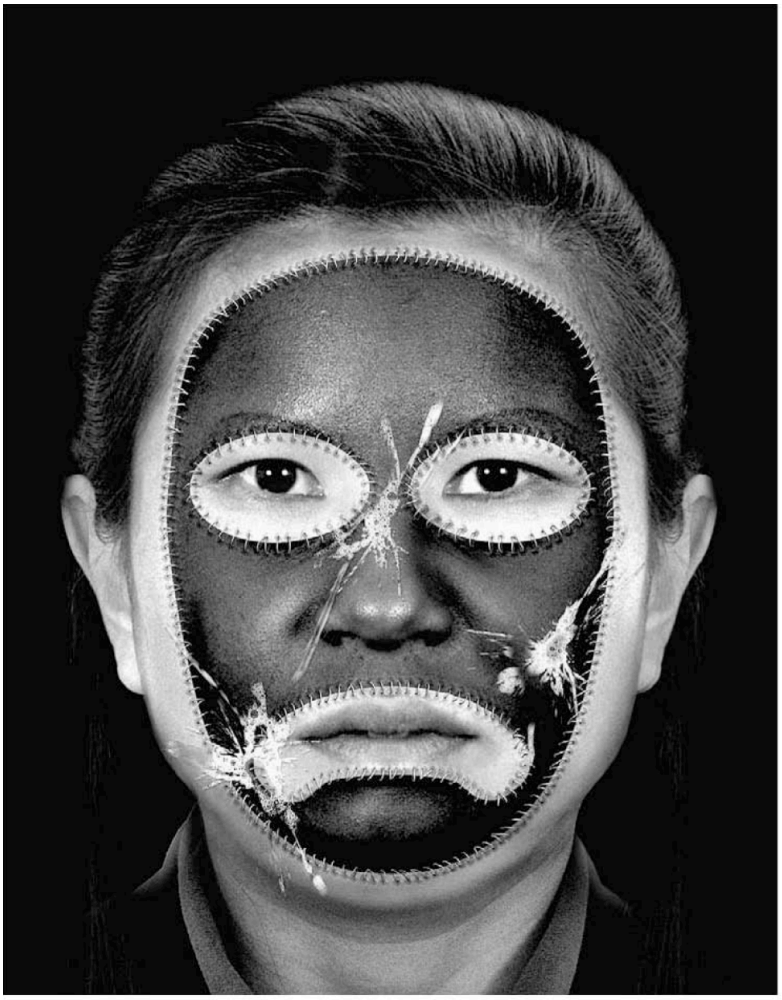

From *Colour Separation* (Mongrel, 1997).
Courtesy of the artist.

Introduction: Race and/as Technology; or, How to Do Things to Race

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This special issue poses the questions: to what degree are race and technology intertwined? Can race be considered a technology or a form of media—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, mediation, or 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 in science and technology, 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 as a cultural phenomenon.

Yet the consideration of race *as* technology brings even more 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, it therefore follows, has never been simply biological or cultural; rather, it has been crucial to negotiating and establishing historically variable definitions of biology and culture. Thus, as the articles included in this special issue make clear, by framing questions of race *and* technology, as well as by reframing race *as* technology, in relation to modes of media naturalization, not only can we theoretically and historically better understand the force 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, mediation and

embodiment, nature and culture, visibility and invisibility, privacy and publicity.

Race, in 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 (nonexpressed) genetic differences or as a way to weigh risk factors for certain diseases.[3] As Jennifer Reardon has noted, these biological "confirmations" have disturbed the post–World War II, cross-disciplinary "consensus" on the physical nonexistence of race, catching off guard many humanities scholars, whose critiques rested in part on "scientific evidence."[4] In response, some, such as the 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 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 argues that race, as an invisible entity, can no longer buttress its logic of revelation. This debate over the ontology of race is important, and this special issue seeks to supplement it with an analysis of race's utility, regardless of its alleged essence, suggesting how race itself has proven key to the modern concept of essence that is apparent in discourses of science and art, of education and entertainment, alike. Most important, understanding

race and/as technology enables us to frame the discussion around ethics rather than around ontology, on modes of recognition and relation, rather than on being.

Clustered around questions of the face, the articles in this special issue focus on how, through various media, we relate to, visualize, and recognize each other. They also reveal how race is used to construct connections between—and indeed construct the very concepts of—public and private, outside and inside. In addition to questioning the logic of revelation that drives both mainstream mass media and the epistemological value of race, they also explore the extent to which race and media can be used to make possible different configurations of visibility, of self and other. In what follows, I offer a historical and theoretical context 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 race can be considered a "saving" grace.

