DCC 106: We are reading ONLY the sections marked with a red arrow in this document.

This is a complex piece and you won't understand it immediately – one of the reasons we are reading it is to for you to get practice in interdisciplinary reading skills. If you come across terms or histories new to you, it might help to look them up quickly online. When you have questions or find something confusing, note it down so we can get to grips with it during class.

2 Race and/as Technology or How to Do Things to Race

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This essay poses the questions: to what degree are race and technology intertwined? To what extent can race be considered a technology and mode of mediatization, that is, not only a mechanism, but also a practical or industrial art? Could "race" be not simply an object of representation and portrayal, of knowledge or truth, but also a technique that one uses, even as one is used by it—a carefully crafted, historically inflected system of tools, of mediation, or of "enframing" that builds history and identity?

"Race *and/as* technology" is a strange, and hopefully estranging, formulation, but its peculiarity does not stem from its conjoining of race and technology. There already exists an important body of scholarship that simply addresses "race *and* technology" within science and technology, film and media and visual culture, and African American and ethnic studies, ranging, just to give some examples, from analyses documenting the resurgence of race as a valid scientific category to those tracing the historically intersecting truth claims of phrenology and photography, from investigations uncovering the centrality of data processing to the execution of the Holocaust to those analyzing the importance of raced images to mass-mediated consumer culture.¹ These works have mapped the ways in which race and technology impact each other's logic and development, especially in relation to enterprises that seek to establish the "truth" of race as a scientific fact or cultural phenomenon.

Yet the consideration of "race *as* technology," in contrast, brings other questions forward. Crucially, "race as technology" shifts the focus from the *what* of race to the *how* of race, from *knowing* race to *doing* race by emphasizing the similarities between race and technology. Indeed, "Race as technology" is a simile that posits a comparative equality or substitutability—but not identity between the two terms. "Race as technology," however, is not simply an example of a simile; it also *exemplifies* similes by encapsulating the larger logic of comparison that makes both race and similes possible. "Race as technology" reveals how race functions as the "as," how it facilitates comparisons between entities classed as similar or dissimilar. This comparison of race and technology also displaces claims of race as either purely biological or purely cultural because technological mediation, which has been used to define humankind as such ("man" as a "tool-using" animal), is always already a mix of science, art, and culture. Humans and technology, as Bernard Stiegler has argued, evolve together.² Race has never been simply "biological" or "cultural"; it has rather been crucial to negotiating and establishing historically variable definitions of "biology" and "culture." Thus, by framing questions of race *and* technology, as well as by reframing race *as* technology, this essay wagers that not only can we theoretically and historically better understand the forces of race and technology and their relation to racism, we can also better respond to contemporary changes in the relationships between human and machine, human and animal, media and environment, mediation and embodiment, nature and culture, visibility and invisibility, privacy and publicity.

Race, within the biological and medical sciences, has returned as a new form of "natural history," that is, as a means to track "the great human diaspora" through mainly invisible (non-expressed) genetic differences or as a way to weigh risk factors for certain diseases.³ As Jenny Reardon has noted, these biological "confirmations" have disturbed the post-WWII, cross-disciplinary "consensus" on the physical non-existence of race, catching off-guard many humanities scholars, whose critiques rested in part on "scientific evidence."⁴ In response, some, such as philosopher of science Lisa Gannett, have analyzed the ways in which race never left population science; similarly, some historians of science and medicine, such as Evelyn Hammonds, have highlighted the biases underpinning the use of current and historical race.⁵ Others, such as Henry Louis Gates, Jr, have embraced DNA tracing in order to write a more comprehensive African American history, and still others, such as Paul Gilroy, have argued that these new biological categorizations, because they view the body from a nanological perspective from which race may exist but is not "visible," defy the epidermal logic that has traditionally defined race and thus offer us an opportunity to shelve race altogether.⁶ That is, if race—like media has involved linking what is visible to what is invisible, then Gilroy's argument is that race, as an invisible entity, can no longer buttress this logic of revelation. This debate over the ontology of race is important, and this article supplements it by analyzing race's utility regardless of its alleged essence, and by investigating how race itself has been key to the modern concept of essence that is apparent in discourses of science and art. Most importantly, understanding race and/as technology enables us to frame the discussion around ethics rather than ontology, on modes of recognition and relation, rather than being. In what follows, I offer a historical and theoretical context for this reframing for these interventions by outlining the ways in which race has been framed as both biology and culture, and how this dichotomy also relies on and is disturbed by race as technology. I further outline the stakes of this reconfiguration of race by considering the ways in which/how race can be considered a "saving" grace. Inspired by the groundbreaking work by Beth Coleman on race as technology,

I conclude by considering Greg Pak's feature film *Robot Stories* as an engagement of race as technology—specifically, Asians as robot-like—that displaces the techno-Orientalism it embraces.⁷

Making the Visible Innate

At a certain level, the notion of race as technology seems obvious, for race historically has been a tool of subjugation. From Carl Linnaeus' eighteenthcentury taxonomy of human races in Systema Naturae to Charles Davenport's early twentieth-century "documentation" of the disastrous effects of miscegenation, from the horrors of the Holocaust to continuing debates over the innateness of intelligence, "scientific" categorizations of race have been employed to establish hierarchical differences between people, rendering some into mere objects to be exploited, enslaved, measured, demeaned, and sometimes destroyed.8 In the United States, racist theories maintained the contradiction at the heart of the nation's founding, that of all men being created equal and black slaves counting as three-fifths human (thus allowing them to be accounted for, but not themselves count). Even after emancipation, racist legislation and bureaucratic practices such as segregation, with its validation of discrimination within social and private spaces as "natural antipathies," maintained inequalities in a facially equal democratic system. Race in these circumstances was wielded-and is still wielded-as an invaluable mapping tool, a means by which origins and boundaries are simultaneously traced and constructed, and through which the visible traces of the body are tied to allegedly innate invisible characteristics.

