Dawson & Hind

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Dawson and Hind

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Unsolicited articles are welcome. Address all correspondence to:

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Winnipeg, Manitoba R3B ON2

Dawson and Hind — recipient of:
AASLH Certificate of Commendation '78
CMA Award of Merit '79

Simon James Dawson was appointed by the Canadian Government in 1857 to explore the country from Lake Superior westward to the Saskatchwan. His report was among the first to attract attention to the possibilities of the North West as a home for settlers. He was later to build the Dawson Route from Lake-of-the-Woods to Winnipeg, Manitoba.

William George Richardson Hind accompanied his brother, Henry Youle Hind, as official artist, when the latter was in command ofthe Assiniboine and Saskatchewan exploration expedition of 1858. W. Hind revisited the North West in 1863-64 and painted numerous paintings of the people and general scenes.

Our Cover: Introducing the new logo for the Association of Manitoba Museums, designed by John Pawlyk, Parks Canada.

Association of Manitoba Museums

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AIMS OF THE ASSOCIATION

Object
The advancement of museum services in Manitoba by:

a) promoting the protection and preservation of objects, specimens, records and sites significant to the natural and human history of Manitoba

b) aiding in the improvement of museums in their role as educational institutions

c) acting as a clearing-house for information of special interest to museums

d) promoting the exchange of exhibition material and the arrangement of exhibitions

e) co-operating with other associations with similar aims

f) other methods as may from time to time be deemed appropriate

Invitation To Membership
You are invited to join the Association of Manitoba Museums so as to take part in its activities and provide support for its projects.

Activities and Projects
A number of activities and projects are planned to help the AMM achieve its objectives. These include:

a) the publication of a regular newsletter and/or quarterly to discuss the activities of the museums, provide information on exhibits, and to distribute technical and curatorial information

b) a regularly updated list of museums in the Province, including their main fields of interest and a list of personnel

c) conducting training seminars aimed at discussing problems of organization, financing, managing and exhibitions at an introductory level

d) organizing travelling exhibits to tour Manitoba

e) the completion of a provincial inventory to assist in preserving our cultural heritage

MEMBERSHIP CLASSIFACTIONS

Individual Membership - open to any resident of Manitoba who wishes to promote the aims of the Association, whether or not he or she is connected with a museum. Annual fee - $3.00

Associate Membership - this includes institutions and individuals outside the Province of Manitoba who wish to promote the aims of the Association, whether or not such member is connected with a museum. Annual fee - $3.00

Institutional Membership - this is restricted to museums located within the Province of Manitoba. Annual membership fee is based on the museum's annual budget as follows:

Annual Budget		Membership Fee
100	1,000	$10.
1,001	20,000	15.
20,001	40,000	20.
40,001	80,000	25.
80,001	160,000	30.
160,001	320,000	35.
320,000+		40.

Further information may be obtained by writing to the Secretary-Treasurer, Association of Manitoba Museums, 190 Rupert Avenue, Winnipeg, Manitoba R3B 0N2

Editor's Forum

DIANE SKALENDA
Museums Advisor
Manitoba Museum of Man and Nature

Tenth anniversaries are always special occasions and the 10th Anniversary of Dawson and Hind is no exception. Do you remember Volume 1, Number 1, 1971, with the Seven Oaks House Museum appearing on the cover? I have had the good fortune to be involved with this publication for nine of its ten years, and have seen it grow from a simple typewritten format, to the more sophisticated typeset copy of today. Hopefully, it has matured content-wise as well as aesthetically.

Dawson and Hind represents, and hopefully reflects, the museum community of Manitoba. Over the past ten years, over 25 museums from all regions of the province, representing numerous disciplines and cultures, have graced our cover. The mandate of Dawson and Hind is to act as a source of reference for museological information, provide a channel of communication for Manitoba museums, and to act as a vehicle in which our readers can publish articles. Our members, and others in the museum community, have supported this mandate very generously throughout the years by providing hundreds of articles for publication. Without their contributions, and the moral support of many of our readers, Dawson and Hind would not have survived to its 10th Anniversary. As Editor, I would like to extend my thanks for this support.

To mark this milestone in our short history, we are pleased to introduce our new cover; as well as the new logo of the Association of Manitoba Museums. The masthead, which we think will enhance the image of Dawson and Hind, was created by designer Eric Crone of the Manitoba Museum of Man and Nature. The logo, designed by John Pawlyk of Parks Canada, represents both the human and natural elements represented in our museums. Our thanks to both Eric and John for these attractive designs.