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's eighteenth-century 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, supposedly objective scientific categorizations of race have been employed to establish hierarchical differences between people, rendering some mere objects to be exploited, enslaved, measured, demeaned, and sometimes destroyed.[7] In the US, 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 in 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 humankind (in distinction to animals), as well as the subspecies 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."[8] 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.[9]

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.[10]

This "seeing" of internal difference makes accidental characteristics essential, prescriptors rather than descriptors. In terms of US 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."[11] For many antiracists, 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 signifies.

The US has a long history of this attempt at denaturing, from the work of radical abolitionists in the nineteenth century to that of cultural anthropologists in the twentieth. 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.[12] 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 of 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.[13] Challenging those who advocated racism as a form of natural selection, Boas contended that antagonism between closed social groups may be innate, but that what constituted a social group was not.

After World War II and the public renunciation by many scientists of overtly racist science in various UNESCO statements, race as a cultural, rather than a biological, fact seemed universally accepted, and the "two cultures" of the sciences and the humanities cemented 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.[14]

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, stemmed from faulty media representations, and thus the best way to combat it was to offer more realist portrayals of "raced others" and to produce media critiques that exposed the fallacies of racial thinking.

As mentioned previously, the resurgence of the category of race in 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.[15] Even more damning, despite the good intentions behind the reformulation, the conceptualization of race as culture has created no fewer 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."[16] 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."[17] Rather than the abatement of racism and raced images after World War II, 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.[18]

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, either conceived 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,"[19] 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" (61 – 62). Race, like media, is also a heuristic, a way to understand, to reveal, the world around us. To return to 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.[20]

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 on essentialism itself, but on the *malleability* of the criteria of psychological dispositions and moral sensibilities that the visual could neither definitively secure nor explain.[21]

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 US 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's foundational description of the male variant of *Homo sapiens 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.[22] 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* differed not by nature but by degree, since both intersected with questions of "blood."[23] 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" (15). The clear separation of biology from culture and transmission from development stemmed from Mendelian genetics' strict separation of germ from somatic cells.[24] 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.[25]

The premise of eugenics—which seemingly

defined race as biological—was the breedability of the human species. Charles Davenport, the father of US eugenics, argued in *Heredity in Relation to Eugenics*, his textbook on eugenics:

> 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.[26]

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."[27] 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.[28] Eugenics is necessary because biology is not enough.[29] Davenport's work also exemplifies the difficulty of separating the natural from the cultivated: in the end, he argued that any "characteristic," such as vagrancy, evident in more than one generation, is transmitted through blood. Although Davenport's work is now considered 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.[30]

However, as the history of segregation and antimiscegenation legislation in the US 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 was 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.[31]

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 US 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."[32] 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" (228). Segregation, importantly, did not only map space but was also 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. (128 –29)[33]

Racist technologies thus sought to make clear distinctions in society where none necessarily existed. Segregation and eugenics are thus 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.

"Racism," he writes, "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."[34]

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" (257). In terms of an analytics of sexuality, eugenics too applies to everyone: Davenport's eugenics textbook, for instance, is directed at those middle-class readers who want to know "how to fall in love intelligently."[35] Eugenics 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 Martin 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.[36] Technology changes the nature of essence as such, making what is essential that which endures rather than its generic type, and it shrinks causality from the rich fourfold system discussed by Aristotle (comprising a material cause, formal cause, efficient cause, and final cause) to one mode: "A reporting — a reporting challenged forth — of standing-reserves that must be guaranteed either simultaneously or in sequence" (23). Most damningly, enframing endangers man by rendering man himself 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.* (27)

This endangerment, though, is not only a misrecognition and a reduction of man to a standing and circulating source of energy; it also makes it impossible for him to conceive of another kind of revealing, since it "conceals that revealing which, in the sense of *poieses*, lets what presences come forth into appearance" (27). *Poieses*, 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."[37] 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, Heidegger's discussion of the experience of the human as not even an object also 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."[38] During this period, she argues, the captives are unmade culturally. The pain of nonrecognition, 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.[39]

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 the human 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 *poieses*, it also makes *poieses* 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."[40] According to Heidegger, *poieses* "brings forth truth into the splendor of radiant appearing" (34). 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."[41] Thus the question becomes: To what extent can ruminating on race as technology make possible race as *poieses*, 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."[42] 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 *poieses*, but rather from 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."[43] 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" (151). 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" (151). 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" (154).

