

# Forum / Colloque

These papers describe differing approaches to research and to the development of collections of material evidence in history museums. Earlier versions of the papers were originally presented at the Fourth Kingston Conference of the Canadian Science and Technology Historical Association, Kingston, Ontario, 25-26 October 1985.

Ces communications décrivent différentes façons d'envisager la recherche et le développement de collections de témoins matériels dans les musées d'histoire. Des versions antérieures en ont été présentées initialement à la Quatrième conférence de Kingston de l'Association pour l'histoire de la science et de la technologie au Canada, Kingston (Ontario), les 25 et 26 octobre 1985.

## An Approach to Historical Research in Museums

D.R. Richeson

Research ideally should precede the addition of an artifact to a museum's collection. Most professionally operated Canadian history and technology museums today acknowledge this approach. When the process works, for the historian or curator, it can be one of the most satisfying accomplishments. For example, several years ago while conducting research for the National Museum of Man on the communication facilities provided in the North West before 1905 by the federal government, I learned that in 1886-87 iron telegraph poles were used on two sections of the Dominion Telegraph line in what is now Saskatchewan. With the assistance of Tony Cashman in Alberta I obtained patent information. An archival photograph showing the poles was also eventually found. In 1985 I was finally able to contact people living along the former telegraph line and to collect two complete units for the Saskatchewan Western Development Museums. I also found that despite their apparent rarity in museum collections they have survived in reasonable numbers – most commonly as supports for baseball backstops!

Another recent example of a research-based acquisition at the Western Development Museums is an early wooden grain elevator manufactured by Brandt Industries in Saskatchewan that was obtained in 1985. Its acquisition resulted from a program of systematic research into the history of Saskatchewan manufacturers of farm equipment.

These two examples illustrate that, in future, museum collections should be easier to manage in terms of research information for collections. The reality of the situation in reference to existing artifact collections, however, can be something entirely different. Depending upon the age of a museum and how the collections were acquired, Canadian history museums hold large numbers of artifacts with no research base. The National Museum of Man's "future history collection" of six thousand or more consumer

products from the early 1970s is one example. Much of the Western Development Museums' collection falls into the same category – bare bones accession data and no research background. Most other Canadian museums have portions of their collections in the same state.

Where do you begin if as a director you find yourself confronted with seventy thousand artifacts housed in four hectares of buildings and various large and sometimes unidentifiable metal artifacts stored in a few hectares outside? The two most obvious solutions that immediately come to mind are: build more buildings or reduce the size of the collection. In this "age of restraint" new buildings and operating funds are difficult to acquire; thus trimming the collection for most museums must become at least part of the answer.

The question then immediately arises concerning what to trim? The Saskatchewan Western Development Museums were set up to "stimulate interest in the history of the economic and cultural development of Western Canada"<sup>1</sup> and to collect and display artifacts of historical value and importance connected with these developments. The question then arises regarding how the two statements of intent affect approaches taken to the collection and to research.

It is easier I believe to develop a museum collection that illustrates technological change than one that interprets history. The artifacts in a technology collection can reveal much more about change simply through direct comparison of one artifact with another. The specific manufacturer matters less and distribution or adoption of the object by society can be nicely generalized. The area of acquisition is of little importance if it is the correct model. A record of Canadian usage is a nice addition, but an American model will do if the identical type was used in Canada. Research can focus on development. Patent records often offer good documentation, and restoration erasing the effects of use is not all that important.

If you want the same artifact to be part of a collection used for historical interpretation, you need to draw upon a collection that is balanced in terms of actual occurrence or acceptance in society at any particular time or place. Manufacturers and distribution patterns are important to establish patterns of economic activity. Regional diversity can be extreme even within a province in terms of artifact use or acceptance. Establishment of a complete history of ownership and use is also desirable. Research to obtain this type of information must often be drawn from various types of archival documents and records, most of which are fragmented and sometimes unreliable.

To illustrate this point, let us examine several examples drawn from cereal agriculture in Western Canada. There are several different techniques commonly used in 1985 for drying damp grain. Fans, propane or natural gas heaters or grain movement systems are the most common. All of these technologies work, and products could be acquired to illustrate the technology. In the fall of 1985 all were difficult to buy in Saskatchewan because of demand. If it promised to dry grain, farmers acquired it – efficient or not. In 1984, a particularly dry year, there was little or no market for the same products. The technology was available, but few farmers needed it. In the future it will be easy for museums to acquire artifacts to show how grain drying was done, but when it was done may be difficult to determine without research.

Wheat in a good crop year in Western Canada is usually cut with a swather, allowed to dry and combined with a pickup type combine. In a poor year the crop can be so short or thin that a swather is not needed; however, a combine with a cutter or header is required. In 1985 swathers were not in demand; cutter attachments for combines were. A generalized museum collection to illustrate technology would have the optional attachments, but only research of a much broader nature would assist in determining when and where the different machines were used.