This edition of Dawson and Hind is a wonderful potpourri of articles. President Tim Worth has taken this opportunity to ponder both the past and future of the Association in his article entitled *The AMM: Reflection's of the President*. Other articles include such topics as a Cook's tour of several famous Hawaiian museums, fossils found in southern Manitoba, using the Western Canada Pictorial Index as a resource, and a history of the Reston and District Historical Museum. To add even more variety to this interesting selection is a look at hairstyle trends at the turn of the century, planning security procedures in museums, and a philosophical approach to interpretation.

The first ten years of Dawson and Hind have been great—we hope the next ten will be even more exciting. A great deal, however, depends on you. Remember its your publication, and should reflect your interests and concerns. Your input is vital if it is to continue to grow and genuinely serve you — our readers!

B.D.S.

UPDATE:

Manitobans Receive CMA Award

We are very pleased to announce that two Manitobans recently received the Canadian Museums Association "Award of Merit".

Congratulations to Brother Jacques Volant, o.m.i., curator of the Eskimo Museum at Churchill, and diorama artist Betsy Thorsteinson of the Manitoba Museum of Man and Nature.

Brother Volant has been an Oblate Missionary in the North since 1925. His love for the Inuit people and their art has resulted in one of the finest collections of Eskimo art in the world. Anyone who has seen the Eskimo Museum and visited Brother Volant will agree the award is well deserved.

Examples of Betsy Thorsteinson's work can be seen throughout the Manitoba Museum of Man and Nature—the latest being the mini diorama in the Boreal Forest Gallery. The detail, accuracy, and over-all beauty of that exhibit, with its miniature figures engaged in the day-to-day activities of an Algonquian encampment, are fitting examples of her talent.

The award was presented to Betsy in person at the CMA's Annual Banquet in Ottawa on May 30, 1981, and to Brother Volant at a special presentation in Churchill on June 9, 1981.

Assistant Deputy Minister Appointed

The Honourable Norma L. Price recently announced the appointment of R. Lynn Ogden as Assistant Deputy Minister of the Department of Cultural Affairs and Historical Resources.

Well known in the Manitoba museum community, Mr. Ogden comes to this province after many years in Ottawa—first at the Canadian Conservation Institute and most recently as Executive Director of the Canadian Museums Associaton.

Mr. Ogden assumed his new duties on June 15.

Bulletin from the St. George's Society

The St. George's Society of Halifax, founded in 1786, is trying to reestablish links with other similar societies across the country. If anyone can give information of present or past such organizations, please write to Ms. Elizabeth Ross, 23 Kirk Road, Halifax, Nova Scotia B3P 1A5.

Fur Trade Conference

The Fourth North American Fur Trade Conference is to be held October 1-4 in Grand Portage, Minnesota and Old Fort William, Thunder Bay. The conference will consist of a variety of lectures, historical reenactments, trail hikes, receptions, and tours including one of Old Fort William. The first half of the conference will be in Grand Portage and the second half at Old Fort William, some 40 miles apart. Session topics include: "The American Fur Company", "Hot Furs—Poachers, Bootleggers, and Game Wardens", "Fur Trade on the Pacific", "The Hudson's Bay Company", and "Fur Trade in the Great Lakes Region", among other topics.

For further information, contact: Fur Trade Conference, Minnesota Historical Society, James J. Hill House, 250 Summit Ave., St. Paul, Minn.

News from Daly House in Brandon

A fund, in memory of Col. S.A. Magnacca, cofounder and first president of Brandon Museum, has been established by his family in aid of Daly House Museum.

Mr. Roy Brown, Director of Daly House Museum, has just published another book entitled "Steam Boats on the Assiniboine". Mr. Brown was recently the recipient of an "Appreciation Award" from the Manitoba Tourist Industry Association for services rendered.

The AMM: Reflection's of the President

TIM WORTH
President
Association of Manitoba Museums

What does the future hold for the Association of Manitoba Museums? Very briefly the Association will, of course, continue to represent a provincial voice for the community museums; representing their interests on a provincial and national scale. However, that is far too simple an answer to a very complex question. The future of the Association will be closely linked to the health and vitality of the museums it represents. In any attempt to look into the future, the present status affects the outcome. We all accept the premise that our present situation is quite often a reflection of what has gone on before us. Surely for museums this statement is truer that for most professions, as our goal is to attempt to illustrate the diverse nature of existence. The manner in which museums interpret this in their presentation, today and tomorrow, and their grasp on what the community desires, will determine their growth and ultimately their future in the community.

In the ten years the Association has been in existence, it has grown from a small number of individuals banded together around a common interest, to an Association representing museums in almost every corner of the province. This growth over the past ten years is a key factor and one which will have a similar importance in the future.

