Charlton D. McIlwain. 2020. *Black Software: The Internet and Racial Justice, from the AfroNet to Black Lives Matter*. (New York: Oxford University Press, 2020. X+296 ISBN 0190863846)

In *Black Software,* Charlton McIlwain, NYU Professor of Media, Culture, and Communication endeavors to represent Black American participation in the development and use of computing and digital technology from the late 1950s into the early 2000s. He examines the conflicting policies of government, business, and academia, who used these technologies to both promote and thwart affirmative action and civil rights gains, leaving progress largely to individual Black efforts to secure technology access and education. Counterintuitively, these exclusions fostered a budding network in the form of a "Black software" community, which developed both an activist and entrepreneurial agenda. This persistence of Black American engagement with computing technology, as well as resistance to exclusionary forces, provided fertile ground for the rise of a Black digital activism. McIlwain examines how these activist efforts sought to eliminate the unequal conditions of access across racial and gender lines that became known as the "digital divide." In compiling this history, McIlwain seeks to answer this question: "…will our current or future technological tools ever enable us to outrun white supremacy?" (8, 112).

The work is organized into two halves, both drawing from an extensive set of government, business, and media documents and interviews. The first half explicates notable points of public policy and computing history that impacted the access and education available to Black Americans in the 1960s-70s. Within this

framework, McIlwain cites the following: *disparate impact theory*, a stipulation promulgated in the 1964 Civil Rights Act which sought to eliminate discrimination policies and practices that negatively impacted protected groups (31); the 1968 Equal Employment Opportunity Commission's efforts to expose discriminatory promotion practices (including progressive monolith IBM); and the academy's struggle (specifically at MIT) with civil rights groups, admission processes, and technology access. These examples, among others that McIlwain cites, indicated that affirmative action efforts by no means guaranteed equal access to or success with technology.

Concurrently, McIlwain reveals an emergent and loosely organized network of Black hobbyists, entrepreneurs, digital organizers, evangelists, activists, and knowledge brokers during the 1970s-80s (7). Referred to by McIlwain as the "Vanguard", their individual histories represented how Black people negotiated different modes of technological participation through educational access, employment and entrepreneurship, community organizing, and content development and distribution. Vanguard members emerged from a variety of experiences, such as traditional civil rights organizations (CORE, SNCC, EPIC) and the early network systems projects of the 1960s-80s (ARPANET, BBS, Project MAC, Usenet, FidoNet, NSF Network and AOL). As they came together, these members began collaborating in the new business and activist networks of the 1990s internet.

McIlwain positions the Vanguard's efforts as a corrective to the combined government, business, and academia failures of the 1960s-80s to provide people of color equal access to technology. Numerous conventions during the 1990s formalized these networks, including the Congressional Black Caucus's "A

Gathering of Eagles" and the "Interactive Niagara Movement" of 1994 (111). The 1999 Vanguard briefing at the Clinton White House, which sought to prioritize internet content and capital investments, substantiated their efforts to increase access to the "information superhighway" for Black communities, college students, and businesses. Consequentially, in the late 1990s, the Vanguard experienced significant upheaval as the "Battle for Black Cyberspace" (141) created competition between online spaces such as GoAfro, Universal Black Pages Afronet, NetNoir, and Blacknet. This competition highlighted important debates over form and content while paving the way for other Black American networks and contributions in the 2000s.

