Creating a Comparative Collection: A Case Study Using Historic Ceramics

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ABSTRACT

The research of artifacts in the archaeology profession relies heavily on the existence of comparative collections. These collections allow for a more quick and accurate identification process as well as an essential form of education for those beginning in the profession and for those interested in the subject. The purpose of this paper is to examine the process of creating a comparative collection and making it useable. The process was generalized in order to be useful to a variety of professions, including many outside of archaeology. The process was tested, using ceramics from various Midwestern farmstead sites and Second Fort Crawford (47Cr247), to create a historical ceramics comparative collection for the Mississippi Valley Archaeology Center at the University of Wisconsin-La Crosse to be used for future research.

INTRODUCTION

Comparative collections are a useful tool for the identification of archaeological artifacts. Comparative collections are groups of artifacts that are representative of the artifact assemblage for a certain time period. These collections can consist of one type of artifact (for example, lithics or ceramics) or a multiple collection can exist in one area, comprising of various smaller comparative collections. They are useful to researchers who are unfamiliar with the typologies of the artifact. It is especially useful for identification of artifacts from recently excavated sites and to show variation within a category. This makes the identification process easier and more consistent for the institution.

The research of artifacts in the archaeology profession relies heavily on the existence of comparative collections. These collections allow researchers to identify and date items found during excavations more quickly and more accurately. They also provide for an essential form of education for those beginning in the profession and for seasoned veterans becoming familiar with artifacts outside their typical area of study. This paper researches what should be included in a newly established comparative collection and how to make it useable. As a case study, historic ceramics were used.

The resulting comparative collection is located at the Mississippi Valley Archaeology Center (MVAC) Laboratory at the University of Wisconsin-La Crosse. The need for this collection arose as the result of an increase in the number of historic sites excavated by MVAC archaeologists. The complexity of historic ceramics called for a need to educate the laboratory assistants in the identification process. Thus, a comparative collection was assembled.

A BACKGROUND ON HISTORIC CERAMICS

Historic ceramics found in the United States are widely varied and sometimes difficult to identify. Ceramics from the 17th and 18th Centuries were mostly shipped from England and Asia and many times consisted of status items, such as porcelain from China and "China sets" from England. Everyday ceramics, such as crockery and cooking dishes, were typically made locally beginning in the 19th Century. During the early 19th Century, potters in the United States attempted to reproduce the "better quality" ceramics from overseas. While not quite successful at a true copy, the ceramics that were produced worked well enough (local potters also continued to produce heavier earthenware goods for the public). The 19th Century was alive with a battle between foreign and domestic manufacturers vying for the heart of the American economy. Finally, during the late 19th Century to the early 20th Century, American potters overtook the foreign competitors, and shipments from overseas slowed down. A majority of the ceramics recovered in the Midwest are from the 19th anad 20th Century. Therefore, most of the research and assemblage for the comparative collection is from this time period.

In addition to the complexity of ceramic history, most of the literature describing 19th Century ceramics concentrates on collector's items, such as porcelain and "limited edition" collector dish sets. Such items were not utilized by the vast majority of the Americas during the settlement period. Information on typical designs and wares are found in bits and pieces in current archaeological site reports and a few articles and books concerning the historic period in the United States (see Further Reading). Much literature is also focused on the 18th Century and the 20th Century, ignoring the difficulty of 19th Century ceramics. Not only were ceramic designs and techniques changing rapidly during the 19th Century, but the wares themselves were also evolving. Knowing this information, hopefully it will be easier to understand the difficulty in analyzing ceramics from sites dating to the early-to-middle 19th Century.

METHODS

In order to make the development of a comparative collection easier, nine basic steps should be followed. These steps are performed before, during, and after the physical assembly of the collection itself. These steps can be used for any type of comparative collection. Researchers from all fields, ranging from Biology to Archaeology, can use this process for the production of a specific comparative collection. The following is an outline detailing the steps used to compile the historic ceramic comparative collection at MVAC. Each step is generalized so it can be applied to any professional field.

Step 1: Research current literature and, if possible, visit an existing comparative collection

In order to correctly identify artifacts for the comparative collection, the researcher should know as much as possible about the artifact assemblage. This includes more than knowing general terms and concepts about the artifacts. For every artifact category, many references exist. Current scholars can be the source of a wealth of acceptable references. If at all possible, use primary references first and foremost. If a reference is found that provides a lot of good data and cites a specific author many times, check out the cited book or article. Most of the time, finding the referenced article or book can tell a lot more about the item in question (with more accuracy and sometimes more clearly).

