Racism, Technology and the Limits of Western Knowledge

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Introduction: Contemporary assumptions

n a day devoted to imaginary demons, the New York Times rather fittingly published an article by Henry Louis Gates entitled "One Internet, Two Nations." In the article, Gates picks up a topic now gathering steam in the United States, namely, the gap in computer literacy between black and white Americans that permeates even income distinctions. In recent articles and television appearances, Gates has become a champion of the black middle class and of middle class values in general, paradoxically using antiblack stereotypes in characterizing the black working class and working poor as lazy, self-destructive, and even in need of a "moral revolution."² Unsurprisingly, in this brief article, Gates glides quickly over the complexity and extent of poverty and racism to focus on a popular conservative explanation for racial inequities and disparities in this country: The culture of poverty and, by extension, the so-called slave mentality. Without actually interviewing the vast number of blacks who do use computers, and without researching black views on the computer and Internet boom, Gates asserts that it is black behavior that must be corrected so that blacks, with corporate support, can finally overcome their self-destructive behaviors and learn how to imitate and eventually, one supposes, integrate with their white and black middle class role models.

Thankfully, there are other views on race and technology. In a January 1999 article in the *Atlantic Monthly*, writer Anthony Walton argues that African-Americans have never been done terribly well by technology: The Caravel paved the way for the slave ships, Eli Whitney's cotton gin gave a shot in the arm to the dying slave economy, and the communications and information revolution rendered black (and white) jobs in the Steel Belt redundant.³ Like Gates, Walton argues that blacks must take independent steps towards computer literacy but, unlike Gates, he suggests a "Marshall Plan" for poorly funded public schools, so that all groups, not just the elite, can receive an equal education. One of the mainstays for that education, Walton concludes, should be computer literacy.

I do not agree with very many of Walton's views or his interpretation of black history (his argument that the Great Migration had nothing to do with the outrages of Southern racist violence and oppression, and everything to do with a shortage of jobs contravenes the bulk of historical evidence), but his more complex understanding of America's treatment of African-Americans the only group forcibly brought to the United States and enslaved for over 200 years—makes me wish Gates had read this article before jotting down his own thoughts. However, Walton and Gates do share one oddity: Despite all the rhetorical flourishes and invocations of the term, neither Gates nor Walton focuses on technology itself—Gates fails to look at it at all, and Walton's only statement is that "technology in and of itself is not at fault," preferring a view of scientists and inventors and disinterested altruistic parties devoted to aiding mankind. This is either wishful thinking or sheer ignorance: Western science has never been kind to peoples of African descent, beginning with slaves serving as live test subjects in the name of medical progress,⁴ and four decades of the Tuskegee experiments.⁵ Gates and Walton both rely upon a series of simplistic assumptions about race, science and technology—completely bypassing historical records—in order to make what are ultimately predictable claims. Ignoring technology and science may have worked very well in Africa, but we're in the West now!

WHOSE TECHNOLOGY?

I want to return to Walton's rhetoric: What is "technology in and of itself?" It is certainly not what Walton thinks it is, as he is speaking of technologies developed by the West to enrich itself rather than the disinterested pursuit of knowledge "in and of itself." Before either Gates or Walton tackles this vexing question of race and technology, it is important to examine the terms of the discourse. After all, how many forgone conclusions are we to encounter using two terms, race and technology, that are not only Euro-centric in their definitions, but also in their connotations and denotations. "Race," like "gender" while claiming to speak to a range of groups, most often speaks to one group in particular that is seen as deviating from the norm. Just as "gender" is incorrectly synonymous with "woman," the deviant from the male, so "race" incorrectly denotes "black," the deviant from the white norm. Given that the categories of "black," "Negro," "colored," and "nigger," first defined an inferior people incapable of learning (and therefore of achieving civilization), how surprised should we be that Gates and Walton begin their work with two terms always already assumed to be in opposition? They then proceed to "discover," either because of their own laziness (Gates) or for reasons unknown-but certainly not the fault of technology—(Walton), an antithetical relationship between the two.

