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*Black Software: The Internet
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BOOK REVIEW

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ABSTRACT

Using both first-person interviews and historical research into organizations ranging from the NAACP to the FBI and CIA, Charlton McIlwain charts the development and intersection of Black culture and the technoscientific technosystem of computing through the twentieth and twenty-first centuries. He charts the ways in which Black people and movements, despite their marginalization in the history of computing, have utilized computers and technology for their own liberation.

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In the introduction to his 2020 text *Black Software*, Charlton McIlwain notes that he began the process of writing around 2016, after the deaths of Trayvon Martin, Renisha McBride, Eric Garner, Mike Brown, Sandra Bland, and so many others who had been brought to public prominence by internet-enabled activism, and that he continued writing throughout the last five years of protests for racial justice. At the end of the final chapter, McIlwain recounts his 2014 appearance on a New York public access show, alongside Reverend Dr. Calvin O. Butts III and Bronx City Councilman Ritchie Torres, where the Rev. Dr. Butts made it clear that these deaths of Black people at the hands of the state were nothing new. The killing of Black people by agents of the state had been going on for fifty, one-hundred, two-hundred years, Butts said — since before America was America — so why were they just now getting a great deal of attention, when they were truly nothing new? It is in part the Rev. Dr. Butts question and conundrum which animates McIlwain’s *Black Software*: What is new about now, today, when there’s nothing new about what’s happening now? Because, as McIlwain responded to the Rev. Dr. Butts, “...there is something that is definitely different.”¹

Between these two bookends exists *Black Software*— a clear look at the history of computing through the lens of those who were, for the most part, excluded from the status quo majority and elite institutions of computing, but who nevertheless made their mark. McIlwain constructs the text to interrogate the multivalent meaning of the term “black software,” both in the sense of “software and computing technology created by Black people,” and in the sense of “the hidden sociological and infrastructural constitution of computing technology in relation to the Black community.” McIlwain examines not only how Black coders and engineers and community organizers came together to leverage and explore computing in multiple ways, but also how and why those Black creators and leaders had to struggle against a sociotechnical system made to exclude, surveil, categorize, and marginalize them. What *Black Software* describes is similar to Andrew Feenberg’s *Technosystem*: an interconnected and mutually sustaining network of logics, artifacts, and values which bring about and depend on socially constructed and directed knowledge or assumptions.² McIlwain demonstrates how assumptions about Black people’s intelligence, their purported criminality, and their economic status or value or overall worthiness are woven in and through the makeup of computing, telecommunications, and American society as a whole.

Black Software is arranged into seventeen chapters across two major sections. In conceptual structure, the book forms a set of recursive loops, much akin to certain programming protocols. Each chapter moves forward chronologically, using the perspectives and testimonials of one or two particular people to explore each era and the efforts of Black people throughout the information age. Then, the following chapter takes a different, crucial person, concept, or social movement previously mentioned and loops back in time to follow their development forward again in more detail, thus moving the whole looping process forward each time. Book One, comprised of chapters one through nine, explores the historical intersections of computing and the Black Liberation Movement, and Book Two— chapters ten through seventeen— lays out the construction of carceral and surveillance computing technology, and the use of that technology on the Black Liberation Movement by the United States government. In this way, the whole of *Black Software* chronicles the history of Black computing from the 1950s through the 1990s.

Using both first-person interviews and historical research into organizations ranging from the NAACP to the FBI and CIA, McIlwain charts the development and intersection of Black culture and the technoscientific technosystem of computing through the twentieth and twenty-first centuries. McIlwain deftly interposes excerpts from interviews with a group of people he calls “The Vanguard”: Kamal Al-Mansour, Lee Bailey, Anita Brown, Derrick Brown, Charlene Caruthers, Allen Frimpong, Malcolm Cassell, Farai Chideya, Barry Cooper, E. David Ellington, Tyronne Foy, Ken Granderson, Dream Hampton, Timothy L. Jenkins, William Murrell, Ken Onwere, and Idette Vaughn. This group’s recollections about their lives, compatriots, struggles, community, and work all give *Black Software* an important emotional heft and resonance. Each person McIlwain showcases was differently involved with and impacted by the work of bringing computing

1 Charlton McIlwain, *Black Software: The Internet and Racial Justice, from the AfroNet to Black Lives Matter*. (New York: Oxford University Press, 2019), 260.

2 Andrew Feenberg, *Technosystem: The Social Life of Reason* (Cambridge: Harvard University Press, 2017).

technology into the Black community and the Black community's engagement with computing to the attention of the wider world. Each voice and recollection thus serves as evidence, not only of the richness of the history of Black computing, but of the multiplicity of values and aims within that project. In McIlwain's telling, even though the Black community did and does labor under the same weight of systemic racism, neither that community's aims nor its proposed solutions are by any means monolithic.

From the very first chapter, *Black Software* emphasizes that many of the people we will meet were educated and employed on university and governmental campuses built and worked by slaves, and that these people faced harassment and discrimination from white classmates. In this way, McIlwain ensures we remember that racism (and many other forms of discrimination) was worked into the literal architecture and the social construction of the places where computing was born. These institutions weren't alone, however, as in the 1950s and 60s even private companies like IBM specifically crafted their job applications to weed out Black applicants, and then those who made it in anyway were given programmer aptitude tests which, if failed, would result in those Black applicants being categorized as "unteachable." But Black coders took the knowledge they could gain from those institutions back to their communities and used it to initiate conversations with each other and other like-minded individuals. Here, McIlwain draws the clear analogy between the shared "secret" handshake greetings between Black people and the TCP/IP handshake protocols between computer networks: a shared knowledge base allowing for people to communicate across what seems like an unbridgeable divide.

