Mapping Massachusetts (Part II, 1750-1801)

In the previous number of this newsletter we surveyed the mapping of Massachusetts from 1600 to 1750. Here we will examine progress in the second half of the 18th century. This period saw two related transitions, stimulated by the requirements of the British colonial administration and later by those of the state government. First, there was a shift of emphasis from delineating external boundaries to documenting internal geographic, cultural and political detail. In a second development, the job of mapmaking was taken over by professionals who introduced the ideal of a systematic regional survey conducted to uniform standards.

MAPPING THE INTERIOR

Prior to 1750 printed maps provided only the sketchiest view of the Massachusetts interior. All this changed with the appearance of William Douglass’ seminal Plan of the British dominions of New England in North America (ca. 1753). Based on original surveys, the Plan was a staggering advance over earlier maps of the region. Of primary importance was Douglass’ integration of official surveys and recent administrative decisions to produce the first accurate map of Massachusetts’ external borders. In particular he depicted the resolution of a long-running boundary dispute between Massachusetts and New Hampshire. George II had ruled in the latter’s favor in 1740, setting the boundary at three miles north of the Merrimack River as far as Pawtucket Falls, from which point it ran directly west.

For interior detail Douglass drew on local surveys to show for the first time the rapidly-growing matrix of township boundaries as well as many of the smaller lakes, rivers and streams. His map is striking for the contrast between the densely-settled areas East of the Connecticut River and the relatively empty region to the West.

The Douglass map is extremely rare, but far more accessible is Braddock Mead’s Map of the Most Inhabited Part of New England, published by Thomas Jefferys in 1755. Mead’s map rather closely follows that of Douglass though with some significant improvements. For example, in Massachusetts Mead added some new place names (such as “Pentusok,” now Pittsfield), introduced county boundaries, and linked Cape Ann to the mainland where Douglass had depicted it as an island.

ENTER THE STATE OF MASSACHUSETTS

Following the Revolution the government of Massachusetts urgently required an accurate map for at least three administrative objectives: calculating tax allotments to the towns based on land valuations, supporting the sale of public land to pay off war debts, and informing infrastructure development. Existing maps were too outdated and small scale to be of use. For example, dozens of townships established after the 1750s were not shown on the Douglass and Mead maps.

Braddock Mead, Map of the Most Inhabited Part of New England (state 5), 1774.
Understanding “editions,” “states” and “issues”

The production of a new map required a substantial investment in compiling information, drafting the map, and preparing it for printing. Many publishers therefore sought to maximize their returns by re-issuing maps as many times as possible.

These later issues usually exhibit differences from their prototypes. These may be relatively minute, such as a change in the date or publisher’s imprint. Or they may be major, such as the addition of important geographic data or dramatic decorative elements.

Such differences may have a substantial impact on the cartographic, historical, aesthetic, and monetary value of a map. Hence it serves collectors to understand in a general way how early maps often evolved as they were reissued, as well as the evolution of specific maps in their area of interest.

“STATE” VS. “EDITION”

Early printed maps were produced by transferring the desired image to a wood block, copper plate, or lithographic stone, from which essentially identical copies (“impressions”) could then be printed.1 Over time, variations of a given map could be introduced in two basic ways.

A new state of the map was created by altering the image on the original plate. The most common alterations were the addition of new geographic knowledge; revision of place names or the insertion of new ones; introduction of decorative motifs; or change of “imprint” to indicate a new printer, publisher or publication date.

Careful detective work can establish the sequence in which different states of a map were produced. Once this is accomplished, the successive states are referred to as “1st state,” “2nd state,” “3rd state” and so on. A special case is a “proof” state, an impression taken during the course of engraving and intended not for sale but to check the progress of the image.

A new edition of the map was produced by re-engraving the image on a fresh plate. This might have been an attempt at an exact copy of the original, or it might have involved significant revisions. The most common reasons for a new edition were:
- Replacement of an original plate that was worn from printing or otherwise damaged
- Introduction of revisions so extensive that it was easier to start anew than to edit the original
- Copying (legally or otherwise) by a second party

The two concepts of state and edition are often both relevant in describing a map. Consider the three maps illustrated here, each belonging to the so-called “Jansson-Visscher” series of maps of the New Netherlands. At top is the first state of the first edition, published by Joannes Jansson in 1650-51. At lower left is the second state of the first edition, published by Jansson in 1660 from the same plate but with a third cartouche added at the bottom. Finally, at lower right is from an example of the second edition, engraved on a new plate and issued by Nicholas Visscher ca. 1655. It is instantly recognizable by the added view of New Amsterdam.

