nature, Nurture, and Human Dignity**

Callahan essentially argues that genetic duplication results in identity duplication. Kass seems to argue this as well at certain points of his essay. The flaw in their argument is glaring; they simply ignore the very important role of nurture (and, in addition, they

seem to waver between accepting and rejecting genetic determinis). If identical multiples can grow into very different persons, despite having identical nature and almost identical nurture, then cloned children will be even more different in the absence of these shared, nurturing histories. From as early as gestation, the nurture experienced by a cloned child will differ from his genetic predecessor. He will experience a different uterine environment, quite possibly within the body of a different woman, who will have a different diet and different habits. He will be born at least a generation apart of her genetic predecessor and will live with a different family, have different friends, attend a different school, and be subjected to different social influences. The power of nurture cannot be underestimated, which Callahan and Kass very much do. The generational and societal differences between a clone and his genetic predecessor will undoubtedly go a long way when it comes to shaping the personality of the former.

However, many individuals who emphasize the role of nurture in creating identity, and conclude from this that clones will experience no identity crisis (Dawkins, 1998; Pence, 1998; Harris, 1997; Bor, 1997), make the same mistake as Kass and Callahan from the other side. Kass is very much correct when he writes that "genotype really does have something to do with identity, and everybody knows it." Although our experience with identical multiples tells us that there doesn't seem to be anything intrinsically harmful in genetic duplication, it also tells us that several aspects of our personalities are very much influenced by our genetic constitution. The Minnesota Study of Twins Reared Apart has been conducting interviews with identical twins who experienced distinct nurturing environments since 1979. After over three decades of study, the participants have concluded that "genetic factors exert a pronounced and pervasive influence on behavioral variability." Another study explored the role of genetics in predicting a child's intelligence and concluded that "many factors have been shown to influence intelligence, but twin studies verify that genetics play an important role... our study indicates that shared environment has a very small effect on intellectual development and supports the position that individuals respond to environments in ways consistent with their genetic predispositions" (Segal, 1997). In another study, Boston University psychiatrist Richard Pillard and Northwestern University psychologist J. Michael Bailey found that in identical twins, if one twin was gay, the other had about a

50 percent chance of also being gay. For fraternal twins, the rate was about 20 percent. Because identical twins share their entire genetic makeup while fraternal twins share about half, genes were believed to explain the difference.

It cannot be denied, then, that genetic constitution plays a significant role in the development of our personalities. A cloned child will, very likely, display certain behavioral and personality similarities with his genetic ancestor (though there is evidence that twins reared apart displayed a greater divergence in personality and behavior than twins reared together (Lewontin, 1982)). The key question is whether those similarities are sufficient to cause a severe identity crisis. Given the vastly different nurture that cloned children would experience, the answer seems to be no. If similarities in personality between a clone and his genetic predecessor are to cause identity problems, it will not be something inherent in being a clone but, rather, will most likely be the result of parental and societal expectations. That is, the second reading of Kass' objection may accurately point to a danger for cloned children, but that danger does not arise from *cloning*. Ironically enough, Kass' alarmist language, and his wavering back and forth between claiming that cloning causes *actual* identity confusion rather than *perceived* identity confusion, helps to propagate the misconceptions that fuel the despotism that he is so concerned with.

Cloning *qua* procedure is amoral – there is nothing intrinsically vicious or virtuous about genetic duplication. If clones are robbed of their individuality, or if they are treated in undignified ways, it is only because people have been misinformed as to what it means to be a clone. Philosophers have long asked what properties an entity must possess in order to have moral status and be accorded the proper respect and dignity that comes with being a moral patient. Various answers have been offered, of course, but the upshot is that a human clone would possess all of those qualities. For example Albert Schweitzer has argued that merely being alive is sufficient for having some degree of moral status, and human clones would certainly be alive. John Noonon has argued that all biological human beings, all members of the species *Homo sapiens*, possess dignity from the moment of their conception. Cloned humans, obviously, would be a member of our species. Utilitarians have maintained that sentience is necessary and sufficient for some degree of moral status, and certainly human clones would be sentient. Some

philosophers, for example Immanuel Kant, have argued that human beings have moral status, higher than that of nonhuman animals, because of our rational abilities, and our capacity for moral agency. A cloned human being would certainly possess those traits as well. Elliot emphasizes this point in his essay: "Kant claims that our dignity comes from our capacity for rational agency, for legislating our lives by universal moral laws... Humans acquire dignity by being rational beings who can act morally..." (Elliot, 1998). We can debate which conception of moral status is correct, but whatever answer we decide upon (I am partial to sentience myself), a cloned human being would most likely possess this characteristic. Genetic duplication *simpliciter* does nothing to compromise a cloned human being's dignity. If it would, then only the multiple who originated from the initial fertilized embryo would possess dignity. Human dignity is not reducible to DNA strands.

### **Conclusion**

There may be some very valid reasons to avoid human cloning, at least for now. Safety concerns are primary. Even Ian Wilmut, Dolly the sheep's co-creator, has denounced human cloning for reproductive purposes due to safety concerns. This reason to be against cloning is only temporary, however. The list of mammals that have been cloned is expanding, and the procedure will probably eventually become as safe as any other type of reproductive technology.

The genetic duplication found in cloning will entail one interesting state of affairs that I do believe warrant further discussion. Because a cloned child would be, genetically, his social parent's identical twin sibling, it is possible that familial roles will suffer from some degree of ambiguity. Such ambiguity already exists when one considers that a child could have as many as five distinct "parents": two genetic parents, one gestational parent, and two (or more) social parents. Already there have been cases of surrogate mothers demanding rights over the children they bear, even when they are not genetically related to them. The definition of "parent" has been blurred because of reproductive technology, and cloning may very well blur it further. Whether it will blur it beyond recognition remains to be seen, as well as whether the ambiguity will be detrimental to cloned children. But, it seems to me, that *these* are the interesting questions that lie behind

human reproductive cloning, not the unwarranted alarmist objections that Kass and Callahan proffer.