

Book Review Symposium

Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism*, New York: NYU Press, 2018. ISBN: 9781479837243 (paper); ISBN: 9781479849949 (cloth)

In a book that is concerned with implicit and explicit biases and their effects on our creations, it behooves me to start this review by divulging some of my own. I am a black female graduate student and often find comfort in works by other black women. I am also concerned with how our identities shape our worldviews. For my own research on urban interpersonal sidewalk interactions I like to use a combination of feminist methods and geographic information systems, so I have a vested interest in the compatibility of these two ways of thinking (often positioned in opposition in academic geography). I am concerned with the phenomenological experiences of people, but also in how we process information.

When I was asked to review the book one of the first things I did was find and follow Safiya Noble on Twitter (@safiyanoble). I'm always looking for black scholars to follow on social media. What I found, in advance of her book release, was a parade of underinformed skeptics who were attacking the book and its methods before they read it (it hadn't yet been released to the public). Some of the people were prominent computer science professors questioning how something as "objective" as computer science could possibly be biased. These attacks surprised and shook me; I identified with her critique that computer science is often taught without regard to ethics or morality, would my work eventually be under the same scrutiny?

I began to question my own methods. Had I chosen these methods for identity reasons or because they were the methods that would convince the most people? Do we "feed the trolls" by

responding to all criticisms? Are internet comments or conference questions good-faith skepticism to begin with, or an effective tool for intimidating minorities? Is it better to live in the silo (or ghetto) of the like-minded or try to stand in the wider public? Had I been chosen to write this review because I was a black woman? Because I used black woman methods? Instead of inspiring me, watching this successful black woman made me rather afraid of what notoriety could bring for people who looked like me.

To paraphrase Toni Morrison, this is the purpose of racism, to sow seeds of doubt and distract us from our work. Reading this book brought a great many examples of people's identities being overpowered by others. Noble explains the logic behind it. Women and minorities are less likely to tell their stories on the internet since algorithms favor the most profitable, and most "popular", searches and sites. The titular example was Noble's Google search for black girls which brought up pornography, not activities for her young nieces in the area. The prevalence of rape culture and racism on the internet make this a rather predictable outcome, searching for Latina yielded similar search results. Another compelling example is the fact that martinlutherkingjr.org was a website managed by neo-Nazis and White Supremacists. Unlike "black girls" this cannot easily be explained by search popularity as this is not likely the most sought after site for those searching for the Reverend Dr. Martin Luther King. This is the result of the first-come, first-served attitude of Google and a lack of internet regulation on hate-speech in the United States.

Noble's final example is perhaps most illustrative. In the last chapter she interviews Kandis, a hair salon owner in a small, mostly white college town. Kandis' salon specializes in black hair, and although Kandis has had her salon for 30 years, she struggles to show up on Yelp, the business review website. Though the Yelp algorithm is a proprietary black box, it seems to prioritize the most popular establishments. Although her salon may be busy, it serves a niche market and probably will never be one of the most popular salons. Locals who search using keywords like "black hair" won't see her salon since the algorithm favors words like "African-

American”, the term that white people use to refer to black people, not generally how black people refer to themselves. In addition, black people and women are less likely to “check-in”, wary of extra tracking in their already over-policed lives. This type of *digital redlining* mimics the real-estate redlining, favoring white male hegemony and keeping people of color from the means to self-sufficiency and success. Kandis describes how her business helps bridge the isolating experience of being a black woman in need of hair care, but she can’t do this if she can’t be found.

How do we create algorithms that are more equitable when the perceived objectivity of popularity leads to experiences for a wider, and in the US, whiter audience? One important feature that Kandis suggests for the Yelp algorithm is rewarding a business’ age, or in other cases, valuing expertise. The other main idea in the book is seeking to decouple commercial interests from information-seeking searches. Noble imagines a search engine where you could specify whether you wanted pornographic, entertainment, non-commercial or commercial sources to be included in your search results. Any move towards transparency seems helpful, so we know whether the link at the top of the list has had the most unique visits lately, is popular in my area or has paid for the highest placement. Since the book’s publication, there has been more and more awareness of misinformation and skepticism of information masquerading as facts. It’s important to keep in mind that the slice of the internet that is dedicated to the most unknown subjects is potentially written by those who understand it the least.

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