

goals and knew what it took to reach them. His great desire was to build a reputation “among the social and intellectual elite, including technically adept men of science” (p. 8). His advice to a colleague was to publish small works often to keep one’s name in the public eye. This isn’t bad advice for junior faculty today.

This is a scholarly book, not designed for the casual reader. There are copious footnotes on every page, usually over 100 per chapter (one reaches 192). There are 22 pages of bibliography and a 16-page index. The author, Mary Terrall, clearly is well-versed not only in her subject, Maupertuis, but also in the time and the science of the time. She is totally at home in the period and knowledgeable of the science, scientists, and scientific disputes. The book is thoroughly researched. Maupertuis’s works were in French as were the manuscript sources (correspondence and some of Maupertuis’s unpublished manuscripts). Professor Terrall did all of the translations herself rather than rely on an outside translator so these are not filtered through another’s views. Often the original French is provided in the footnotes.

The author assumes familiarity with the period of the Enlightenment and the people and places. A reader who is not so conversant with the time, may find him/herself wishing for a cast of characters at the front of the book as in 1930s mystery novels. Professor Terrall’s familiarity with the period has led to some odd omissions; latitude and longitude are carefully explained to the reader, but some terms unfamiliar to a modern reader, e.g. *fluxions*, are not. This is not a fast read or a fast-paced story focusing on one event or theory. Seeing the title, one might assume that the book is concerned primarily with the story of the Lapland expedition, a book along the lines of Dava

Sobel’s highly popular *Longitude*. Anyone expecting that will be disappointed, but one who is looking for a thorough, scholarly treatment of science and society in the eighteenth century will be pleased.

Cataloging Sheet Maps, the Basics

By Paige G. Andrew
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If I have learned anything from my experience as an Army Reserve officer, it is this: You do not have to know everything—just where to find the answers. Now, I am not by any means an experienced cataloger. I have no formal training to speak of. However, I have been learning by doing in the company of some very fine experts for over three years now. Some of my teachers, in addition to the author, are acknowledged in this book. I also owe a great deal to bosses and coworkers who show me the ropes every day. I realize that this review is about the book and not about me, but I feel it is important to point out a bit of my background because I think it will help to emphasize how vital this book is to those learning to catalog maps. In the forward, Alice C. Hudson points out that increasingly map catalogers and curators are not map specialists, that the job of map cataloging has been placed upon many who are

unfamiliar with the intricacies of maps and map making. While this is certainly true, and a key audience for this book, my situation is quite different. Having received a geology degree and gone on to study cartography in graduate school, I have always dealt with maps. Even as a child I was fascinated by maps and became the family navigator while on vacation. As a map cataloger/curator, I do not know which is more difficult: having a good understanding of maps but no cataloging experience or vice versa. For the past three years, I have made use of the various sources on cataloging: *Anglo-American Cataloging Rules*, Second Ed., *Cartographic Materials*, MARC 21 *Concise Format for Bibliographic Data*, to name a few. These essential tools have been helpful yet often confusing. *Cataloging Sheet Maps, the Basics* brings the myriad of cataloging resources into focus and points directly to the particular manuals and rules that pertain to specific tasks in properly describing a map.

Cataloging Sheet Maps, the Basics consists of five sections, each with clear illustrations and, where necessary, multiple examples of various cataloging situations. The first section, “In the Beginning,” consists of a bit of background into why basic map cataloging is so important as more and more libraries are making the decision to bring their maps up to the level of the rest of their collections where cataloging is concerned. It asks, “What is a map?” And “Why bother to catalog maps?” These are two very basic questions but certainly worth asking. A cataloger who is new to maps might do better knowing what is considered a map and may just be surprised by the answer. Knowing and understanding the parts that go into a map is the key to describing them. As for the second question, I believe that anyone would agree that anything worth having in a

library collection is worth describing for their patrons. In the second chapter of the first section, the author jumps right into the nuts and bolts of map cataloging. He begins with some advice on methodology and quickly points out that each cataloger has to develop his or her own style. Keep in mind, however, that his advice comes from many years of experience and dedication to the craft, which has helped shape some of the rules we use currently. The third chapter describes the various publications that a map cataloger needs to have at his/her disposal in order to adequately describe cartographic materials. This list of resources is quite extensive but is broken down into basic, essential, and helpful tools. Some are strictly electronic sources, some strictly paper, and some are both. The basic tools are those that should be found in any cataloger's arsenal whether they deal with maps or not, such as *Anglo-American Cataloging Rules, Second, Ed.* (AACR2R). The essential tools are those that every map cataloger should have at hand such as *Cartographic Materials: A Manual of Interpretation for AACR2R*, and a measuring device with centimeters on it. The helpful tools include articles published on map cataloging, helpful websites such as Western Association of Map Librarians "Map Librarians Toolbox" and many others. Section One finishes with the chief source of information (the map and/or its container) and prescribed sources of information as outlined in AACR2R that one can use to derive the content that will go into the various parts of the bibliographic record.

Section two, "Coded Fields," describes the fixed fields and the variable fields in the bibliographic record, describing first those fixed fields that are specific to cartographic works and then those fixed fields that are general. The

variable fields are treated in the same manner but in much greater detail—naturally since this includes the 007 or physical description field, which is mandatory and must relate consistently with the physical description or 300 field and any notes that relate to physical description. If a particular field is repeatable and/or mandatory and under what conditions is also spelled out here.

