

## map library bulletin board

### The Osher Map Library and Smith Center for Cartographic Education

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The Osher Map Library and Smith Center for Cartographic Education (OML), the only separately established rare map library in northern New England, is located on the ground floor of the Glickman Family Library on the Portland campus of the University of Southern Maine. A relative newcomer to the field, OML celebrated its fifth anniversary in 1999 with a number of special programs and exhibitions. *Worldly Treasures: A Fifth Anniversary Celebration*, an exhibition highlighting recent gifts and acquisitions, illustrates the breadth and scope of the collection. This exhibition may be viewed on the OML website (<http://usm.maine.edu/maps/exhibit7>).

OML's three areas of responsibility are reflected in its physical space. Visitors enter through the exhibition gallery which functions as a cartographic museum. The core of OML's operations—its reference and research component—is housed in its reading room. An adjacent seminar room accommodates classes using OML's rare materials. Offices, a work room, and vault complete the eight-room suite.

The cartographic collections were formed from two major gifts, the first from the late Lawrence M.C. and Eleanor Houston Smith, and the second from Dr. Harold L. and Mrs. Peggy L. Osher. Other generous gifts from several individual donors, notably Professor Peter H. Enggass and Tony Naden, have substantially augmented the collections. The combined collections

currently contain approximately 30,000 maps as separate sheets or bound in books and atlases, and include many fine examples of original maps, atlases, geographies, and globes spanning the years from 1475 to the 1900s. In addition to geography and cartography, there are works on related fields such as cosmography, astronomy, and navigation. While the collections are global in scope, they emphasize the discovery, exploration, and mapping of North America with a focus on northern New England and the Canadian Maritimes. Through gifts and acquisitions, OML is assembling a comprehensive collection of Maine maps from the colonial period to the present in all available formats: manuscript, print, photocopy, micro-film or fiche, and digital image. This compilation will serve as the foundation for a cartobibliography of printed maps of Maine from 1600 to 1900. Access to these collections is primarily through checklists available in the reading room. An ongoing project is to catalog all the collections through OCLC/Worldcat. They are also available online through the local Maine state online catalog "URSUS" (<http://ursus.maine.edu>).

The rare materials are supplemented by many facsimile maps and atlases in reprint editions, together with a reference collection containing monographs and journals on the history of cartography, carto-bibliographies, regional histories, and exhibition catalogs. This growing reference collection, totaling some 1,200 volumes, is fully catalogued on URSUS and OCLC/Worldcat.

To ensure OML's ability to support the academic curriculum, the University of Southern Maine appointed a "faculty scholar" to interpret the maps for instructional use. Professor Matthew H. Edney, author of *Mapping an Empire: The Geographical Construction of British India, 1765-1843* (Chicago, 1997) and co-editor of volume 4 of *The History of*

*Cartography*, has held this position since September 1995. Each year he teaches three courses developed specifically around the collections. These courses range from introductory level, such as *Maps: Knowledge, Technology, Society, Culture*, to graduate seminars, such as *Mapping New England*. Prof. Edney also produces OML's web site which has drawn praise from the educational community for its content and design (see *Mapline* no.88/89 [Fall 1999]). Since 1996, over 55,000 visitors have viewed the web versions of OML's exhibitions (<http://usm.maine.edu/maps>).

Each semester a number of faculty in Anthropology, Geography, History, Art, English, and Romance Languages bring their classes to OML for seminars led by Prof. Edney and the OML staff. In addition to the Curator and Faculty Scholar, the OML staff consists of the Rare Book Cataloger (Albert A. Howard), Cartographic Associate (George S. Carhart), and Administrative Assistant (Tami Christopher).

OML has hosted and co-ordinated several academic conferences. In October 1994 it presented the symposium *Mapping the World* as part of its opening celebration. Two years later, in October 1996, OML hosted the 36th annual meeting of the Society for the History of Discoveries (SHD). On June 1-2, 2000 the North East Map Organization (NEMO) held its annual meeting at OML. The Harvard Map Collection and OML will co-host the 20<sup>th</sup> International Conference on the History of Cartography from June 14-21, 2003 with programs in Cambridge and Portland.

As an integral part of a comprehensive urban university, and in keeping with the donors' wishes, OML is committed to sharing its collections with a broad, public constituency by means of exhibitions, publications, lectures, conferences, and other special events. The foundation for these outreach programs

are OML's exhibitions. Two or more new exhibitions are mounted each year, based mainly on OML holdings but drawing as needed on other archives and libraries. To date OML has produced a dozen exhibitions and hosted two traveling exhibits.

OML has enjoyed a productive relationship with print and broadcast media including Maine Public Television and local commercial television stations. The library has provided appropriate images for historical productions and a number of its exhibitions have been the basis of feature programs. Working closely with the University's media relations staff, OML has publicized major acquisitions such as the Columbus Letter and important historic maps.

The current exhibition, running from April 2000 to January 2001, is *Charting Neptune's Realm*, displaying four centuries of nautical mapping from the early explorers to contemporary satellite imagery. Future exhibitions will explore road maps, colonial settlement and historic archaeology, and urban mapping. Facsimile versions of three exhibitions have traveled to historical societies, public libraries, and campus galleries throughout Maine. Since 1997 all exhibitions are preserved on the worldwide web.