Race as a mapping tool stems from its emergence as a scientific category in the eighteenth century, although it has consistently designated relations based on perceived commonalities. According to Bruce Dain, race first denoted a group of people connected by common descent (e.g. a noble house, family, kindred); then, in the fifteenth and sixteenth centuries, the Era of Exploration, it roughly corresponded to "geographical groups of people marked by supposedly common physical characteristics" (e.g. the English race); lastly, in the eighteenth century, it designated all of humankind (in distinction to animals), as well as sub-species of homo sapiens (such as homo sapiens asiaticus; according to Linnaeus, a male of this subset is "yellowish, melancholy, endowed with black hair and brown eyes . . . severe, conceited, and stingy. He puts on loose clothing. He is governed by opinion").⁹ As science moved from eighteenth-century natural history, which based its species classifications on visible structures, to nineteenth-century science, which pursued the invisible processes of life itself, race became an even more important means by which the visible and the invisible were linked.10

The modern value of race stemmed from its ability to link somatic differences to innate physical and mental characteristics. According to Samira Kawash:

In this shift to a modern, biologized understanding of race, skin color becomes visible as a basis for determining the order of identities and differences and subsequently penetrates the body to become the truth of the self . . . race is on the skin, but skin is the sign of something deeper, something hidden in the invisible interior of the organism (as organic or ontological). To see racial difference is therefore to see the bodily sign of race but also to see more than this seeing, to see the interior difference it stands for.¹¹

This "seeing" of internal difference makes accidental characteristics essential, prescriptors rather than descriptors. In terms of U.S. slavery, dark skin became the mark of the natural condition of slavery through which all kinds of external factors—and the violence perpetrated on African slaves—became naturalized and "innate." As Saidiya Hartmann has argued, "the wanton use of and the violence directed toward the black body come to be identified as *its* pleasures and dangers"—that is, the expectations of slave property are ontologized as the innate capabilities and inner feelings of the enslaved, and moreover, the ascription of excess and enjoyment to the African effaces the violence perpetrated against the enslaved.¹² For many anti-racists, then, the key to loosening the power of racism was (and still is) to denaturalize race, to loosen the connection between the bodily sign of race and what it signified.

Within the United States, there has been a long history of this attempt at denaturing, from the work of radical abolitionists in the nineteenth to that of cultural anthropologists in the twentieth century. Frederick Douglass, in his commencement address at Western Reserve College in 1854, famously contended that similarities between the bodies of Irish workers and black slaves undermined theories of racial traits as inherent or natural.¹³ To Douglass, the congruence between the "deformed" physical features of the American slave and the common Irish man revealed the importance of education and class to bodily form, and the accomplishments of many Irish thinkers (and implicitly himself) testified to the potential of emancipated and educated slaves. For Douglass, racist arguments about the inherent inferiority of Africans were also a case of media bias, since they would always feature images of the "best" Caucasians next to those of the most oppressed African slaves. Franz Boas also deployed arguments against "natural" reasons for visible racial traits in the 1930s. Boas's work, which was key to transforming race from a biological to an anthropological category, argued against the innateness of both racial traits and racism.¹⁴ Challenging those who advocated racism as a form of natural selection, Boas contended that antagonism between closed social groups may be innate, but what constituted a social group was not.

After WWII and the public renunciation by many scientists of overtly racist science within various UNESCO statements, race as a cultural, rather than biological, fact seemed universally accepted, and the "two cultures" of the sciences and the humanities coalesced together around this common understanding.

Indeed many humanists in the late twentieth century rested their own critique of race as ideological on scientific definitions of race. Henry Louis Gates Jr, for instance, argued:

Race has become a trope of ultimate, irreducible difference between cultures, linguistics groups, or adherents of specific belief systems, which—more often than not—also have fundamentally opposed economic interests. Race is the ultimate trope of difference because it is so very arbitrary in its difference. The biological criteria used to determine "difference" in sex simply do not hold when applied to "race." Yet we carelessly use language in such a way as to *will* this sense of *natural* difference into our formulations.¹⁵

By calling race a careless use of language, Gates implies that the problem of racism (which stems from race) could be fixed by a more careful use of language. Racism, in other words, stems from faulty media representations, and thus the best way to combat racism is to offer more realistic portrayals of "raced others" and to produce media critiques that expose the fallacies of racial thinking.

As mentioned previously, the resurgence of the category of race within science and medicine has troubled this position, which rests, as Reardon notes, on a separation between what are evaluated as "ideological" and "true" scientific statements-a separation that work across media and cultural studies has repeatedly emphasized is impossible.¹⁶ Even more damning, despite the good intentions behind the reformulation of race as culture, the conceptualization of race as culture has been no less effective at creating social divisions than the notion of race as biology. Racist arguments have adeptly substituted culture for nature, creating what Etienne Balibar has called "neo-racism."¹⁷ For instance, as Anne Anlin Cheng has pointed out, the psychological evidence used in Brown v. Board of Education, the "doll test"-which was pivotal to the juridical overturning of segregation in schools—is now used to justify segregation as granting "black children the opportunity to develop a stronger, 'healthier,' more independent black identity."18 Rather than the abatement of racism and raced images post-WWII, we have witnessed their proliferation. As Toni Morrison notes:

Race has become metaphorical—a way of referring to and disguising forces, events, classes, and expressions of social decay and economic division far more threatening to the body politic than biological "race" ever was. Expensively kept, economically unsound, a spurious and useless political asset in election campaigns, racism is as healthy today as it was during the Enlightenment. It seems that it has a utility far beyond economy, beyond the sequestering of classes from one another, and has assumed a metaphorical life so completely embedded in daily discourse that it is perhaps more necessary and more on display than ever before.¹⁹

Although Morrison here argues that race has become metaphorical, it is important to note the ways in which race, cultural or biological, acts as a trope. Even when understood as biological, race was not simply indexical, but rather still served as a sign, as a form of mediation, as a vehicle for revelation.

On the Limits of Culture

Race, conceived either as biology or as culture, organizes social relationships and turns the body into a signifier. Michael Omi and Howard Winant have influentially argued that race is "a fundamental *organizing principle* of social relationships,"²⁰ and they have used the term "*racial formation* to refer to the process by which social, economic and political forces determine the content and importance of racial categories, and by which they are in turn shaped by racial meanings."²¹ Race, like media, is also a heuristic, a way to understand, to reveal, the world around us. To return to Samira Kawash's argument regarding skin color:

the modern conception of racial identity maintains an uneasy relation to the visual; the visible marks of the racialized body are only signs of a deeper, interior difference, and yet those visible marks are the only differences that can be observed. The body is the sign of a difference that exceeds the body. The modern concept of race is therefore predicated on an epistemology of visibility, but the visible becomes an insufficient guarantee of knowledge. As a result, the possibility of a gap opens up between what the body says and what the body means.²²

By linking outside to inside in an effort to make the body transparent, the body becomes a signifier: by creating a gap between what one sees and what one knows, racial markers are placed in an ever-shifting chain of signification.

Crucially, this gap between what the body says and what the body is taken to mean underlies the force of racism. As Ann Laura Stoler has argued, racism's force lies in the productive tension between the somatic and the essential. Reflecting on how racial discourse slips between discussions of somatic and visual difference and notions of inner, essential qualities, Stoler argues:

the ambiguity of those sets of relationships between the somatic and the inner self, the phenotype and the genotype, pigment shade and psychological sensibility are not slips in, or obstacles to, racial thinking but rather conditions for its proliferation and possibility... The force of racisms is not found in the alleged fixity of visual knowledge, nor in essentialism itself, but on the *malleability* of the criteria of psychological dispositions and moral sensibilities that the visual could neither definitively secure nor explain.²³

Racial discourse has always been polyvalently mobile and capable of thriving in the face of uncertainty. Race as biology and race as culture are similarly mobile

and flexible technologies. Focusing on race as a technology, as mediation, thus allows us to see the continuing function of race, regardless of its "essence." It also highlights the fact that race has never been simply biological or cultural, but rather a means by which both are established and negotiated.