This question of seeing doubly—and indeed the act of seeing more generally, especially as filtered through both race and mass media—is taken up by the authors in this special issue. They examine race as both

the imposition of a grid of control and as a lived social reality in which kinship with technology can be embraced. And most important, as previously noted, they frame this question of race and/as technology in terms of ethics. Race, for these authors, is fundamentally a question of relation, of an encounter, a recognition, that enables certain actions and bars others.

Face-ing Public Exposure

This special issue pursues race and/as technology by analyzing a wide range of phenomena: from the production of photographic evidence to digital art practices, from the rise of the raced brand image in advertising to the emergence of the generic Asian terrorist in terror TV, from science fiction to legal cases and political speeches. Focused on the intersections of facial and racial recognition, it addresses the ways in which race constructs relations between self and other, private and public, visibility and invisibility. These articles argue that race, like one's face, is not simply a private possession or technology —it is not a usually hidden "card" that one can choose to "play" publicly, but rather exists at the cusp between the public and the private, the visible and the invisible. As Jennifer González argues in "The Face and the Public: Race, Secrecy, and Digital Art Practice," "race is . . . a relation of public encounter," or, as Eden Osucha contends in "The Whiteness of Privacy: Race, Media, Law," mass media are technologies of racialization, and the legal right to privacy is a response to this racialized, mediatized publicity. The other articles in this issue— Lisa Nakamura's "Interfaces of Identity: Oriental Traitors and Telematic Profiling in *24*," Thomas Foster's "Faceblindness, Visual Pleasure, and Racial Recognition: Ethnicity and Technicity in Ted Chiang's 'Liking What You See: A Documentary,' " and Beth Coleman's "Race as Technology" —further investigate

the relationship between media and race, publicity and privacy, cul-tural forms and embodied experience by examining the interrelationship between technical and racial productions.

In her essay, González addresses the limitations of seeing technoculture as an ideal public sphere through insightful critiques of contemporary new media theory and digital art. Starting with the contradiction between the "desire to see online digital spaces as sites of universal subjectivity that can escape the limitations of race" and the "proliferation of racially marked avatars and experimental hybrids (human and nonhuman)," she argues that both positions reduce cultural and racial difference to the domain of visual signs in order to construct digital space as one free of aggression, exclusion, and invisibility. Taking on Mark Hansen's analysis of Keith Piper's work as revealing the corrupt emptiness of images and racial identifications in a capitalist system, and thus enabling what Giorgio Agamben has called "community beyond identity," González argues that Piper's work instead reveals how racial discourses elicit complex affective and embodied identifications. It is precisely because race is an embodied discourse that raced others cannot participate in community without identity, for, according to Agamben, community without identity is possible only if humans become a "whatever face": "if humans could, that is, not be-thus in this or that particular biography, but be only *the* thus, their singular exteriority and their face, then they would for the first time enter into a community without presuppositions and without subjects, into a communication without the incommunicable."[44] This position, however, is impossible for "raced" others precisely because they are reduced by others to their face, although this does not mean that the face cannot produce ethical encounters.

Indeed, González turns to Emmanuel Levinas's theorization of the face to argue that it can make legible the absolute infinity of the other. In addition, rather than construct the digital as somehow outside commodified images, she investigates, through the work of digital artists Ken Obadake and Mongrel, how "visual culture (both online and off) is the very place where contemporary race discourse might be most powerfully critiqued and transformed." Most provocatively, González concludes by redressing the question of the paradoxical erasure and proliferation of race online by positing race as the secret fundamental to the ongoing conflation of technoculture with the ideal public sphere. As she argues, "race and other forms of cultural difference have been historically presented as secret unknowns that require definition, mapping, measuring, and legislating by those in power to render them public."

