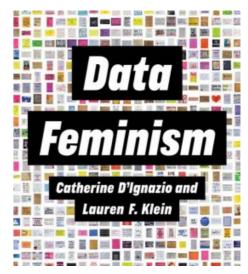
Book Review: Data Feminism by Catherine D'Ignazio and Lauren F. Klein

In Data Feminism, Catherine D'Ignazio and Lauren F. Klein use an intersectional feminist lens to examine unequal power structures in the realm of data, and highlight attempts made to rectify them. Showing how the data we collect is representative of our unequal society, this book is a call to action that will particularly benefit feminists seeking to learn how activism can contribute to creating a more equitable form of data science, writes Prachi Shukla.

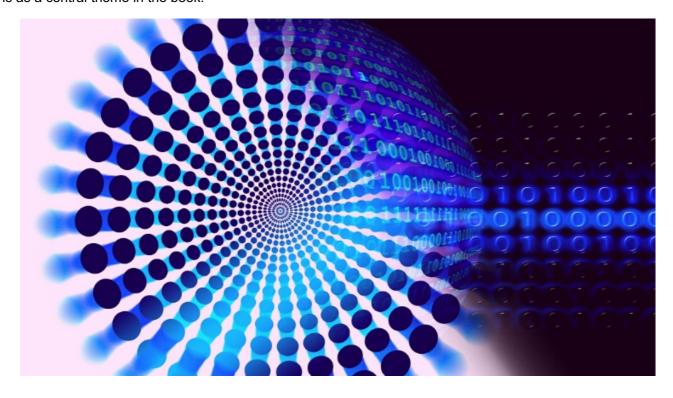
Data Feminism. Catherine D'Ignazio and Lauren F. Klein. MIT Press. 2020.

'Data is the new oil' begins Catherine D'Ignazio in a webinar conducted to discuss her co-authored book, *Data Feminism*, written with Lauren F. Klein. While this phrase has been used repeatedly by businesspeople and politicians (most often, elite men) to highlight the potential for extraction and conversion to profit, the authors use it to discuss the same hierarchies of power and structural oppression faced by women, immigrants, people of colour, indigenous communities and LGBTQ+ people, in newer digitised forms. The primary aim of the book is to use an intersectional feminist lens to examine unequal power structures in the realm of data, and highlight attempts made to rectify them.

Like the term 'intersectional feminism', *Data Feminism* does not only talk about women and gender. Instead, it examines intertwined structural forces of power such as sex, race and class. Particularly, it examines how these power dynamics play out in a data-driven society. If data is power, then who benefits from it, who do we leave out of our data and why, and how do we use data to maintain power structures? The book is structured around seven



principles, with each chapter being a deep dive into one. From the long-lasting impacts of redlining in the US to the falling proportion of female graduates in computer sciences since 1984, the examination of unequal power forces runs as a central theme in the book.



The authors focus on data justice, as opposed to data ethics. They argue that data ethics and its focus on fairness and biases create structures that protect power. A great example of this is the rampant use of artificial intelligence for a 'fair' hiring process. As Al pulls from existing datasets (in which white, rich men are overrepresented), it can hamper the chances of women and minority communities getting past resume screenings. Conversely, datasets in which marginalised communities are overrepresented, such as policing or access to government aid, lead to situations where algorithms will predict them to be more of a threat, making it more difficult for these groups to access credit or producing a higher probability of individuals being incarcerated.

Conversely, data justice acknowledges historical inequalities and power differentials; as a result, it can challenge existing dynamics. The book begins with an anecdote about <u>Dr Christine Darden</u>, a mathematician at NASA's Langley Research Center, whose story served as an inspiration for the book, *Hidden Figures*. Early in her career, Darden realised that while she held the same qualifications and did the same work as her male colleagues, she had not been promoted. She consulted an employee of the Equal Opportunities Office, Gloria Champine, who visualised data on all employees' qualifications by gender and rank. Identifying a systemic issue, she then took this up with senior management who finally gave Darden her overdue promotion. Dr Christine Darden went on to become the first ever African-American woman to hold a Senior Service Executive rank at Langley and was a director when she retired from NASA in 2007.

However, the authors also use these examples to caution against the burden of proof which is always laid on members of marginalised communities to identify and validate claims of their oppression. One example of this that is highlighted in the book was the lack of data available on maternal mortality, particularly for Black mothers, leading to a situation where the horrifying maternal mortality rates for Black women were never flagged as a cause for concern. Serena Williams's experience of giving birth became a landmark moment for many women of colour who realised they had not been the only person whose pain had been ignored by doctors. Estimates suggest that maternal mortality for Black women may be more than triplefold that of white women, and the lack of validation of their pain has often taken the lives of these women.

Apart from the contents of the chapters, the authors embody their intersectional feminism (particularly the book's seventh principle, 'Make Labour Visible') in the pages of their bibliography by providing a problem-led breakdown of their sources. The authors make it a point to include literature about and written by members of the LGBTQ+ community, people of colour, previously colonised nations and indigenous communities. The authors actively go beyond academic works as this has been a space which has often neglected contributions from marginalised groups. Nearly two-thirds of their citations are from women or non-binary people; almost every chapter has a project from the Global South; a third of all citations are from people of colour; and nearly half of all projects mentioned in the book are led by people of colour.

Powerful examples of the projects in the book include a counterdata initiative led by María Salguero to record cases of femicide (gender-based killings of women and girls) in an open, accessible manner. The lack of government-published data on the subject prompted Salguero to sift through newspaper articles and Google Alerts, finding every instance she could and logging these on a map. Another example is the 'Gender Shades' project wherein a team of researchers led by Joy Buolamwini and Timnit Gebru found that Black women are 40 times more likely to be misclassified by facial recognition technology than white men. This piece of research quickly sparked IBM to launch its 'Diversity in Faces' project which aims to build facial recognition technology which is racially fair and accurate; however, it recently abandoned this project after broader discussions on the unethical use of such software in racial profiling and mass surveillance.

While researching the authors and the book, I came across a social media post that questioned who this book was meant for and its ability to convince a sceptic. I believe that the book is primarily meant for feminists who are trying to learn about feminism in the digital age, and how their own activism can contribute to creating a more equitable form of data science. The authors do not provide you with all of the answers to the extremely intricate issues we face in a digitised information economy, but they do give you some frameworks to aid thought and analysis.

Data Feminism goes beyond compiling research, literature and anecdotes: it serves as a call to action. For me, the biggest takeaway from the book was the fact that no amount of technological fixes or algorithmic tweaks will give us the result we are looking for. Systemic forms of oppression cannot be coded away or fixed by sufficient data collection. The data we collect has been, and still is, representative of our unequal society, shaped as it is by racist, sexist and imperialist forces.

Note: This review gives the views of the author, and not the position of the LSE Review of Books blog, or of the London School of Economics.

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