Automobiles and trucks were being manufactured in the 1930s although most people in Saskatchewan could not afford them. A collection showing technological change might well have a number of automobiles and trucks from the 1930s, while a collection illustrating actual events would probably have none. The artifact can tell a researcher much about technological change but little of the history of use. The first set of pneumatic tractor tires used in Saskatchewan and perhaps in the West are the Western Development Museums' collection. No one knows with any certainty the point at which more Saskatchewan tractors existed on rubber tires than on steel. Pneumatic tires are always cited as a major technological change in agriculture, but when they became so remains unclear.

The above were intended to show some of the problems involved in assembling a museum collection that illustrates historical events. An interesting attempt to deal

with this type of problem was made by Bob Turner at the British Columbia Provincial Museum in 1981. An inventory was put together including all of the logging locomotives in museum collections in British Columbia. Research was then carried out to see if the collections were in fact representative. The results were reported in the *Material History Bulletin* and revealed that there were differences.<sup>2</sup> The collection was not totally representative in terms of historical occurrence, and incorrect conclusions would be drawn both for interpreting history and technology if the surviving artifacts were studied without a research base.

The way in which history and technology collections have been assembled in the past has contributed to distortion. One of the problems apparent at the Western Development Museums is that the number of historical artifacts collected decreases with distance away from the museums, despite the best efforts of curators and administrators. It is simply easier to collect things at hand or that are brought to the museum. The collections of the National Museum of Man in history and those of the National Museum of Science and Technology are overwhelmingly central Canadian, with the Ottawa Valley disproportionately represented in most categories. I think the same would be true of most of the major regional museums in the West – overrepresentation of artifacts from nearby communities and underrepresentation from those far away. If these collections are then drawn on, with no background study, distortions are certain to be part of the interpretation.

Having raised some of the fundamental questions that can be encountered in forming a history or technology collection, I would like to present an actual instance of a particular problem category of artifacts – large harvesting artifacts. The Western Development Museums' collection includes 112 combines and separators or threshing machines. Placed wheel to wheel in a block they would totally occupy a 2300 square metre building. As a storage problem among agricultural artifacts I think only gang plows cause more problems. Research into this category of artifact at the Western Development Museums, as with many others, is a problem. With forty staff, program costs, utility bills and the occasional lawsuit to contest, it was impossible to provide funds for specialized research. The Western Development Museums were forced to use existing staff, supplemented where possible by temporary grant staff and some contract workers. The research reports could not be put in a form to be made available beyond internal museum use.

The focus of the research project centered on a series of questions asked of the existing collection documentation.

1. What exists on the subject (including other museum studies)?
2. How accurate or relevant to the Western Development Museums' collection is the existing research?

3. What would be required in terms of general background research to provide the historical context for the artifact, or what Bob Turner at the British Columbia Provincial Museum has called "the why questions of broader context...."<sup>3</sup>
4. Was the artifact used, assembled or manufactured in Saskatchewan?
5. Is the artifact accurately described in terms of model, size, age and physical condition?

The actual work steps that followed began with physical condition assessments for all large artifacts in the collection including harvesting equipment. Four levels of condition assessment were used, from A, artifacts that were generally in exhibitable condition, to D, artifacts beyond hope of restoration. All artifacts were flagged accordingly and at this point an effort began to eliminate to a minimum of two, artifacts that were essentially the same but were found in multiples. For example five Fordson tractors and seven Happy Farmer tractors were found in the collection.

The preparation of the condition assessments involved minute examination of all of the museums' existing records and correspondence. This required standard historical research skills plus detection instincts to determine for an assortment of material dating back to the mid-1940s the history of ownership, the use and acquisition information. To confuse further the process, the Western Development Museums at three different stages had embarked on new artifact numbering systems that were never fully put in place. The combination of double numbering and missing numbers hindered the matching of artifact to documentation. A secondary problem cropping up at this point involved artifacts on loan to the Western Development Museums. Initially they were given the same condition assessments, but an immediate effort was begun to locate owners and to return most of them. This process came to resemble a daily soap opera in terms of the passions aroused in owners and present-day heirs. My advice is to make friends with a good lawyer before your museum gets dragged too deeply into the fine points of the law concerning bailment.

Once the condition assessments were completed for entire categories of artifacts, such as large harvesting equipment, drilling equipment and automobiles and trucks which were intermixed in storage, the next research step began. It was to assess what the collection represented as a resource for interpreting the social and economic history of Saskatchewan. What did the collection look like when organized by time period, by region in the province, or by manufacturer? Was there sufficient range in the category to illustrate technological change over time if this should ever be desired?

The computer as a collections management tool made this process somewhat easier, but there was an ongoing

problem with dubious information and missing dates, which meant that complete reliance could not always be placed on the results. Research reports began to take shape that included recommendations for artifact retention, for deaccessioning, and for extension use. And, of equal importance, to continue to build the collection, a plan was developed for acquiring artifacts within each category. This process was accompanied by an internal planning process intended to produce a master exhibit plan, which would provide the structural framework for exhibit production over the next ten years.

