

BIG DATA

The future of memory

A deluge of digital data threatens to destroy our collective identity

By Clifford B. Anderson

A surprising fact about professional archivists and librarians is their unsentimental readiness to turn away books, documents, and other tidbits of information, an act known as “appraisal.” Archivists are skilled at making these evaluations because they are charged with curating coherent collections rather than assembling hodgepodes of stuff.

The art of appraisal makes sense when the material in question must be stored in a physical space. Archivists would be overwhelmed if they tried to keep every item delivered to their doorsteps. But what about in the digital world? If technological advances allow us to keep every bit of digital data, should we? How would the resulting proliferation of information affect our ability to make sense of it all? And if we come to depend on this digital record, how can we ensure that it persists into the future? In *When We Are No More*, Abby Smith Rumsey, a professional historian and consultant to libraries and other memory organizations, explores these questions through the wide lens of human history.

Rumsey adopts an evolutionary perspective on the function of memory in society, arguing that our ability to transmit information by encoding it in physical media is what enables us not only to develop a sense of the past but also to meet future challenges. However, the externalization of memory has its downside. We become reliant on the material artifacts of culture. This dependence becomes fraught as we move to more ephemeral media. Clay tablets, although not capable of recording much information, have survived over millennia. Burn down a Mesopotamian archive and the “fired” tablets become more durable.

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Opened in 1878, the Peabody Library Building in Baltimore houses more than 300,000 titles.

By contrast, digital artifacts like websites change constantly. And if you unplug a data center, you stand to lose everything.

Rumsey tells her story through a series of vignettes, focusing on significant episodes in cultural history. She sketches the development of writing in the ancient Near East, the organization of libraries in the Hellenistic world, the invention of movable type and the rise of the first “print natives,” and the Jeffersonian dream of a universal library. These inflection points paved the way for our current understanding of the material world as one that encodes its own history. “Nature is the ultimate archive, the most complete set of records about the past, the Universal Library itself,” she writes, and science is “the ultimate library card.”

The digital age has vastly increased our ability to collect and recollect data, although perhaps at the cost of our personal memories. Our reliance on smart devices, which summon facts on demand, decreases our need to recall facts unaided. In part, this is an old worry. Socrates fretted about how the technology of writing affected wisdom. Committing something to memory is,

after all, among other things, a moral act. We are what we know. However, as Rumsey notes, forgetting also serves a critical purpose, freeing up our minds to incorporate new experiences.

Is there a danger that computers may supplant us as our cognitive systems struggle to keep up with all the data we now produce? Rumsey is skeptical; she regards brains and computers as different and largely complementary. Drawing on contemporary neuroscience, she contends that, unlike computers, the brain relies on affective, emotional experiences of the world to organize facts into patterns and to produce narratives about future courses of action.

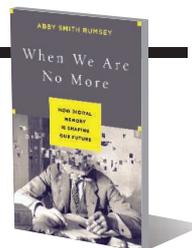
Rumsey also issues a warning against the temptation to overoptimize our preservation strategies. Although we may consider certain forms of information unimportant or useless at present, that same information may turn out to be vital in the future. She points, for example, to information about climate change that scholars have retrieved from the antiquarian logbooks of naval voyagers.

The goal of *When We Are No More* is not to have the final word on the subject of information management but to challenge us to consider more seriously how the consequences of our current data deluge will influence society moving forward. In that, Rumsey succeeds admirably.

When We Are No More How Digital Memory Is Shaping Our Future

Abby Smith Rumsey

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