I want to argue here that it is our *representation* of technology that must first be analyzed, critiqued and revamped so that we might avoid this slew of foregone conclusions, recuperation of stereotypes, and this mythology of the West as the "cradle of civilization"—and therefore the sole owner of "technology in and of itself." It is difficult, if not impossible, to fairly assess all aspects of this debate on the "digital divide" when the assumptions we bring to bear on this discussion rest on 250 year-old Western myths of European superiority and the vigorous defense of these fictions in the face of contrary evidence. Gates and Walton provide excellent examples of reaching these foregone conclusions from a flawed framework by failing to specify that they are discussing *Western* technology rather than technological innovations from all civilizations. I would

venture to say that for both authors the two terms are synonymous. As any student of world civilization will tell you, they are not.

Understanding the fallacy of assuming that the (white) West is the birthplace of technology makes an important difference in Walton's argument. In his discussion of technology versus African-Americans, he ignores the technological innovations created by the latter, Africans, and the rest of the world. This leads the reader to assume that no black (without Western tutelage) has played a role in the history of technology except as victim or passive recipient. The first alphabets; the concept of zero; gynecology; veterinary medicine; the 365 day calendar (anticipating its "discovery" in the west by three thousand years⁶); elements of geometry; Caesarian section; iron and copper smelting—all of these and far more were accomplished outside the West; indeed, before the West had developed from roaming tribes into permanent organized settlements.8 This is not to claim, therefore, that African civilizations are obviously superior: Only that the rather large and influential advancements they provided have been denied and usurped by late nineteenth and early twentieth century historians such as Arnold Toynbee, who famously declared that, outside of Europe, no other continent had contributed to world civilization. Toynbee, of course, did not provide any evidence, and in taking these beliefs to heart, we have yet to ask for evidence supporting this grand assertion. We ask non-whites to prove their case, and then ignore or ridicule them; we do not ask ourselves the basis for our assumptions of superiority. Yet, in our representation of the technological revolution, we construct the same mythological doctrine that still plagues public school and mass media representation of its American history by presenting it as almost wholly white and male.9

THE HISTORY OF A MYTH

Although I would venture to guess that very few Americans could name a single theory from the 19th century German philosopher Georg Friedrich Wilhelm Hegel, very many of us continually espouse and/or propagate some of his ideas regarding progress, history and civilization. More importantly, foreign policy discussions and decisions by Western nations and organizations (i.e., World

Bank, International Monetary Fund and the World Trade Organization) reflect an attitude towards developing nations that also echoes Hegel's discourse on civilization. One need only compare the generous loan terms offered by the World Bank and World Trade Organization to other "white" nations, and the loan restrictions and terms for non-Western nations to understand how skin color, more than any other factor—including propensity towards defaulting on payments—determines one's status as either "first world" or "Other." This is not to claim that Hegel is the architect of Western military and economic colonization, only that his theory of history had a profound influence on 19th and 20th century Western thinkers and leaders.

Drawing directly from his arrestingly prescient *Philosophy of History* [*Philosophie der Geschichte*], one can easily see that we, like Hegel, do not trouble too long over the dangerously simplistic binaries "civilized" and "primitive" and, more likely than not, pin these terms to the equally erroneous dichotomy we assert between the West and "developing nations." Like Hegel, we understand the history of Western civilization to be a *Bildungsroman*—an insular progressive narrative about the search for ourselves, where external characters (i.e., the rest of the world) play little or no role. Technology is deployed as the latest chapter of evidence for Western superiority. Yet, it is a specific representation of technology as white, male and Western, that is championed and accompanied by a truncated history that grossly distorts the facts.

Hegel begins the *Philosophy of History* by noting that there are three types of history: Original, reflective, and philosophical—but of these three, it is the middle one that is significant because it is a history that records the meaningful progress of civilizations rather than the mere passage of time or the contemplation of events past. More specifically, Hegel argues that it is the *result* of history, that is, the developing human consciousness of freedom, with which we should occupy ourselves. More to the point, he argues that Europe—and his fatherland (Germany) in particular—is the premier site for such a history. By contrast, he claims, the continent of Africa is sadly lacking any (reflective) history. To follow Hegel's logic: Just as we would not consider the last several centuries of animal history as anything more than a passage of time for them, so

should we regard Africa and Africans as *passing time* rather than *progressing* in history, as is the self-evident inclination of Europe: 10

