Discrimination, Algorithms and Privacy

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Reading Group Statement

This reading group is a bottom-up take on the broad question of how and when technological change affects our social norms. It does so through the examples of privacy norms and antidiscrimination norms—norms that are long standing but changing along humanity's history. And it does it for the technological change that has shaken social interactions the most in the last quarter of a century: big data.

Everyone seems to agree that discrimination is undesirable and should be eradicated from our society. But in the times of big data, sometimes it is not a person who discriminates, but an automatic algorithm that was programmed without the intention of doing so. What happens when an algorithm discriminates? Is it still discrimination, even without intent or bias? For example, is it ok for people of a minority to be searched more in airports than others? Is it ok for overweight people to be hired less, when it is not a deliberate decision? If it is ok, should we have to compensate the people that were hurt? If it is not ok, who is responsible? For some, the answers to these questions will seem obvious, but participants will note that these seemingly obvious answers will all be different.

The connections between privacy and discrimination will then be explored. For some, discrimination is a problem of not having enough information about others. This insufficiency makes us use heuristics to judge them, which can easily derive in false opinions. Increasing the amount of information about one that is available to others would therefore reduce discrimination, and having more privacy would worsen it. The LGBTQ movement, for example, implicitly used this rhetoric with coming out as a political strategy. Their idea being that the more LGBTQ people that are out, the more the general population will notice that they interact with LGBTQ people daily, and the fewer prejudices that will prevail. We will challenge the universal applicability of this conventional belief and show how privacy can in most situations be used as the reverse: a tool to fight discrimination.

In the end, we will go back to the broader questions. We will ask: did technology generate new problems for privacy and discrimination, or did it merely make more salient problems that they already had? Did it change our social norms about them, or did it just change the context in which those social norms operate?

The reading group represents one unit of credit (C/F). According to YLS guidelines, members must attend 750 minutes (12.5 hours) to obtain the credit. The reading group will meet 8 times during 2 hours to allow each member to miss one meeting if needed. All reading material will be provided to participants.

I will invite some of the authors of the cited material to Skype in and discuss their text with us.

Syllabus

Week 1: Big Data
In this meeting we will explore what is Big Data and how it changed the ways in which we interact with each other

- Kenneth Neil Cukier and Viktor Mayer-Schoenberger, "The Rise of Big Data," *Foreign Affairs* (2013).
- Justin Jouvenal, "The New Way Police are Surveilling you: Calculating your Threat 'Score'," *The Washington Post* (2016).
- Stacey Higginbotham, "ISPs Really, Really Want to be Able to Share your Data," *Fortune* (2015).
- Chris Hoofnagle, "Big Brother's Little Helpers: How ChoicePoint and Other Commercial Data Brokers Collect and Package Your Data for Law Enforcement" 29 *N.C. J. Int'l L. & Com. Reg.* 595 (2003).

Week 2: Biased-based and Statistical Discrimination
In this meeting we will discuss the information dynamic of discrimination and its psychological undertones

- Peter A. Riach and Judith Rich. "Field Experiments of Discrimination in the Market Place." 112 *The Economic Journal* 483 (2002).

- Marianne Bertrand and Sendhil Mullainathan, "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," 94 *The American Economic Review*, 991 (2004).
- Angela Onuachi-Willig and Mario Barnes, *By Any Other Name?: On Being 'Regarded As' Black, and Why Title VII Should Apply Even If Lakisha and Jamal Are White*, 5 WIS. L. REV. 1283 (2005).
- Daniel Kahneman, *Thinking Fast and Slow* (Macmillan, 2011), chapters 12-15.
- David Neumark, Ian Burn and Patrick Button, "Is it Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment," *National Bureau of Economic Research Working Paper* 21669 (2015).

Week 3: Algorithmic Discrimination

In this meeting we will see how, counter-intuitively, algorithms and other automatic processes can discriminate

- Indre Zliobaite, "A Survey on Measuring Indirect Discrimination in Machine Learning," *Association of Computer Machinery* (2015).
- Claire Miller, "Can an Algorithm Hire Better Than a Human?" *New York Times* (2015).
- Claire Miller, "When Algorithms Discriminate," *New York Times* (2015).
- Lauren Kirchner, "When Discrimination Is Baked Into Algorithms," *The Atlantic* (2015).
- Andrew Heikkila, "Artificial Intelligence and Racism," *TechCrunch* (2016).
- Kate Crawford, "Artificial Intelligence's White Guy Problem," *New York Times* (2016).
- FRANK PASQUALE: BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION (2015) (Chapter 4, "Finance's algorithms: the emperor's new codes").

Week 4: Looking for Solutions for Algorithmic Discrimination I

In this meeting we will discuss how to approach discrimination in the context of these technologies. Should we focus on biases or disparate impact?

- Solon Barocas and Andrew Selbst, "Big Data's Disparate Impact," 104 *California Law Review* 671 (2016).
- Solon Barocas, "Data Mining and the Discourse on Discrimination," *Conference on Knowledge Discovery and Data Mining* (2014).

- FRANK PASQUALE: BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION (2015) (Chapter 5, "Watching (and improving) the watchers").

Week 5: Looking for Solutions for Algorithmic Discrimination II
In this meeting we will discuss how to approach discrimination in the context of these technologies. Should we focus on biases or disparate impact?

- Pauline Kim, "Data-Driven Discrimination at Work," *William and Mary Law Review* (forthcoming 2017).
- Michael Feldman et al., "Certifying and Removing Disparate Impact," *Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* 259 (2015).

Week 6: Privacy and Discrimination: Psychology
In this meeting we will see the informational and psychological aspects of privacy that link to discrimination

- Claudia Goldin and Cecilia Rouse, "Orchestrating Impartiality: The Impact of "Blind" Auditions on Female Musicians," *National Bureau of Economic Research* (1997).
- James Illingworth, "Big Data in IO Psychology: Privacy Considerations and Discriminatory Algorithms," 8 *Industrial and Organizational Psychology* 4 (2015).
- Christopher Shea, "Less Privacy Means Less Discrimination", *The New York Times* (2008).

Week 7: Privacy and Discrimination: Law and Social Norms I
In this meeting we will address the normative aspect of privacy and discrimination. We will then go back to the broader questions that puzzled us initially

- Lior Strahilevitz, "Privacy versus antidiscrimination," 75 *University of Chicago Law Review* (2007).
- Danielle Citron and Frank Pasquale, "The Scored Society, Due Process for Automated Predictions," 89 *Washington Law Review* 1 (2014).

- Jessica Roberts, "Protecting Privacy to Prevent Discrimination," 56 *William and Mary Law Review* 2097 (2015).

Week 8: To be agreed (related topics)

Having completed the required number of hours, the content of this meeting will be a related topic determined by the participants. We could discuss Internet speech, revenge pornography, or another topic that interests the group and relates to the ideas discussed so far. An equivalent amount of readings will be assigned once the topic is finalized.

General reference:
B. Custers, T. Calders, B. Schermer, and T. Zarsky (eds.) *Discrimination and Privacy in the Information Society* (Springer, 2013).