Issue is a third, more general term for differentiating maps. It is typically used—as in the second paragraph of this article—to distinguish any subsequent printing of a map, from either the original or a new plate, with or without alteration. As such it is often found used as a synonym for either state (“a later issue of Ruscelli’s Tierra Nueva, with the ships and a sea monster added”) or edition (“Sartine’s French re-issue of Des Barres’ chart of Boston Harbor”).

The exact usage of “state,” “edition” and “issue” is the subject of some dispute. For example, some writers argue that any change in an engraving yields a new state, while others are more restrictive. Terminology aside, the essential point is that variations occur in two basic ways—either by revising an image on an existing plate, or by recreating it on a new plate.2

STATES, EDITIONS AND VALUE

Different states and editions of a map may have very different values on the antiquarian map market, particularly if the piece is important or otherwise desirable. All things being equal, earlier states or editions tend to be more valuable.

All things are not equal, however, when later issues of a map contain significant new information or decoration, or are substantially rarer. Consider for example the maps of the “Jansson-Visscher” series discussed above. On account of the
inclusion of the New Amsterdam view, the Visscher edition often commands a higher price than the Jansson prototype.

It is therefore incumbent on would-be buyers to do their homework. Before shopping for a specific map, do some research to answer a few basic questions: Was it issued more than once? If so, when and by whom? How do the different issues vary, and what is the significance of these variations? Finally, which issue(s) best fit your collecting priorities and budget?

Thanks to Michael Hirsch and Joel Kovarsky for reviewing a draft of this article. All errors are the responsibility of the author.

NOTES
1 For brevity, "plate" will henceforth be used as shorthand for "plate, block or stone." Descriptions of printing methods may be found in MapForum magazine, issues 5-8; F.J. Manasek's Collecting Old Maps, pp. 52-63; and David Woodward's Five Centuries of Map Printing.
2 For one lucid take on these and other "cartobibliographic" terms, see Manasek, op. cit., pp. 63-65. Another useful resource is the Online Dictionary for Library and Information Science (http://lu.com/odlis/about.cfm).

Mapping Massachusetts (continued)
This presented the legislature with a dilemma, as public funding for a State Map would have been prohibitively expensive. So in 1774 it resorted to an unfunded mandate, requiring each town in Massachusetts to conduct a survey of its territory and submit a plan to the Secretary of State. These would then be compiled and where necessary reconciled to produce the official map.

The Resolve stipulated a number of quality requirements for the plans. They were to be at a uniform scale of 200 rods (ca. 3300 feet) to the inch, and township boundaries were to be carefully delineated as to length and compass bearing. And they were to depict many features of the natural and human landscape, including "... the names and course of rivers, the bridges over rivers, the course of county roads, the situation of houses for public worship, Court-Houses, ... the breadth of rivers, the number and reputed magnitude of ponds, the falls of water, mountains, manufactories, mills, mines and minerals, and of what sort, iron-works and furnaces ..."4

Though specific regarding content, the Resolve said little about methods. In particular, there was no reference to the advanced tools and techniques in use by European surveyors in North America as early as the 1750s. Presumably these were far beyond the limited financial and human resources of the individual towns. Consequently the hundreds of plans ultimately submitted were highly variable in terms of both accuracy and detail.5

In 1797 Osgood Carleton, a Boston mathematician and mapmaker, and John Norman, a printer and mapmaker also based in Boston, were commissioned to compile and print the State map. They were to receive no compensation, though after delivering 400 copies for official use they were free to profit from whatever sales they could generate. This model of state-local-private partnership was similar to one used by Vermont in 1790 and later adopted by New Hampshire 1803.6

Osgood Carleton, Map of Massachusetts Proper (state 2), 1802.

