Shipwrecks, Hospital Wards, and Landscape Architecture: On the Unexpected Utility of Maps in Archival Collections

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Introduction

An obsessive cartographer in Reif Larsen’s novel, The Selected Works of T.S. Spivet, describes a 25-year project of attempting to compile and catalogue maps of all kinds to arrive at “a totally comprehensive understanding of the history, geology, archaeology, botany, and zoology of the land.” Mr. Benefideo realizes that the task is too much for one person or even one generation and hopes that a new generation of cartographers will pick up where he left off. “A map does not just chart,” he suggests, “it unlocks and formulates meaning; it forms bridges between here and there, between disparate ideas that we did not know were previously connected.”

Maps are among the best tools available for historical analysis, much as charts and graphs are essential to science. They come in many varieties. Good maps are a graphic, succinct summary of information, fertile with potential applications that may never have been predicted by their creators. This article summarizes how maps, and closely related documents, have been used in innovative ways by visitors and staff at three archival repositories where the author has provided reference services.

The Edgerton Papers at the MIT Archives and Special Collections

The first example looks at sonar records created by scientist Harold “Doc” Edgerton (1903-1990) and preserved among his personal papers in the Massachusetts Institute of Technology Archives and Special Collections.

Edgerton first became involved in underwater research in 1953 under sponsorship from the National Geographic Society. He designed electronic flashtube camera equipment capable of taking pictures in the deepest ocean trenches, where water pressure was as much as 8.5 tons per square inch. His success with underwater cameras led to a lifelong association with French explorer Jacques-Yves Cousteau. Various experiments while rigging equipment for Cousteau’s research vessel, Calypso, and for the Woods Hole Oceanographic Institution spurred the development of special sonar equipment capable of data transmission, distance measurements, and location of underwater objects not visible to the unaided eye or the camera’s lens. Even the clearest ocean water reveals little to the eye at a distance of thirty meters, but sound-based technologies can pinpoint objects and activity over much greater distances. Edgerton’s “side-scan sonar,” an acoustic device that located objects lying on the surface of the seabed, was especially useful in deep or murky water. His “boomer” was a sonar device that allowed continuous seismic profiling or mapping of the ocean floor. The “pinger,” an echo sounder, found its most useful application in searching for shipwrecks that had long been submerged by mud or sediment.

In 1968, Edgerton’s penetrating sonar devices located Henry VIII’s ill-fated warship, the Mary Rose, in the Solent, just north of the Isle of Wight. In 1973 his side-scan sonar located the Civil War battleship, USS Monitor, lost off Cape Hatteras since 1862; and in 1975 similar equipment found the British Army hospital ship, HMHS Britannic (sister ship to the Titanic), sunk off the Greek
Edgerton’s innovative accomplishments were motivated by the principle that if you cannot see something directly, you should find a way to record it indirectly. His sonar systems mapped the data they recorded, displaying the information as outlines and contours of what lay on or beneath the ocean floor. Exact location and relative positions appeared on rolls of paper that served the same function as more conventional maps. These records have been used with surprising frequency in the MIT Archives and Special Collections by historians, divers, and those bitten by the allure of underwater salvage, treasure, or adventure. Research results are not always reported to the archives staff. Treasure seekers are less forthcoming than others about the clues they discover.

The MGH Archives and Special Collections

The second example describes how maps have been used to good effect in the Massachusetts General Hospital Archives and Special Collections to caption historical photographs of buildings by examining their position and shape in relation to known buildings, roads, wharves, fences, etc.

The photographic collections at MGH consist of a wide variety of formats, including daguerreotypes, paper-based vintage prints, glass lantern slides, glass plate negatives, 35mm slides, published pictures for which original prints or negatives have been lost, copper printing plates used for reproducing images in books and newsletters, and digital images. Many pictures have an architectural focus, or show buildings incidentally as background to individual or group portraits. Buildings are sometimes identified by handwritten captions or labels on the back of a picture or on a mat, but often they are not, and they have sometimes been misidentified by well-meaning, but poorly-informed volunteers. Such mistakes, once written down, are likely to be perpetuated by researchers who assume that they are correct.

Maps of the hospital campus at various periods in its development show the outlines and relative positions of buildings. For example, the MGH’s no-longer-extant “pavilion wards” (1873) were loosely modeled after Civil War army field-hospitals. Many of the wards had a similar footprint and external details that were much the same. Erroneous identifications found their way into printed captions. By scrutinizing vintage photographs in conjunction with site maps it has often been possible to come up with reliable identifications. The angle from which a picture was taken can be inferred. Examining the architecture in the background (or other features) relative to that angle yields additional clues about position. Matching the inferred location with the footprint seen on a map near that spot often leads to a reliable answer.