Africa proper, as far as History goes back, has remained—for all purposes of connection with the rest of the World—shut up; it is the Gold-land compressed within itself—the land of childhood, which lying beyond the day of self-conscious history, is enveloped in the dark mantle of Night.¹¹

The rhetorical counter-point assumed here between an "enlightened" Europe and the "dark continent" is clearly attached to concepts of intellectual development. Although Hegel had never been to Africa he did not hesitate (in this otherwise intellectually dense treatise), to recount outrageous stories of cannibalism, human sacrifice, and other bloodthirsty gore as anthropologically sound. Indeed, he was not alone: The first anthropologists reported that some Africans had tails, or two heads, or spoke out of their chests. Earlier Enlightenment philosophers such as David Hume, Emmanuel Kant, and Johann von Herder, while debating long and loud the relative merits of a priori versus a posteriori in the discussion of human consciousness, eagerly asserted black inferiority despite their supposed attachment to the scientific method. That is, when it came to the discussion of the black, they abandoned their now famous methodology of questioning the reliability of myth and hearsay, and insisting upon an exhaustive gathering of evidence and the rigorous pursuit of the scientific method before making any truth claims on such an enormous scale. 12 While the respect of this method was certainly accorded to those they considered their peers (other economically respectable white males), those whom they already assumed as inferior remained so.

CONSTRUCTING A PAST TO JUSTIFY THE PRESENT

The irrationality of these racist assertions might be partially justified if Europe had had no contact with Africa until the Portuguese stumbled across West Africa in the late fifteenth century. But Mediterranean Europe had shared some 1,000 years of trade, warfare, and intellectual exchange before the Portuguese arrival, and the very ancient Greek texts that Hegel cites in his Philosophy make mention of the centrality of Egypt to the development of Ancient

Greece—which Hegel locates as the cradle of Western civilization and "reflective history." As Martin Bernal has argued in his "controversial" trilogy *Black Athena: The Afroasiatic Roots of Classical Civilization*, this "amnesia" is due to the replacement of Europe's "Ancient Model" of historiography with the "Aryan" model. ¹³ This replacement, Bernal argues, was not due to the uncovering of new evidence, but simply to a change in European ideology that evinced a disgust, fear and contempt for non-European peoples and civilizations that far outweighed the xenophobia of classical Greece:

[Hellenic superiority] was negligible compared to the tidal wave of ethnicity and racialism, linked to cults of Christian Europe and the North with the Romantic movement at the end of the 18th century. The paradigm of 'races' that were intrinsically unequal in physical and mental endowment was applied to all human studies, but especially history. To be creative, a civilization needed to be 'racially pure'. Thus it became increasingly intolerable that Greece—which was seen by the Romantics not merely as the epitome of Europe but also as its pure childhood—could be the result of the mixture of native Europeans and colonizing Africans and Semites.¹⁴

Bernal offers two equally important arguments: One, that European civilization owes much to its African predecessors and ancient contemporaries; two, that this evidence is easily obtainable from classical texts because the virulent anti-black sentiment that clouds contemporary Western thought did not, at that time, exist. It is the second point that many American classics scholars find so offensive: That their knowledge of world history is not based on research but racist myths. As historians Lerone Bennett, Jr., Winthrop Jordan and George Frederickson have noted, in the 17th and early 18th centuries, both blacks and whites were kidnapped and sold to traders as indentured servants, with distinctions being made only in terms of Christians and non-Christians. From the Jamestown settlement, that introduced "perpetual servitude" as a condition specific to non-Christian blacks (and then all black Africans) up to the late 18th century, there were very few justifications proffered for this custom beyond the pull of profit. Justification for racially determined chattel slavery based on supposed inferiority was developed after the fact and not, as we are often taught, the other way around. 15 In other words, in order to justify its claims to racial and cultural superiority, we in the West are not simply ignoring facts to the contrary, we are actively vilifying them and erasing them before they reach a wider audience.