Creating Differences: Eugenics and Segregation

Like technology, race has never been merely cultural or biological, social or scientific. Indeed, the strict conceptual separation of culture from biology—nurture from nature, development from transmission—is a fairly recent phenomenon, stemming from the acceptance of Mendelian genetics. Focusing on U.S. eugenics and segregation in the twentieth century as technologies of difference, this section outlines how accepting race as biology also makes race technological.

Race did not simply move from a biological to a cultural concept. The early "mixed" nature of notions of race is evident in Linnaeus' foundational description of the male variant of *homo asiaticus* cited earlier: "yellowish, melancholy, endowed with black hair and brown eyes . . . severe, conceited, and stingy. He puts on loose clothing. He is governed by opinion." This description treats interchangeably visible physical traits ("yellowish"), psychological characteristics ("melancholy"), and cultural traditions ("loose clothing"). Similarly, Thomas Jefferson, writing in the eighteenth century, argued against incorporating African slaves into the nation using a mix of both historical and natural reasons.²⁴ Even in the nineteenth century, race was seen as encompassing both cultural and biological transmission: as George W. Stocking, Jr, has argued, the terms "race" and "nation" were not different by nature but by degree, since both intersected with questions of "blood."²⁵ Both environmentalists and extreme hereditarians, that is,

started from the same inclusive idea of race as an integrated physical, linguistic, and cultural totality. Furthermore, because science—to paraphrase a number of contemporary social scientists—no longer separated the phenomena of the body from those of the mind, both hereditarians and environmentalists tended to assume that racial mental differences were related to racial physical differences.²⁶

The clear separation of biology from culture and, transmission from development stemmed from Mendelian genetics' strict separation of germ from somatic cells.²⁷ This emphasis on the chromosomes as unchanging from generation to generation both made possible and relied on a belief in unchanging "eternal" features, many of which were racialized.²⁸

The premise of eugenics—which seemingly defined race as biological—was the breedability of the human species. Charles Davenport, the father of U.S. eugenics, argued: Eugenics is the science of the improvement of the human race by better breeding or, as the late Sir Francis Galton expressed it: "The science which deals with all influences that improve the inborn qualities of a race." The eugenical standpoint is that of the agriculturalist who, while recognizing the value of culture, believes that permanent advance is to be made only by securing the best "blood." Man is an organism—an animal; and the laws of improvement of corn and of race horses hold true for him also. Unless people accept this simple truth and let it influence marriage selection human progress will cease.²⁹

This notion of traits in the blood, which can be manipulated through proper breeding, places eugenics within what Michel Foucault has called an "analytics of sexuality."³⁰ The term "breeding" exemplifies human races as technologically manipulable, while also muddying the boundary between culture and biology, human and animal. Agriculture, Davenport's favorite metaphor—"the human babies born each year," he writes, "constitute the world's most valuable crop" nicely encapsulates the intertwining of the natural and the cultivated that is necessary to human civilization.³¹ Eugenics is necessary because biology is not enough.³² Davenport's work also exemplifies the difficulty of separating the natural from the cultivated: in the end, he argues that every characteristic, such as vagrancy, evident in more than one generation, is transmitted through blood. Although Davenport's work is now considered to be ideologically corrupt, race and breeding are still intertwined in more modern understandings of race. According to modern population genetics, a human race is a "breeding population" marked by certain gene frequencies.³³

However, as the history of segregation and anti-miscegenation legislation in the U.S. makes clear, breeding populations, if they exist, are never simply natural, but rather result from a complex negotiation between culture, society and biology. Importantly, segregation was a response to failures of biological theories of the innate physical degeneracy of mulattos and Africans. It is also a response to the "confusion" brought about by emancipation. As Hartmann argues:

the conception of race engendered by slavery and abolished by the Thirteenth Amendment made "black" virtually synonymous with "slave" and "white" with "free" ... Now that race no longer defined status, classificatory schemes were required to maintain these lines of division. The effort to maintain the color line, or, properly speaking, black subordination, involved securing the division between the races and controlling the freed population. Central to this effort was the codification of race, which focused primarily on defining and containing blackness.³⁴

This codification—especially its "one drop" formulation—widened the gap between what the body says and what it means, since it became increasingly difficult to read the signifier, let alone the signification.

Segregation is an important U.S. racial technology, a clarifying spatial mapping that creates stark racial differences where none necessarily exist. As Grace Elizabeth Hale has argued, "whites created the culture of segregation in large part to counter black success, to make a myth of absolute racial difference, to stop the rising." Segregation made "race dependent on space, and the color bar became less a line than the ground on which southern people were allowed to drink and buy and stand."³⁵ Segregation, importantly, did not only map space, but was a reaction to the transgression of space brought about by modern technologies, such as trains. It fought mobility with immobility. Hale, analyzing the importance of segregation on trains, argues:

For southern whites, however, more was at stake than comfortable plushy cushions and clean-carpeted aisles. Whiteness itself was being defined in late nineteenth-century first-class train cars. When middle-class blacks entered the semi-public space of railroads, they placed their better attire and manners in direct juxtaposition with whites' own class signifiers. Because many whites found it difficult to imagine African Americans as anything other than poor and uneducated, finely dressed blacks riding in first-class cars attracted their particular ire . . . Greater mobility made the poorest whites more visible to the rising white middle class as well . . . Class and race, then, became more visibly unhinged as railroads disrupted local isolation. Confusion reigned.³⁶

Racist technologies thus sought to make clear distinctions in society, where none necessarily existed. Segregation and eugenics are therefore examples of what Foucault has called modern racism, a racism fostered to allow states, which are supposedly dedicated to the social welfare of their populations, to exercise sovereign power—that is, to punish and destroy. He writes,

Racism is bound up with the workings of a State that is obliged to use race, the elimination of races and the purification of the race, to exercise its sovereign power. The juxtaposition of—or the way biopower functions through—the old sovereign power of life and death implies the workings, the introduction and activation, of racism.³⁷

Importantly, though, for Foucault, modern racism did not simply apply to those who were subjugated. Extrapolating from Nazism, he argues that race wars became "a way of regenerating one's own race. As more and more of our number die, the race to which we belong will become all the purer."³⁸ Also, in terms of an analytics of sexuality, eugenics applies to everyone: Davenport's eugenics textbook, for instance, is directed to those middle-class readers who want to know "how to fall in love intelligently." Eugenics also redefined all humans as the carriers of eternal characteristics, making the base unit not the human but the trait. Racism renders everyone into a standing reserve of genes to be stored and transmitted.

