Interview with Dr. Safiya Umoja Noble, Associate Professor at UCLA, visiting faculty member to University of Southern California’s Annenberg School of Communication. Dr. Noble will join Oxford Internet Institute as a Senior Research Fellow in 2019.

Let’s start with the first question: What made you write your book Algorithms of Oppression: How Search Engines Reinforce Racism?

Well, I wrote this book for a few different reasons, the most important of them being that with the intensification of the internet in our everyday lives, I felt most of the things I was reading in the fields of information studies and digital media studies were not concerned specifically with the incredible stakes that exist for Black people, and other people of color. I had always been intellectually and professionally attuned to the ways in which
Black/African Americans were represented in popular and mainstream culture, media, advertising, and arts. There was a drive for all people to increasingly and unquestioningly use the web - with search typically as an entry point - to help make sense of culture. And when I discovered that we were so grossly misrepresented in search engines and their results, I felt that this would be an important topic to write about. I was disgusted, to be honest, that pornography was the primary representation of Black girls in large commercial search engines, and I knew this was a case study that I could use to both specifically but also as a mechanism by which to critique more broadly the political economy of the internet, and of digital information as commodity.

In your book, you offer the term “technological redlining.” What do you mean by that? Could you please say a bit more about that?

I’ve come to detail “technological redlining” as a form of digital data discrimination. It’s a process by which our digital identities and activities are used to bolster inequality and oppression. It is often enacted without our knowledge, through our digital engagements, which become part of algorithmic, automated and (so-called) artificially intelligent sorting mechanisms that can either target or exclude us – in either case typically not to our benefit. I think people of color will increasingly experience it as a fundamental dimension of generating, sustaining, or deepening racial, ethnic and gender discrimination. This process is centrally tied to the distribution of goods and services in society, like education, housing and other human and civil rights, which are often determined now by software, or algorithmic decision-making tools, which might be popularly described as “artificial intelligence.” Technological redlining, as I see it, is closely tied to longstanding practices of “redlining” that pre-date the internet, and which have been consistently defined as illegal by the United States Congress. This type of redlining is increasingly elusive because it’s deployed through internet-based software and platforms, and it typically precludes oversight or intervention. In essence, it’s automated discrimination under the guise of a more perfect and objective adjudication process when it is anything but.

Google is a giant within the high-tech/creative economy system. What do your findings say about the ways in which race is inscribed within the creative industries at large?
Most tech-media companies think they are objective, neutral, fair, and unbiased in the ways they “innovate,” but the truth is that we see rampant discrimination and exclusion of underrepresented ethnic minorities and women from decision making positions of power—many of whom might be able to intervene or see racist and sexist output from these systems if they were more significantly employed and respected. Beyond that, we have a huge class of technologists that are deeply under-prepared to think about the social impact of their work—systems design, functionality, product development, data manipulations, and so on—on society. To this end, I often say that those who know so little about society have no business designing and deploying their technologies on society. I think the colorblind and gender-blind ideologies that bolster a false notion that only the best and brightest are working in large tech corridors around the world—Silicon Valley being the prime example of this—precludes more nuanced and complex ways of thinking or different ways of knowing that come from people, who, for example, may have deep training in and experience with power, culture, and the social, political and economic consequences of what it means to, say, erase civil rights protections, as just one example. Yet, we see these kinds of systems expertly taken up in the service of fomenting or exacerbating discrimination in the areas of housing or employment, or in the propagation of hate speech or efforts to organize White nationalist terrorism. I would much prefer to have people with graduate degrees in ethnic studies, gender studies, sociology and so forth be in the room to think through whether some ideas should come to fruition at all, rather than have people without this kind of social expertise unleash technologies with almost no regulatory, or civic, oversight. We do not have the kinds of consumer safety protections or human and civil rights frameworks in place to seek remedy for the aftermath of some of these projects, which have incredibly disparate effects on the most vulnerable and oppressed.

Your book is quite interdisciplinary. In addition to political economy, you primarily deploy black feminist theory. What contributions does black feminist theory have to offer for those who want to understand how the creative industries work in the 21st century?

