EXPLORING EARLY CONNECTICUT MAPMAKING



AT FIRST, there were only the mental maps of the Native Americans, who easily traveled the whole region we now call Connecticut along lightly marked trails, from memory. Connecticut's first formal cartographers were Europeans working in the 17th century to record and capture the details they considered important, mainly to help lay claim to territory for their nations. The earliest locally produced maps exist only as manuscripts, their makers usually anonymous, ranging from rough sketches to visually sophisticated renderings of the landscape as seen by the mapmaker. Scattered across town, state, and private collections, they provide valuable glimpses of events great and small in Connecticut history.

During the 19th century, an astounding variety of maps were published for sale by a network of American surveyors, engravers, cartographers, and printers. These mapmakers were sometimes prolific and sometimes not; some became famous, and others remain obscure. Some maps of this period were produced wholly or partly in Connecticut, depicting places outside and inside the state. Although Connecticut's role was relatively small, all of these cartographic efforts are part of the economic and social history of the state and the nation.

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above: "Map of Ancient Simsbury," a wonderful example of a manuscript map used to settle a dispute over the siting of Simsbury's meetinghouse, attributed to Samuel Higley. Pen, ink, and watercolor, 1736. Connecticut State Library, photo: Walter Wick

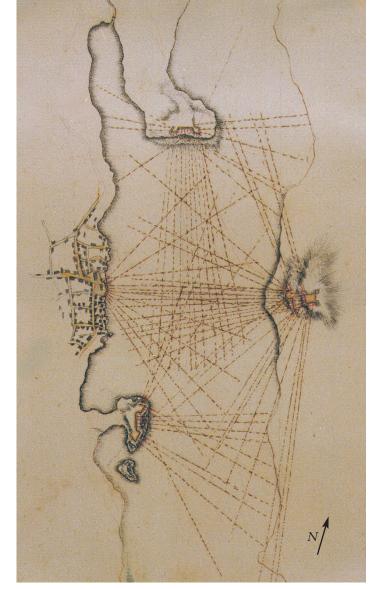
Manuscript Cartography and its Uses

Manuscript maps, hand-drawn and unique, were most often made for specific reasons having to do with territories, boundaries, and properties. For example, in 1662, the Mohegan sachem Uncas was asked by colonial officials to help them describe the extent of the territory of the Pequot tribe that had been conquered by an alliance of Englishmen, Mohegans, and Narragansetts in 1636. This map, probably drawn by a colonial official with input from Uncas, supported colonial claims to territory encompassing much of southeastern Connecticut, which had been divided among the victors decades before but was still being argued over with various parties. A little more than a century later, the colony was still arguing over Indian lands, this time directly with the Mohegans. The tribe commissioned a series of maps supporting their territorial claims, which they were making to a British royal commission. This "Mohegan Controversy" waxed and waned through most of the 18th century, with the first decision in favor of the Mohegans and the appeals (up through 1773) going in Connecticut's favor.

A little-known feature of colonial Connecticut mapping is the use of maps in certain religious disputes. Congregational churches were official branches of local government (known as "ecclesiastical societies"), and the location of a town's meetinghouse (or church, as we know it) was a serious issue. The goal was to make access to the meetinghouse—which all the residents supported through "rates" (taxes) and were required on pain of fines to attend every Sunday—as equitable as possible. One result of such controversies was often a map of the society, depicting with painstaking attention the relative locations of the residents' homes with respect to the proposed meetinghouse. How useful such maps were in any given case is difficult to say, but we appreciate them now for showing us where people lived at the time.

Military personnel sometimes created maps for planning related to fortifications and the defense of areas. Connecticut has seen relatively little direct military action, so maps of this kind are rare, and very little research has been done to establish how many might exist in Connecticut. One fine example, however, is a detailed 1776 sketch made by John Trumbull of the forts on the Thames River, establishing their locations and lines of fire. We can hope that in the future, more maps of this kind (though perhaps not this quality) will be discovered.

Another use of mapping was—and is—to portray the results of land surveys, from state and town boundaries down to individual parcels of land. As late as the 1950s, groups of surveyors did their work with a compass or surveyor's transit and a metal chain (usually 66 feet long), which was used much like a tape measure is today, despite its weight. Sometimes cadastral maps, showing some or all of the land parcels in a town, or even a single parcel, were drawn to clarify land ownership and boundaries. Like the meetinghouse maps, these can be fascinating historical artifacts, with details not otherwise available to the scholar. Manuscript maps of various kinds were made into at least the 19th century, as need arose. The information they provide to historians makes each one valuable—even when they are not also beautiful.



