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# Genetics and Education: The Ethics of Shaping Human Identity

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NOTE: At the time of publication, author Vardit Ravitsky was affiliated with Bar Ilan University. Currently March 2007, he is a faculty member in the Center for Bioethics at the University of Pennsylvania.

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Identity, genetic interventions, behavioral genetics, children, education, culture, liberalism, autonomy, diversity

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# Genetics and Education: The Ethics of Shaping Human Identity

VARDIT RAVITSKY, M.A.

## Abstract

This paper suggests an analogy between education and genetic interventions as means of shaping the identity of children and future adults. It proposes to look at issues discussed in the philosophy of education as a possible source of insight for ethical guidelines regarding future genetic interventions. The paper focuses on situations of conflict between parents and state regarding the authority to determine the child's best interests. It describes the current formulation of the conflict in the literature as lacking the crucial element of the child's right to a cultural identity. It argues that this element is a necessary component in an ethical analysis of the child's best interests in a multicultural, liberal society which respects diversity. The paper therefore proposes a better model for the moral evaluation of identity-shaping decisions and offers some implications of this model for genetics.

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## Introduction

THE HUMAN GENOME PROJECT, and the consequent efforts to understand the meaning of genetic information, are providing us with new choices regarding the creation of new people. As in any other field of human activity, greater choice means greater responsibility. Thus, each discovery regarding the genetic basis of a disease, a trait or a behavior, raises ethical concerns about the proper use of such information.

At present, prenatal genetic testing enables parents to have access to information about the genetic makeup of their fetus. On the basis of this information, they may decide to terminate a pregnancy. Furthermore, pre-implantation genetic screening provides potential parents who have chosen *in vitro* fertiliza-

tion, with information about the various pre-embryos and enables them to select the candidate they prefer for implantation. In the future, it may become possible for parents to request direct genetic interventions in a specific pre-embryo in order to add, extract or modify pieces of DNA, with the aim of shaping the identity of their future child. Such interventions, when done not with the aim of diagnosing disease, but rather with the aim of choosing a characteristic, raise the ethical issue often referred to as the problem of "designer babies."

Much of the bioethical literature perceives the idea of parents consciously and voluntarily shaping the identity of their offspring by genetic interventions as raising new ethical concerns. However, the case of "designer babies" raises some very old ethical issues. Human beings have been shaping the identity of children for centuries, by controlling the environment in which children develop and, more directly, by educating them. I propose to think of education as the classical method of achieving the same goals that behavioral genetics will probably pursue through high-tech interventions.

The "nature vs. nurture debate," that famous competition between genetic and environmental explanations of human identity and behavior, has accompanied philosophical thought from its origins. From the days of Plato (1), philosophers have been discussing the proper way to shape the identity of future citizens,

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both in terms of genetic choice (i.e., choice of mate) and in terms of education. New insight into the role genes play in the shaping of human identity is not likely to put an end to that debate. The ethical discussion should, however, relate to the process of identity shaping as a continuous one. Any conscious, voluntary human intervention aimed at influencing that process has important ethical dimensions, whether it is genetic choice at the very beginning, or education at later stages.

Genetic determinism, which is scientifically untenable as well as ethically dangerous, is not a necessary assumption in such an ethical discussion. It is enough to accept that there is a genetic component involved in aspects of human identity such as intelligence, aggressiveness, assertiveness, submissiveness, sexual orientation, or the predisposition to addiction, to depression, or to novelty seeking. All phenotypic expressions (physical, cognitive, mental or behavioral) are the result of a complex interaction between genes, other biological factors and the environment in which the individual develops. Even though, within that complex system, the genetic factor is but one of many, there is still an important ethical dimension to any attempt to shape human identity by controlling that one factor.

One may attack this proposed analogy between education and genetic interventions by arguing that identity shaping through education is permissible insofar as it is reversible, whereas identity shaping through genetic interventions is irreversible and should therefore be prohibited. However, education and genetic interventions are both highly complex ways of influencing the development of human identity. There is no reason to assume that one will have more conclusive results than the other. Both are components in an intricate process that humans have always tried to influence or control.

