

Ethan Marcotte, 2023

You Deserve a Tech Union. Chapter 5 – Tech Solidarity, Forever

"The voices of the powerless are not usually heard in technological deliberations, and we have no civic equivalent of the family's practice of 'one cuts, the other chooses.'"

- Ursula Franklin, The Real World of Technology

THE HIDDEN HANDS THAT MAKE TECH WORK

On that note, I have two pieces of art I'd like to recommend.

Let's start with Krissy Wilson's The Art of Google Books (<https://ydatu.com/05-22>), specifically the posts tagged #hand (<https://ydatu.com/05-23>). The first thing you might notice are the pages, and how off some of them look. Many of the scans are blurred, or misaligned, or covered with digitization artifacts (FIG 5.5). Some of them aren't even pages at all. And as you scroll through these images, you'll likely spot a hand or two, each gently holding a page in place for scanning (FIG 5.6).

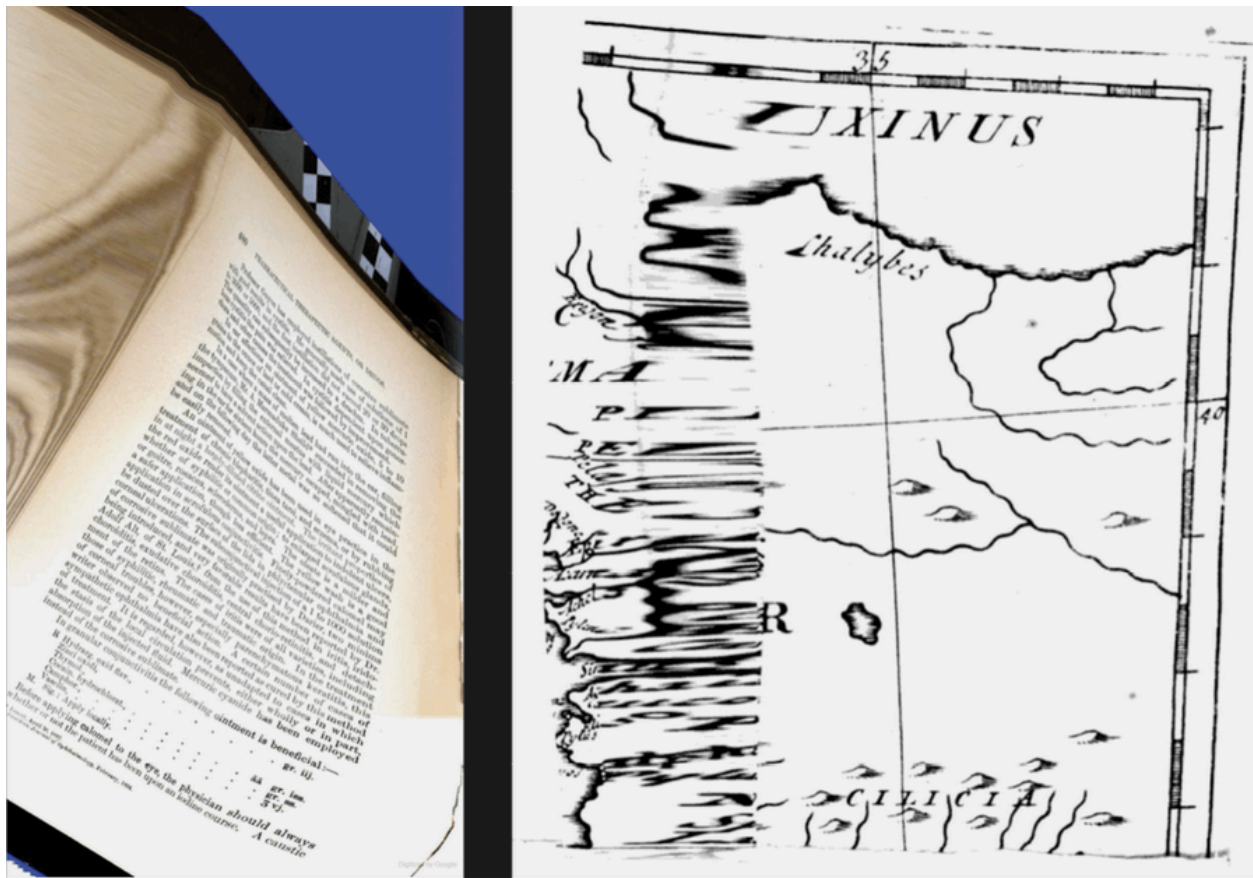


FIG 5.5: A collection of beautiful “errors” from Google Books: misaligned or distorted pages, some overlaid with digital artifacts 9<https://ydatu.com/05-22>).

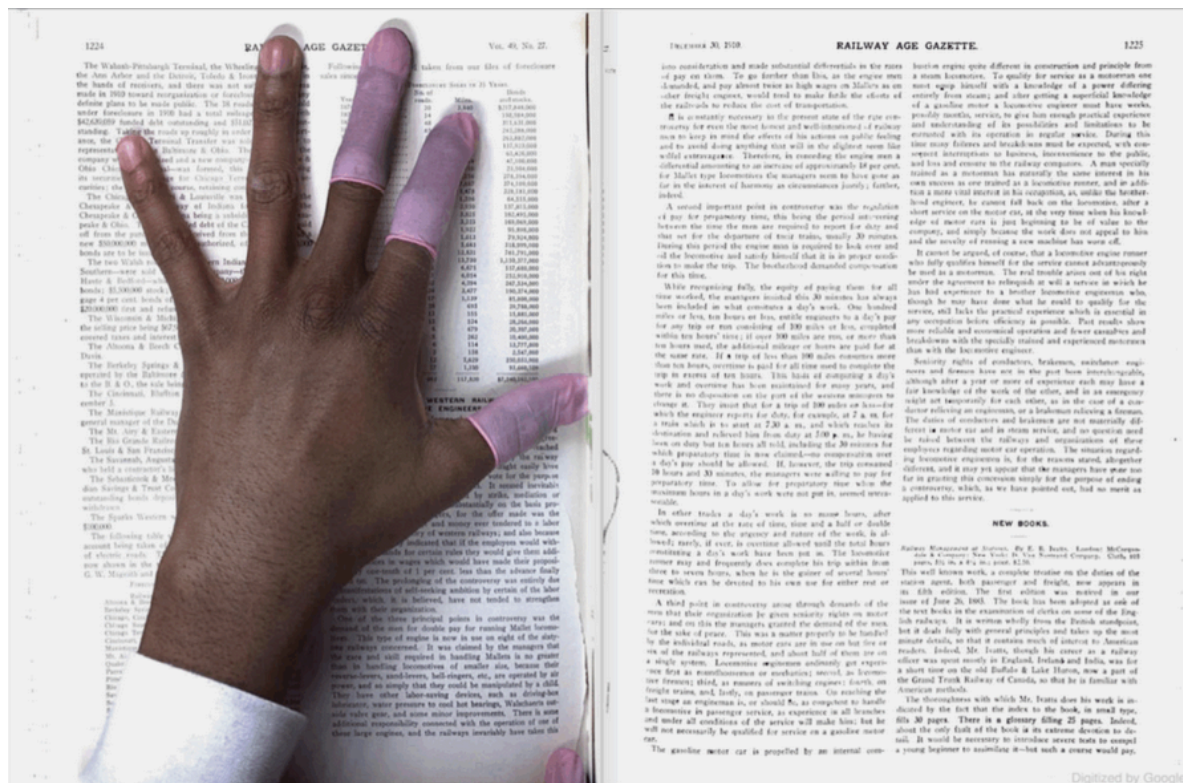


FIG 5.6: An entry from Krissy Wilson's “The Art of Google Books” shows an accidental scan of a worker's hand (<https://ydatu.com/05-24>)

But look at the hands - not the pages. These are the hands that hold pages in place for digitization, before they're made accessible online. These are the hands that, quite literally, built Google Books, Alphabet's online digital library.

Take a closer look at those hands.