The origins and functions of hospital architecture and campus planning cannot be adequately understood until considered in the context of the development of medicine and the role of hospitals in medical history. Maps are essential to the study of hospital buildings as they relate to one another and to overall planning. Studying the configuration of hospital buildings and their relative positions, can reveal much about the philosophy of hospital managers, the treatment goals they espoused, the flow of patients and accessibility of services, and the efficiency of hospital administration.

The Wakefield Archives Project
The third example discusses how historical maps, site plans, and map-like planting schemes located and catalogued by the Wakefield Archives Project have been used by landscape historians to reconstruct gardens and orchards to approximate their former condition.

Mary May Binney (1914-2004) descended from a Boston Brahmin family that inherited a substantial estate in the semi-rural suburb of Milton, Massachusetts. The title to the land can be traced back to 1707; the principal dwelling (among several) is the Davenport Mansion, dating from 1795. Mary, known as Polly, was a studious child who attended private schools and spent much of her leisure time raising goats and imagining gardens. She graduated from a school that specialized in landscape design and put her knowledge to work on the estate. Her late marriage in the 1950s to Kennard Wakefield, a Harvard-educated businessman, resulted in no heirs. Consequently, Mrs. Wakefield’s will stipulated that her estate and liquid assets were to be converted to an educational purpose.

The trustees decided that historical and horticultural programs for public enjoyment would be the best way to honor Mrs. Wakefield’s intentions. The Mary M.B. Wakefield Charitable Trust hired an Executive Director, a Landscape Architect, and a handyman to carry out programs in the spirit of Mrs. Wakefield’s wishes. They studied the buildings and grounds insofar as that was possible without adequate access to documentation. The grounds had fallen into neglect during a prolonged period of illness and confusion toward the end of Mrs. Wakefield’s life. But scattered plans for orchards, formal gardens, dogwood groves, and various ornamental details popped up among the disorganized masses of paper she left behind.

The Wakefield Archives Project grew out of a perceived need for better intellectual and physical access to documents. As the Consulting Archivist, aided by a rotating crew of library school assistants, I located hand-drawn maps that showed Mrs. Wakefield’s actual and proposed planting schemes, including her never completely realized plans for a sequence of connected outdoor “rooms” framed by trees and shrubbery (nicely accented by sculpture), an elegantly conceived outdoor extension of the house. Other hand-drawn maps show the property’s fields, orchards, and woodlands as they were before falling into neglect and becoming overgrown. The maps are useful in a variety of contexts for restoration work. Staff members often compare the old schemes to old aerial photographs of the property, apparently commissioned by the family at various periods.

The educational programs hosted by the Wakefield Charitable Trust, which use the buildings and grounds as a laboratory, include the following: An arrangement with Boston University’s Historic Preservation Program to study the buildings and how they have been modified to accommodate the needs of succeeding generations; an arrangement with BU’s Department of Archaeology for excavating evidence of prehistoric Native American activities; an archival internship program in conjunction with Simmons Library School; cooperative agreements with various museums for cataloguing and studying historical furniture, paintings, and other objects; nature appreciation programs that bring in groups of school children from surrounding communities; and garden tours and horticultural workshops for the general public. The hand-drawn maps found among family papers during several phases of archival processing have been an indispensable aid to these programs.

Conclusion

Over the centuries, maps have ignited war and secured peace. Uncharted areas (labeled “terra incognita” on early maps) inspired some men to explore and left others daunted by uncertainty. Territorial boundaries and maps indicating wagon trails, waterways, and/or the proximity of railroads were critical instruments of expansion in the American West. Some maps, defining claims,
facilitated the orderly settlement of the continent by homesteaders; while others, marking the boundaries of treaties and the limits of reservations, served as tools for Native American repression and containment. Frederick Jackson Turner’s 1893 Frontier Hypothesis was predicated on maps, as were the many refutations of his theory that followed. Maps were a key factor in historical developments, and remain an essential tool for research related to those events.

The geo-political aspects of maps, however, are not their only utility. Maps are replete with often untapped potential for unconventional and surprising applications. They are among the most versatile documents available in archives for those with sufficient imagination to see beyond the conventional coordinates and explore new problems in inventive ways.


2 See MC 25, Harold E. Edgerton Papers, MIT Archives and Special Collections.


Jeffrey Mifflin received an A.B. from Harvard University, a J.D. from Northeastern University School of Law, an M.A. in History and Archival Methods from the University of Massachusetts at Boston, and an M.S. in Library and Information Science from Simmons Library School. He has been a consultant on many archival and historical projects and is currently the Consulting Archivist for the Wakefield Estate and Arboretum, Milton, Massachusetts, and the Archivist and Curator of Special Collections at the Massachusetts General Hospital in Boston. His publications related to archival topics as well as the history of anthropology, cinema, jazz, medicine, printing, and visual culture have appeared in a wide variety of books and journals.