Mimicking Standing Reserves

According to Heidegger in his 1955 "The Question Concerning Technology," the essence of technology is not technological. Indeed, by examining tools, we miss what is essential about technology, which is its mode of revealing or "enframing." This mode of revealing, he argues, "puts to nature the unreasonable demand that it supply energy that can be extracted and stored as such"; once transformed into energy, it is also transmitted and circulated.³⁹ Technology also changes the nature of essence as such, making what is essential that which endures rather than its generic type, shrinking causality from the rich fourfold system discussed by Aristotle to one mode: "a reporting—a reporting challenged forth—of standing-reserves that must be guaranteed either simultaneously or in sequence."⁴⁰ Most damningly, enframing endangers man by rendering man himself into a standing reserve:

As soon as what is unconcealed no longer concerns man even as object, but does so, rather, exclusively as standing-reserve, and man in the midst of objectlessness is nothing but the order of the standing reserve, then, he comes to the brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve. Meanwhile man, precisely as the one so threatened, exalts himself to the posture of lord of the earth. In this way the impression comes to prevail that everything man encounters exists only insofar as it is his construct. This illusion gives rise to one final delusion: It seems as though man everywhere and always encounters only himself ... In truth, however, precisely nowhere does man today any longer encounter himself.⁴¹

This endangerment, though, not only reduces man to a standing and circulating source of energy: it also makes impossible his recognition of another kind of revealing, since it "conceals that revealing which, in the sense of *poiesis*, lets what presences come forth into appearance."⁴² Poiesis, art, enables a revelation that does not reduce nature into a standing reserve, but rather lets it stand against man as an object.

The resonances between Heidegger's post-World War II reflections on the dangers of technology and analyses of race and racism are profound (and perhaps not surprising, given Heidegger's involvement with National Socialism). In a 1949 lecture on technology, Heidegger argued,

agriculture is now a motorized food industry, the same thing in its essence as the production of corpses in the gas chambers and the extermination camps, the same thing as blockades and the reduction of countries to famine, the same thing as the manufacture of hydrogen bombs.⁴³

The National Socialist program reduced all humans to standing reserves: some to be "destroyed," others to be optimized and made more productive. Intentionally or unintentionally, race too, understood as a set of visible or

invisible genetic characteristics, is a mode of revealing that renders everyone into a set of traits that are stored and transmitted; and also race is then seen as what allows man to endure through time as a set of unchanging characteristics. Further, Heidegger's discussion of the experience of the human as not even an object resonates with the historical experience of people of color. Hortense Spillers, writing on the situation of slaves in the Middle Passage, argues, "under these conditions, one is neither female, nor male, as both subjects are taken into 'account' as quantities."⁴⁴ During this period, the captives are "culturally unmade." The pain of non-recognition, which makes one neither object nor subject, has also been eloquently enunciated by Frantz Fanon:

I came into the world imbued with the will to find a meaning in things, my spirit filled with the desire to attain to the source of the world, and then I found that I was an object in the midst of other objects.

Sealed into that crushing objecthood, I turned beseechingly to others. Their attention was a liberation, running over my body suddenly abraded into nonbeing, endowing me once more with an agility that I had thought lost, and by taking me out of the world, restoring me to it. But just as I reached the other side, I stumbled, and the movements, the attitudes, the glances of the other fixed me there, in the sense in which a chemical solution is fixed by a dye. I was indignant; I demanded an explanation. Nothing happened. I burst apart.⁴⁵

In addition, race understood as a set of visible or invisible genetic characteristics, is a mode of revealing that renders everyone into a set of traits that are stored and transmitted; race is then seen as what allows man to endure through time as a set of unchanging characteristics.

Yet crucially, for Heidegger, understanding the essence of technology also makes salvation possible: although enframing conceals poiesis, it also makes poiesis a saving power. "Because the essence of technology is nothing technological," he writes, "essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it. Such a realm is art."⁴⁶ According to Heidegger, poiesis "brings forth truth into the splendor of radiant appearing."⁴⁷ Similarly, Fanon writes:

The crippled veteran of the Pacific war says to my brother, "Resign yourself to your color the way I got used to my stump; we're both victims."

Nevertheless with all my strength I refuse to accept that amputation. I feel in myself a soul as immense as the world, truly a soul as deep as the deepest of rivers, my chest has the power to expand without limit.⁴⁸

Thus the question becomes: to what extent can ruminating on race as technology make possible race as poiesis, or at least as a form of agency? Can

race become a different mode of creation or revealing? Race has historically enabled subversive action. Homi Bhabha, for instance, has influentially argued that colonial mimicry—the mimicking of the colonizers by the colonized, demanded by the colonizers—"is at once resemblance and menace."⁴⁹ Understood as something that is repeatedly performed, race, like gender, opens up the space of parody and agency. Intriguingly, Fanon describes his strength in terms that trouble the boundary between nature and human: his soul as "deep as the deepest rivers." This simile suggests an embracing of factors not usually considered human. That is, if race as technology does make it possible to expand without limit, could this power stem not from asserting the difference between humans and technology, technology and poiesis, but rather through an acceptance of their similarities—through race as prosthesis?

Donna Haraway has influentially argued that we must embrace the breakdown in boundaries between human and animal, natural and artificial, mediation and embodiment. According to Haraway, "late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines."⁵⁰ Rather than condemning this situation, as does Heidegger, she argues for the cyborg as a utopian figure precisely because it reworks nature and culture so that

the one can no longer be the resource for appropriation or incorporation by the other. The relationships for forming wholes from parts, including those of polarity and hierarchical domination, are at issue in the cyborg world . . . The cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust.⁵¹

As she notes, however, "the main trouble with cyborgs . . . is that they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism."⁵² Thus, in dealing with cyborgs, one must always see things doubly and "see from both perspectives at once because each reveals both dominations and possibilities unimaginable from the other vantage point."⁵³ To see race as technology, thus, is always to see double: to see possibilities (reworkings) and domination (eugenics) together.

In an effort to do so, I conclude by rethinking arguments I've made in the past regarding high-tech Orientalism—the high-tech abjection of the Asian/ Asian America other—through Greg Pak's 2003 feature film *Robot Stories*, which explores the extent to which high-tech Orientalism might be the ground from which some other future can be created; the ground from which dreams can be made to fly, flower, in freaky, queer unexpected ways.⁵⁴

Loving Robots

High-tech Orientalism would seem to be the limit case for race as technology, for it literally figures the raced other as technology. Stemming from 1980s'

anxiety over rising Japanese dominance, its most dominant strain figures the Asian other as a robotic menace, so that s/he literally becomes the technology s/he produces.