Black Software highlights Black people working at universities and corporations in Boston, New York, Los Angeles, Atlanta, and points in between, both separately and together, in concert and at odds, all in an attempt to ensure that their community had a stake in the burgeoning and increasingly central field of computing. From ARPANet, to BBSes, to FIDONet, to Usenet, to CompuServe, to America Online, and from AfroNet, to the Universal Black Pages, to NetNoir, to *Knowledge Base*, to the African American Cultural Forum, and so many more, McIlwain demonstrates that Black people were simultaneously intimately engaged in the formative stages of the Internet as we know it, and used their knowledge and positions to build tools to serve and connect Black communities. But McIlwain is also unflinchingly clear that these efforts often struggled against differing values within the Black community as well as against unseen and pervasive external forces. Starting with a breakdown in the origins and dispersal of crack and powder cocaine, then moving into the differences in mandatory minimum sentencing between their communities of users, McIlwain paves the way for a deep dive into how computerized categorizations of Black people as more likely to be criminal began, and how they persist to this day.

Book Two loops back around to 1960 to talk about the creation of "black software" as the code that entraps us and served as the Vanguard's invisible, omnipresent antagonist. Dr. Donald N. Michael developed the term "cybernation" to describe the process by which computing technology takes over jobs and spaces, and how that process benefits those at the top at the expense of those in middle and at the bottom, and benefits the *status quo structure itself* most of all. Even as Black people marched and demonstrated for their civil rights to hold jobs and take equity within a system, many could see that those positions were being winnowed away by computerized automation. But this form of Black software wasn't merely economic; it was also woven through the carceral legal system and the public's communication around the Black Liberation Movement. IBM itself sponsored coverage of the 1965 LA Watts Riots, putting its name at the beginning of every segment: "International Business Machines. IBM Presents, CBS Reports: Watts, Riot or Revolt." The coverage on offer was purported to be in service of the Black community, but still managed to cast the Black communities in the worst possible light, and prey on the fears of 1960s white America, with reporter Bill Stout's narration and LA Police Chief William Parker laying the blame for violence at Civil Rights' leaders' feet. From here, IBM positioned itself as the "solution" to America's "Negro Problem."

McIlwain details how IBM had previously developed a categorization system used by Nazis during the Holocaust as well as a surveillance mechanism called the "Book Of Life" for Apartheid South Africa, which monitored every movement and transaction of whoever was entered into it and which was deployed almost exclusively to track and monitor Black South Africans. The US government saw these as successes to be emulated and added to efforts such as COINTELPRO, and asked IBM to help develop their own tools to track, monitor, and respond

to “the Black problem,” a phrase which was cover for a direct and deliberate conflation of Black life with a perception of inherent criminality. The Law Enforcement Assistance Administration was formed to develop and use automated tools to “aid” in state and local law enforcement processes. The tools developed by IBM and the US government included weighted metrics of criminality and networked databases to correlate the behavior and past records of anyone entered into them. These systems relied on paper records written by humans and encoded by hand into the system, and Black individuals and communities “somehow” always managed to be regarded as “higher risk,” rating increased response from police. Not only that, but if a “high risk” (Black) individual was seen in a “low risk” (white) neighborhood, then that too would result in greater personnel deployment. These tools and metrics are the precursors to contemporary predictive policing and sentencing tools, such as the Compas sentencing and recidivism algorithm investigated by ProPublica in 2016; we are confronting the same problems today as existed in the 1960s.

Though racist logics permeate the history of computing and the Vanguard dissolved with the bust of the dotcom bubble, the field of computing is still full of Black people working to bring the Black community and its concerns into the wider public. “But there is something that is definitely different.”³ What has changed, McIlwain seems to argue, is a visibility and an immersion of the Black community within the fabric of the internet and computing as a whole — Alicia Garza creating #BlackLivesMatter to remember Trayvon Martin; Charline Caruthers and the Black Youth Project 100; Tweets about the death of Mike Brown getting picked up by national news; Dream Hampton on Twitter using filmmaking knowledge to develop Cop Watch. This, too, is Black Software.

Charlton D. McIlwain’s *Black Software* is an accessible, engrossing text which illuminates previously obscured areas of the history of computing, suitable for historians of technology and non-experts alike, as each group will learn something from both the historical details and the relational context in which McIlwain has placed them. Through this text one may learn that, though the persecution and deaths of Black people at the hands of the state is nothing new, neither is Black people’s determination to push back against those oppressive systems and develop new, liberatory strategies and systems of our own. The histories of computing technology and Black liberation have always been entwined, but as McIlwain demonstrates, the way they have come together at this time and in this place to be engaged and enacted by Black activists is still “definitely different.”

COMPETING INTERESTS

The author has no competing interests to declare.

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REFERENCES

- Feenberg, Andrew. *Technosystem: The Social Life of Reason*. Cambridge: Harvard University Press, 2017.
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- McIlwain, Charlton. *Black Software: The Internet and Racial Justice, from the AfroNet to Black Lives Matter*. New York: Oxford University Press, 2019.

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