When using dates in the collection, be as consistent as possible. If more than one date for an artifact is found, always use the same primary source first. Use secondary and tertiary sources last, and only if needed. Again, check with current scholars to find out which authors are more widely accepted in the field.

For this project, twelve references were used. The list was first split into primary and secondary references. Next, current researchers who work with historic ceramics were asked which of the references were most widely accepted. From this information, the list was reorganized to place the more widely accepted references first. If a reference cited the author of another reference, the former was listed after the latter. For the end result, see Figure 1. When using dates for the ceramics, the references were always placed in the same order of importance.

Author's Note:

This guide is broken up into wares, decorative types, and vessel forms. The types within each of these larger categories include a table with associated dates and references. A number of references were consulted during this study, 12 of which were chosen, as they contain the most current information. For consistency, the references were placed in a "pecking order," each time being listed in the same order. Primary references were listed first (in the order of popular usage within the field of historic archaeology), followed by more widely used secondary sources, etc. When using the charts, the first listed date should be considered as the primary date. Other dates represent variations in agreed upon date ranges for that category of ceramic. The order used for this guide is as follows:

South (1977)
Lofstrom et.al (1982)
Hume (1970)
Peterson (2001)
Porubcan and Benchley (1995)
Gums et.al (1999)
Voinovich and Wray (1991)
Price (1979)
Majewski and O'Brien (1987)
Norman-Wilcox (1965)
Sutton and Arkush (1998)
Sussman (1985)

Figure 1. Description/List of the Pecking Order of References Used for the Ceramic Comparative Collection

Step 2: Find artifacts to be designated to the comparative collection

After enough background information has been gathered, the next step is to find artifacts to be used in the collection. This is not always as easy as it sounds. Comparative collections are used by laboratory workers and various visitors, as well as by professionals. Therefore, rare and/or delicate artifacts should not be considered for placement in the collection, as they could be lost, broken, or stolen.

Artifacts that are not as significant in research are often used for comparative collections. For example, artifacts without a provenience are perfect for the collection. These artifacts either do not have locational information or come from a disturbed context. Consequently, they give less information to the archaeologist and are therefore most useful as examples in a comparative collection (unless the artifact is rare or delicate).

For the MVAC ceramic comparative collection, ceramics from sites already analyzed were used first. The artifacts had been curated and were stored in boxes. As the analysis was complete, it was determined that it would be more beneficial to use them as an educational tool than to leave them in storage. After taking what was needed from those sites, more recently excavated sites were searched to find any other beneficial representations and to fill in the gaps for the collection (see Figure 2).

Thanks to the permission of the Mississippi Valley Archaeology Center, the ceramics located in the comparative collection were obtained from the following site(s):

47Ju224 (Castle Rock and Petenwell Reservoirs – excavated 1994)
47Pt154 (Treasure Island Dairy Site - excavated 1996)
Prairie du Chien Corridor – Extension - excavated 2001

Figure 2. References of Sites Used for the Comparative Collection

Step 3: Choose a permanent location for the collection

Next, a permanent location for the collection needs to be chosen. Plan for a permanent location, and something large enough to accommodate the current collection and later additions. Depending on the make-up of current collections (see below), looking for an area with many smaller compartments may be necessary and/or a better approach for organization.

At MVAC, storage space is limited. Fortunately, a filing cabinet was found that was empty and turned out to be very suitable for this collection. The cabinet consisted of 22 separate drawers, each measuring about ten inches wide by two feet long by five inches deep. As archaeological ceramic sherds are usually not too large, these drawers were well suited for this comparative collection. Also, the quantity of drawers allowed for a more detailed organization method (designating one drawer for each ware type and one drawer for each decoration type).

Step 4: Decide which artifacts will be used for the comparative collection

It is very helpful to form a “checklist” of the artifacts to be included in the comparative collection. With the checklist in mind, search through the artifacts designated for the comparative collection. Remember that not all samples need be large pieces. Sometimes a small representative of the item can be as helpful for identification as a large piece, although many times larger pieces can tell more about the item. For example, for decorated types a larger sherd will be more helpful than one small piece. On the other hand, when identifying the paste of a ceramic, only a small example is needed for comparison.