In my first book, Control and Freedom: Power and Paranoia in the Age of Fiber Optics, I examined the importance of high-tech Orientalism to cyberpunk fiction and film, and to the emergence of the Internet as cyberspace. High-tech Orientalism is the obverse of the "scenes of empowerment" that flooded the airwaves in the mid- to late-1990s-conflations of racial and technological empowerment that argued that technology would eradicate racial difference. Foundational cyberpunk pre-visions, from William Gibson's 1984 Neuromancer to Neal Stephenson's 1993 Snow Crash, I contended, use "Asian," "African" and "half-breed" characters to create seductively dystopian near futures. Gibson's fiction in particular perpetuates and relies on this high-tech Orientalism, a "navigate-by-difference" tactic in which disembodied heroes/console data cowboys emerge through disembodied representations of "local" people of color, irrevocably fixed in the past, and cyberspace is made desirable and exotic through relentless comparisons between it and Ninsei.⁵⁵ Importantly, Gibson's vision of cyberspace has little to nothing in common with the Internet-other than a common 1990s fan base. Inspired by the early 1980s Vancouver arcade scene, Gibson sat at his typewriter and outlined a 3D chessboard/consensual visual hallucination called the Matrix or "cyberspace," in which corporations exist as bright neon shapes, and console cowboys steal and manipulate data. In Neuromancer, cyberspace is a "graphic representation of data abstracted from the banks of every computer in the human system."⁵⁶

Even though Gibson's cyberspace does not coincide with the Internet, its seductive vision of a consensually hallucinated network in which U.S. cowboys thrive in an unfriendly, Asian-dominated corporate world made it an origin myth in the 1990s. Cyberpunk literature, which originated the desire for cyberspace as a frontier rather than cyberspace itself, seductively blinds users to their circulating representations through dreams of disembodiment (freedom from one's body), sustained by representations of others as disembodied information. Cyberpunk offers unnerving, disorienting yet ultimately readable "savage" otherness in order to create the mythic user. Rather than brush aside fear of strange locations, strangers, and their dark secrets by insisting that we are all the same, these narratives, like the detective fiction on which they are often based, romanticize and make readable, trackable and solvable the lawlessness and cultural differences that supposedly breed in crowds and cities. Racial and ethnic differences, emptied of any link to discrimination or exclusion, make these spaces "navigable" yet foreign, readable yet cryptic. Difference as a simple database category grounds cyberspace as a "navigable space"; through racial difference we steer, and sometimes conquer.

High-tech Orientalism offers the pleasure of exploring, the pleasure of being somewhat overwhelmed, but ultimately "jacked-in." Crucially, this pleasure

usually compensates for lack of mastery-Neuromancer was written at a time when the U.S. seemed to be losing its status as the number one financial power. The future in Neuromancer seemingly belongs to Japanese and other non-U.S.corporations—the status of the U.S. as a nation-state is unclear—although U.S. console cowboys still ride high in cyberspace. High-tech Orientalism is not colonialism, but rather a paranoid reaction to global economic and data flows. High-tech Orientalism promises intimate knowledge, sexual concourse with the "other," which it reduces to data, to a standing resource. This will-to-knowledge structures the plot of many cyberpunk novels, as well as the reader's relation to the text; the reader is always "learning," always trying understand these narratives that confuse the reader. The reader eventually emerges as a hero/ine for having figured out the landscape, for having navigated these fast-paced texts, since the many unrelated plots (almost) come together at the end and revelations abound. This readerly satisfaction generates desire for these vaguely dystopian futures. Thus, if online communications threaten to submerge users in representation—if they threaten to turn users into media spectacles—hightech Orientalism allows people to turn a blind eye to their own vulnerability and to enjoy themselves while doing so, to enjoy one's emasculation. Silicon Valley readers are not simply "bad readers" for viewing these texts as utopian, for they do not necessarily desire the future as described by these texts; rather, they long for the ultimately steerable and sexy cyberspace, which always seems within reach, even as it slips from the future to past. They also yearn for cyberspace as the space of "biz."

To put it slightly differently and to draw from the work of Karen Shimakawa on abjection and Asian American performance, high-tech Orientalism is a process of abjection—a frontier—through which the console cowboy, the properly human subject, is created. Shimakawa, drawing from the work of Julia Kristeva, argues that abjection is

both a state and a process—the conditions/position of that which is deemed loathsome and the process by which that appraisal is made . . . It is . . . the process by which the subject/"I" is produced: by establishing perceptual and conceptual borders around the self and "jettison[ing]" that which is deemed objectionable.⁵⁷

The human is constantly created through the jettisoning of the Asian/Asian American other as robotic, as machine-like and not quite human, as not quite lived. And also, I would add, the African American other as primitive, as too human.

The question this essay asks in rethinking of race as technology is: can the abject, the Orientalized, the robot-like data-like Asian/Asian American other be a place from which something like insubordination or creativity can arise? To put it slightly differently, can the formulation of Asian as technology, Asians as the future, be turned from something terrifying to something like what

Judith Butler calls a future horizon—"a . . . horizon . . . in which the violence of exclusion is perpetually in the process of becoming overcome"?⁵⁸ Can the abject, as Shimakawa argues, be a place for a critical mimesis—can we critically assume the role of the abject in order to call into question the larger system of representation and its closure? That is, can Asian/Asian American as robots, as data, be a critical mimesis of mimesis itself—a way for all to embrace their inner robot?

To explore this possibility, I turn to the work of HAPA filmmaker Greg Pak. His feature film *Robot Stories* explores the parallel between robots and Asians that lies at the core of high-tech Orientalism. Although at times relentlessly sentimental—the promotional materials that claim "everything is changing . . . except for the human heart"—*Robot Stories* asserts Asian American as human by emphasizing their alleged similarities and their opposition to robots *and* at the same time deconstructs the opposition between human and robots. That is, his stories play with the stereotypes of Asian Americans as relentless, robotic workers, as looking all the same (can't tell them apart), as dragon ladies, in order to create a livable future—literally a future in which Asian Americans and African Americans live as the non-abject.

