Putting the 'Revolution' Back into 'Data Revolution'

FOURTH-WAVE FEMINISM, DIGITAL DATA COOPERATIVES, AND THE MEANING OF POWER

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The digital data revolution has immense potential to advance gender equity across the world. Policymakers lack knowledge on many issues that affect the lives of women, girls, and gender-diverse people—mental health, forced migration, and gender-based violence, to name just a few current global emergencies. The massive volume of data generated by our digital lives could be used to design more nuanced, effective policy responses.

But we should also be wary of naïve techno-optimism. We've seen repeatedly over the past few centuries how technologies can improve aggregate economic productivity while widening the gap between rich and poor. We've witnessed how political and economic elites gradually gain control over new instruments of cultural expression.

Simply put, the question is: *when does technology make the world a better place?* The equally simple answer: *when it's democratized*—when power over technology and its outputs, including digital data, is distributed broadly. Data will continue to be misused or underused until the people who generate this data actively control how it's deployed.

What does power over digital data mean? A few ideas are prominent in the regulatory conversation. Consent over how data is used by private and public actors. Participation in the process of generating and analyzing data. Mechanisms of accountability to prevent and penalize abuse of data.

These are all important, but they are weaker alternatives—or at best useful complements—to the dominant form of power in a market economy: ownership. We can soften the bluntly capitalist tone of that statement by observing that, with respect to data, *individual* property rights are not the only kind of ownership that matters. *Collective* rights are just as, and in many cases more, relevant. That's because most digital data are relational goods: they're generated by people engaging in relationships, with the implication of shared ownership. In addition, pooling data unlocks value. A single person's mobility pattern holds little policy importance, but the location data of tens of thousands of people can help inform an efficient public transit system, for example. But whether we're talking about individual or collective ownership, the truth stands: property rights confer genuine voice. Voice assures that the value of data will be distributed more democratically.

The regulatory debate has thus far skirted the issue of ownership, however. The most well-known digital data law in the world today, the European Union's General Data Protection Regulation (GDPR), enumerates rights that defend "data subjects" (individuals) from exploitation, specifically by setting guidelines for transparency, informed consent, redress, erasure, and complaint. The same is true of other data laws across the world. In focusing on *protection*, the GDPR and its cousins are dealing with the symptoms of disempowerment, not with the more fundamental cause: lack of ownership rights. Powerful people are, by definition, less in need of protection.

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How do we shift the data conversation to power? A compelling answer arises at the junction of two modern social movements, feminism and cooperativism.

The first wave of feminists in the 19th and early 20th century focused on voting and civic rights; the second wave of the 1960s-1980s on reproductive rights, bodily security, and workplace equality; and the third wave of the 1990s-2000s on sexual and gender identity. Today's fourth-wave feminism deals with all these issues, but is distinguished by two unique characteristics: a rootedness in intersectionality and a focus on digital life.

Intersectionality is the idea that every individual contains multiple and simultaneous identities—race, class, age, sexual orientation, profession, among many others. Oppression and empowerment occur at the intersection of these identities. In emphasizing inclusion, fourth-wave feminists affirm interdependence: that the freedom of *any* person—including white, heterosexual, cisgender women—depends on progress against every form of discrimination.

The fourth wave lives in a digital world with novel opportunities and risks. Social media facilitates collective understanding and solidarity around diversity in identity. Twenty-first century feminism is becoming authentically multicultural, often by way of hard conversations around the historical dominance of white liberalism in the feminist movement. But social media is not just a tool for connection. It's also a digital public square, and as such creates new opportunities for harassment, objectification, and hate. Fourth-wave feminists fight for the same rights as their forebears—autonomy, representation, power—but the field of contestation is as much virtual as physical.

Questions around data rights are thus a natural focus of attention for modern feminism. How are individual rights regulated in the digital public square? How is power gained? The ethical framework to answer such questions is rapidly being built. Catherine D'Ignazio and Lauren Klein's seminal work *Data Feminism* lays out the key principles. Examine and challenge existing power. Elevate emotion and embodiment. Rethink binaries and hierarchies while embracing pluralism. Consider context. Make labor visible.

Now we must make these core principles—as well as their more detailed implications[1]—manifest. We must build vehicles of collective action that get down to the practicalities of what, for example, "making labor visible" means with respect to digital life, technology, data.

This is where cooperatives can help.

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1. See, for example, the conversation on feminist internet principles: https://feministinternet.org/en/principles.

Humans have always been cooperators. The ability to work together for mutual benefit is one of the primary reasons our species is so successful. The rise and fall of historical societies can partly be traced by how well their institutions encouraged cooperation and constrained conflict.