In 2022, Google's own corporate diversity annual report stated that its tech workforce was 62.4 percent male, and 37.6 percent female; Black+ and Latinx+ employees made up 5.3 percent and 6.9 percent of Google's workforce, respectively (<https://ydatu.com/05-25>). But nearly all of those hands - these workers' hands - have darker skin than I do; on many of the photos, you can spot a pop of color from nail polish, or a glint of light from the odd piece of jewelry. In many ways, the hands scanning Google Books feel like an inversion of the broader Google workforce: the hands in these pictures are overwhelmingly coded as feminine, and belong almost entirely to people of color.

Those hands belong to data entry workers, a throng of hourly contractors employed as part of Google's Scan Ops workforce. And that brings us to the second piece of art I'd like to recommend to you, Andrew Norman Wilson's "ScanOps" project (<https://ydatu.com/05-26>). Wilson learned about the scanning operation back in 2007, when he was working at Google's headquarters. You see, people employed by Google, whether salaried or not, were issued different-colored badges to communicate their status:

full-time Google employees were issued white badges; contractors were issued red badges; interns were issued green badges. Wilson, a red badge-bearing contractor himself, had access to free meals, on-campus events, and transportation, even though he didn't have access to white-badge benefits, like stock options.

Wilson noticed that Google Books' data entry workers had yellow badges, and even less access to the benefits enjoyed by other workers - even other contractors at Google. The Scan Ops employees weren't allowed to eat free meals in the campus's many cafeterias, take free rides home on the corporate shuttles, or even ride free bikes around campus.

In 2011, Wilson created a short video titled "Workers Leaving the Googleplex" (FIG 5.7). In it, he recorded the Scan Ops team leaving their building at the end of a shift - 2:15 p.m. on the dot, after starting work at 4:00 a.m. It almost feels, as Wilson says in the video, "like a bell just rang, telling the workers to leave the factory."



FIG 5.7: Andrew Norman Wilson's "Workers Leaving the Googleplex" shows digitization contractors streaming out of a building at the end of a long day (<https://ydatu.com/05-27>, video).

According to the documentary, Google fired Wilson not just for recording this footage, but for speaking with some of the workers; Wilson maintains he was simply trying to understand more about the terms of their yellow-badge employment. In other words, Google allegedly fired Wilson for breaching the secrecy Google placed around a new, hidden class of contractors. Contractors who were digitizing content for Google's products, who were beginning their shifts well before dawn - all while they received less pay and fewer benefits than other tiers of workers at Google's headquarters.

But this practice extends far beyond Google. In fact, it's one that enjoys a long, rich history in our industry. The tech industry's gains have, time and again, been made precisely because of workers like Google's Scan Ops contractors: hourly workers performing rote, repetitive tasks, working long hours for little pay. And the reason this strategy has worked is that these workers - and their labor - have, whenever possible, been hidden from sight.

The hands that teach the machine

We've already looked at some of the advances our industry has made in "machine learning," which is often described as a type of artificial intelligence. But to put it simply, machine learning software is designed to become more accurate over time by itself - without human intervention. Think of your favorite streaming service's recommendation engine: any time you rate a movie or show, their software uses those inputs to "learn" how to provide you with better recommendations in the future. In other words, a machine learning algorithm will review the data it has processed in the past - its prior experience, if you like - to improve what it produces in the future. In other words, machine learning software is about automation: it improves its output without needing a human to program better results.

But these advances in machine learning are, at least in part, driven by something called "training data." Training data is fed into machine learning algorithms to make them more accurate. It quite literally is responsible for teaching them: working from training data, machine learning algorithms learn how to identify objects and relationships, and how to make decisions. Put another way, if you show an image recognition algorithm one million pictures that you definitively know contain cats, the algorithm will be able to more accurately identify - you guessed it - cats.

And training data often comes from humans. Humans have to sift through all those photos not just to confirm that, yes, they're photos of cats, but to highlight the part of the photo that contains a cat, and to label that collection of pixels accordingly (FIG 5.8). That act of annotating and labeling- done by human hands and eyes - is what makes the data meaningful to a computer, which is how the algorithm begins to learn.