American history in particular is only now beginning to confront the myths that have been presented as fact. In their article, "Narrating Competing Truths in the Thomas Jefferson-Sally Hemings Paternity Debate," Venetria K. Patton and Ronald Jemal Stevens¹⁶ look at how white American historians have long refused to even pursue the possibility that Hemings' children were part of the Jefferson line despite the overwhelming amount of circumstantial evidence. As examples, Patton and Stevens cite the numbing frequency of rape and forced liaisons with slave women by their white owners, the striking resemblance of Hemings' sons to Jefferson, and the unreliability of Jefferson's writings on slavery, not to mention the extensive and detailed oral histories of Hemings' descendants.¹⁷ All this has been consistently refuted by prominent Americanists such as Merrill D. Peterson simply because Jefferson wrote unfavorably on miscegenation and, therefore, they reason, would never consent to have sexual relations with a black woman. In this contest between detailed oral histories supported by what little documentation exists, and a handful of sentences from a text (which did not hesitate to wonder if blacks did not have different colored blood and stated that African women mated with apes), traditional and mainstream texts determine what is credible not through research, but by the race and gender of the contestants.

Although we in the West pride ourselves on the objectivity of our scholar-ship—especially in fields that rely on "facts" from the social and natural sciences—we spend little time questioning the basis for that pride or doing more than angrily refuting those who point out the racial and gender biases inherent in much of our work. Despite the rocky history of both disciplines with regard to women and other minorities, science, like the phoenix, rises again and again from the flames in a perfect amnesia about past mistakes. As a result, the like-lihood that these mistakes will be repeated *ad nauseam* unless the cause is thoroughly examined, discussed, and rectified remains all but certain.

Patton and Stevens suggest that, in Jefferson's case, it is our refusal to examine the enduring nature of anti-black sentiment in America that leads us to such dismal scholarship and regrettable ignorance. For those on the receiving end of this prejudice, questions such as "why would Jefferson lie?" bear little mystery:

Time and time again, African Americans have witnessed hypocrisy and contradiction whether it be in the Declaration of Independence, which declares all men equal while legitimizing slavery, or in slave narratives in which slave masters view slavery as extending a familial relationship while disrupting slave families. This hypocritical view of America is related to the unwillingness of many historians to address adequately Jefferson's hypocrisy. Many of us prefer to see his contradictory views as mysterious rather than use them as a means to analyze race relations. ¹⁸

In other words, the deep-rooted racism in American minds today only further perpetuates the lies and mythologies of our history. This is hardly surprising: It is difficult to recognize the myths and crimes of the past if they are in fact so much part of our present.

AFRICAN AND AFRICAN-AMERICAN TECHNOLOGIES

Consider a handful of the contributions that African-Americans have made to science and technology.¹⁹ We have forgotten that Granville Woods invented the steam boiler furnace and the telephone transmitter; Mary Moore invented one of the first artificial pain relievers in the 18th century; Lewis Latimer invented the incandescent light bulb (greatly improving on Edison's use of a bamboo filament by replacing it with carbon, and therefore making light bulbs last from a mere 30 hours to over 300), and he supervised the implementation of electric lights in New York City, Philadelphia, Montreal, and London. We have forgotten that Garrett A. Morgan invented the prototype of the gas mask and the automatic stoplight; Frederick Jones made the transportation of fresh foods and dairy products possible when he invented mobile refrigeration. Elijah McCoy made it possible for locomotives to operate continuously without having to stop every few miles to re-lubricate the wheels and machinery. Despite the attempts of corporate competitors to duplicate his invention, only McCoy's actually worked, causing railway engineers to always ask if the automatic lubricator available for purchase was "the real McCoy"—this phrase has been re-attributed to several white McCoys, an athlete, an entrepreneur, and an inventor whose inventions were never actually used by anyone.

The only black inventor America acknowledges is George Washington Carver, who revolutionized Southern agriculture by developing more advanced methods of crop rotation so that farmers did not exhaust their soil after three years but could use it indefinitely (indeed, crop rotation was taught by the first African-Americans to white planters). Carver also developed peanut oil as a cheaper alternative additive to motor oil, diesel fuel, printing ink, rubbers, and lighting oil, but, today, his only publicly acknowledged invention is peanut butter. More recently, A. P. Ashbourne developed the airplane propeller; Dr. Charles Drew discovered plasma in blood; Henry Sampson patented the cell phone; Otis Boykin developed pacemaker controls for the guided missile; and Dr. Patricia Bath has patented her technique of using laser surgery to remove cataracts.

