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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)

I will go out on a limb and assume that if you are reading this collection of academic responses to a book about algorithmic oppression in a leftist journal, then you likely agree with me about the exciting promises of Safiya Noble's book. That admittedly is presumptuous, as intersectional racism is un/consciously reproduced in both symbolic and material ways within academic circles–even for those of us on the Left (just take a look at the list of panelists for many Marxist geography sessions and you will see what I mean!). Still, we are likely to coalesce around the notion that *Algorithms of Oppression* draws our attention to the important ways internet technologies curate, articulate, and reproduce "race" as a key social organizing logic. We are likely on the same page with regard to the book's key insight: search engines and information sorting algorithms reaffirm whiteness as the default lens on the world, despite the seeming "objectivity" of the computational mathematics these algorithms employ. And while we may diverge in our precise response to "What is to be done?", we would likely recognize the value of Noble's suggestion to break up the private, multinational, borderline-monopolistic corporations that feed us this information. They are, indeed, *hegemonic* by conceptualizations as broad as Gramsci's or Laclau and Mouffe's, and a more racially just world might require their dissolution.

Yet, I may still depart from complete agreement with my audience. *Algorithms of Oppression* is situated within the growing interest in the social and political implications of algorithms, a niche field spanning broad interdisciplinary conversations. The collection of research in this area incites us with important questions, and yet I often find its terminological

and methodological approaches untenable–to say nothing of the consequent problematics raised for its conceptual foundations. More specifically, this often takes two forms: some seem to use "algorithm" as a stand-in for "things occurring in a black box", and others want to define it so broadly that it encompasses nearly any computational operation. The first can be seen when Amoore and Raley (2017: 3) declared algorithms to be "both technical process and synecdoche for ever more complex and opaque socio-technical assemblages"; the second, when Crampton and Miller (2017) say, "a recipe is an algorithm". The result can be confusing for those looking to think about algorithms *per se* as actants within broader systems alongside software, databases, protocols, and so on. It's unfortunately not rare that scholars describe the impacts of "algorithms" in ways that sound far more like software, or that are unthinkable without being linked with databases. Of course, if algorithms are both (nearly) everything *and* (nearly) unknowable, then how are we as critical researchers to say anything meaningful about them, and much less, to build a research program around them?

In *Algorithms of Oppression*, Noble provokes us with search engine results that disturb even those of us already familiar with racism in digital technologies. She shows how companies like Google periodically (and unreliably) address problematic results, and how difficult it is to demand the right to be forgotten. As a political project, the stakes are clear. As a knowledge production project, however, the book raises many important questions that call into question the approach's soundness.

I will focus on three. First, we never see an algorithm itself, but instead only the *results* of algorithms. Implying less systematicity, we are shown screenshots of search results, and at the risk of methodological pretension, this does not hold up well to critical scrutiny. There are often multiple algorithm versions running simultaneously for testing and user research purposes, and they are often linked in compound arrangements, so it's difficult to identify with any level of certainty which part or parts of an algorithm are responsible for particular societal impacts (Kitchin 2017). Of course, this is largely by design: algorithms are often valuable assets to

corporate actors, and peeks "under the hood" are all but impossible (and not just for secrecy, as some are immensely complex with few individuals having a full grasp of their scope and purposes) (Gillespie 2014). To an extent, Noble is aware of this as she manages to distinguish the different algorithmic practices constituting: (1) a simple search result; (2) the AdWords platform that receives some of her attention; and (3) search engine optimization "rigging". Arguably, though, she later conflates them, again, under the umbrella "algorithm".

Second, it is unclear how much of the algorithmic results Noble shows us should be explained by the massive datasets that search engine companies like Google and Bing have about individuals–in other words, not the algorithm itself. Google search results, and AdWords, derive largely from personal search histories, demographics Google surmises about the searcher, the geographic location of the searcher, and other personal information, an acknowledgement that led Gillespie (2014: 169) to argue that "[a]lgorithms are inert, meaningless machines until paired with databases on which to function". I would argue the same could be said of software code, as I mentioned above. It is a little too easy to say that "the algorithm" is responsible when terminological and conceptual precision is muddied and have come to mean anything at all.

Third, I'm intrigued by the tension in *Algorithms of Oppression* between analytically treating algorithms as works of art and thus symbolically constituting real worlds, and as an expression of unequal social relations similar to gendered domestic work for feminists and policing for race scholars and radical Marxists. Noble engages the first approach when discussing the imagery surrounding black (women's) bodies (p.92-109). In this treatment, the algorithm can be analyzed as an expression of worldview that simultaneously performs that worldview; it is mutually constitutive of social relations. I think this is what Noble wants us to take away from our read. However, one may also contend that search results' rankings are partially explained by the always-already racialized landscape of internet information, such that drawing out co-occurrences of terms is likely to draw out that extant racism. Noble at times slips into this formulation, such as when she says, "I do not look deeply at what advertisers or Google

are ‘intending’ to do. I focus on the social conditions that surround the lives of Black women living in the United States and where public information platforms contribute to the myriad conditions that make Black women’s lives harder” (p.90). From many perspectives, including Gramsci’s and Laclau and Mouffe’s, internet information would already reflect racist relations, and thus search engines simply draw that racism in stark relief. This is less to excuse search institutions and more to ask how we as critical scholars attribute the agency of scare-quoted “algorithms”.

I think these points raise important challenges for algorithm studies as a whole. For one, and most obviously, what does it mean politically and intellectually that we are increasingly unable to peer into the algorithms, databases, software, and other information architectures that reproduce the racist geographies in which we live (Pasquale 2015)? Could that set of social practices itself–the obfuscation of algorithms’ inner workings–constitute the objectives of an algorithm studies? I also raise these points to call algorithm studies to turn the critical lens on itself by subjecting its scholarship to greater conceptual and methodological scrutiny. If the concept of “algorithm” comes to mean anything but also nothing (or nothing observable, at least), the concept loses all meaningful concreteness and its scholarship loses political and intellectual potency. This to me seems a real risk that the field faces at its current juncture.

At the same time, I want to underscore that ultimately, I arrive at a very similar conclusion to Noble: that the social institution of “search” should be reconceived as a public resource, subject to critical dialogue and democratic participation. Such a move would represent a momentous political-economic shift that is hard to envision but ever more important because of that. While Noble and I might take different paths to get there, we end up in very similar destinations.

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