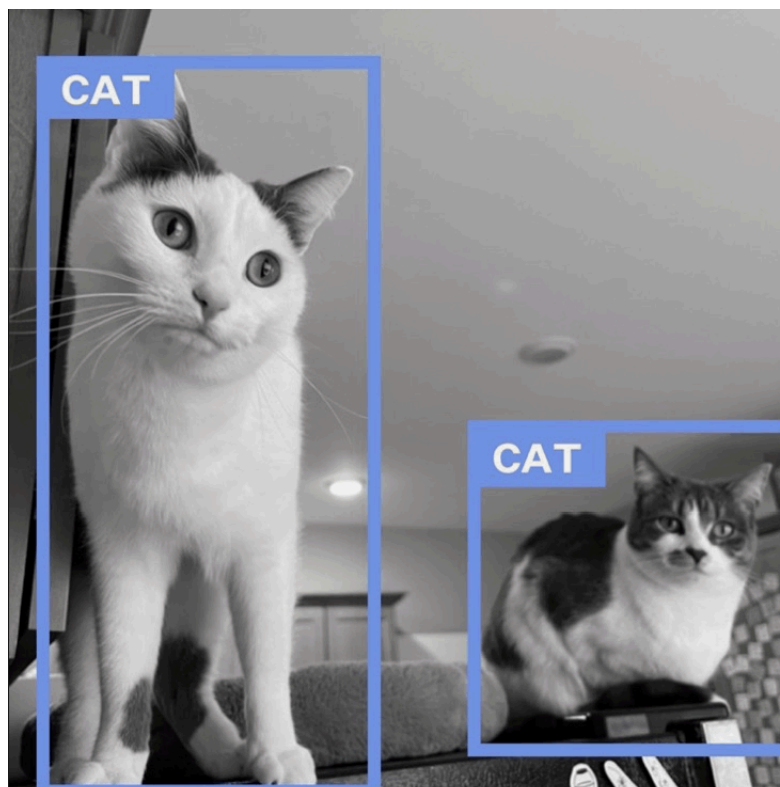


FIG 5.8: Humans must annotate "meaningful" pieces of training data, the way I've labeled our cats in this photograph.

That annotation step applies to other kinds of training data, too. Whether it's audio recordings, text transcripts, or videos, those files are often reviewed and labeled by human annotators. Doing so improves the quality of the data, which improves the accuracy of the machine learning models that are subsequently trained on that data. In other words, a human does work, so that the machine can learn.

As the industry's attention has shifted to machine learning and artificial intelligence, entire industries have sprung up around the annotation of training data, often employing underpaid contractors in countries with few labor protections. And this model makes for incredibly big business. In January 2023, *Time* reported that OpenAI had hired Kenyan laborers and tasked them with "cleaning up" ChatGPT, their artificial intelligence chatbot. ChatGPT had been producing violent, sexist, and racist statements, and these workers were hired to tag and identify the problematic sentences. They were, effectively, training the software to be less bigoted. And the work was grueling:

All of the four employees interviewed by TIME described being mentally scarred by the work. Although they were entitled to attend sessions with "wellness" counselors, all four said these sessions were unhelpful and rare due to high demands to be more productive at work. Two said they were only given the option to attend group sessions, and one said their requests to see counselors on a one-to-one basis instead were repeatedly denied by Sama management.
(<https://ydatu.com/05-28>)

OpenAI has a \$29 billion valuation; Sama, the contractor who hired the outsourced labor, was reportedly paid \$12.50 an hour. The Kenyan laborers were paid less than \$2 an hour.

Obviously, this is exploitation; these people are being exploited. And none of it happened by accident. By opening offices in impoverished communities, where wages are low and where labor protections are minimal, outsourcing companies like this one - and their corporate clients - can maximize their gains and minimize their costs.

And imagine how precarious these jobs are. As image and text recognition technology improves, will these contractors still have jobs in a few years time? It's quite possible that the data work they're doing is being fed into automated solutions that will eventually replace them.

