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Physics in Perspective

EDITORIAL



The Impermanent Archive

Information regarding our past is often more mutable and less accessible that it seems. Upon retirement, some individuals curate their own archival material before sending it to institutions, making sure that less flattering materials are taken out. Sometimes paper archives are destroyed, as was the case with the University of Cape Town's special collections, destroyed by a wildfire in 2021. Perhaps most concerningly, digital archives such as email correspondence rapidly become inaccessible—they are deliberately deleted, hard drives crash, or their file formats become impossible to access with current technology. Such concerns have led some scholars to worry that we are living through a "digital dark age," and that future generations will be unable to reconstruct narratives of the early twenty-first century through archival sources. If this is the case, historians of the future will have to rely more on oral interviews, with all the problems and opportunities that they entail.

With such impermanence in so many of our sources, it can be tempting to see hefty objects such as microscopes, spectroscopes, and heliostats as an anchor to stop our drift. However, as Laura Rigotti explores in this issue, the journeys such objects take are also mutable. Collections themselves change, and the meanings of collections shift as the world changes around them. Rigotti's work is important in helping us understand these changes and why they happen—as historians we need not fear change in our sources, only changes that mystify or mislead.

Despite this, one place where some form of "permanence" can be attained is through our use of language. This is not permanence in the sense of being added to the *Oxford English Dictionary*, which is a source as mutable as any other, but a permanence in the sense of becoming part of the lexiconic family tree. Consider the following sentence:

klewdhi moy, ph2tér H1wérune!

This is a reconstruction of the Proto-Indo-European language, from the poem *The King and the God*, which was put together by a team of Indo-Europeanists and published in the *Encyclopedia of Indo-European Culture* in 1997. Proto-Indo-European is the common ancestor of Hindi-Urdu, English, and many other languages, of which no written record exists, and which was spoken as long ago as 4,500 BCE. A translation is as follows:

"Hear me father Werunos!"

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This is an exhortation to a god. We can reconstruct Proto-Indo-European through a comparison and analysis of its descendent languages, and through this we can understand much about the culture of the people who spoke it. We can understand their marriage customs, their attitude to horses, the names of their gods, all through the ever-changing non-material archive of spoken words.

In this issue, Helge Kragh discusses the introduction of new words in physics during the twentieth century through the use of acronyms, terms such as radar, laser, and pulsar. Many of these words have transcended the scientific community and entered everyday usage. It gives us pause to reflect upon a possible future where the archives and dictionaries have burned, but linguists of the future are able to work out that people of the late second millennium had an interest in radio astronomy and the stimulated emission of electromagnetic radiation, as that is what the future descendants of our languages will suggest. Perhaps, in a strange way, the material archive is the least permanent record we have. Although we should support efforts to protect the digital sources that slip so easily from historical grasp, we need not despair: fleeting conversations over the coffee table might reflect a more lasting record.

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