The research reports also permitted the systematic formation of a restoration parts collection to support the artifact categories identified in the collections plan and the exhibit plan. This permitted the creation of the first stages of a long-term restoration-conservation plan with priorities keyed to the major artifact categories. The Western Development Museums' attempts to preserve both form and function, using under normal circumstances two identical artifacts that are subject to two entirely different sets of standards for restoration and/or conservation. A swather with original webbing and belts from the 1950s is good for exhibition but not practical for demonstration. A carriage with original shafts from the 1920s is good for exhibition but not safe for demonstration.

This process for the Western Development Museums has been completed for large harvesting equipment including combines and threshing machines, for drilling equipment and for automobiles and trucks. It is in progress for steam engines, gas tractors and stationary engines. It remains to be completed for buggies and wagons, smaller harvesting equipment, fire equipment, road building machinery and tillage equipment. Following this the same process will be used for small artifacts related to the business, professional and domestic domains.

A side benefit of this process was an in-depth examination of all research resources and documentation within the Western Development Museums. Of particular importance in this work is our eight thousand item collection of original operator's manuals, part guides, and repair manuals for agricultural machines. Indexes have been prepared for about four hundred companies to facilitate use of this material and improve the museum's ability to respond to outside researchers.

This article has been an attempt to provide some insight into how one museum with a very large collection of undocumented artifacts, collected over a forty-year period, attempted to deal with the problems related to collections research. Other types of collections, and museums with additional resources, may be able to use alternative approaches. But the first step must always be to consider the museum's purpose and to define it clearly. This step would involve determining what categories of artifacts to collect, what chronological period to cover,

and what geographic region to include. An overall plan serves as the best defence against intrusive collections or against becoming "the community attic." The plan must be clearly understood by everyone involved and be periodically reviewed.

Once the overall plan for the collection is in place – "there must be research." In both history and science museums research staff are the core people who "need time to search out the stories and meanings of the things they collect." "These things will be the more valuable the more is known about them, so...collection research which is done easiest and best while the object is a recent arrival to the museum and its past is along a recent trail outside the museum" must be given a high priority.<sup>4</sup> This may lead from time to time to "formulating questions which have

no answers," as one of the Western Development Museums' staff recently put it, but museums have an obligation to try.

#### NOTES

1. Saskatchewan Western Development Museums, "Statement of Intent," March 1, 1979.
2. Robert D. Turner, "Logging Railroads and Locomotives in British Columbia: A Background Summary and the Preservation Record." *Material History Bulletin* 13: 3-20; and Robert D. Turner, "The Limitations of Material History: A Museological Perspective," *Material History Bulletin* 20: 87-92.
3. Turner, "Limitations of Material History," p. 91.
4. Yorke Edwards, "Research and Education: Museums Need Both," *Muse* (Spring, 1985): 10-12.

## Research and the Development of a Domestic History Collection

Barbara Riley

What a museum chooses to collect and preserve is determined by its mandate and by the acquisition policy flowing from that mandate. A museum of technology may decide to collect a range of similar artifacts to show technological change over time, or to show a series of superlatives: the first, the last, the wholly Canadian-made. Museums of social history acquire objects that demonstrate change of people and communities over time. What is collected is typical or representative of certain social milieus; it is not necessarily the first, the best, or the most unusual. A historic site collects for a sharply defined historical situation, identified precisely as to time, place, and context.

Ideally research should precede any acquisition programme in order to ensure that the artifacts collected are chosen in accordance with their significance for the museum's purpose. The direction and scope of research should proceed from the institution's mandate and should provide a basis not only for selecting artifacts to be preserved but also for making them comprehensible through exhibition and education programmes.

Although most museums subscribe to this ideal, they are usually unable to practise it consistently since much of their resources are spent in grappling with the problems presented by existing collections. Ironically many of these problems stem from a lack of coherent research in earlier years. Present-day staff attempting to organize the existing collection must do so with no knowledge of the impulses creating it in the first place. Usually the artifacts were acquired over several years by a number of different curators, each with his or her own perception of what was to be preserved and why. No record exists of the rationale underlying earlier acquisition decisions. In fact it is unlikely that any such record was ever created by the staff of

the day. Multiple, unexamined, and unrecorded collecting philosophies create incoherent collections which may even result in confusing the museum's original purpose.

The difficulties in organizing existing collections, physically and informationally, are well known to current museum staff. Similar problems arise in developing a new collection, with the advantage that most of these can be dealt with on paper prior to acquisition activity. Many of these issues are common to all museums; others are particular to each institution's specific circumstances. What follows is an attempt to identify and resolve these issues as they pertain to a specific research project undertaken by one museum: the study of women's domestic history in the twentieth century at the History Division, National Museum of Man.

The National Museums Act defines the purposes of the National Museums of Canada:

to demonstrate the products of nature and the works of man, with special but not exclusive reference to Canada, so as to promote interest therein throughout Canada and to disseminate knowledge thereof.

As part of that overall mission, the National Museum of Man is responsible for researching and demonstrating the history of human existence in Canada from prehistoric times and for preserving the artifacts which testify to that history. Within this context the goal of the History Division is to increase understanding of Canadians' experience in the historical period through reference to the objects embodying that heritage. The approach taken is that of social history (the study of change and continuity in the circumstance of all social and economic classes through