Sketch by John Trumbull of fortifications at the mouth of the Thames River and their lines of fire, New London and Groton, 1776. State Archives, Connecticut State Library

PRINTED MAPS

The oldest printed map drawn in Connecticut by a Connecticut resident was surveyed and drafted by Moses Park of Preston (assisted by Asa Spaulding of Norwalk and Samuel Mott of Preston) in 1765 and portrayed the colony. Its engraver and printer are unknown, but according to Edmund Thompson's *Maps of Connecticut* (reprinted by G. B. Manasek, 1995), its making was supported by the colony government, which gave Park authority to trespass on private land in order to survey the lines—an extraordinary action for the time. For the earliest map both surveyed and known to be printed in Connecticut we must turn to a 1771 chart of the Saybrook Bar, a large sandbar at the mouth of the Connecticut River. It was compiled by Captain Abner Parker of Saybrook

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(1697-1788) and engraved by Abel Buell of New Haven. This is one of very few examples of navigational charts made in Connecticut; most were produced by or for national governments, either European or American, or by professional chart makers based in England or France. Engraving is an often-overlooked part of the printing process, yet it was essential to the production of many images from the 15th century into the 20th, although serious competition from the lithography process emerged in the 1840s and from other new processes later on. Engravers were skilled craftsmen who created mirror images of existing drawings by making fine, shallow grooves on copper plates with needles, punches, and tools called gravers. They produced all kinds of illustrations for printed works, and also plates for paper money. Their time and expertise were expensive—as much as, or more than, an original survey that required a crew of men to cover the ground in person. For an example of the engraving costs, Thompson reported that the engraving of the Parker map of 1771 cost £30; the two large copper plates used for it cost £6.5. In 1798, as reported in Mary Sponberg Pedley's The Commerce of Cartography (University of Chicago Press, 2005), the survey and compilation of a map of Maine and Massachusetts cost \$1,136, while the engraving of its eight plates cost \$1,100. Engraved plates were therefore sometimes re-used: Walter Ristow's American Maps and Mapmakers (Wayne State University Press, 1985) notes that a plate of a Connecticut state map engraved and published around 1827 by Alfred Daggett of New Haven was re-used in 1831, 1836, 1847, and 1858, each time with new engravers' and publishers' names added. Although

the less expensive technique of lithography (involving the chemical transfer of an image to a smooth piece of stone or paper for printing) was perfected by the 1840's copper engraving remained in use for some time.

Needless to say, the printing of maps was not undertaken casually. According to Thompson, the engraving of Parker's map was paid for through sales of legislatively authorized lottery tickets, which at the time was occasionally done to support public infrastructure projects (in this particular case, river navigation improvements). A more common approach was (as with books in the 19th century) a subscription scheme under which customers committed to buy the work once it was produced. The 1813 map of Connecticut by Moses Warren and George Gillet (engraved by A. Reed of East Windsor and printed by Hudson & Goodwin of Hartford) was surveyed under direct authority granted by the state but was paid for by the surveyors themselves, with the backing of a subscription list. Of course, there was never a guarantee that all the subscribers would actually buy the map, so this was often a risky venture. Whether or not Warren and Gillet and their publisher made back their investments, Gillet re-published the map—with updates—five times between 1820 and 1847 (the later versions engraved by Asaph Willard of Hartford). This longevity, its relative accuracy, and the investment of time and effort put into it by the mapmakers make this one of the more significant early Connecticut maps.

above: Engraving tools, late 19th century. photo: William F. Keegan, Connecticut State Library



"Map of the United States of America" by Amos Doolittle in *Geography Made Easy, Being a Short but Comprehensive System* by Jedidiah Morse, 1784. Connecticut Historical Society, Hartford Connecticut

Who Were these Mapmakers?

Connecticut mapmakers came from a variety of backgrounds and professions. Moses Warren (1762-1835), one of the makers of the important 1813 state map, was a professional surveyor. Born in Hopkinton, Rhode Island to Moses Warren, Sr., he moved to Lyme, Connecticut with his family in 1764. Among his many activities, Ristow says, Warren was a sergeant during the Revolutionary War, helped to survey the Western Reserve in 1796, surveyed the Connecticut/Massachusetts state line in 1826, made an ecclesiastical map of the First Society of Lyme in 1815 (for one of those disputes over the meetinghouse), speculated in turnpike development, and served as a state legislator from Lyme and as county surveyor for New London County—a fascinating career of diverse public service and private enterprise. His partner on the 1813 map, George Gillet (1771-1853), was a resident of Hebron and also worked as a professional surveyor and served as surveyor-general of Connecticut.

William Blodgett of Middletown (1754-1809) is a contrast to Warren and Gillet. He had produced a map of the state in 1791, that was engraved by Joel Allen of Middletown. His varied career, however, included stints as an officer in the Revolutionary War army, navy chaplain, storekeeper, artist, author, and musician, a variety that suggests either lack of success or lack of persistence. (According to one account, he was once reduced to trading copies of his Connecticut map for 10 pairs of shoes). He only made two known notable maps, the 1791 one of Connecticut and another of Vermont.