### The Question of Authority

Questions about the ethics of current and future genetic interventions have an important political dimension, because they raise concerns about the authority to make decisions regarding the identity of future children. How should authority be delegated between parents or families on the one hand and the state on the other, when the identity of children is at stake? In this paper I propose to look at the question of authority as discussed in the philosophy of education, as a possible source of ethical insight for the future regulation of genetic interventions. My discussion will be limited to the context of the democratic liberal state, in which public policy regarding these issues is actually developing.

I will focus on situations of conflict between parents and state, around the question of the child's best

interests. What ethical considerations are involved when parents choose to educate their children in ways that the liberal state believes to be harmful to them? What is the scope of parental liberty? What justifies state interference with parental choice? Some important implications of these questions of education, I argue, are valid in the context of genetic choice as well.

Liberal theory, following in the footsteps of Locke (2), does not perceive children as the property of their parents but rather as separate and independent moral individuals. He states, "Thus we are born free as we are born rational . . . age that brings one brings with it the other, too. And thus we see how natural freedom and subjection to parents may consist together. . . ." When parents do not act in their children's best interests, the state in its traditional role of *parens patriae* (parent of the nation) intervenes on behalf of the child. The scope of parental liberty is defined around the notion of the child's best interests. State intervention is perceived as legitimate and even mandatory when risk of harm to the child is present or probable.

Defining "best interests" or "harm" thus becomes an important political issue of authority. Having the power to determine the conditions of harm means having the power to justify state interference with the private sphere of parental autonomy. In the context of multiculturalism, in a social reality of diversity, where different cultures and value systems are competing, the concept of harm may be understood in many different ways. The question of authority becomes, therefore, central to the debate.

### Autonomy-Based Liberalism

A classical liberal answer to the question of the child's best interests, rooted in Locke's theory of education, is provided by the notion of "personal autonomy." It says that growing up to become an autonomous adult is the child's main best interest, so that an education which does not promote autonomy is harming the child. Raz (2) states it simply, when he discusses the way liberal states should treat non-liberal cultures within them:

One particular troubling problem concerns the treatment of communities whose culture does not support autonomy. . . . Since they insist on bringing up their children in their own ways they are, in the eyes of liberals like myself, harming them.

According to this view, if parents choose education which does not promote future autonomy, the state has a moral obligation to intervene. Possible ex-

amples are those of the education provided by the Amish or the Jewish ultra-orthodox community. Children raised within these communities may find later in life that they are unable to get into college or find employment outside of their communities.

In Raz's terms, their autonomy is being diminished rather than enhanced by their education, and the state must intervene. He therefore adds: "Assimilationist policies may well be the only humane course, even if implemented by force of law." "Autonomy-based liberalism" gives the state the authority to enforce the liberal majority's view of the child's best interest as developing into an autonomous adult, on minority cultures which hold different views. Such enforcement is likely to result in the long run in the "break-up [of] their communities, which is the inevitable by-product of the destruction of their separate schools" (3).

### **Diversity-Based Liberalism**

However, "autonomy-based liberalism," and the hierarchical conception of cultural diversity which accompanies it, is not the only possible version of liberalism. A different voice in the literature is that of "diversity-based liberalism," according to which a serious respect for diversity requires that we accept the reality that personal autonomy is valued by certain cultures and not by others. According to this view, promoting autonomy over other, competing values constitutes a serious violation of people's right to manage their lives, and to educate their children, according to their own beliefs. In Galston's words (4):

[T]he decision to throw state power behind the promotion of individual autonomy can weaken or undermine individuals or groups that do not and cannot organize their affairs in accordance with that principle, without undermining the deepest sources of their identity.

