Book Review

Review of Frith, Jordan. 2019. *A Billion Little Pieces: RFID and Infrastructures of Identification*. Cambridge, MA: MIT Press.

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“Techlash” was the *Financial Times*’s word of the year in 2018. It’s defined as “The growing public animosity towards large Silicon Valley platform technology companies and their Chinese equivalents” (Foroohar 2018). Growing fears about the power of big tech—usually comprising Facebook, Apple, Amazon, and Google but sometimes including other data-driven companies like Microsoft, Uber, etc.—and its hoovering up of our personal data in its pursuit of monopoly have come to dominate much of the recent public discourse around information and communication technologies. Shoshana Zuboff’s (2019) book on “surveillance capitalism” perhaps best exemplifies the intellectual strand of this emerging techlash—although her book is not without its detractors, including the likes of Evgeny Morozov.

Whereas Zuboff and others stress the almost inevitable headlong rush of humanity towards a dystopian future in which our lives and their digital traces are harvested for exploitation by canny advertisers able to supposedly predict our every move, *A Billion Little Pieces: RFID and Infrastructures of Identification* by Jordan Frith provides a more in-depth, and therefore ambivalent or nuanced, take on precisely *how* our data are collected, what this means for how our societies function, and where the limits of the techno-economic systems we’ve put into place are located. Above all else, Frith is concerned with the infrastructural specifics underpinning glossy notions thrown around by international “thought leaders” and policy-makers (e.g., “Internet of Things,” “Fourth Industrial Revolution,” and “data-driven economy”). For Frith, this means unpacking the particularities of mundane objects (see Chapter 2 in particular) like radio frequency identification (RFID).

Frith opens *A Billion Little Pieces* by positioning RFID at the “convergence” of “mobility” and “datafication,” representing a “suite of technologies” that often lie hidden as the background infrastructure we end up taking for granted (1–2). As such, he is taking—and necessarily so—an interdisciplinary path towards understanding RFID as an “infrastructure” of both identification and communication. It’s a way for him to get at the future imaginaries—and they are just that right now—of a fully-automated dystopian or utopian capitalism and to repurpose a more-hopeful vision of our futures. Whether you prefer a dystopian or utopian capitalism, of course, depends on your proclivities. What makes this such an interesting analysis is the fact that RFID has come from nowhere to near-ubiquity within the space of less than two decades. According to Frith, it has only really taken off since 2012. He notes that one company alone expects to sell over 100 billion RFID tags in 2019. RFID need to be produced. As tags, they are attached to all sorts of things. Their usefulness is limited by distance. In these ways, materiality very much continues to matter: the digital is physical.

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Frith does so much in this book that attempting to pin down the contributions of each individual chapter is not helpful. However, a few chapters stand out as offering especially valuable contributions. I found Chapter 2, “Infrastructure and Identification,” especially interesting and eye-opening. It traces the history of identification technologies—from barcodes onwards—and explores how such technologies and their attendant standards come to configure our techno-economic practices. It’s the first time I’d heard about the Universal Product Code, International Article Number, and European Product Code and their development from the 1940s onwards. As they have evolved, they’ve become more complicated, shifting from identification systems for classes of objects (e.g., *a* shirt) to individual objects (e.g., *that* shirt you’re wearing). These standards evolve with technologies like RFID, making the latter more and more viable as a tool for commerce.

I also enjoyed Chapter 3, “Understanding RFID Technologies,” with its account of the technical side of RFID technologies. The level of detail and depth to the analysis provides a counterpoint to some of the more laudatory or condemnatory claims about information technology in the twenty-first century. A lot can be done with identification technologies like RFID but they are limited techno-economic systems necessarily connecting the transponder, reader, and software required to make them useful. Different types of RFID tags have different limits: passive tags, for example, are small and cheap but only come alive when next to a reader. More worrying are recent developments with smartphones’ near-field communication capacities—which we use to pay for things, for example—since they can then operate as both tag and reader on the go (82). All of this comes together in Chapter 4 when Frith turns his sights on the Internet of Things (IoT). As he points out, the IoT will mean—at least in idealized visions—that everything will be given a unique digital identifier that can and will be interacted with. In this conception, much of life can be automated (e.g., your fridge ordering food for you when you run low). Smart cities are probably the most obvious example, but Frith includes more everyday examples to illustrate the potential ubiquity of these technologies. Our movement can be tracked continuously, as can our decisions, our purchases, and our preferences. Similarly, our movements can be restricted and our decisions closed off depending on the algorithmic processes built into the infrastructure. Whether we’re actually making decisions anymore becomes an important wider question, one that I’ve started thinking about myself in developing the concept of “automated neoliberalism.” That question is: if markets are supposedly reflections of automated, algorithmic processes, then are they free anymore?

I could say more about *A Billion Little Pieces*, but I think I’m happy to finish by giving it my strongest endorsement—and not just for those already interested in datafication or mobility. It has something for most thinkers, even if it’s just the identification of something that Frith has overlooked and needs further exploration.

References

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