RESOURCES

I am a relatively new student to labor history, and my education has come from the writing and research of countless historians, journalists, organizers, activists, and workers. If I have one wish for this book, it's that it will act as an introduction to the voices that taught me

In this section, I've included a few key pieces that guided me through this book. I hope they lead you down some interesting paths.

Books on labor, its history, and the law

I kept five books close at hand while I wrote:

- A Collective Bargain; Unions, Organizing, and the Fight for Democracy by Jane McAlevey (<https://ydatu.com/06-01>)
- Labor Law for the Rank and Filer: Building Solidarity While Staying Clear of the Law by Staughton Lynd and Daniel Gross (<https://ydatu.com/06-02>)
- Fight Like Hell: The Untold History of American Labor by Kim Kelly (<https://ydatu.com/06-03>)
- A History of America in Ten Strikes by Erik Loomis (<https://ydatu.com/03-02>)
- Subterranean Fire: A History of Working-Class Radicalism in the United States by Sharon Smith (<https://ydatu.com/06-04>)

I'd like to note that the last three books were invaluable sources for the histories I've covered in this book. But I owe a debt to all five of these titles, and to their authors. (Of course, any errors that remain are mine alone.)

Online resources

- The Voice of Industry was a worker-run newspaper published by young American women, filled with coverage and criticism of the labor issues rampant in the 1840s. Thankfully, its issues have been digitized and archived online (<https://ydatu.com/06-05>)
- Collective Action in Tech is a volunteer-run organization dedicated to covering worker-led actions in the tech industry, and to publishing profiles of the tech organizers fighting for a better future (<https://ydatu.com/06-06>)

Interintellect is an online community that hosts countless online events, and their (free!) series of talks on labor and organizing has been absolutely stellar (<https://ydatu.com/06-07>).

- The Zinn Education Project offers a trove of excellent labor-related teaching materials, histories, and resources (<https://ydatu.com/06-08>)
- The Kickstarter United Oral History is a podcast that charts the formation of Kickstarter's groundbreaking union, "from genesis all the way to the vote win." (<https://ydatu.com/06-09>)

Organizing guides and training

I'd strongly recommend Secrets of a Successful Organizer, a short guide to effective organizing published by the team at Labor Notes (<https://ydatu.com/06-10>).

- Bill Fletcher's "They're Bankrupting Us!": And 20 Other Myths About Unions directly addresses many of the myths surrounding unions, and might be helpful to you in your organizing conversations with coworkers - and perhaps again during a management fight (<https://ydatu.com/06-11>).
- Labor Notes is a nonprofit that provides union members and labor activists with the training and community they need. Toward that end, the nonprofit offers free online workshops, as well as an annual conference (<https://ydatu.com/06-12>)
- The Emergency Workplace Organizing Committee is a grassroots organizing program designed to support workplace organizing with resources and free online training (<https://ydatu.com/06-13>).
- Collective Action in Tech published DMs Open, a free zine about winning your remote organizing campaign (<https://ydatu.com/06-14>).

Staying informed on labor issues

It's never been easier to stay abreast of the latest labor news and developments. Here are some of my favorite ways to do just that.

- In addition to everything else they do, Labor Notes also publishes a monthly magazine covering labor issues and union fights (<https://ydatu.com/06-15>).
- CWA's CODE-CWA and OPEIU's Tech Local 1010 both have free newsletters I recommend, in which they update readers on the respective unions' activities. You can subscribe at <https://ydatu.com/06-16> and <https://ydatu.com/04-06>, respectively.
- Lauren Kaori Gurley (<https://ydatu.com/06-17>) and Caroline O'Donovan (<https://ydatu.com/06-18>) are two reporters whose coverage of the modern labor movement has been endlessly helpful to me.
- Published by the United Electrical, Radio and Machine Workers of America (UE). UE NEWS is a print periodical containing in-depth coverage of labor news and issues (<https://ydatu.com/06-19>).
- In These Times is an American nonprofit news organization offering coverage of the labor beat. It is excellent, and very much worth your time (<https://ydatu.com/06-20>).
- Before her passing, Jane McAlevey wrote a magnificent labor column for The Nation. As with everything McAlevey wrote, it's filled with keen insight, clear-eyed strategies, and timely lessons (<https://ydatu.com/06-21>).
- Economic Policy Institute is a nonprofit think tank that aims to center low- and middle-income workers in policy decisions; its newsletter is excellent (<https://ydatu.com/06-22>).
- Washington Center for Equitable Growth is a nonprofit research organization that studies economic inequality in the United States, and labor is one of their key focuses. As it happens, they also offer a free newsletter (<https://ydatu.com/06-23>).
- Tim Carmody's Amazon Chronicles is a newsletter covering the planet's largest retailer, digging into its plans, its ambitions - and its labor issues (<https://ydatu.com/06-24>).