Although the West bases its assumptions of technological (and therefore intellectual) superiority over the non-West on "objective" evidence, what is most educational about returning to Enlightenment philosophy, Hegel, and thence to Bernal, is the degree to which myths and legends were quickly incorporated as truth into the Western discourse on civilization. Furthermore, it is important to understand that these myths were created to overturn roughly a millenium of history and evidence. We are still using them to quash all the overwhelming evidence to the contrary, such as that supplied by Bernal's voluminous proofs, as well as those supplied by historians such as Ivan van Sertima, Théophile Obenga, and Ali Mazrui.²⁰

The refutation of this evidence has been swift, anxious, angry, and offensive. Mary Lefkowitz, Mellon professor in the Humanities at Wellesley College, is the most public academic in this debate. The cover of her book, *Not Out of Africa* features a bust of Plato wearing a Malcolm X baseball cap tilted to one side. This advertises the level of respect with which she intends to treat any claims that ancient Europe did not suddenly flower on its own, achieving greatness in a vacuum. In other words, to question European superiority, by arguing that African civilizations were also influential is tantamount to claiming Plato was down with Malcolm X. What in the world does Malcolm X

have to do with ancient African civilizations? In the eyes of Lefkowitz and her allies, one black is the same as any other, and just as Malcolm X could not have influenced Plato, so, too, it is impossible that any non-white civilization might have been influenced.

Responses to Bernal from public intellectuals of the far right have been alternately furious, sarcastic and patronizing, often attacking established scholars as misguided minds desperately seeking proof of racial equality in their myth-making. Most notably, these figures refuse to distinguish between Afro-centrists who back their claims with extensive data, and those reactionaries who, as Clarence Walker points out in *We Can't Go Home Again*, simply convert white racist myths and doctrines into equally ridiculous claims (i.e., all blacks in the West are descended from Egyptian kings and queens, all whites are evil). Bernal and his colleagues are not interested, as Lefkowitz and others claim, in elevating Africa to the top of the civilizational heap through myth—rather, they simply seek to demonstrate how all civilizations have contributed to world knowledge and progress.²¹ In a West devoted to a binary thinking in which one is either inferior or superior, this is a difficult concept to understand.

As we have already seen, it is important to question not only the basis of the evidence but also the economic and political agendas of European claims to superiority. As Molefi Asante (among others) has pointed out, *Black Athena* quotes directly from the ancient texts of Herodotus, Diogenes, Plutarch, and Plato, in which African scientific contributions to Greece are explicitly recorded. Paradoxically enough, in their effort to uphold these scholars (as well as those who studied in Africa, such as Solon, Democritus, Anaxamander, and Pythagoras), the scholars assembled for *Black Athena Revisited* ask us to interpret those writings on Africa as false, but everything else as true. As Bernal, Asante and others have pointed out, Lefkowitz directly ties any attempt to question the superiority of Ancient Greece (and, by association, all of the West) to a direct attack on democracy. In other words, it is not so much the truth that is at stake as our way of life.

TECHNOLOGY AND THE "NEW FRONTIER" MENTALITY

The contemporary representation of technology in the West is deeply implicated in this ideologically motivated mythology in which, outside of Africa, "history," that inherently progressive linear narrative of conquests and inventions, is the sole province of the West (and sometimes just the United States). Despite overwhelming evidence to the contrary, those scholars who reject the evidence of African achievements are convinced that acknowledging the contributions of non-Western civilizations is tantamount to admitting the West is inferior to all other civilizations.

The nature of this discourse and its perpetuation is also evident in contemporary views of African-Americans and their technological prowess. We assume that the information we receive in the media is up to date; that is, if there were evidence of African civilizations that influenced Europe, it would by now be generally acknowledged. The idea that Western knowledge often constructs itself on the basis of an assumed racial superiority—and actively attacks and suppresses contrary claims—runs counter to our self-construction as the *only* site on earth where truth, not myth and magic, structures our world. The truth is, we are just as fallible as other civilizations, and one need only compare white American ideas about black inferiority with the innumerable instances of black achievement to understand that what we believe, especially in terms of race, is often based on wishful thinking rather than current evidence. While thousands of black Americans have distinguished themselves in all professional fields, we prefer to turn our eyes to those who have not done so and express wonderment at their failure to keep pace with their white countrymen. Like Hegel, we rely upon hearsay to maintain the binaries of black/white, inferior/superior, and savage/civilized rather than bother with actual research and fact checking. Polls and articles on the gap between white American and black American computer literacy always seem to express some sort of surprise, some sort of shock, but why are we so shocked?