Osucha also links races and faces as sites of exposure through an insightful analysis of the mass-mediated and commodified faces of two women: Nancy Green, the first model for the mass-produced Aunt Jemima pancake mix, and Abigail Roberson, the "anti-Jemima," an upper-class white woman whose image was used, against her wishes, to advertise flour. Looking at the historical emergence of privacy as a right, most famously articulated by Samuel Warren and Louis Brandeis in "The Right to Privacy," Osucha argues that media publicity constitutes a technology of racialization. That is, the right to privacy, conceptualized as a property right in the self, emerged in response to the invasion of the domestic sphere by new visual technologies and media, an invasion that threatened to expose and "sell" all individuals as African Americans had historically been exposed and sold. She writes, "The specter of injury to privacy that haunts 'The Right to Privacy' and *Roberson* and the

laws that followed in its wake thus finds more concrete expression in the media depictions of people of color in that era, images generically shaped by abjecting and frequently grotesque racial stereotype." Focusing like González on race and commodification, Osucha emphasizes the historical dimensions behind this commodification. The right to privacy is inextricably linked to the construction of whiteness as inviolable and, in contrast, of other bodies as "natural" objects of visual consumption. Osucha's analysis therefore reveals that the threat—or, conversely, what we might call the democratic potential—of mass media lies in the ways in which they threaten to racialize, to expose, everyone.

Similarly addressing questions of race and publicity, Nakamura reveals how, after 9/11, the threat of raced others has been used to deny everyone's right to privacy. In the landscape of terror TV, every face can and must be scanned so that the truth can emerge and the foreign terrorist in the nation be exposed. Examining the television series *24* in relation to face recognition technologies more broadly, Nakamura argues, "the horror of witnessing torture perpetrated both by and on American bodies, as well as the destruction of urban infrastructures in the US, is paired with the spectacle of the digital sublime in the form of advanced telecommunication technologies that perform the work of remote sensing and the identification of bodies and especially of faces." That is, "the problem of correctly identifying the true and loyal 'American,' as opposed to the concealed Islamic fanatic, can only be solved by the deployment of highly advanced, spectacular surveillance and identification technologies, such as aerial and satellite photography, FRS [facial recognition systems], biometrics, frame enhancement technology, infrared visioning systems, and extensive databases and 'traces' of informational network traffic." In terms of the "watchful eye" of facial recognition

technology and the larger security society it supports, the ideal is to deny the mystery of every face—the basis for Levinas's concept of ethics—and to render all of them into completely knowable entities. Importantly, this making of the face completely knowable also racializes the terrorist as Asian and Asian American. Terror TV justifies racist stereotyping by representing "*both* West Asians and East Asians as spies, permanent aliens whose loyalties are always in doubt"; the technologies used on these shows thus seem to reveal the rightness of racial profiling. Once again, race becomes the open secret that must be exposed.

Foster also addresses questions of what it means publicly to recognize a face through a science fiction story by Ted Chiang and through new media and its theory. A highlight of Foster's article is an investigation of how nature and culture are being reformulated within technoculture, a process encapsulated by what he calls "technicity." Foster specifically focuses on how "processes of visual recognition and response are being reconceptualized in some technoculture contexts," so that "today, this technical manipulability seems to be increasingly relocated to the level of the viewers' cognitive architectures and mental processes, understood as scientifically material, physically identifiable, and therefore open to change rather than reified or eternalized." Rather than nature and culture simply changing places, though, Foster argues that Chiang's "Liking What You See: A Documentary" reveals that the "breakdown in traditional conceptual distinctions between nature and culture, biological givens and social constructs, might also represent an opportunity to move beyond the impasse of these dichotomies to an understanding of the natural environment, including our own bodies, as something other than a constraint and to a recognition of our technology as something other than a neutral instrument or extension of our conscious

will." In particular, it is through this story's representation of the perception and recognition of racial features—which are first classed as " just cultural," but then shown to intersect biology and culture in interesting ways—that a new form of technoscientific hybridity emerges.

Finally, these questions of hybridity and of the possibilities of technology are taken up in Coleman's piece. The proposition of race as technology, she argues, "moves race away from the biological and genetic systems that have historically dominated its definition, toward questions of technological agency"; that is, it moves race from an object to a technique. Drawing from a wide range of theories of technology and race, she addresses examples of both theorizations and enactments of race as technology that span philosophical texts and political speeches, cinema practice and film criticism, art and science. They include Barack Obama's 2008 speech on race in Pennsylvania, the film *The Battle of Algiers*, recent debates on genomics, and James Snead's theory of blackness as repetition. Acknowledging that the construction of race as technology can be used for good or evil, Coleman nonetheless argues that "race as technology . . . moves toward an aesthetic category of human being, where mutability of identity, reach of individual agency, and the conditions of the culture all influence each other." That is, "if race as we know it is an 'algorithm' inherited from the age of Enlightenment, reprogramming its function from inheritance (a form of destiny) to insurrection provides the possibility of new formulations." This is because the pronounced quality of race, Coleman finds, is its immateriality, "its speed of change, its sliding value, its apparent and invisible differences." Coleman, like Foster, thus also investigates the extent to which modes of racial recognition allow us to address changes to visuality

brought about by new technologies and by varied media forms.

