from adobe brick to terracotta. Chapter 25 addresses the analysis of adobe bricks from an ancient wall in Reggio Calabria with a view to reproducing similar bricks for its restoration. The next chapter discusses the conservation problems of the Giotto fresco of the Last Judgment in the Scrovegni Chapel in Padua. Since the outer brick wall of the chapel is unplastered, a water-repellent treatment was suggested to reduce water and salt migration towards the interior of the structure. The paper reports on the laboratory and in situ tests that were carried out. Chapter 27 discusses the development of adequate gypsum-lime mortar mixtures for the restoration of historic brick buildings completing the study described by the same authors Thiddendorf and Knöfel, in chapters 17 and 18. The following paper (chapter 28) discusses injection grouting for the strengthening of unreinforced brick masonry buildings. Both the development of the grout mix and its laboratory and test evaluations are presented. The next chapter deals with desalination procedures for brickwork and discusses regular and improved poulticing procedures as well as electromigration methods. Chapter 30 discusses the conservation problems of 19th-century terracotta plaques and tiles at the Schwerin Castle in northern Germany, focusing mainly on the analytical results of this study. The last chapter in this section, the fourth by Hoffman and Niesel in this volume, studies changes in porosity and pore-size distribution of mortars and plasters resulting from variations in formulation, in particular the grain-size distribution of the aggregate. The study is completed by assessing the capillary absorption and evaporation behavior of test brick walls prepared with these mortars.

The outline of the contents of this volume is presented to whet the appetite of any prospective reader, but it should be stressed that most of these papers are not light reading. They require slow and thoughtful reading to glean as much as possible from all the information packed into them. The papers collected as a result of this pilot study also serve to point to the direction that future research should take in various fields: nondestructive testing for masonry structures, air pollution effect on mortars and renders, salt and moisture problems, and development of replacement materials.

Since the pilot study lasted more than six years, much of the material presented in this volume has been published, at least in part, in various other places, such as conferences, reports, or journals. However, most of these publications are either unedited proceedings or in other languages. The value of this book lies in bringing together these carefully edited papers and making them accessible to a wide audience through publication in a formal book. It would have been desirable, though, if the editors had made a point of indicating the original dates of the presentation of the papers. For example, chapter 16 by Elsen resulted from the combination of the papers presented at the Fifth and Sixth Expert Meetings in 1991 and 1992. It also would have been useful if the editors had required the authors to note whether the results presented were updated for this publication, or, if the paper had been previously published, as was the paper on the smokehouse at Colonial Williamsburg, to give the original reference (APT Bulletin 23 [3] [1991]:3-12). But these flaws are minor in a book that has effectively summarized more than six years of research on the conservation of historic brick structures.

In general, the high quality of the papers brought together in this volume and its practically impeccable editing and presentation reveal that the editors invested a great deal of labor, in particular the senior editor, who was the driving force in the book's preparation.

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ROBERT BARCLAY, ANDRÉ BERGERON, AND CAROLE DIGNARD, WITH ILLUSTRATIONS BY CARL SCHLICHTING, MOUNT-MAKING FOR MUSEUM OBJECTS. Ottawa: Canadian Conservation Institute, and Québec:

Mount-Making for Museum Objects is a short book on a subject essential to the well-being of museum artifacts. It is an important effort because it is the only book devoted exclusively to the mount-making of a variety of objects for display. The book's publication, by itself, increases the visibility and importance of this sometimes overlooked activity.

The spiral-bound paperback is nicely printed, and information is concisely written and easy to find. Emphasis is appropriately placed throughout on the safety of the objects being mounted. Following several short introductory sections on the principles of mounting objects, there are two main sections. The first, a well-organized 12-page section devoted to materials for mounting artifacts, is subdivided into sections on base materials, padding and finishing materials, and adhesives and fasteners. The second, a 32-page section, gives 16 examples of actual mounts. Each mount is presented on two facing pages, a format that makes each example easily accessible and readable. The left-hand page has one or more drawings and text that briefly describes the mount as well as lists of materials and equipment used. The right-hand page is illustrated with one or more photographs of the object and its mount, while its text lists the step-by-step mount-making procedure in bullet form. Most mounts are for archaeological or ethnographic objects (eight) and clothing or accessories (five), but there are also single examples of a book, a musical instrument, and a soft sculpture mount. While the stated goal is “to expose the reader to a wide variety of useful materials and potential techniques,” acrylic sheet is the main support material for 10 out of 16 mounts (no wonder there is an advertisement for Plexiglas on the back cover!). Three mounts use polyethylene foam plank or sheet; one, polystyrene foam plank; and two, wood and metal combined. The book concludes with a useful bibliography of related references.