Talks and interviews

- Vicki Crosson and Shane Moore, two members of the NYT Tech Guild, gave a talk at the 2022 Strange Loop conference on the technology and tools their union used to manage its organizing (<https://ydatu.com/06-25>, video).
- In 2019, Jane McAlevey gave a wide-ranging interview with Current Affairs, in which she discussed organizing strategies and finding electoral and political power through unions, and expanded on her distinction between "mobilizing" and "organizing" (<https://ydatu.com/06-26>).
- Labor Notes hosted an event in March 2023 discussing LGBTQIA+ labor histories, and invited speakers from Pride at Work Boston, Howard Brown Health, and the Alphabet Workers Union. Videos and resources from the event have been posted online (<https://ydatu.com/06-27>).

Workplace surveillance and union-busting

- This research paper from 2022 looks at the rise of labor organizing in tech workplaces, and studies the privacy habits adopted by organizers to mitigate the risk of retaliation (<https://ydatu.com/06-28>).
- The Intercept looks at a recent trend among union-busting law firms, and how they've embraced the language of diversity and inclusion to mitigate worker organizing (<https://ydatu.com/06-29>).

- Protocol reported on the union-busting campaign that defeated the Mapbox union election, and tied it to a larger wave of anti-union mobilization sweeping across tech companies (<https://ydatu.com/04-20>).
- In an essay for Boston Review, Brishen Rogers looked at technology as a tool for corporate surveillance in the workplace, and argued for greater worker control in response to it (<https://ydatu.com/06-30>)
- A 2021 research paper by Kathryn Zickuhr outlined how worker monitoring and surveillance has become the norm in modern workplaces, and suggested several structural and regulatory fixes for addressing the harms caused by these practices (<https://ydatu.com/06-31>)
- Vox published an in-depth look at a leaked memo detailing Amazon's strategy for combating unions: namely, a massive, tightly orchestrated public relations campaign (<https://ydatu.com/06-32>).

On marginalized tech workers

- I was introduced to the concept of underpaid data trainers by this 2018 BBC feature profiling Brenda Monyangi, a single mother who works at a data annotation company in Nairobi (<https://ydatu.com/06-33>).
- I first learned about Google's Scan Ops workers in "The Invisible Labor of the Web", Sarah Adams's talk at the 2019 Theorizing the Web conference (<https://ydatu.com/06-34>). It's a marvelous talk, and I still think about it.
- Ghost Work, by Mary L. Gray and Siddharth Suri, is a searing look at the invisible labor powering the modern tech industry (<https://ydatu.com/06-35>).
- During the tech layoffs at the end of 2022, both Time (<https://ydatu.com/06-36>) and Bloomberg (<https://ydatu.com/06-37>) reported on the outsized impact the layoffs had on H1-B visa holders.
- The Markup published a data-driven look at the violence faced by gig economy drivers and couriers (<https://ydatu.com/06-38>). Please note: this article contains graphic descriptions of violence.
- Adrienne Williams, Milagros Miceli, and Timnit Gebru wrote a remarkable article on the exploited labor behind the modern "artificial intelligence" movement (<https://ydatu.com/06-39>)
- Mandy Brown's "Smoke Screen" is an incisive, thoughtful essay on "artificial intelligence" and the value of human labor (<https://ydatu.com/06-40>).