Section Three, "Description of the Map," is by far the largest and with obvious reason. After all this is what it's all about—describing the map. It begins with a chapter on Main Entry and Statement of Responsibility. Main entry under personal author versus corporate body and the issues one encounters when dealing with maps can be sticky for a cataloger accustomed to working with monograph titles. This section offers explanations of the rules involved and lists terms one might find on the map to aid in making informed decisions. The next chapter under "Description of the Map" concerns entry of a title in the record. This may seem like an easy task and often is; however, as the author points out, there are many situations where the title is not immediately obvious. Many maps will often have more than one title which may pertain to the same main map or two titles for two separate but equally important maps on one sheet. Sometimes maps bear no title at all. There is information here for dealing with just about every situation regarding titles. Next is a chapter on edition, which describes the importance of a map's edition in a description due to a map's graphic nature and how small changes in a map from one edition to the next could have a marked impact. The next chapter concerns the mathematical data area, which makes me thankful that I have a cartographic background. To many catalogers start-

ing out with maps, this can be like learning a new language. This will become easier with exposure and experience, as the author points out. Much of this chapter is a bit of a lesson in basic map reading and discusses concepts related to map scale, projection, and map coordinates. Map scale and how it is depicted on a map, concepts of large scale versus small scale, and how to correctly enter this information in the record are discussed at length. I have seen professors of Geography become confused about scale so you can imagine how this subject can scramble a new map cataloger's grey matter. Using clear language and illustration, the author does an excellent job of describing scale and how it is to be depicted in the map record. Projection, while a potentially difficult concept to grasp, is not discussed in great detail primarily because it is not necessary to fully understand the idea in order to place it in the record. Recording the map's coordinates is not as simple, however, and although optional, the author urges its use whenever possible as this allows for mathematical access to maps contained within the stated coordinates. This chapter carefully outlines the process of recording coordinates and even extrapolating coordinates where the mapped area extends outside of the printed coordinates. A boxed section in this chapter gives a quick look at rules of thumb and provides situational examples for recording coordinates. Publication information is discussed in the next chapter. This is information that is not always evident on many maps. Even dates can be nonexistent or encrypted on some road maps. Publication date versus date of situation is discussed here also. Next is an extensive chapter covering the physical description area or 300 field. For this area in the record, the author describes various ways that maps

can be put together such as map sets, map series, a map on multiple sheets, and how they should be dealt with. In this section the descriptions start with the simplest situation and end with the most complex situation for the physical description. The chapter then continues with how to record a color versus monochromatic map and how to deal with two sided maps and the application of recto and verso. Finally the chapter discusses measuring the map and how, where, and when it is appropriate to measure the map and/or its container. This is where that tape measure with centimeters is put to good use. Section three concludes with a chapter devoted to including notes in the record. This chapter contains a list of essential notes and additional information notes pertaining to cartographic materials. There are examples listed categorically dealing with map description at the end of the chapter.

Section four, "Other Access Points," deals with other items in the record to assist the searcher in finding the right map. Beginning with classification using the Library of Congress (LC) G-schedule, the author breaks down a typical LC call number into its component parts and discusses each thoroughly. LC is the only classification discussed in the book since it is the most widely used classification system for maps. Then the section moves on to a chapter on subject analysis for maps. This chapter refers heavily to specific resources related to subject analysis. This provides a close look at geographic subject headings and guidelines for indirect and direct geographic subdivision. The section ends with a chapter dealing with how and when to place added entries in the record and its justification.

The fifth and final section, "Historical Sheet Maps and Special Cases," begins with the

fact that individuals rather than corporations or agencies are more often given main entry and that it is important to include everyone involved in statements of responsibility. Secondly, titles can be a special problem in historical maps and there are references to the rules on how to handle these. Scale conversion from historical units of measurement to today's units based on miles is listed under mathematical data as is projection and conversion of coordinates. Like scale, coordinates require conversion to today's system and this is explained here. The chapter discusses how to provide publisher, place and date of publication and how to deal with placenames that have changed since the map was made. There is some discussion about the rules that govern physical description that reflect how the map was produced. The chapter lists unique notes that are essential in describing historical maps such as the description of a watermark or information regarding donor or previous owner. Finally, subject subdivision and particular subject practices are covered, such as the use of current geographic names over historic names in the subject entry. The final chapter relates to special formats and situations, starting with specially mounted wall maps and how this affects physical description. Next, the author covers cataloging map series by touching on each element of the bibliographic record, including relevant coded fields, title, mathematical data, physical description area, etc. The next item discussed covers the handling of indexes, text, and other supplementary items relevant to the map itself. Then finally a reference to resources on how to handle various map reproductions completes the final chapter.

The appendix consists of practical exercises, with answers, where the reader is asked to supply ap-

propriate entries in 034 field (projection), the 052 field (geographic area code), and 300 field (physical description).

In my opinion, *Cataloging Sheet Maps, the Basics*, accomplishes the long overdue task of bringing together everything one needs to know to create good map records. It does not supply all of the answers, but it provides excellent examples, and refers you directly to the sources of authority on every aspect of a good map record. I not only recommend this book but I urge anyone cataloging maps to include it in their arsenal, whether you know map cataloging or are new to it all. With this tool in hand, the various resources will be so much easier to navigate when answers are needed. Obviously, if you are an experienced cataloger new to maps, it is the cartographic stuff that is most troubling and this book will definitely ease your mind. For me, however, *Cataloging Sheet Maps, the Basics* will become my portal into the vast cataloging resources available for cataloging sheet maps.