Around each exhibition, OML stages public lectures and develops age-appropriate interpretive guides and activities for elementary and high school students. A grant from the Davis Family Foundation has enabled OML to produce educational guides and activities for *Charting Neptune's Realm*. OML staff present these K-12 activities through group tours from area schools. It also loans out classroom "teaching kits" and coordinates in-service workshops for teachers.

To assist OML in support of these various activities and programs, the *Osher Library Associates* was formed in 1990. Thanks to the generosity of this friends group,

OML has been able to publish a series of posters, checklists, and catalogs to accompany its exhibitions. For membership information, please contact the OLA's Secretary/Treasurer, Dr. Alf Jordan, at 156 West Elm Street, Yarmouth, ME 04096 (ajordan1@maine.rr.com) or OML at 207-780-4850.

OML's users do not comprise the traditional constituency of special collections, i.e., doctoral and post-doctoral researchers. Rather, it has developed a diversified clientele including university students (primarily at the undergraduate level) and users generally found in large urban public libraries such as para-legal researchers, home schoolers, genealogists, advertisers and graphic designers, foundations, and amateur and professional historians. OML is currently building links to relocated retirees who constitute the fastest growing demographic group in southern Maine through the University's newly established Senior College. What will the future bring? It's hard to say right now but, based on OML's first five years, it is bound to be both interesting and rewarding.

### **Charting Neptune's Realm: From Classical Mythology to Satellite Imagery**

Everyone is familiar with maps and the information they contain, but few are conscious of the nautical chart with its special characteristics and iconography. In the absence of land, one piece of water looks like any other, leading one to ask, "what is there that can be delineated on the vast, trackless ocean?" The charts in this exhibition attempt to answer this question of how to "map" the ocean beginning with examples of 16<sup>th</sup> century sea charts created by European mariners and concluding with satellite imagery of the space age.

The Osher Map Library and Smith Center for Cartographic Education opened a free, public exhibition on nautical charts on Tuesday, April 4, 2000. The exhibition continues through January 11, 2001. Titled *Charting Neptune's Realm: From Classical Mythology to Satellite Imagery*, it examines the special iconography mariners have developed over the centuries to depict the ever changing conditions of the oceans caused by changes in winds, currents, depth, sea surface temperature, and other transitory features. The maps on display illustrate the challenge to understand and document these illusive powerful phenomena.

As European mariners left their familiar coasts in the sixteenth and seventeenth centuries to venture forth into the limitless seas and oceans, they brought back their observations of the earth's fluid envelope. These discoveries could not be explained by classical Graeco-Roman constructs and required re-thinking this new information about winds and currents into a body of knowledge we today call the science of oceanography. The collective experience of seafarers when linked with advances in chemistry and physics, produced new interpretations of the world. This knowledge of the sea grew from several simultaneous lines of investigation, sometimes overlapping, sometimes containing large gaps, and even on occasion contradicting one another. But through the centuries one goal remained constant and undiminished: bringing order out of chaos. Given expression in the form of cartography, these graphic images reveal more succinctly than the written word, and is grasped more quickly by the mind, humanity's search for, and knowledge about the watery sector of our globe the ancients called Neptune's Realm.

The charts displayed in this exhibition are drawn from the cartographic collections of the Osher

Map Library which holds some 30,000 rare maps dating back to 1475. It is located on the first floor of the Glickman Family Library 314, Forest Avenue, Portland, Maine. Exhibition hours are from 12:30 to 4:30 pm, Tuesday, Wednesday, and Thursday; 6:00 to 8:00 pm Wednesday and Thursday; and 9:00am to 1:00pm on Saturday. It is recommended to call ahead at 207.780.4850 for any changes in schedule or to make group tour arrangements. Or visit the Osher Map Library's Web site at <http://www.usm.maine.edu/maps>



This depiction of Neptune by the 18<sup>th</sup> century French artist Francois Boucher is the frontispiece from the 1774 edition of Jean Baptiste Nicolas Denis d'Apres de Manneville, *Le Neptune Oriental* which gives sailing directions from France to the East Indies. Courtesy of the Osher Map Library of the University of Southern Maine.

## cartographic techniques

### Using Remote Sensing Imagery to Texturize Layer Tinted Relief

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Combining layer tinting or "painting" with relief shading has proven to be a very effective method for portraying the landscape. Ad-

ditionally, the "painted relief" is important in providing a backdrop for maps designed for land management and resource planning at the Bureau of Land Management's Oregon State Office. Figure 1 illustrates a typical "painted relief" image (color image can be viewed at <http://www.or.blm.gov/gis>). This article introduces a technique that gives cartographers a new capability of adding visual texture to maps, by combining layer tinted relief with a modified Digital Elevation Model (DEM) using SPOT or Thematic Mapper imagery or Digital Ortho-photography. This texturizing method has greatly enhanced the "painted" relief maps in communicating detailed land-

cover features. The result is not only more informative, but also very visually exciting because of the tactile appearance. This technique has been particularly useful in showing patterns of recent forest management activities in the Northwest. Figure 2 illustrates the same area as Figure 1, but with landscape patterns texturizing the surface. The techniques described here specifically uses ESRI Arc/Info software, but the general methodology could be applied using other mapping software.

A step by step flow through the process of "texturizing" painted relief with land-cover patterns derived from SPOT satellite imagery using Arc/Grid and Arc Macro