

## **Algorithms of Oppression: How Search Engines Reinforce Racism**

SAFIYA UMAJA NOBLE

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After reading *Algorithms of Oppression*, Safiya Umaja Noble's central arguments that search algorithms enact and re-enact oppression seem clear, obvious, and self-evident. But this is due to the masterful way Noble systematically shows how what we search and what we find, are deeply intertwined with the white supremacist and unequal society and culture we are all enmeshed within. *Algorithms of Oppression* illustrates not only how the platforms and programmes we use in our daily life are created and built within a specific economic, racial, and gendered context, but that that context and those platforms enact and reinforce new oppressive social relationships as we use them. The underlying argument here is one that is probably familiar to readers of *Archifacts*, but it bears repeating: computers, algorithms, big data, and artificial intelligence are not neutral, or objective, or inherently benign. Rather they were made by human beings in all their specific imperfections. And those human beings most likely work or worked for large capitalist and multi-national corporations whose first goal is to advertise or sell something, not to provide trustworthy information and knowledge.

The questions and issues Noble, an Associate Professor of Information Studies at the University of California, Los Angeles, and a visiting faculty member at the Annenberg School for Communication at the University of Southern California, raises are central to archivists and record keepers, as well as to our colleagues working in libraries, museums, galleries, or anywhere where people come (or we hope people come) when looking for authoritative information. While I don't hear it so often anymore, I can remember a time in the not so distant past when every conversation about how to make archives and library catalogues, databases, websites, finding aids, and other services more user friendly, meant to "make them more like Google". Google and other Silicon Valley technology companies are adept at organising and classifying information, at using metadata to help people find information, to guide us to specific information (and also to track and understand us). But while as information professionals working in archives, libraries and associated fields, we work hard to use open standards and be transparent about how we organise ourselves and the information resources we are custodians for, Google's search

algorithms and business practices are trade secrets. The white screen and the empty search box is the front end to a giant black box that we have been collectively asked to take at their word that it will “do no evil”. But we have never been allowed to peek behind the curtain and see how it all works.

Noble’s book gives us that peek. While she doesn’t have access to the code that is determining the search results of your latest query, she has done the work to interrogate why search results are not static, but subject to change and manipulation. Perhaps more importantly she illustrates the effects our search results have on our understanding of ourselves and our world. The book is particularly persuasive in showing how search results that highlight or bring to the forefront racist, sexist, and anti-Semitic information are explained away by Google as neutral results of the algorithm or a glitch in the system that Google has no control over; but then these same “glitches” are later quietly fixed or tweaked when public outrage is expressed.

One example of this is illustrated on the cover of this book, and outlined in her chapter “Searching for Black Girls”. In this chapter Noble returns to a story first told in the introduction of doing a search on the keywords “black girls” when looking for activities that would be of interest to her young stepdaughter and nieces, and the first result was for HotBlackPussy.com. From this initial shock Nobel explains she has since spent hours researching and teaching all the ways Google “could completely fail when it came to providing reliable or credible information about women and people of colour and yet experience seemingly no repercussions whatsoever” (p.4). Using the lenses of critical information studies and critical race and gender studies, Noble analyses how and why the representations of marginalised peoples have been shaped by digital media, even as these same media are characterised as neutral technologies. She examines who is responsible for the search results we all see, and shows how the workforce of Google, and other Silicon Valley firms, are largely white and male, leading to an environment where diverse perspectives are not sought out, and where white and male supremacist perspectives go unchallenged or are so prevalent as to be rendered invisible. Noble then outlines how Google generates much of its income through the sale of advertising and the way that has informed the way web designers and developers build websites to drive traffic, leading to a whole sub industry and field of search engine optimisation that can be gamed by anyone paying attention. Finally she connects this narrative to the history of media representation of women and especially women

of colour, looking particularly at advertising and the way “stereotypical depictions of women and minorities in advertising impact the behaviour of those who consume it” (p.105).

Throughout the book Noble’s argument is not just that these search results are damaging to particular groups of people, but that black box information-sorting tools like Google have become essential to many data-driven decisions. We have by default given over much of our information categorising, classifying, and retrieval practices to a number of opaque private companies, which now not just provide us with information, but are instrumental in shaping what we know and understand about ourselves and the world. When we have no access to how that information is stored, sorted, or controlled, we have no control over our histories, our identities, or our future. This is a huge issue, and one of the key reasons libraries and archives have traditionally been considered key institutions to a healthy democratic culture.

The majority of this book was researched and written before the 2016 United States election, and a postscript by the author, written in late 2016, discusses some of the recent revelations of the way digital media platforms from Google, to Facebook and Twitter, were manipulated to sway opinion and control the conversation in the 2016 US election and the United Kingdom’s Brexit referendum. Noble argues that we need to advocate for legislative oversight of these corporations, and for regulations that control who has access to the algorithms that organise the data and metadata found online. An important first step in this work, and something that archivists and record keepers should be involved in, is doing the work to inform the public and increase everyone’s digital literacy about how our digital platforms work. It is part of all our jobs to encourage active society engagement in understanding how people are described, classified, and organised in historical, economic, and political context.<sup>1</sup>

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**Endnote**

1. I am reminded while writing this review of Thomasin Sleight’s recent 2018 National Digital Forum talk on ten years of Digital New Zealand, and the importance of an open source platform for Aotearoa GLAMs to share and make their metadata and content discoverable outside the purview of large for-profit digital platforms such as Google, Facebook, etc. <https://www.youtube.com/watch?v=0OZkC9lx3g>