The intended audience is not specified, but the book is said to have grown “out of our workshop experiences in mount-making . . . throughout Canada.” These origins and the level of information suggest that the primary audience is meant to be the small museum staff member who makes mounts but may have relatively little knowledge or professional training in the field. For this group, the materials section is excellent, except that materials may be difficult to obtain without names and addresses of manufacturers or at least a source of further information (surprisingly, the reader is not referred to the Canadian Conservation Institute). A slight quibble is that the language used to describe undesirable mounting materials seems too understated for an audience unfamiliar with them. The reader is cautioned to “avoid” materials such as acidic and noncolorfast matboards, interior-grade plywood, and polyurethane foam, instead of being told more definitely not to use them. Inclusion of polystyrene foam as a support material on an equal footing with polyethylene foam also seems unfortunate for those who might not know that the latter is the better material. If polystyrene is included primarily as a less expensive substitute for cash-strapped institutions, the reader should be so informed and told that it may be unstable and could contaminate artifacts with unreacted styrene monomer.

The authors state, I think correctly, that examples should be used as a “jumping-off point for mount design” rather than copied verbatim. Nevertheless, the format implies a “how-to” book by its lists of supplies and step-by-step procedures. Slavish copying by the inexperienced seems likely, especially since the rationales for design choices and alternative solutions are not given. One can imagine acrylic sheet bases all over North America supported on four small acrylic disc feet, as shown in one example, unless there is a good reason, use of two supports instead of one also
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makes assembly of a mount for an archaeological ceramic fragment substantially more difficult, but no reason is given. Absence of rationales probably stems from the admirable desire to keep each example to two pages, likely also the reason for some drawings attempting to illustrate too many things at once. The result is that several drawings are nearly incomprehensible, however, confused by multiple disembodied depictions of hot-melt glue guns, utility knives, and other tools.

The shortness of the book considering its cost was a common complaint voiced by a group similar to the presumed audience for the book—exhibits specialists of relatively limited experience with mount-making who recently took a week-long course on mount-making at Smithsonian Center for Materials Research and Education (SCMRE). Other potential audiences for a book on mount-making—conservators and exhibition designers—may wish for the presentation of a greater number of examples and a greater variety of support materials, with less emphasis on acrylic sheet. The shortage of examples of metal mounts is especially noteworthy, given their versatility and the excellent results that can be achieved. As an alternative to the two Plexiglas rods that support a polyethylene foam block inside a busby, for example, a single brass shaft could be used and unobtrusively hidden behind the chin strap. Indeed acrylic sheet is not “universally used in display applications because of its attractive appearance and excellent working properties,” as the authors state. Several of the best professional mount-makers seldom use this material. It can be difficult to form, its joints are neither strong nor permanent, and it scratches easily and must be perfectly finished. Even the scratch-resistant variety can be abraded, and the coating that makes it scratch-resistant cannot be repaired. My most serious objection to its use, however, is aesthetic: as a modern, plastic material, acrylic sheet often imposes itself on objects. For other reasons, several other examples of mounts in the book also seem unnecessarily obtrusive. The perimeter of white polyethylene sheet form extends beyond the perimeter of a Haida hat without benef
ting the support of the object, and the white contrasts noticeably with the hat itself (this would be acceptable for a storage mount but not for a display mount). Aluminum brackets on a Greek red figure vase interrupt the design when they could easily have been camouflaged with paint.

Multiple authorship shows occasionally in the somewhat uneven quality of examples and in discrepancies between the material and examples sections. In the materials section the text states:

Soft solder is recommended for light mount components made of brass, but if higher loads are planned steel can be joined with hard solder. . . . Stainless steel is the preferred [metal support] material, although brass can be used when components are to be joined by soft soldering.

The implication here is that the hard soldering of brass is not an option. Yet for the only example given in which brass wire is used, it is hard soldered, presumably because hard soldering makes a stronger joint.

All the authors are conservators by profession. Although many museums cannot afford the services of a staff member dedicated to mount-making, and conservators may act in this capacity, no conservator can match the experience of a full-time mount-maker. Many of the illustrated mounts would benefit from the simplification and refinements that extensive, daily experience in mount-making can provide. The authors, however, do not intend this book to be comprehensive. They describe it as a “stop on the way, not the end of the journey.” One hopes that it will spur others to make the trip after this admirable start.

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