Robot Stories consists of four shorts, which create an intriguing progression. Since this progression is central to my argument, I will spend some time outlining the plot of the film. The first story is "Robot Child," in which an Asian American couple—Roy and Marcia Ito—take care of a robot baby for a month in hopes of being given a real baby to adopt. Taking care of this robot, it is hoped, will make these stereotypically work-driven people human, especially the non-maternal Marcia Ito, who is scarred by memories of her own mother. Symbolically, at the adoption agency, for instance, Roy Ito turns to Marcia and says that this adoption of a robot baby will make them real people, a real family just as the camera focuses on the image of a white blond baby. Although Roy seems the most committed to having a child and to non-traditional gender roles (the child and he bond quickly, and the child and Marcia reject each other's awkward gestures; Marcia drops the baby a couple of times), Roy soon leaves for Japan, in proper husbandly fashion, to pursue a project that will secure the child's future. Turning to her own father to find a software solution to baby care (the robot becomes hooked to their iMac, which simulates feeding, caring, etc.), Marcia returns to the office. On her return home, however, she is confronted by a robot/child gone mad. Deciding in the end not to return the robot and thus disappoint Roy by jeopardizing their chance of ever adopting, Marcia goes after the "little fucker," to find it, like herself so many years ago, crying in a closet (see Figures 2.1 and 2.2). Breaking down in tears herself as she identifies with the robot, the "mother" and robot finally bond. In this story, white figures are still very much in positions of control: the white nurse who oversees the adoption controls the gaze and she, in the end, will decide whether or not they are "good parents."



FIGURE 2.1 Marcia in closet Still from *Robot Stories*



FIGURE 2.2 "Baby" robot in closet Still from *Robot Stories*

In the next story, "Robot Fixer," a mother, stricken with grief, guilt and anger over her comatose son, is driven to obsessively complete and repair her son's toy robot collection. Fixing these robots—showing them the care she felt her son Wilson was never able to give—becomes a way for the mother to deal with her son's accident and his failure to live up to her dreams. Through these robots, however, she comes to respect the interests and ways of her son, who seems to have been a bit of a robot himself: one co-worker describes him as a "G9," an office robot; as a child he played endlessly with these robots and perhaps

dreamed of them. The mother becomes fixated on one robot in particular, whose wingless condition stems from her own carelessness during vacuuming. Stealing a rare female figure for her wings, she accidentally handicaps it as well. As the son's body parts are distributed to needy Asian Americans, the mother returns home, carrying a prized one-winged robot which she no longer feels the need to fix. Insisting on the importance of parts, as both a human and robot condition, "Robot Fixer," like "Robot Child," pursues Asian Americans as robots, as ideal workers, to break down the opposition between robot and human; Asian American and white.

The next story, "Robot Love," moves from an Asian American son like a G9 to a pair of G9s like Asian Americans, and also breaks down the barrier between Asian American and white. The G9 robot coders, who look Asian, are perfect workers (much better than their real Asian American equivalents who, like their white counterparts, play video games in their spare time). They work continuously, following the commands of their bosses and their "inner" female voice that reminds them "you have work," and they accept sexual harassment (both male and female robots are objects of scopic desire and physical molestation). The attempts of the male G9, Archie, at interactions are rebuked by all, except the nerdy white sysop Bob, who sympathizes and identifies with Archie-Bob allows Archie to address him as "Bob" (after Bob is teased by his co-workers), and he also allows Archie to leave the building to pursue the female G9 (after Bob's co-worker calls the pair of them "fucking freaks"). The audience too is made to identify with Archie: not only are many shots taken from Archie's point of view, but the audience's view goes dark when Archie has been turned off. This story brings out nicely the relationship between sexual exploitation and reduction to information brought about by high-tech Orientalism.

Interestingly the actors who play the mother in "Robot Fixer" and the husband in "Robot Child" re-used in this story, playing with the notion that "we" can't tell Asian Americans apart, but also emphasizing that Robot Stories demands the suspension of disbelief. The entry of Asian American-like robots at this point of the film both buttresses the status of and places some Asian Americans as non-abject (defined as human in opposition to the G9s and to Bob), but also attacks the notion of, and critically mimics, the robotic as abject (as frontier). This move from abject happens at the conclusion of this story, and is most clear in the scene in which robots finally get together and "make love" (see Figure 2.3). In this scene, love—which is implied earlier as making one human-is reworked into "robot love." In robot love, slurs ("freaky," "they could've put a bigger rack on her") move from being that which separates humans and robots, to that which with care-robot-like humanism-can be reworked into loving statements. They inhabit the slur and the insult, turning them into the basis for love. Following Judith Butler's call to become the bad copy, robot love, in other words, seems to claim robots as a fake or bad copy in order to rework claims of human love as originary and unique. The queerness of robot love is also physically queer: explicit in its physical manifestation, which



FIGURE 2.3 Robot sex Still from *Robot Stories*

comprises the mutual stimulation of female plugs. It displaces heterosexual normativity within an ostensibly heterosexual coupling—it also troubles the boundary between private and public. With robot love, Archie and his female counterpart are finally also granted the privacy denied to them during their love-making scene. As everyone watches the coupling, "Bob" requests that they give Archie and the female robots some privacy and everyone leaves, even though he stays to watch for a little while. Intriguingly, though, the robots don't seem to care (privacy is something granted, not demanded); privacy is also something violated by Bob's look, but respected by the camera's—rather than it showing what Bob sees, Bob himself becomes the spectacle.

The sentimentality of the series becomes most clear in the last story, which is set farthest in the future (in 2027), at a time in which antibiotics no longer work but humans have reached immortality by being "scanned" into data banks. From there they can supposedly see everything, do everything, know everything. The story centers around an Asian American sculptor, dying of pneumonia, who is fighting against being scanned, and his African American wife, who has already been scanned. Rather than representing the "natural other," his African American wife represents a certain embrace of technology: the traditional roles have been reversed. What is truly remarkable about this story, however, is that there are no white people portrayed in this future. Even more remarkably, no one seems to have noticed. All the critics reviewing Robot Stories emphasize its universal "human heart" angle and its differences from blockbuster sci-fi films, rather than its status as an "ethnic film," or its relationship to other Asian American films-certainly not as a film in which white people have disappeared. This is because Asian Americans and African Americans have come to represent humanity as seamlessly as the scanned people

have come to take the place of the robotic. What is abject here is not death, which is embraced, but informatic immortality—even as the notion of humans as robot-like has been embraced.

Clearly, this raises some questions: for instance, to what extent is sentimentalizing humanism key to this reworking of high-tech Orientalism? To what extent is this displacing of abjection dependent on a reification of humanity as original? Regardless, what is remarkable here is that the invisibility and universality usually granted to whiteness has disappeared, not to be taken up seamlessly by Asian Americans and African Americans, but rather to be reworked to displace both what is considered to be technological and what is considered to be human. The opening credits of *Robot Stories*, which begins with the now stereotypical stream of 1s and 0s, encapsulates Pak's methodology nicely. Rather than these 1s and 0s combining to produce the name of the actors etc. (as in Ghost in the Shell and The Matrix), the credits interrupt this diagonal stream (this stream mimics the path of the flying robots in "Robot Fixer"). As the sequence proceeds, little robots are revealed to be the source of the 1s and 0s. Shortly after they are revealed, one malfunctions, turnings a different color, and produces a 2 (Figure 2.4). Soon, all the robots follow, turn various colors and produce all sorts of colorful base-10 numbers. Thus, robots turn out in the end to be colorful and to operate in the same manner-and in the same numerical base—as humans. The soundtrack features a Country and Western song telling Mama to let herself go free. The 1s and 0s, rather than being readable, are made to soar, to color the robots that are ourselves.