The modern recorded history of formal cooperatives begins in the 19th century. The dislocation and exploitation of the Industrial Revolution led workers to form cooperatives that gave people control over their own labor. Similarly, consumer and marketing cooperatives, and later credit unions, gave people control over capital. Co-ops steadily grew in number and size over the decades, attracting those seeking an alternative to privately owned and shareholder-controlled firms.

Over three million co-ops currently exist globally. They employ 280 million workers— one-tenth of the world's working population—and count one billion people as members. Revenue from cooperatives is close to 5 percent of global economic output, with total asset holdings of at least 20 trillion USD. By any measure, co-ops are a tremendously successful form of economic organization—and yet we hear about the cooperative economy more rarely than these figures would suggest. That's because cooperatives don't exist for the purpose of unbounded economic growth. They exist to distribute wealth and power democratically, to assure a secure and healthy existence for their members. This mission is only marginally interesting to central planners and investment capital—but it's at the core of a vision of an equitable world.

Just as traditional co-ops allow people control over labor and capital, *data* cooperatives offer control over what is rapidly becoming the global economy's most valuable asset: information.[2] Many of the largest firms in the world, as measured by market capitalization, became wealthy by controlling the massive volume of data that streams from our increasingly digital lives. Data co-ops offer a means to recapture a fraction of that value.

Data cooperatives are admittedly not yet well-defined. A few prominent models exist, but we're still in an intensely experimental stage, with groups around the world proposing diverse ideas about how a data cooperative might look. These ideas span the economy— from traditional labor sectors like agriculture to new forms like gig work—and include ideas for novel co-ops as well as plans to use data pooling to increase the resilience of existing co-ops.

Generally, however, any group calling itself a data cooperative should fulfill three functions. First, it should serve as an *information fiduciary*, legally bound to use data in the best interests of its member-owners. Second, it should contain a *democratic governance* (one member one vote) structure to allow members to make decisions about how and with whom data is shared. Third, it should create a *safe data infrastructure* that enables pooling and guarding of individual data while permitting secure, voluntary sharing through a transparent consent mechanism. Taken together, these features suggest a viable and concrete definition of data ownership.

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2. See Aapti Institute's *The Case for Data Cooperatives* for a detailed discussion.

There's ample reason to believe in a bright long-term future of data cooperatives, but there's also cause for near-term concern. The data cooperatives that currently exist are islands of democratic hope in a sea of tech capital hungry for large and immediate returns on investment—again, an objective for which cooperatives, of any kind, are not designed. Until the global data cooperative network becomes strong enough to be self-supporting (that is, internally *mutually* supporting), seed capital must come from public agencies, private foundations, and non-profit organizations building a more equitable digital future.

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Fourth-wave feminism proposes an ethical blueprint for what empowered digital life could look like. Data cooperatives are a concrete expression of empowerment. The successful integration of these two dynamic movements depends on all of us—feminists, data co-op entrepreneurs, policymakers, advocates—keeping our attention on this word "power."

It begins with admitting that the global community, including us at Data2X, have not adequately highlighted power. We speak about knowledge gaps to be filled, of a potential flow of data from people to policymakers. We speak of better understanding the lives of women and girls. These have been tremendously impactful conversations, but now it's time to go further.

It's time to talk about women, girls, and gender-diverse people owning their selves—bodies and digital representations both—and then choosing whether and how to share (or withhold) knowledge of self with others. The public and private audiences for this data are then forced into the humbler position of ensuring that their requests correspond to the aspirations and values of real people. This is power. Instead of knowledge gaps to be filled, the vocabulary shifts to the democratization of knowledge, with its implication of people engaging in deliberative conversation about how information enters the economy and polity.

To conclude by emphasizing an earlier point: intersectionality implies interdependence. Just as our various individual identities are interlocking and inseparable, so much more so is our collective identity. Who we are—who we perceive ourselves to be, who we choose to be—depends on the perceptions and choices of others. Seen from that vantage point, feminist data cooperatives are much more than a solution to a data privacy problem. They are the only mode of economic organization that offers a flexibility of identity, allowing people to choose from one moment to another the balance of autonomy and community, holding close and sharing widely, that they wish.

We talk of a data revolution, but there is nothing revolutionary about yet another asset class in the hands of the elite. The revolution is in the recognition that we are always multiple selves, tangled up in each other, and in the creation of institutions built on this truth. We at Data2X and Aapti Institute are learning as we go. The territory ahead is exciting but unexplored, and allies on the journey are very welcome. If you'd like to learn more about data cooperatives or help build the data cooperative economy, email us at bvaitla@data2x.org and astha@aapti.in.