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. Importantly, it displaces ontological questions of race—debates over what race really is and is not, focused on discerning the difference between ideology and truth—with ethical ones: what relations does race set up? The formulation of race as technology also opens up the possibility that, although the idea and the experience of race has 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. Crucially, however, this is not simply a private decision, since race has proven key to the definition of the private and the public as such. 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, NJ: Princeton University Press, 2005); Coco Fusco and Brian Wallis, eds., *Only Skin Deep: Changing Visions of the American Self* (New York: Harry N. Abrams, 2003); Aly Gotz and Karl Heinz Roth, *The Nazi Census: Identification and Control in the Third Reich* (Philadelphia: Temple University Press, 2003).

1 See Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford, CA: Stanford University Press, 1998).

2 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 (1999): 632 –50.

3 See Reardon, *Race to the Finish*.

4 See Lisa Gannett, "Making Populations: Bounding Genes in Space and Time," *Philosophy of Science* 70 (2003): 989–1001; and Evelyn Hammonds, "Straw Men and Their Followers: The Return of Biological Race," SSRC, http://raceandgenomics.ssrc.org/Hammonds, 7 June 2006.

6. See Henry Louis Gates Jr., *African American Lives*, PBS Series, 2006; and Paul Gilroy, *Against Race: Imagining Political Culture beyond the Color Line* (Cambridge, MA: Harvard University Press, 2000).

7. See Charles Davenport and Morris Steggerda, *Race Crossing in Jamaica* (Washington, DC: Carnegie Institution of Washington, 1929); Edward Black, *IBM and the Holocaust* (New York: Crown, 2001); Richard J. Hermstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: Free Press, 1994).

8. Bruce Dain, *A Hideous Monster of the Mind: American Race Theory in the Early Republic* (Cambridge, MA: Harvard University Press, 2002), 7; Carl Linnaeus, as quoted by Gregor Benton and Edmund Terrence Gomez, *The Chinese in Britain, 1800–Present: Economy, Transnationalism and Identity* (Basingstroke, Hampshire: Palgrave Macmillan, 2008), 287.

9. See Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. Alan Sheridan Smith (New York: Pantheon, 1971); and

François Jacob, *The Logic of Life: A History of Heredity*, trans. Betty E. Spillman (New York: Pantheon, 1973).

10. Samira Kawash, *Dislocating the Color Line* (Stanford, CA: Stanford University Press, 1997), 130.

11. Saidiya Hartmann, *Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America* (Oxford: Oxford University Press, 1997), 26.

12. 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!" (Douglass, *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).

13. 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" (Franz Boas, "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 them, which could then coincide with a natural antipathy to other closed social groupings.

14. Henry Louis Gates Jr., "Writing 'Race' and the Difference It Makes," in *"Race," Writing, and Difference*, ed. Gates (Chicago: University of Chicago Press, 1986), 5.

15. Reardon, *Race to the Finish*, 18 –19.

16. Etienne Balibar, "Is There a Neo-racism?" in *Race, Nation, Class: Ambiguous Identites* (London: Verso, 1991), 17 –28.

17. 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 that "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" (5).

18. Toni Morrison, *Playing in the Dark: Whiteness and the Literary Imagination* (New York: Vintage, 1993), 63.

19. Michael Omi and Howard Winant, *Racial Formation in the United States: From the 1960s to the 1980s* (New York: Routledge, 1986), 66.

20. Kawash, *Dislocating the Color Line*, 130.

21. Ann Laura Stoler, "Racial Histories and Their Regimes of Truth," *Political Power and Social Theory* 11 (1987): 187, 200.

22. 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." Quoted in Dain, *Hideous Monster of the Mind*, 31.

23. 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-ofthe-Century Concept of Race," *Modernism/Modernity* 1 [1994]: 6).

24. 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 provides a perfect example of this. Yet importantly, this argument did not strictly separate biologically transmitted racial traits from cultural ones—that is, racial characteristics were considered mutable.

25. 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 he also argued that "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" (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 diametrically opposed to the "one-drop rule" used in many southern states and to the percentage logic that drove Nazi anti-Semitism (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). See 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.