Here again, the Jewish ultra-orthodox community provides an excellent example. Making personal autonomy an educational goal will undermine the ability of such a community to maintain its identity. Autonomy-derived ideals such as critical thinking or "being the author of one's own life-story" are not easily compatible with a culture based on the acceptance of religious authority. Therefore, in a multicultural society, in Macedo's words (5):

That the good life consists in autonomy is properly regarded as one more sectarian view among others, no more worthy of commanding public authority than other philosophical and religious ideals of life that reasonable people might reject.

A liberal conception which is seriously committed to the protection of diversity cannot take the future autonomy of the child as an absolute standard against which all identity-shaping procedures are morally evaluated. Therefore, it leaves the authority to make identity-shaping decisions in the hands of parents and communities. But does that mean that, other than clear cases of physical abuse and neglect, there are no limits to parental freedom? If personal autonomy is not the standard against which harm is defined, what other standard can the state hold?

Elliott (6) writes:

It is not uncommon these days for groups of human beings with a particular biological characteristic, often an illness or disability, to identify themselves as a culture or a community. In the same way that we hear of Jewish or Amish cultures . . . we now hear about Deaf culture. . . . This makes the once-familiar lines between biology, identity and culture look rather tangled.

Should parents be allowed to "choose for disability" (7) in the name of cultural compatibility? If one accepts the Deaf culture argument, and considers the Deaf community to be a valid source of cultural identity for its members (8), one should admit that the liberal state, as committed to the protection of cultural diversity, must allow parents to make a genetic choice that will ensure the birth of a deaf child, since they themselves do not perceive such a choice as harming that child. Does respect for diversity leave children completely "defenseless" against their parents' ideals of the good life? How can we provide a full account of the child's best interests in a liberal multicultural society which respects diversity while being committed to the protection of all children?

### **Identity Shaping and the Right to Culture**

Following in the footsteps of Kymlicka (9), I would like to argue that identity does not develop in a vacuum. It is rather the result, among other things, of a process of socialization which occurs within a specific cultural context. People have the right to belong to a culture (10), the right to be embedded in the social context of a community, because only in such a context can they give meaning and value to their lives, and evaluate the different options available to them. Cultures provide the environment within which individuals can make meaningful choices. Personal autonomy cannot be exercised outside a cultural context, because in a moral and social vacuum the individual is unable to ascribe meaning or to assess value.

It is, therefore, misleading to think of the child as having a deep interest in becoming autonomous, or in having an “open future” (11), without giving enough weight to the child’s interest in belonging to a culture. And in order to be culturally embedded, a child must go through a long and complex process of education and socialization. In other words, for a child to exercise her right to a culture as an adult, her parents must create a cultural context during her formative years.

Since children are born into families, they are also born into given cultures, and a strong argument can be made in favor of their right to become embedded in those cultures. Other options involve either the removal of children from their organic families, and as Gutmann comments (12): “liberals justifiably fear a state so powerful that it could, as a matter of routine practice, take all children away from their biological parents,” or state intervention within the private sphere of family life, which must be justified on grounds of protecting the child from harm.

### **The Child’s Best Interests: A Balanced Model**

The concept of the child’s best interest is of paramount importance in the liberal model. The current formulation of the dilemma in the literature (7, 11, 13) confronts the child’s best interests, as perceived by the liberal majority, with the interests of his parents and the community into which he has been or will be born. However, according to this formulation a crucial element is missing from the picture. That element is the child’s interest in having a cultural identity.

I would like to propose a better way of constructing the dilemma of identity-shaping, one which offers a fuller and richer account of the child’s best interests: not as a conflict between the child’s future autonomy and the parents’ current autonomy, but rather as a conflict between two different interests that the child herself has: one, in being socialized into a cultural context that will provide her, as an adult, with a cultural identity and will give meaning and value to her life; the other, in having an open future in the sense of “cultural mobility,” i.e., the ability to choose, as an adult, to leave the culture she was socialized into, and join a different one. An ethical analysis should look for a sensible and sensitive balance between these two different interests, rather than ignore an important aspect of the child’s identity-shaping process.

