Gene editing, race, and the social contract

by Max A. Hunter and Dylan P. Marashi

June 14, 2016

Imagine Jennifer Doudna working in the lab overnight, her eyes sore, her head pulsing, and her mind swirling with an existential crisis. Utilizing a bacterial cell's self-defense mechanism, the geneticist has mastered the ability to reproduce and guide gene-editing technology, otherwise known as CRISPR-Cas9. This technology could save countless lives, cure genetic diseases, and reverse the effects of cancer. But it could also advance efforts at human enhancement, leading to a revival of modern eugenics.

In December, the National Academy of Sciences and the National Academy of Medicine held a three-day summit on CRISPR technology. Participants considered the scientific, ethical, and governance issues associated with new and emerging gene-editing technologies such as recombinant DNA technology, stem cell research in human embryos, and human cloning. They discussed the scientific foundations that govern the clinical, ethical, legal, and social implications of gene editing in humans. The summit hosts created a gene-editing outline to provide researchers, clinicians, and policymakers with a comprehensive understanding of the rising concerns over human gene editing.

As towering scholars hypothesize our biofutures, many faculty and undergraduates in the life sciences are imagining the world to come. We ponder such miracles as curing genetic diseases. Yet we wonder if deliberations on CRISPR technology will establish a context for genetic enhancement and eugenics in our global neoliberal context.

In the late 1990s, Lee M. Silver forecasted a new social cleavage that would emerge when gene-enriched humans began to rule over natural ones. In this scenario genetic engineering would reproduce an aristocratic society with both genetic and socioeconomic inequalities. Francis Fukuyama has also imagined the political implications of genetic enhancement. He argues that genetic and cognitive alterations to humans would undermine the social contract, the basis of liberal

democracy.

Social contract theory posits the protection of individuals' rights by the abdication of some of those rights to a sovereign. The sovereign is ceded absolute authority over the people and can impose punishments for breach of contract. Thomas Hobbes, the first philosopher to give a full exposition of the theory, believed that the sovereign would protect people from their vulnerable condition in the state of nature.

John Locke, Jean-Jacques Rousseau, and John Rawls have critiqued Hobbes' social contract theory, offering new perspectives on moral law and natural rights. Most notable is Rawls's theory of distributive justice, influenced by Immanuel Kant, wherein the individual sets aside his or her personal interest and capacity for choice under the "veil of ignorance." In stepping behind the veil we return to the "original position"—a state that is unaware of talents, abilities, ethnicity, gender, or religion—in order to negotiate a more equitable society.

But in the midst of our current social foment, the universal application of ideas regarding human dignity and personhood to the social contract is not self-evident. Specifically, what's in question are non-contextualized notions of citizens abiding by a unanimous contract.

Philosopher Charles M. Mills argues that the social contract is in fact a racial contract between a subset of humans, defining one group as "white" and others as "nonwhite." Mills explains that within the racial contract nonwhites are of

inferior moral status, subpersons, so that they have a subordinate civil standing in the white or white-ruled polities the whites either already inhabit or establish, or in transactions as aliens with these polities, and the moral and juridical rules normally regulating the behavior of whites in their dealings with one another either do not apply at all in dealings with nonwhites or apply only in a qualified form.

In our current economic, social, and scientific context, Mills forces us to interrogate Rawls's veil of ignorance. Who is allowed behind the veil? How might the ability to utilize gene-editing reproductive technologies in humans lead to further betrayals or exclusions from the veil? The end of the 20th century was marked by social activism confronting biases regarding different abilities, ethnicity, gender, religion, and sexual orientation. But Mills illuminates Rawls's blindness to the fact that not

everyone has been invited into the social contract.

Moreover, if the social contract is an exclusive contract promoting social domination, then we can imagine that Fukuyama's concern about human dignity and personhood is naive. We can imagine a neoliberal dystopian society in which affluent global citizens reproduce their social advancement through genetic enhancement, leading to unfathomable genetic and social inequities.

Our weekly feature Then and Now harnesses the expertise of American religious historians who care about the cities of God and the cities of humans. It's published in partnership with the Kripke Center of Creighton University and edited by Edward Carson and Beth Shalom Hessel.