Something to keep in mind during this step is to record every piece that is placed in the comparative collection. When an item is not labeled with an acquisition number, a short description of it could be given instead. The list should be placed with the collection as a reference to the specific items present in the collection. Another list should be placed with the rest of the stored artifacts from which the collection was taken, indicating which artifacts are missing and where they are currently located. Finally, making this list can also help prevent “looting” of the collection – if regular inventories are taken.

The comparative collection produced for this project used a few artifacts from various sites. Items in the collection from each site were placed on a list and stored with the remaining artifacts not used. If, in the future, someone was looking for a specific ceramic sherd from one of these sites, a note would be found indicating that the sherd was placed in the historic ceramic comparative collection during the spring of 2002. A copy of this list was also placed with the ceramic comparative collection.

Step 5: Use current collections in the lab as a guide to the organization of the new comparative collection

Comparative collections are meant to be accessible and easy to use. Therefore, consistency is the key when formulating a new comparative collection in a place where other collections already exist. If other collections exist at the organization, use them as a guide for how the new collection should be set up. If the collection being produced is the first collection at the organization, any suitable organization of the collection is acceptable. It helps to visit current collections at other institutions in order to get an idea of a current organizational method that works.

At MVAC, many comparative collections exist, from lithics, to prehistoric ceramics, to faunal remains. Each collection is set up in a similar fashion. Each artifact is placed in a various sized cardboard box with no lid (picked to hold the artifact comfortably) in a drawer, thus separating the artifacts. This also allows each artifact to be "labeled" (on the box) for those using the collection. The historic ceramic collection was set up in the same fashion, making it more familiar and easier to use for those accessing the collection.

Step 6: Arrange the artifacts in the permanent location

The next step in the process is to physically place the artifacts into the comparative collection. Artifacts must be clearly labeled, as well as the drawers they are placed in. All attempts to make the collection easy to use should be taken.

The ceramic comparative collection contains labels on each drawer, indicating its contents. Each item in the drawers is placed in a box and contains a piece of paper revealing the site number, site name, catalog number (if present), description of the sherd, and the associated date for the sherd (if possible).

Step 7: Prepare a guide describing the artifacts in the collection

A comparative collection would be almost useless without an instruction booklet. Collections are usually made because a written description does not help enough to convey all of the information needed to identify an artifact. On the other hand, some people learn better orally than visually. In order to satisfy each type of person, written text should supplement the collection. The main purpose of the guide is to point out specific features to look for in each item of the collection to make it easier to identify. This makes identification faster and more efficient and accurate than having only the artifacts themselves.

The comparative collection guide for the ceramic collection at MVAC resulted in a long and detailed guide. Written descriptions of each ware type, decoration type, and vessel form were included, as well as tables of associated dates for these categories. The guide also included a brief overall history and description of historic ceramics, a glossary for those unfamiliar with ceramic terms, and attached illustrations for decoration types that were either difficult to explain or rare decorations and vessel forms that were not represented in the collection (i.e. no representative in the lab collections or due to the large size of the artifact).

Step 8:Ask for suggestions/comments from those using the collection (ongoing throughout the use of the collection)

While forming the collection, consult with others who will be using the collection. They will be benefiting from the collection the most, so they should be comfortable with the set up of the collection. Remember that, after researching the subject, the author knows more than most about those artifacts, so the collection will seem almost “elementary” to them. This is ideal. Keep in mind that those using the collection know little or nothing about the artifacts in the collection. Use their suggestions and listen to their comments.

For this project, students working in the lab and faculty working at the facility were asked to proof read the guide and look through the collection as they were being made. Their suggestions and comments were used to modify the guide and the collection. After the collection and guide were finished, students and faculty were encouraged to offer more comments or suggestions about them, which were used to modify the collection more.

Step 9:Add to and subtract from the collection throughout the life of the collection

Finishing the collection does not mean that it is set in stone. If changes need to be made, make them. If new evidence arises that shifts a date for an artifact, change the date in the collection. If an artifact is found to be identified wrong, correct it. If a more suitable representative is found, add it to the collection and vice versa (i.e. take out bad examples). Also keep an updated inventory of which items have been added or removed from the collection.