Amos Doolittle of New Haven (1754-1832) was another case again. He was originally a silversmith by trade, for which he presumably learned engraving, a skill he turned to political purposes when in 1775 he published four unsophisticated engravings depicting the battles of Lexington and Concord, clearly intended to inflame patriotic citizens to action. This launched his career in illustration, which included images in books ranging from almanacs to histories of Connecticut to various magazines and more. His shop became an engraver's and printer's shop, which produced book plates, tickets, and Yale diplomas. And he also produced maps for books, atlases, national

atlases, and geography textbooks. Most of these maps were not surveyed by him, but rather were adaptations of the works of others. Thus, although he "made" maps, he usually did not create them from original research. But he did also survey, engrave, and publish a map of his home city of New Haven, in 1812.

Doolittle's geography textbook work is of particular interest because some of those books were written by Jedidiah Morse (1761-1826) when he was living in New Haven. A Yale graduate and Congregational minister born in Woodstock, Connecticut, Morse is known as the "father of American geography," according to John Rennie Short's *Representing the Republic* (Reaktion Books, 2004), a distinction he earned apparently by accident after he began publishing popular geography textbooks in 1784 (with Doolittle's engraving work) to support himself financially. His was the first book of American geography written and published in the United States. Although Morse was not, strictly speaking, a mapmaker, his patriotic and exceptionalist vision of America and American geography influenced generations to think of his native New England as the source of authentic American culture.

THE HEYDAY OF CONNECTICUT MAPMAKING

Mapmaking activity in the Northeast increased substantially from the 1820s, buoyed by a flourishing economy and especially the thriving commerce in the region. Connecticut's robust publishing industry, with its high concentration of engravers, printers, and publishers, made some notable contributions to this surge in activity. The best-known examples of these maps are those that were widely distributed among the upper echelons of society (usually for display) and therefore have survived.

An unusual number of maps of ports were produced in 1824 and 1825, no doubt to capitalize on the market among the *nouveau riche* merchants and manufacturers of the region. Interestingly, several of these are stylistically very similar to a 1748 manuscript map of New Haven that was drawn by General James Wadsworth of Durham, in which the homes of the so-called "better sort" were depicted as tiny sketches, complete with chimneys and windows. This particular map was copied and printed multiple times in the opening decades of the 19th century, a time when the new nation began trying to define itself. The style was copied for several ports. Middletown was surveyed and mapped by H. L. Barnum and engraved by J. T. Porter, both of that town.

Nathaniel and Simeon Jocelyn are worthy of note. Our survey of works in which they were involved indicates that, along with Doolittle, they were prolific producers of maps during the 1820s and 1830s, covering areas ranging from Connecticut to Greece to the Caribbean (the latter map includes "Piratical depredations and barbarities, from May 1818 to August 1825"). According to Ristow, the Jocelyns eventually relocated to New York, and while Nathaniel seems to have remained in the commercial engraving business, Simeon turned his energies to the anti-slavery movement around 1858.

The next major trend in mapping was the county map, usually a very large, wall-sized work for display, which became popular among well-off rural citizens during the 1850s. Bound county atlases containing maps of the individual towns began to appear in the latter part of the century. Most of both types were published in New York and Philadelphia, but Connecticut also published a small share.

One of the most surprising features of Connecticut's mapmaking history, and that of the country in general, is the role of Newtown and the Newtown Academy. According to Ristow, John Homer French, who served as the school's headmaster from 1852 to 1855, was also a civil engineer and surveyor who was active in New York State before and after his relatively short service in Newtown. When he was put in charge of an ongoing project to map the counties of New York in 1855, he recruited some of his former Newtown students: first Silas N. Beers, Frederick W. Beers, and D. Jackson Lake, and later Daniel G. Beers, Augustus Warner, J. Silliman Higgins, and others. These young men later established—outside of Connecticut—a series of publishing companies that ultimately portrayed all of the Northeast and much of the Old Northwest in county atlas form. Thus, the cartographic style and creative energy of much of the expanding nation was strongly, though not exclusively, influenced by Connecticut natives.

This frontispiece from A System of Modern Geography for Schools, Academies, and Families, Nathaniel G. Huntington, 1838, represents the argument that geography is an essential part of education. Connecticut Historical Society, Hartford, Connecticut



Detail of "Map of the city of Middletown surveyed & delineated by H. L. Barnum" showing the developing wharf area, 1824. Connecticut Historical Society, Hartford, Connecticut

Many reasons for the production of manuscript maps remained as the 19th century drew to a close, including the continuing dispute over Indian lands, but the disestablishment of the Congregational Church in 1818 meant that conflicts over meetinghouse locations were no longer a matter of public record. At the same time, improvements in printing and publishing machinery meant that printed maps (like books) were less expensive to produce, and so became increasingly common. Earlier printed maps are notable for their scarcity, for their historical content, and often for their intentionally decorative appearance. Mapmakers continued their work, in Connecticut and elsewhere, in a context of greater abundance and of an increasingly broad audience. It was their predecessors, however, who first showed the way.