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**Archiving Machines: From Punch Cards to Platforms.** By Amelia Acker. (2025). The MIT Press, ISBN(Electronic):9780262384568, DOI: <https://doi.org/10.7551/mitpress/14957.001.0001>

In his now-famous address at Kenyon University, the novelist David Foster Wallace uses a brief parable of fish in water to demonstrate “that the most obvious, important realities are often the ones that are hardest to see and talk about” (Wallace 2009, pg 4). It is the great merit of Amelia Acker’s recent monograph *Archiving Machines: From Punch Cards to Platforms* to articulate the seemingly banal facts of our information environment. First among these is the atomic element that makes it possible: data. Acker’s book shows how archiving machines have evolved from static repositories of an integrated whole, to disconnected bits of data. The shifting meaning of “archives” is interrogated by the author, following others who show the contested meaning of the discipline (Caswell, ML, 2016). And finally, Acker diagnoses the ills that this data regime has brought.

The first chapter gives an overview of the current state of play for our data-rich environment—dominated by large platforms such as Meta and Amazon. Data is “born networked” (Acker 2025, pg. 2) ; that is, information that only possesses meaning and value when being referenced by other access points. The technologies that enable this large-scale transfer of information are surveyed, along with the behavior that it teaches and reinforces for its users—what Acker calls “grammars of action.” (Acker 2025, pg.9) The through-line: these technologies and those that run them are increasingly coercive.

The second chapter is historical, tracing how data began and persisted for many centuries as a strictly physical phenomenon. The great leap to the virtual, networked data which dominates modern life begins with the shift from punch cards, where data was inscribed manually, to machine-readable records that brought along attendant possibilities for automation (Acker 2025, pg.23). The story of the abandoned effort to create a National Data Center in the 1960s highlights a crucial point. Public mistrust of the government handling data contrasts with its confidence in corporations that are driven only by profit. This, despite the fact that researchers have clearly understood the need for responsible data archiving for decades (Loughnane and Aspray, 2018, pg.226). The third chapter focuses on how data grew more distant—“externalized”—from its origins, and began to wander from the large machines that had held them (Acker 2025, pg.53).

The pivotal fourth chapter describes the point, beginning around the mid-1980s, at which people’s understanding of data shifted. During this time, businesses began collecting large amounts of data on their customers. This was in spite of the general sentiment that had doomed the National Data Center’s earlier attempts at centralizing data—the difference this time is that it was private enterprise behind the effort (Acker 2025, pg. 82). The rise of applications, as well as

the shifting consumer behaviors that facilitated them, is discussed. Acker points out that users collectively agreed to a “distancing” from their own information. Once confined to stable, private locations, data in this de-regulated, corporate environment began to serve the market first.

Chapter 5 develops the theme, using the lens of a cell tower as the central metaphor. The rise of the cell tower, a conduit for the rapid transformation and relay of information has allowed unheard-of levels of convenience to our lives, has also had other consequences. And one of these is that the average citizen has very little understanding of the volume and extent of data that they create, and which can be bought and sold by third parties. This data exists and moves perceived only by machines, in formats that are not legible in plain language, and destined for uses that may only emerge in the future (Acker 2025, pg.118). The importance of metadata is highlighted: certain types of it, including location and frequency, almost obviate the need for further surveillance.

The final chapter brings us to the present, with the mature state of play for born-networked data having fully given way to the regime of profit-obsessed platforms. Acker notes that there has been a tradition of trusting various historical institutions with individuals’ data, for access, privacy and other purposes (Acker 2025, pg.138). Libraries are central to this tradition. And while Acker traces how many platforms have been the subject of various government initiatives to ensure public access to data, these initiatives are found to be compromised and incomplete in the best of cases. The chapter explains how Application Programming Interfaces (APIs), the de facto method by which people and organizations can access data on platforms, are curtailed by platform restrictions. At the same time, data integration from disparate streams, as provided by firms like Palantir, present an ominous prospect of comprehensive surveillance.

The epilogue looks to the future, where data monetization meets emerging AI technology. This escalation of the powers of data brokers—to manipulate and control the lives of the citizens who create it— challenges our fundamental belief in “dataism” (Acker 2025, pg.167). Dataism is the ideology that platforms’ unprecedented level of access to our lives is worthwhile and should continue. Acker suggests rethinking this belief, and how we might, at least sometimes, put our data “to rest.” (Acker 2025, pg.163)

*Archiving Machines* is a well-argued, convincing history and call to reexamine some basic facts of life for a 21st-century citizen. It is strongly recommended for the general public and policy advocates, as a sobering account of how we have arrived at our present difficulties, and an intellectual starting point for a different path.

- Timothy Provenzano