Data activism and social change

In light of the inequalities and practices of *dataveillance* –as José van Dijck has called mass corporate and governmental surveillance based on big data (van Dijck, 2014)—, different ways of data use have emerged that allow people and organizations to act independently. This book is one of the best examples of an in-depth research analysis to describe and analyze what these practices are, what they have in common, and what challenges they face.

Data activism and social change addresses how people and organizations are using data infrastructure –understood as software, hardware, and processes that convert data into value— as a fundamental tool in their strategies. The book is situated at the intersection of two phenomena: the interaction between data, technology, and communicative practices, on one side, and democratic participation and social movements, on the other. It is a movement that makes use of big data for social change, human rights, and environmental protection. Data activism is a practice that emerges, primarily, as a resistance to datafication –understood as the ability to translate any facet of life into data— and mass surveil-

lance and focuses its research on data infrastructure for social change, humanitarian aid, the defense of human rights and the environment.

It's challenging to summarize the complexity and originality of this work, considered one of the world's top 12 books on data activism (https://bookauthority.org/books/new-social-activism-books) according to Book Authority[1]. The book is based on 30 semi-structured interviews with experts, activists, and representatives from the research field, that rely on data infrastructure for their work, define themselves as data journalists or activists, or use data for social purposes. This group of people goes all the way from an epidemiologist that sees data as a way to empower people in social medicine to a journalist that has managed the largest data filtration in history to an architect that uses citizen participatory data to design public spaces. In addition, it is based on the results of observing over 40 organizations and cases that make data the focus of their activity. These include communities, organizations, and individuals that are mapping conflicts, generating alternative narratives, mobilizing and solutions to social problems.

The object of this work is to describe a new phenomenon – data activism— and analyze its mechanisms and structures based on a large number of real cases and interviews with the pioneer community of experts that practice it. It is divided into 5 parts. First, to create context, the book describes the uses of data infrastructure in various sectors. Then, based on cases

and interviews, it defines and proactively explores data activism as a social practice. Later, it goes in-depth into the digital humanitarianism platform Ushahidi as a practice that illustrates data activism. Ushahidi specializes in supporting humanitarian efforts in situations of crisis, war, violence, emergency, and disaster. The earlier proposed classifications apply to the case. Finally, it proposes a model for effective data activism.

In light of the opaqueness and closed doors with which corporations deny access to data they have collected free-of-charge from users, consumers or customers, the book provides an analysis of the strategies and practices of organizations and individuals that obtain or generate such data and, thus, contribute to social activism. The book's main contributions are the 2 typologies taken from 2 different angles (i.e. "what data activists do" and "where they get data from"). The classifications serve as a heuristic tool, to observe and support other cases, which is being used as

a foundation for other studies (e.g. Briones 2019). First, data activists can be those who transfer technological skills, those who catalyze and make data projects possible, those who produce data journalism as a form of activism, and those who participate in data activism as their main line of work. A second taxonomy classifies the initiatives from the perspective of the alternative ways in which activists acquire data, that range from the obtaining of data from whistleblowers and access to open public data to the creation of platforms and communities to collect people's data and implementation of mechanisms, networks and devices that collect data (e.g. community drones).

Ushahidi is an example of the third type of organization, since it is based on crowdsourcing of people's data, which can be a powerful process. In order to demonstrate it, Gutiérrez dedicates a considerable amount of space in her work to the case of the platform Ushahidi. The map of the 2010 earthquake in Haiti, using the Ushahidi platform, addressed important information gaps in the initial period before humanitarian agencies began to operate in the field. Via the platform, geolocalized data was sent to small, rather unknown NGOs and provided quick, highly-accurate situational information to the public, helpful for decision making in the midst of a disaster. The map of Haiti marked the transition towards a paradigm change in the presence of emergencies or natural catastrophes, making way for digital humanitarianism.

Among the multiple examples discussed by the author, there is also "Liquid Traces", by Forensic Architecture, an organization that uses satellite signals, heat, and radar, among other surveillance technologies, to document that negligence was the cause of aid being denied to 72 migrants fleeing from Libya in March 2011. Despite the fact that various coastal authorities from different countries along the Mediterranean Sea received the calls for help, no one went to their rescue and barely 9 people survived. WeRobotics, as another example, has helped communities in Nepal to analyze and map their risk to diverse consequences of climate change, such as avalanches.

The author also identifies 11 characteristics that define organizations that work with data used for activism. Among them there is the work in alliance, given that, often, the causes by far exceed the resources available, for example, in cases of human rights abuses or in large databases. Another aspect is that data activists frequently make maps as a tool for analysis, coordination, communication and mobilizing. Historically, maps have been objects full of knowledge, power and authority, and the apogee of digital cartography, mobile technology, data crowdsourcing and geographic information systems make maps even more powerful than conventional maps. This occurs coincidentally with a growing interest in the mapping of the crisis, a practice that combines the capabilities of the geoweb with humanitarian aid and campaigns. In that sense, in the hands of the right people and organizations, the

maps have been a form of political counterforce. Using maps is so useful that the author considers them a specific variety of data activism: geoactivism. InfoAmazonia, an organization specializing in environmental and human rights issues in the Amazon region, is an example of an organization that specializes in visualization of geo-localized data.

Another feature is that data activists are generally flexible in combining methods and tools from diverse fields. Several organizations are hybrids because they cross lines that often separate journalism, research, humanitarianism, and activism, yet because they also combine repertoires of action from different areas. One example is *Los vagabundos de chatarra*, a journalistic project that includes comic strips, a book, interactive maps, videos, and a website to tell stories of people who survived the economic crisis in Barcelona by collecting and selling scrap metal (Carrion, 2016).

The variety and complexity of the numerous cases analyzed by the author require that, at times, the reading forces one to make associations between topics and cases whose connection is not easily made. Regardless, this book addresses an important contemporary issue: how people and civil society revert technological and political processes to propose their own narratives and solutions and is a must-read for communication and social activism specialists.

The book is a contribution to critical data studies, along the lines of Nancy Gitelman (Gitel-

man, 2013) and Tom Boellstorff (Boellstorff, 2013). We know that data and algorithms do not "speak" for themselves and are not neutral. Data cannot be "raw"; data and metadata are "cooked" in processes that do not come about naturally, but rather are always built and developed based on interests. In other words, big data is not a natural, necessary, or automatic resource, but rather a cultural resource that must be generated, treated and transformed. The fact that data infrastructure is used for noble causes, such as data activism, does not eliminate the biases and the imbalances present in the databases, algorithms, and transformation processes. The book does not dodge this issue, yet focuses on that, even using imperfect technology, this kind of activism gets results.

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Note

1 Based on public mentions, recommendations, evaluations and sales, among other indicators, Book Authority creates lists and recommendations of non-fiction books.

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