Well, one of the most amazing things about seeing things from multiple vantage points or interdisciplinary frameworks is that it allows us to ask different research questions, and uncover different practices or answers than we may have seen from a singular vantage point. Many people had written about Google and large tech companies before
me, but using Black Feminist Thought, for example, allowed me to center Black women and girls in my case studies, and that led to theorizing about the impact of something as seemingly benign as a search engine in new ways. Remember, Google search is visually represented in terms of user interface design as a literally white box! The implication, of course, is that 1) there’s nothing to see in terms of the process of sorting content on the web, and 2) it acculturates the public to thinking there are answers to complex questions about people and ideas that can be answered in .03 seconds. I wanted to parse these notions, because a lot is at stake when we assume the veracity of information served up by, or even what is answerable by, commercial search engines. People often forget that commercial search engines are advertising platforms for the highest bidders and the most technically proficient at optimization, and that’s not going to provide the same thing as a library, archive, university, school, or other knowledge center where we engage critical thinking, complexity, and time in the process of coming to understand and know about social phenomena, typically in the absence of a profit motive.

More importantly, writing this book allowed me to think about people in our society who are vulnerable, not well-capitalized, not in the numerical majority, as a focal point for studying whether they were fairly represented or respected. I wanted to think about that in the context of evidence I collected that showed the systems themselves are designed to optimize against women and people of color, not simply by happenstance, but because racism and sexism is incredibly profitable online. Black feminism and critical race studies in the study of the internet led me to discover, for example, that Latinas and Asian women and girls did not fare much better in how they were misrepresented by search, and that the historical and social processes undergirding such representations are then taken up into and redeployed from a system massive in scope and scale on the one hand, and masking those processes on the other.

It is my belief that my work has helped to trouble and ultimately dislodge the idea that these systems are neutral and fair; that alone is a great thing to see, because when I first started my academic research in this area almost a decade ago, most people, many of whom were in positions of authority over my academic career, in fact, told me that it was technologically impossible for socio-technical or computational systems to racially discriminate. Contrast that with today, when we now have many scholars working on so many dimensions of race, gender and power on the internet that we can take my original thesis as a point of departure rather than start off with a battle over its legitimacy. That feels like a sea change to me.
Additionally, we have had a lot of signal-boosting by journalists who are also doing important investigative work on this beat and have had their important work widely disseminated, such that I think some of the things I was made to routinely debate years ago are pretty well considered common sense now. I am also grateful to the scholars who worked on race and representation before me who helped me to think about racialized and gendered capitalism as the defining logics of the internet and information systems, which is probably the way in which I would categorize my work. It hasn’t always been the case that people would consider the ethical and oppressive dimensions of digital technologies – and now I think all of us who have worked on these issues from a lot of different vantage points – dating all the way back to the 1990s, have made a huge impact on these conversations.

This greater awareness and sensitivity to the problematic outcomes of what we might term racialized blind spots have now even begun to permeate their points of origin (witness the new attention within engineering programs to courses on ethics, not that a survey course on “ethics” is really adequate, but anyway) – and this was pushed for quite hard by social scientists and humanists working at the intersections of society and technology. I think there will be many more people who will continue to engage critical race studies and Black feminism in their studies of digital media and technical systems precisely because it broadens in key ways our ability to pursue questions about issues of power, control, benefit, etc., in ways that are not prioritized by other theoretical approaches. This will continue to bring about the new insights that we need to intervene upon these harmful outcomes of largescale technological projects and their inevitable social outcomes, and will hopefully lead to public policy and interventions that will protect the vulnerable and upend the myriad dimensions of harm that I see on the horizon. I have argued that artificial intelligence will become a major human rights issue in the 21st century, and I think we still have a lot of work to do, together.

You live in Los Angeles and I assume you are familiar with the work cultures in the Bay Area. What can you say about the impact of the expansion of high-tech industries on urban space and ecology? What can be done to achieve a sustainable creative industry ecology, especially from the perspective of non-White populations?