Why are we so shocked when our human representations of technology (save for a few Apple computer billboards) are overwhelmingly white and male? Why are we so shocked when our mythological history of technology begins in the West without the mathematical and scientific advances produced by non-white civilizations?

The information and communications revolution was not invented in a garage by two teenage boys, it came out of long and arduous advancements in metallurgy, mass production, an overwhelming accumulation of capital and, of course, slave labor. American Indians, Africans, Asians, Chicanos, Latinos, and working class white men and women were indispensable to the West entering the modern age, but their contributions (more often cruelly coerced and/or callously exploited than voluntary), have now been quickly dismissed. Technology, we are told, comes from the independent genius, such as Bill Gates or Steven Jobs, the same way we are told that America began with George Washington and Thomas Jefferson, the same way we are told that Abraham Lincoln wrote the Emancipation Proclamation and suddenly black slaves were free to do as they liked.

What I want to say here is that we are returning to old and dangerous myths in our construction of technology, in our short-sighted and heavily prejudiced recitation of its origins. Why should we be so shocked when those who belong to groups long designated as primitive and irrelevant, criminal and immoral, would not possess the skills or have access to a science that has worked hard to maintain an image almost wholly antagonistic to them?

In "Technology versus African Americans," Walton avoids a binary I have perpetrated in this brief essay and must examine—one between blacks and whites, where blacks are impotent and whites sadistically powerful. As Walton points out, many black Americans with the clout and power to change some of this imagery have only reinforced it—albeit for their overwhelmingly white audience.

FEEDING RACIST FANTASIES

In the past few years, "cyberstyling" has become a mainstay of many R&B and rap videos: Futuristic sets populated with blacks dressed in robotic or otherwise space-age costumes, technologically aware, if not completely cyborg in their familiarity. At the same time, the messages pushed forward are

problematic because they reify this dichotomy between race and technology. The only exception I have found is rapper Missy Elliott's bold and powerful video "I'm a Bitch," in which, dressed in an impressive (and deliberately exaggerated) robot's armor, she declares her right as a black woman to make her own decisions and follow her own path, even if others might (predictably) see her as a "bitch." However, this video and its message, unlike her previous releases, failed to reach the Top Ten on any charts. More successful and yet far more compromised is TLC's visually seductive "No Scrubs" video, in which black men are rejected for being stereotypically oversexed and too lazy, too stupid, to earn a decent salary. Although playful and intelligent in some of its critiques, this highly popular single and award-winning video offers no other representation of blacks outside of this stereotype as well as showing the black woman as a cold gold digger. I am not even going to mention the nasty response this song elicited that further pushes these negative stereotypes of black men and women to greater depths.

I would argue that even in some of these more liberating and radical musical art forms, old myths are replayed to destructive ends. After all, it is the African American development of rap music rhythms that spurred important technological innovations by both blacks and whites, including drum machines and more sophisticated synthesizers that could accommodate complex sampling techniques. These technologies in turn have been used to help develop the use of sound bytes and musical samples on the Internet. Why can't the musical form that aided in their creation celebrate these connections?

HOW WE ACTIVELY MAINTAIN THE DIGITAL DIVIDE

In our drive to bring African-Americans into the computer revolution, let us also ask exactly what it is we are offering and how we can change those assumptions and representations. At present, as many black students and colleagues from highly ranked "tech" universities will attest, we are inviting black students into an environment where many of their white teachers believe them to be intellectually inferior, where many of their white peers take cues from those teachers and ostracize them from study groups or less formal gatherings. We

are inviting them into an environment where they are often discussed as handicaps and a threat to the university's pursuit of excellence.