An Accurate Map of the Commonwealth of Massachusetts was published in 1798, with a vastly improved edition issued in 1801 and 1802 under the new title Map of Massachusetts Proper. For sheer volume of information this beautiful production represents a great advance over the Douglass and Mead maps. At 4 miles to the inch it is on a larger scale than any previous map of the region. This enables it to depict for the first time the road network, schools, meeting houses, and courthouses, as well as the locations of key natural resources. It also provides a far stronger depiction of the complex pond, lake and river systems of the state. Finally, it reflects the rapid pace of settlement, with the region west of the Connecticut River now shown completely subdivided into dozens of new townships.7

MAPS BY BRITISH MILITARY SURVEYORS
The maps discussed hitherto form a distinct evolutionary thread. Their content, with the emphasis on political boundaries, natural resources and (in the Carleton map) economic activity, reflected the twin goals of administration and economic development. They were largely indigenous efforts, compiled from dozens of local surveys by Americans with modest training and few resources at their disposal.

After the French and Indian War, the British were left in control of all lands east of the Mississippi. They were well aware that existing maps were ill suited to the tasks of administering and defending these vast holdings. As the Privy Council wrote to George III in 1764: "We find ourselves under the greatest difficulties arising from the want of exact surveys of these counties in America ... and, in this situation, we are reduced to the necessity of making Representations to your Majesty, founded upon little or no information."8

Consequently, the years between 1764 and 1775 saw a rush of mapmaking by military engineers in British employ. This effort represented an entirely new approach to mapping North America. The long-term goal was a "geodetic" survey of all British holdings, modeled on state-of-the-art practice in Europe. The core of this method was the use of astronomical observations to determine the precise location of a few "control points." With these as a foundation, careful measurements and basic trigonometry were used to establish hundreds or thousands of secondary locations over a large region. When combined with precise instruments and the painstaking checking of data, this method yielded strikingly accurate results.

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Mapping Massachusetts (continued)

Though this grand endeavor was halted by the Revolution, in Massachusetts substantial advances were made both along the coast and in the western third of the province. Rather in contrast to their indigenous counterparts discussed above, the resulting maps were above all about mobility, either of ships at sea or armies and commerce on land. Consequently there was a heavy emphasis on features that enabled or hindered movement—soundings, navigational aids and hazards at sea, and roads, elevations, and waterways inland.

By far the most successful effort was a survey of the North American coast from Newfoundland to the Gulf of Mexico. The New England component of the project was overseen by Samuel Holland, Surveyor General of the Northern District, and the resulting charts were published by Joseph Des Barres in the *Atlantic Neptune* (1775 and later). The *Neptune* includes several charts that, in terms of scale, detail and accuracy, are landmarks in the mapping of coastal Massachusetts.

Western Massachusetts was included on several important new maps in the 1760s and -70s, though only Claude Joseph Sauthier’s *Chorographical Map of the Province of New-York* (1779) provides substantial new information about this area. This map focuses on the strategic Hudson River valley, but also depicts much of western New England including Massachusetts as far East as the Connecticut River. Unique among early maps of the area, Sauthier used hachuring to provide extensive detail of elevations and slopes. He also showed many roads, rivers and streams not depicted elsewhere.

CONCLUSION

This article has reviewed two distinct threads in the mapping of Massachusetts during the second half of the 18th century. Driven by their respective objectives and the skills and resources of the mapmakers, each had its distinct methods and content. In the final installment of this series we will see how these threads ultimately converged during the 19th century.

Thanks to Henry Taliaferro for reviewing an earlier version of this article. All errors are the responsibility of the author.

NOTES

1 For more on the Douglass map see Matthew Edney’s “William Douglass (ca.1691-1752) and his Map,” available at http://www.usm.maine.edu/~maps/percy/douglass.html.

2 High-resolution images of the Douglass and Mead maps may be viewed by navigating to http://memory.loc.gov/ammem/gmdquery.html then entering the desired search terms.


5 The originals may be viewed at the Massachusetts State Archives, and copies are available for a nominal fee.


7 A high-resolution image of the 1801 edition may be viewed by navigating to http://lib.harvard.edu/, clicking on the Hollis Catalogue link, then entering the desired search terms.


9 See chapter 1 of J.B. Harley’s, *Mapping the Revolutionary War* (1978) for an excellent discussion of British military mapmaking prior to the Revolution.

10 A high-resolution image of Sauthier’s map may be viewed by navigating to http://memory.loc.gov/ammem/gmdquery.html then entering the appropriate search terms.