The ceramic collection at MVAC was not finished with the end of this project. Every year excavations produce more historic ceramics. These ceramics, after the final analysis, can be evaluated for their usefulness in the comparative collection.

CONCLUSIONS

The creation of a comparative collection for research can be a lenghty process. If a collection is needed for a small number of items that are easily identified and do not need an in-depth description, it will be easy to create the collection and will not take a long time. If the group for the collection is large, for example, 19^{th} Century historic ceramics, and the descriptions are in-depth, more work will be needed to create the collection. Also, separate sections of a collection can be created at a time, spreading out the completion of the collection. For example, historic ceramics can be subdivided into many groups: different ware types, decoration types, vessel forms, etc. To make things easier, a collection could be created first of solely ware types. When more time and resources are available, decoration types could be added. Lastly, at a later date, vessel forms could be researched and added to the collection. However, no matter the size of the collection the items within it should be carefully analyzed for accuracy in identification and be detailed enough in description.

Overall, comparative collections are a fundamental part of research in many professional fields. The existence of a comparative collection can provide for a building block of information. The addition of one comparative collection to a research facility can greatly improve the knowledge of its employees and strengthen its research techniques. Although sometimes the process can be long and tedious, it is well worth the work.

REFERENCES

Buys, S. and V. Oakley. 1993. *The Conservation and Restoration of Ceramics*. Butterworth and Heinemann, Oxford.

Gums, Bonnie L., Lucretia S. Kelly and Neal H. Lopinot. 1999. *Archaeology at the Whitley Site: An Early Historic Farmstead on the Prairies of Eastern Illinois*. Transportation Archaeological Research Reports No. 5. Department of Anthropology, University of Illinois at Urbana-Champaign.

Hume, Ivor Nöel. 1970. *A Guide to Artifacts of Colonial America*. Alfred A. Knopf, New York.

Ketchum, William C. Jr.. 1973. *Pottery and Porcelain*. Alfred A. Knopf, New York.

Kovel, Ralph and Terry Kovel. 1986. *Kovel's New Dictionary of Marks on Pottery and Porcelain: 1850 to the Present*. Crown, New York.

Lofstrom, Ted, Jeffery P. Tordoff and Douglas C. George. 1982. A Seriation of Historic Earthenwares in the Midwest, 1780-1870. *Minnesota Archaeologist* 41(1).

Majewski, Teresita and Michael J. O'Brien. 1987. The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis. *Advances in Archaeological Methods and Theory*, Vol. 11. Pp. 97-209.

Norman-Wilcox, Gregor. 1965. Pottery and Porcelain. In *The Consice Encyclopedia of American Antiquities*, Vol.1, edited by H. Comstock, pp. 132-161. Hawthorn Books, New York.

Peterson, Cynthia. 2001. *Artifact Identification Guide for Iowan Historical Archaeology*. Office of the State Archaeologist, University of Iowa, Iowa City.

Porubcan, Paula J. and Elizabeth D. Benchley. 1995. *The Warren Hause Site (47Da-910): Final Report of Phase III Archaeological Data Recovery at a Mid-19th Century Homestead in Verona Township, Dane County, Wisconsin*. Report of Investigations No. 124. University of Wisconsin-Milwaukee Archaeological Research Laboratory, Milwaukee, Wisconsin. Pp. 64-157.

Price, C.R.. 1979. *19th Century Ceramics in the Eastern Ozark Border Region*. South 1977west Missouri State University, Center for Archaeological Research, Monograph Series No. 1.

South, Stanley. 1977. *Method and Theory in Historic Archaeology*. Institute of Archaeology and Anthropology, University of South 1977 Carolina. Academic Press, Columbia, South 1977 Carolina.

Sussman, Lynne. 1985. *The Wheat Pattern: An Illustrated Survey*. Parks Canada, National Historic Parks and Sites Branch, Canada.

Speight. 1989. *Hands in Clay: An Introduction to Ceramics*. 2nd ed. Mayfield Publishing Company, Mountain View, CA.

Sutton, Mark Q. and Brooke S. Arkush. 1998. *Archaeological Laboratory Methods: An Introduction*. 2nd Ed. Kendall/Hunt Publishing Company, Dubuque.

Voinovich, George V. and Jerry Wray. 1991. Coding System Manual for the East Liverpool, Ohio Urban Archaeology Project. Ohio Department of Transportation, Archaeology Series No.1