In his famous book, *The Souls of Black Folk*, W.E.B. Du Bois analyzed a question often put to him by curious whites: "How does it feel to be a problem?" As Du Bois and many others since then have explained, positing blacks, rather than racist behavior, as the "problem" leads nowhere. This is the circular path that leads Gates, Walton, and others to scratch their heads over the "digital divide" instead of questioning the broad assumptions about race and technology that begin their discussions. In working to include all of our citizens in this new Internet nation, we can work towards learning and disseminating the true history of technology, as "in and of itself" as we can get: Involving *all* races (yes, *all*) and dispelling this destructive myth of white Western superiority.

CONCLUSION: AREAS OF EMPOWERMENT

In the midst of these debates on the "digital divide," black activists, students, faculty, entrepreneurs and "techies" are using the Internet to encourage black participation, and linking African-Americans and their communities both to one another as well as to concerned non-profits and corporations. Continuing the tradition of self-help community outreach developed by the Oakland Black Panthers, San Francisco Mayor Willie Brown, musician Herbie Hancock, and Pittsburgh entrepreneur Bill Strickland are three of the main sponsors for Rhythm of Life (http://www.rolo.org), a non-profit organization that raises money to provide both computer skills and job training to the black working poor and working class in the San Francisco Bay Area. The Afro-Futurist collective (<http://www.afrofuturism.net>) provides a clearinghouse for a discussion on how the work of African-American and African diasporic artists and intellectuals intersects with the latest breakthroughs in technology. The Website also provides a series of links to other Web-sites that take a radical political and social stance, and seek to inform, connect and empower dispossessed communities. The Cyber Sisters Club from Allentown, Pennsylvania (http:// www.lv.psu.edu/jkl/sisters>), created by a Lehigh Valley black women's collective, provides face-to-face mentoring, online and outdoor activities and advanced computing skills to elementary school girls who live in disadvantaged and remote areas. Sistahspace (http://www.sistahspace.com), by contrast, is a for-profit site for black women interested in connecting to one another through bulletin boards and chat rooms, and to a wide range of both non-profit and for-profit services.

There are also Web-sites that document and record African and African-American cultural and technological developments, including African Fractal (<http://www.cohums.ohio-state.edu/compleglash/afrafractal>), African Indigenous Science and Technology Systems (http://www.members.aol. com/afsci/africana.htm>), and the Black Cultural Studies Web Site (http:// www.tiac.net/users/thaslett>). They provide a forum for both posting and reading messages, as well as links to scholars and artists across the Diaspora interested in exploring the role of black writers, thinkers and artists in the West and beyond. There are other steps being taken by academics and activists. Most recently, activist and novelist Walter Mosely, and activists/scholars Manthia Diawara, Clyde Taylor, and Regina Austin came together to produce the book Black Genius: African American Solutions to African American Problems, enlisting the aid of figures such as Haki Madhibuti, Anna Deavere Smith, bell hooks, Angela Davis, Jocelyn Elders, Spike Lee and many others, to discuss practical and affordable solutions (no more than \$5) for African Americans to empower themselves not only in areas of technology, but also lifestyle, finance, the arts, and politics. Black Genius also focuses on developing non-profit organizations that are based in, made up of, and serve the black community.

POSTSCRIPT: STRATEGIC ILLITERACY

Many African-Americans *are* working towards social, educational and economic parity with whites, and in the past *have* developed and progressed along the same yardstick that the West uses to favorably distinguish itself from other civilizations. For those of us seeking to end the "digital divide," our main obstacle is *not* the Black computer illiteracy that the mainstream bemoans, but the *strategic illiteracy* deployed by those who wish to bemoan lazy black communities too closely tied to their primitive past. ★