Race as technology thus problematizes the usual modes of visualization and revelation, while at the same time making possible new modes of agency and causality. Race as technology is both the imposition of a grid of control and a lived social reality in which kinship with technology can be embraced. Importantly, it displaces ontological questions of race—debates over what race



really is and is not, focused on separating ideology from truth—with ethical questions: what relations does race set up? As Jennifer González has argued, race is fundamentally a question of relation, of an encounter, a recognition, that enables certain actions and bars others.⁵⁹ The formulation of race as technology also opens up the possibility that, although the idea and the experience of race have been used for racist ends, the best way to fight racism might not be to deny the existence of race, but to make race do different things. Importantly, though, this is not simply a private decision, because race has been so key to the definition of private and public as such. In order to reformulate race, we need also to reframe nature and culture, privacy and publicity, self and collective, media and society.

Notes

- 1 For examples, see Jennifer Reardon, Race to the Finish: Identity and Governance in an Age of Genomics (Princeton: Princeton University Press, 2005); Coco Fusco and Brian Wallis, eds. Only Skin Deep: Changing Visions of the American Self (New York: Harry N. Adams, 2003); Aly Gotz and Karl Heinz Roth, The Nazi Census: Identification and Control in the Third Reich (Philadelphia: Temple University Press, 2003).
- 2 See Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford: Stanford University Press, 1998).
- 3 See Luca Cavalli-Sforza and Francesco Cavalli-Sforza. *The Great Human Diasporas* (Reading, MA: Addison-Wesley, 1995); Alan Templeton, "Human Races: A Genetic and Evolutionary Perspective," *American Anthropologist* 100.3 (1999): 632–650.
- 4 See Reardon, Race to the Finish.
- 5 See Lisa Gannett, "Making Populations: Bounding Genes in Space and Time," *Philosophy of Science* 70 (December 2003): 989–1001; and Evelyn Hammonds "Straw Men and their Followers: The Return of Biological Race," SSRC, June 7, 2006, available at: http://raceandgenomics.ssrc.org/Hammonds
- 6 See Henry Louis Gates, Jr, *African American Lives*, PBS series; and Paul Gilroy, *Against Race: Imagining Political Culture Beyond the Color Line* (Cambridge, MA: Harvard University Press, 2000).
- 7 Beth Coleman "Race as Technology," Camera Obscura 70, 24:1 (2009): 177–207.
- 8 See Charles Davenport and Morris Steggerda, *Race Crossing in Jamaica* (Washington: Carnegie Institution of Washington, 1929); Edward Black, *IBM and the Holocaust* (New York: Crown Publishing, 2001); Richard J. Hermstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: Free Press, 1994).
- 9 Bruce Dain. A Hideous Monster of the Mind: American Race Theory in the Early Republic (Cambridge, MA: Harvard University Press, 2002), 7.
- 10 See Michel Foucault, The Order of Things: An Archaeology of the Human Sciences (New York: Pantheon, 1971); and François Jacob, The Logic of Life: A History of Heredity, trans. Betty E. Spillman (New York: Pantheon, 1973).
- 11 Samira Kawash, Dislocating the Color Line (Stanford: Stanford University Press, 1997), 130.
- 12 Saidiya Hartmann, Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America (Oxford: Oxford University Press, 1997), 26.
- 13 Relaying his experience of speaking on temperance before "the common people of Ireland," Douglass stated:

Never did human faces tell a sadder tale. More than five thousand were assembled; and I say, with no wish to wound the feelings of any Irishman, that these people lacked only a black skin and woolly hair, to complete their likeness to the plantation negro. The open, uneducated mouth—the long, gaunt arm—the badly formed foot and ankle—the shuffling gait—the retreating forehead and vacant expression—and, their petty quarrels and fights—all reminded me of the plantation, and my own cruelly abused people. Yet, *that* is the land of GRATTAN, of CURRAN, of O'CONNELL, and of SHERIDAN... The Irishman educated, is a model gentleman; the Irishman ignorant

and degraded, compares in form and feature, with the negro! (The Claims of the Negro: An Address, Before the Literary Societies of Western Reserve College, at Commencement, July 12, 1854 (Rochester, NY: Lee, Mann, 1854), 30.)

14 Responding to arguments that racism was key to the evolution of the species, Boas contended:

I challenge him [Sir Arthur Keith] to prove that race antipathy is "implanted by nature" and not the effect of social causes which are active in every closed social group, no matter whether it is racially heterogeneous or homogeneous. The complete lack of sexual antipathy, the weakening of race consciousness in communities in which children grow up as an almost homogeneous group; the occurrence of equally strong antipathies between denominational groups, or between social strata—as witnessed by the Roman patricians and plebeians, the Spartan Lacedaemonians and Helots, the Egyptian castes and some of the Indian castes—all these show that antipathies are social phenomena. If you will, you may call them "implanted by nature," but only in so far as man is a being living in closed social groups, leaving it entirely indetermined [sic] what these social groups may be. ("Race and Progress," *Science* 74 (1931): 8)

Importantly, this argument highlighted race's functioning: race was a tool for creating social groupings to enclose "man" into social groupings, which could then coincide with a natural antipathy to other closed social groupings.

- 15 Henry Louis Gates, Jr, "Writing 'Race' and the Difference It Makes," "*Race*," *Writing, and Difference,* ed. Henry Louis Gates, Jr (Chicago: University of Chicago, 1986), 5.
- 16 Reardon, *Race to the Finish*, 18–19.
- 17 Etienne Balibar, "Is There a Neo-Racism?" *Race, Nation, Class: Ambiguous Identities* (London: Verso, 1991), 17–28.
- 18 Anne Anlin Cheng. The Melancholy of Race: Psychoanalysis, Assimilation, and Hidden Grief (Oxford: Oxford University Press, 2001), 5. The same group of white parents argued, "major differences exist in the learning ability patterns of white and Negro children." As Cheng notes, "this line of argument advanced by white segregationists aimed to transform psychical damage as the result of social injury into a notion of inherent disability" (ibid.).
- 19 Toni Morrison, *Playing in the Dark* (New York: Vintage, 1993), 63.
- 20 Michael Omi and Howard Winant, *Racial Formation in the United States: From the 1960s to the 1980s* (New York: Routledge, 1986/89), 66.
- 21 Ibid., 61–62.
- 22 Samira Kawash, Dislocating the Color Line, 130.
- 23 Ann Laura Stoler, "Racial Histories and their Regimes of Truth," *Political Power and Social Theory* 11 (1987): 187, 200.
- 24 Thomas Jefferson, arguing against the incorporation of freed black slaves into the nation-state, argued,

deep rooted prejudices entertained by the whites; the thousand recollections, by the blacks, of the injuries they have sustained; new provocations; the real distinctions which nature has made; and many other circumstances, will divide us into parties, and produce convulsions which will probably never end but in the extermination of one race or the other. (Dain, *A Hideous Monster of the Mind*, 31)