The model I would like to propose is one in which the scope of the child’s right to a cultural identity is determined by the ethical requirement of “cultural mobility” or “conditions of exit.” Parents should enjoy the liberty to determine the content and the aims of children’s education, as well as the liberty to make genetic choices that will shape the identity of their fu-

ture children, as long as these choices do not create adults who are “trapped” within their own cultures.

Galston (4) speaks of “rights of exit” from one’s original culture, in the context of adulthood: “In circumstances of genuine pluralism, individual freedom is adequately protected by secure rights of exit coupled with the existence of a wider society open to individuals wishing to leave their groups of origin.” However, in the context of childhood “the classic model of voluntary association” is inadequate. Galston is aware of the fact that “we are born into certain groups to which we do not choose to belong.” A child is generally incapable of leaving his group of origin, but without certain basic capacities he also will not be able to exercise his right of exit in the future.

Determining the minimal requirements for the future exercise of rights of exit becomes, therefore, the key to a properly balanced model for the protection of children’s best interests. Galston mentions four necessary conditions which would make the adult’s right of exit a meaningful one. To meet these conditions of exit, the process of identity-shaping must provide: (a) basic knowledge about the existence and content of other cultures; (b) the ability to evaluate other cultures and compare them to one’s own; (c) basic abilities which make it possible to effectively become integrated into another culture; and (d) protection from physical or psychological coercion to remain a part of the community in the future. Each of these conditions should be grounded in adequate genetic choice, in proper education, and in a properly balanced process of enculturation.

### **Implications for Genetics**

The implications for genetic choice are clear in the case of “choosing for disability.” Just as parents should not be allowed to intentionally raise illiterate children who will not be able to become effectively integrated in other cultures, so they should not have the liberty to make genetic choices which will result in children with limited physical or cognitive abilities. Any choice that will obviously trap the future individual in her community of origin is thus impermissible.

In the context of behavioral genetics, however, the implications are more complicated. As noted earlier, future discoveries of genes which underlie not disease and disability, but rather normal variation in human behavior and personality traits, may induce parents’ attempts to increase the level of control they have over the genetic makeup of their offspring.

Parents’ wishes to genetically reinforce a certain personality trait or behavioral predisposition, in order to enhance the cultural compatibility of their child with the community in which she will live or with a certain set of beliefs that they hold, should be evalu-

ated through the ethical lens of future cultural mobility. State interference is justified when genetic choice is not in the child's best interest, as determined by balancing her right to her own culture against her right to future cultural mobility.

If, for example, parents choose a genetic intervention aimed at the enhancement of aggressive behavior because they live in a warrior culture such as the fictitious Klingon culture (as depicted in "Star Trek — the Next Generation"), their choice will be ethically impermissible if as a result of it the child will never be able to successfully become integrated in a non-warrior, peace-loving culture.

Other parents, living in a patriarchal society, may wish to genetically enhance their future daughter's predisposition to submissiveness, in order to improve her chances for a "good marriage." In their own eyes, they will be acting in her best interests. However, conditions of exit require that such an intervention will not result in a woman who is submissive to the point of being unable, as an adult, to choose life in a culture based on gender equality.

### Conclusion

This paper analyzed the concept of the child's best interests in the context of the liberal multicultural state. It argued for a model of evaluation in which the ethical consideration of the child's future autonomy is balanced against considerations regarding her future cultural identity, so that future cultural mobility is protected. It then offered some general guidelines for "conditions of exit" from one's culture of origin.

This proposed model for the ethical evaluation of education has important implications for the evaluation of future genetic interventions which aim to shape aspects of children's identities in order to enhance their compatibility with their parents' community and culture. As in the context of education, parental freedom to use genetic interventions should be restricted by the state if, as a result of it, the child will be unable, as a future adult, to leave his culture of origin and become effectively integrated in the culture of his

choice. The proposed model thus offers a tool for the ethical evaluation of future genetic choices ranging from physical characteristics to behavioral predispositions and personality traits.

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