- 1 Henry Louis Gates, Jr., "One Internet, Two Nations," *The New York Times*, 31 October, Final Edition.
- 2 See the PBS Frontline special from 1997 on "African Americans and Class."
- 3 Anthony Walton, "Race and Technology." Atlantic Monthly, January, 1999.
- 4 While James Marion Sims is celebrated by most medical histories for his pioneering efforts in surgery, his practice of operating on unwilling slaves and the white poor, without the use of anesthesia, is rarely discussed.
- 5 Although the Clinton administration admitted that the U.S. sanctioned withholding treatment at Tuskegee, the government has yet to acknowledge that Tuskegee doctors also deliberately exposed healthy black men to syphilis.
- 6 I apologize for the obnoxious Italics, but some things really need to be stressed, given our odious assumptions that Western civilization holds a monopoly on all significant technological inventions.
- 7 Long predating Julius Caesar, after whom the procedure was named upon its "discovery" in the West.
- 8 All these facts and more are available in the Encyclopedia of the History of Science, Technology, and Medicine in Non-Western Cultures, ed. Helaine Selin (Boston: Kluwer Academic, 1997), and Milestones in Science and Technology: The Ready Reference Guide to Discoveries, Inventions, and Facts, by Ellis Mount and Barbara List, (Phoenix, AZ: Oryx Press, 1994).
- 9 Even those books and articles sympathetic to how former colonies have been exploited by the West often operate on these fallacies, referencing books some 20–50 years out of date.
- 10 Unsurprisingly, Hegel's attitudes towards Asia reflect many contemporary ones of being "not quite white;" he notes that Asians are superior to Africans, but inferior to Europeans; behind, but not in such a hopeless limbo.
- 11 Georg Wilhelm Friedrich Hegel, *The Philosophy of History*. trans. J. Sibree (New York: Dover Publications, 1956), p. 91.
- 12 For the best account of early French anthropology in Africa, see Christopher Miller's *Blank Darkness: Africanist Discourse in French* (University of Chicago Press, 1985), and for the "best of" selections from Enlightenment philosophers, see Emmanuel Chukwudi Eze's *Race and the Enlightenment: A Reader* (London: Blackwell Publishers, 1997).
- 13 Despite the extensive documentation supplied by Bernal, and the acknowledgement of his achievement by some of our leading scholars in linguistics, history and anthropology, Bernal's argument that the West has only recently (since approx. 250 years) denied the contributions of other civilizations has enraged a vocal minority who insist that the West has always been the superior civilization and always known it.
- 14 Martin Bernal, *Black Athena: Vol. 1.* (New Brunswick: Rutgers University Press, 1987).
- 15 See Thomas Jefferson's "Notes on the State of Virginia," *Thomas Jefferson: Writings*, ed. Merrill D. Peterson (New York: Library of America, 1984), for one of the earliest claims for black inferiority, relying upon such bizarre suggestions as the tendency of blacks to mate with "Oran-Ootans" and the possibility that black blood is a different color. Jefferson's passages on the racial future of America are especially enlightening given the widespread knowledge of his having fathered children with bonds-woman Sally Hemings—directly contradicting the disgust he evinces for miscegenation in the Notes.
- 16 The Black Scholar 29, no. 4 (2000).

- 17 All we do know "for sure" at this point is that either Jefferson or his nephews fathered Hemings' children, but it is far less likely it was his nephews, given Jefferson's preferential treatment of Sally and her children.
- 18 The Black Scholar, p.14.
- 19 There is still no one book specifically devoted to African or African American inventors, but there are a dizzying array of exhaustive sources that detail these inventors and provide bibliographies. The Masschusetts Institute for Technology http://www.inventorsA-H/Aaweek2.html and the Detroit Public Library http://detroit.lib.mi.us/glptc.aaid as well as a website known as "The Patent Café" http://patentcafe.com/inventors_cafe_africanam.html are a good place to start, as well as *The *Encyclopedia Africana*, edited by Henry Louis Gates, Jr. and Anthony Appiah. One can also consult M.A. Harris, *The Black Book* (New York: Random House, 1974); or check out http://www.invention-express.com/oa4.html.
- 20 It should be noted that the one bone of contention African scholars bear towards Bernal is his failure to look beyond Egypt to the range of other African peoples and civilizations, such as the Kush, Eritreans, Ethiopians, Nubians, Timbuktu and the Asante kingdom—just to name a few, mind!
- 21 There are some reactionary black figures who do in fact want to claim that blacks are superior to whites, and these marginal fanatics are often the ones trotted out by the press and quoted by journalists when this debate over African civilizations arises. Unless we trot out the KKK's Grand Dragon as an expert in Western history for these same debates, I see no value in this distortion.