25 He writes:

In 1896, the processes and the problems of heredity were little understood, and "blood" was for many a solvent in which all problems were dissolved and all processes commingled. "Blood"—and by extension "race"—included numerous elements that we would today call cultural; there was not a clear line between cultural and physical elements or between social and biological heredity. The characteristic qualities of civilizations were carried from one generation to another both in and with the blood of their citizens. (George W Stocking, Jr, "The Turn-of-the-Century Concept of Race," *Modernism/Modernity* 1.1 (1994): 6)

- 26 Ibid., 15.
- 27 To be clear, this is not to say that understandings of race prior to the widespread acceptance of Mendelian genetics did not assert racial differences as biological: the polygenesist argument is a perfect example of this. Yet importantly, the polygeneticist argument did not strictly separate

biologically transmitted racial traits from cultural ones—that is, racial characteristics were considered mutable.

28 Charles Davenport's studies of the transmission of traits, for instance, revealed how eye color, skin color, feeblemindedness, and so on, moved unchanged from generation to generation. These characteristics allegedly formed a stable link between individuals across time. These unit characteristics, however, also reveal that, although eugenics is now popularly conceived as pitting race against race, it also made unstable the concept of race. Davenport, for instance, consistently wrote about the need to better the race, but also argued:

two very light "colored" parents will have (probably) only light children, some of whom "pass for whites" away from home. So far as skin color goes they are as truly white as their greatgrandparent and it is quite conceivable that they might have mental and moral qualities as good and typically Caucasian as he had. Just as perfect white skin can be extracted and a typical Caucasian arise out of the mixture. However, this result will occur only in the third, or later, hybrid generation and the event will not be very common. (Charles Davenport, *Heredity in Relation to Eugenics*. New York: Arno, 1972, 37–38)

In this passage, the race of a typical Caucasian is viewed as something that is "recoverable" from a mixture of other races—a notion that is diametrically opposed to the "one drop rule" used in many Southern states and that is also against the percentage logic that drove Nazi antisemitism (although later, arguing against hybrid vigor in offspring between black and white Jamaicans, Davenport would write about the disharmonies in mulattos, thus implying that racial types comprised a certain balance of racial features (Davenport and Steggerda, *Race Crossing in Jamaica*, 471)). This passage also reveals the connection between visible differences—white skin—and mental characteristics. Yet, importantly, what this passage suggests is that the move to separate biology from culture did not designate the biological as unchangeable, but rather as technological—as something that could be bred and improved upon.

- 29 Charles Davenport, Heredity in Relation to Eugenics, 1.
- 30 Michel Foucault, *The History of Sexuality*, Vol. 1, trans. Alan Sheridan (New York: Vintage, 1978), 148. Foucault argues that, within a sovereign society, blood relation was paramount because:

differentiation into orders and castes, and the value of descent lines were predominant . . . It [blood] owed its high value at the same time to its instrumental role (the ability to shed blood), to the way it functioned in the order of signs (to have a certain blood, to be of the same blood, to be prepared to risk one's blood) . . . blood was *a reality with a symbolic function*. We, on the other hand, are in a society of "sex," or rather a society "with a sexuality": the mechanisms of power are addressed to the body, to life, to what causes it to proliferate, to what reinforces the species, its stamina, its ability to dominate, or its capacity for being used. (Ibid., 147)

Given Davenport's argument, it would seem, however, that the society of sex does not forego blood, but rather resignifies it.

- 31 Charles Davenport, *Heredity in Relation to Eugenics*, 2.
- 32 Breeding is an "unnatural" product of human ingenuity, needed because natural and sexual selection are not sufficiently rational: "the general program of the eugenist is clear—it is to improve the race by inducing young people to make a more reasonable selection of marriage mates; to fall in love intelligently" (ibid., 4). This falling in love intelligently implies that any "natural" phenomenon can be cultured, cultivated, in order to produce something better—that biology, in other words, can never be completely separated from culture.
- 33 See Lisa Gannett, "Making Populations."
- 34 Saidiya Hartmann, Scenes of Subjection, 187.
- 35 Grace Elizabeth Hale. *Making Whiteness: The Culture of Segregation in the South, 1890–1940* (New York: Vintage, 1999), 21.
- 36 Ibid., 128–129. This technology of segregation was also accompanied, Hales contends, by modern technological spectacles such as the lynch festival, which represented the consequences of crossing racial lines through a perverse "crossing" of the black lynched body.
- 37 Michel Foucault, Society Must Be Defended: Lectures at the College de France, 1975–1976 (New York: Macmillan, 2003), 258.
- 38 Ibid., 257.

- 39 Martin Heidegger, "The Question Concerning Technology," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977), 14.
- 40 Ibid., 31 and 23.
- 41 Ibid., 27.
- 42 Ibid., 27.
- 43 As cited in Philippe Lacoue-Labarthe, *Heidegger, Art and Politics: The Fiction of the Political* (Oxford: Blackwell, 1990), 34.
- 44 Hortense Spillers, "Mama's Baby, Papa's Maybe: An American Grammar Book," *Diacritics* 17.2 (Summer 1987): 72.
- 45 Frantz Fanon, *Black Skin White Masks*, trans. Charles Lam Markmann (New York: Grove, 1967), 109.
- 46 Martin Heidegger, "The Question Concerning Technology," 35.
- 47 Ibid., 34.
- 48 Frantz Fanon, Black Skin White Masks, 140.
- Homi Bhabha, "Of Mimicry and Man," *The Location of Culture* (New York: Routledge, 1994),
 86.
- 50 Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), 152.
- 51 Ibid., 151.
- 52 Ibid.
- 53 Ibid., 154.
- 54 Robot Stories, DVD, directed by Greg Pak (2003; NY, NY: Kino Video, 2005).
- 55 Wendy Hui Kyong Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics* (Cambridge, MA: MIT, 2006), William Gibson, *Neuromancer* (New York: Ace Books, 1984), Neal Stephenson, *Snow Crash* (New York: Bantam Books, 1992).
- 56 William Gibson, Neuromancer, 51.
- 57 Karen Shimakawa, *National Abjection: The Asian American Body Onstage* (Durham: Duke University Press, 2002), 3.
- 58 Judith Butler, *Bodies that Matter: On the Discursive Limits of "Sex,"* (New York: Routledge, 1993), 53.
- 59 Jennifer González, "The Face and the Public: Race, Secrecy, and Digital Art Practice," *Camera Obscura* 70, 24:1 (2009).