McIlwain uses the second half of the book to explore how the computer and civil rights "revolutions" of the 1960s created dual concerns of job loss due to computer automation and institutional use of computers to restrain the political, economic, and social gains made by Black Americans. The era's increase in urban social protests and the subsequent debate over whether to frame them as "riots" or "civil disorders" provided social engineering opportunities using computing technology. Here McIlwain places IBM at the center of this development. The 1965 Watts conflagration exemplified the coordination that occurred between government, business and media to solve the "Black urban-crime problem. He describes how IBM's courting of the Johnson Administration, in particular through the Law Enforcement and Administration of Justice Commission and the Kerner Commission on Civil Disorders, as well as the major media outlets, to propose its computer-networked Criminal Justice Information System. This software program became part of the new national law enforcement model after Kansas City adopted it

following its 1968 "civil disorder." This dynamic came to dominate the relationship that Black Americans experienced with computer technology for decades, as a much more coordinated criminal justice system could observe, profile, and isolate potential "ghetto agitators" (210). Consequently, the Johnson Administration's "law and order" campaign encouraged this targeting which escalated the mass incarceration of Black men.

Against this backdrop, McIlwain uses the Vanguard to provide contrast. Here he turns his focus to technology-minded Black women as a source of resistance to being technologically disempowered and as leaders in computer-based Black activism. He includes a brief mention of the Black female analysts at NASA in the 1960s before devoting significant attention to reluctant 1980s technophile Anita Brown, who became "the best-known Black woman on the web" during the 1990s (164). A rare example of a Black female technology advocate and activist, Brown created *Black Geeks Online*, which sought to "connect tech-savvy African Americans (who) are willing and eager to bridge the widening gap between technology haves and have-nots" and *Taking IT to the Streets*, an offline effort that created urban cyberlabs where computer literate volunteers trained and modeled computer literacy and activism. These activities exhibited how Black producers of computer and internet content could connect to Black consumers in order to strengthen technology awareness and presence, an important theme that McIlwain carries throughout the book. He also showcases freelance writer Farai Chideya's upstart journalism in the late 1990s-present at Harvard, *Newsweek*, CNN and *New York Online* blog *PopandPolitics*. Her efforts acted as a model for new ways to produce Black multimedia content that discussed pop culture, political analysis, literature, and civic

engagement among others topics.

Perhaps McIlwain's strongest illustration surrounds Congresswoman Maxine Waters's charge to the 1996 Congressional Black Caucus Convention. She demanded of these leaders an integration of issues regarding internet access and connectivity with larger social justice issues, such as the war on drugs, to strengthen awareness of inequalities through newer modes of computer mediated activism. McIlwain uses Waters's charge to compare the racially unequal treatment of cocaine-as-stimulant use among Whites in the Silicon Valley technology corridor to the crime-producing, urban Los Angeles crack epidemic of the 1980s and 1990s. He effectively extends this into a "coding" metaphor to elucidate the promotion of white supremacy and purity as opposed to the isolation and removal of the Black male through the unequal treatment of crime and access to technology.

McIlwain completes his compelling work by examining the Vanguard's Web 2.0-era activities and the subsequent rise of digital activism. Using the *Black Lives Matter* movement to illuminate the emergent use of digital media and social networking, McIlwain reinforces the point that individual persistence in Black communities will continue to be necessary to maintain a stake in technology access, production, and direction. McIlwain concludes by rephrasing his original question, "there is something that is definitely different…but can we ever outrun our history?" (258-59). While clearly cautioning the reader against lofty expectations for unprecedented change, McIlwain effectively narrates how one generation's grass-roots computer networking influenced the next generation of "netizen" activists. He successfully portrays how the broad range of 1960-70s Black activism translated into

representation in the various technology platforms of the latter twentieth and early twenty-first centuries.

While the book repeatedly meanders through the time period, the narrative effectively combines past and present to generate clear examples of technological representation. Although not exhaustive in any one area of technology, McIlwain's collection is substantial enough to paint a picture. As a historical work, this book pieces together a wide range of actors, events, and efforts that underscored the importance of both White and Black contributions necessary in encouraging individual activism and thwarting institutional control. The humanistic research he conducted, specifically, the historical research, ethnographic methods, and impressive interview collection, represent a valuable collection and method for students and instructors in the humanities. *Black Software* is an important addition to the growing scholarship of Black representation and identity in communications, media, and emergent technologies.

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