Oh, well, yes, I live in Los Angeles and the expansion of Silicon Beach employees into my neighborhood in South LA is palpable and has led to many people selling their homes at
a premium, as well as increased foreclosures. Once the Whole Foods Market moves in about a mile from me, my family will likely be priced out of our neighborhood and our rental will become too expensive. I don’t know how, as a tenured professor and with a professional, white collar spouse, we can afford to buy in Los Angeles proper or within 20 miles of the place I work, so that tells me a lot about the situation. We see demographic change in the makeup of neighborhoods, where people of color are being pushed and priced out of their neighborhoods in the city. This is not a secret. In fact, this situation is so acute and critically important that Sarah T. Roberts from UCLA and I are writing a book that deals, in part, with the impact of the media-tech industries on communities. We hope it will be a primer for policy makers and everyday people who are interested in these concerns, too.

In LA, like the Bay Area, it’s almost impossible to find affordable housing anymore, and much of this has to do with the unprecedented, at least since the Gilded Age, wealth and income inequality that are directly linked to the explosion of the media-tech industries – from Silicon Valley but also closely intertwined with Hollywood. We knew the convergence of the media-tech-culture industries was coming, but along with it came gentrification, evictions, increased food and housing insecurity, and so forth. It’s shameful on every level that we have organized our society in these ways, and that the gap between the rich and working-class is so acute, not just in the United States, but around the world, that no one should imagine this to be a sustainable way forward. I think we will have to come to terms with the huge transfers of wealth that are happening before our eyes under the current administration and over the last 30-plus years of neoliberal economic and social policy. We also will need to attend to the ways in which total social investment in systems that reify and indeed even amplify inequities means that the profits, too, from those systems are invariably also benefiting those of privilege already.

We will need the wealthy and corporations to pay their fair share of taxes back into the public coffers that subsidize their growth. There are a lot of human and environmental costs to the expansion of capital through the high-tech and media industries, and it’s imperative we resist and reconcile global wealth inequality and divestment from public goods like education, air and water quality, housing and healthcare as we ramp up investments in the former. My work, for the long-haul, is concerned with these issues.
Your book beautifully demonstrates the ways in which web search is not simply a technological but also a deeply social process. Today, scholars across disciplines are discussing the rise of right-wing politics across the globe. What does your book have to say about the recent debates regarding fake news, algorithms and rise of hate speech? What are the broader implications of your book as far as how we think about democracy today?

Thank you, and this is a great question. There is no doubt that the digital systems that arise from high-tech media companies, often funded or launched by the state, are increasingly implicated in undermining democracy and giving rise to authoritarian and fascist governments. Many scholars and journalists have made and continue to make this case – just one reason why critical histories of technology and computing are so important for the present moment.

I also think that the intense datafication and tracking of our every move by the technologies that are deeply embedded into many dimensions of our everyday lives are also implicated in undermining democracy. For example, I have so many students who will not exercise their 1st Amendment right to free speech in the realm of politics or social issues because they think they will be documented through social media, tracked into databases or systems they can’t see or don’t know about, and excluded from employment or educational opportunities. It is not clear to me that I can or should claim to them otherwise, and that’s but one example currently on my mind as the semester draws to a close. I believe it is indicative of a subtle shifting set of expectations about freedom or resistance to authoritarianism. When social engagement and political discourse begin to be funneled into commercial systems defined by their capacity for gatekeeping and control, not only can they be easily deployed to propagate hate speech and so forth, but they may also limit what possibilities exist for responses to that speech.

Without free speech, without a free press, without intellectual freedom for academics, without a literate and well-educated public, conditions will inevitably be created that undermine democracy and give rise to authoritarianism, and that will make it even more difficult to oppose and resist it. I am concerned, as are other scholars, with how those who are already living with and under systemic oppression will be able to resist these conditions, and also organize for a fair and just society in which we can all flourish. The containment and suppression of democratic, anti-racist ideas and politics, coupled with the signal-boosting of hate and calls for nationalism will only make our efforts at bolstering civil and human rights more difficult. To me, we are in a very
important historical moment, and we should not relinquish all of our power and decision-making about the distribution of social goods and resources, and other forms of governance, to automated systems—-from algorithms to AI and robotics. The more control we cede to automation, the harder it will be to dismantle its effects.