26. Davenport, *Heredity in Relation to Eugenics*, 1.

27. Michel Foucault, *The History of Sexuality*, volume 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" (147). Given Davenport's argument, it would seem, however, that the society of sex does not forego blood, but rather resignifies it.

28. Davenport, *Heredity in Relation to Eugenics*, 2.

29. 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" (4). This falling in love intelligently implies that any "natural" phenomenon can be cultured, cultivated, to produce something better—that biology, in other words, can never be completely separated from culture.

30. See Gannett, "Making Populations."

31. Hartmann, *Scenes of Subjection*, 187.

32. Grace Elizabeth Hale, *Making Whiteness: The Culture of Segregation in the South, 1890–1940* (New York: Vintage, 1999), 21.

33. This technology of segregation was also accompanied, Hale 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 (see "Deadly Amusements" in *Making Whiteness*, 199–239).

34. Michel Foucault, *Society Must Be Defended: Lectures at the Collège de France, 1975–1976*, trans. David Macey (New York: Macmillan, 2003), 258.

35. Davenport, *Heredity in Relation to Eugenics*, 4.

36. Martin Heidegger, "The Question Concerning Technology," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper and Row, 1977), 14.

37. Qtd. in Philippe Lacoue-Labarthe, *Heidegger, Art and Politics: The Fiction of the Political*, trans. Chris Turner (Oxford: Blackwell, 1990), 34.

38. Hortense Spillers, "Mama's Baby, Papa's Maybe: An American Grammar Book," *Diacritics* 17 (1987): 72.

39. Frantz Fanon, *Black Skin, White Masks*, trans.

Charles Lam Markmann (New York: Grove, 1967), 109.

40. Heidegger, "Question Concerning Technology," 35.

41. Fanon, *Black Skin, White Masks*, 140.

42. Homi K. Bhabha, "Of Mimicry and Man," in *The Location of Culture* (New York: Routledge, 1994), 86.

43. 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.

44. Qtd. in Mark Hansen, "Digitizing the Racialized Body; or, The Politics of Universal Address," *Substance* 33 (2004): 110.

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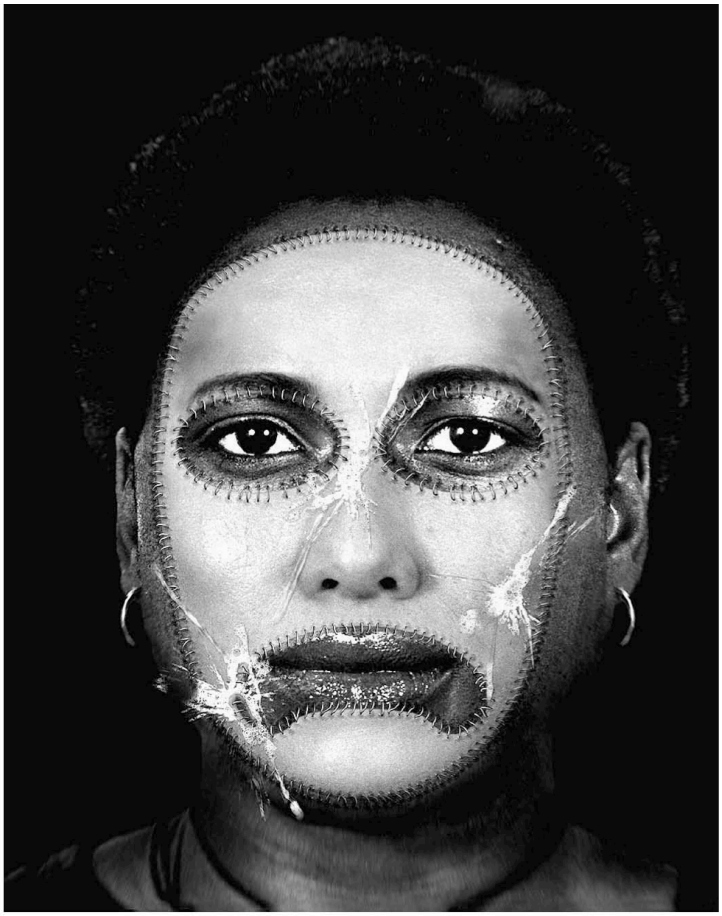

From *Colour Separation* (Mongrel, 1997).
Courtesy of the artist.