To understand our potential a thorough perception of the past must be achieved. When the community museums came into existence, they were largely an outgrowth of either an individual's or a group's dedication to preserve a segment of the past; in whatever form it took. What these pioneers of the museum community might have lacked in knowledge of museological technique, they made up with determination. Over the intervening years, a source of information has developed and has been shared amongst those wishing to further their knowledge on how to develop their museum. Foremost in these developments have been three specifics—the invaluable assistance of the Museum Advisory Service, a quality publication in the form of **Dawson and Hind**, and the unestimatable value of the regional and annual seminars. These resources have trained those involved since the formation of the Association, and continue to demonstrate their value as newcomers are introduced to the management and operational modes of community museums. As problems are met today, the developing knowledge and strength will continue to be available as an asset for the future. In so doing, the Association and its members will be establishing a path towards the achievement of our prime objective—to promote and preserve.

Taking another look at our development, one readily identifies the role of various governmental agencies. Many museums today owe their very establishment to money which was received during one of a number of centennial celebrations of the early 1970's. Certainly without the impetus of collections already in existence, the task would have been much harder. Once established, it soon becomes evident that operating a museum is far more demanding than establishing one. Although funding has been available from the provincial government to qualifying museums, there has never been enough to carry out programs which would ensure the stablization of collections, thus guaranteeing they are available for the benefit of future generations. Several years ago a report was compiled which showed the step-by-step progress which museums and governments should take to arrive at a mature situation. However, for the most part, the suggestions contained in "**Path For the Future**" remained unaccepted by any of the governments to which the Association of Manitoba Museums made its appeal. Repeated changes in ministers and governments brought little change for over six years. Only within the last year and a half has any sort of action been commenced by any government. Mind you, it took the form a complete reevaluation of the cultural scene, but at least any resulting legislation will be based on very recent figures. For the Association's part, a vigilant attitude into the government handling of the cultural review, and more specifically the heritage component, is the most responsible thing that it can do at the present. When a policy is set—then a reaction can be made. Then, and only then, must the Association react to guarantee a healthy future and thus ensure the stable development of the museum community.

Certainly the development of changes in the provincial and indeed the national levels of funding could mean a considerable stimulus to the museum community. Just how much a stimulus, of course, would depend upon what sort of changes were made. But both the Association and its membership of museums and museum colleagues must not relax while waiting for some government to provide a hint of what the future might be like. They must deal with the situation on a more individual basis. The security of their future surely will not depend only on monetary gains, but also upon how relevant their audiences consider the museums are dealing with the needs of the community.

It has already been stated that a diverse representation of our culture exists in our museums today. In fact, as society continues to develop, all culture matures, thereby creating changes in how a museum must look at the society it serves. The guidelines upon which a museum may have been founded fifty years ago would certainly have little bearing on the society of today. None but the most specialized of museums should ever consider concentrating their efforts around one theme. Museums must change with the times. As each day passes a little more history is created and becomes relevant to the concerns of the museum.

Some museums are faced with the prospect of having to find ways of becoming more socially accepted. The more public interaction that a museum is able to build around its programs—the more secure it can consider itself in that community. Perhaps Mr. Steve Prystupa, Curator of History, Manitoba Museum of Man and Nature, in an article in **Dawson and Hind**, has identified what the museum community must strive for: "The museum can...become a unique social space, a resource centre and a media facility for learning, creativity and interaction between all sectors of the public". This statement clearly expresses the major role that all museums should work towards if they hope to be an integral part of their society in the future.

The methodology of providing better service falls into two realms—that of the previously-mentioned improvement of relations between community and museum, and the improvement of both facility and staff.

In the past when mention was made of the creation of a museum the first thing to come to mind was the construction of a shelter for a collection of artifacts. Fortunately, however, this attitude is changing and consideration is being given to the history associated with the items and the need to accumulate such information. At the same time, more and more people are emphasizing the necessity of creating a stable environment within a structure to preserve the collection for as long as possible. Both these factors have received considerable attention in the past few years but a tremendous amount of work still remains. The Association bears the responsibility of carrying on the promotion of collections management—proper artifact care, documentation and conservation techniques. It must be remembered that it is far more irresponsible for a museum not to provide a secure facility and/or environment for the items in its care, than for a general citizen to do likewise.

With the commencement of regular training sessions through the regional spring seminars and those that occur at the time of the Annual Meeting, the museum community in Manitoba has expressed a genuine interest in becoming knowledgeable about the various museum-related topics which assist them to do a better job within their museums. However, this is only one step. In the near future the Association is going to have to develop a more comprehensive style of training. One which over a period of time will cover all aspects of museology and in which the participants will receive recognition for having taken advantage of the training program. Already this type of program is operational in at least two provinces. Both the Ontario and British Columbia Museums Associations have developed successful training programs in which they receive the support and participation of their members.

With this in mind, as early as last October a committee was formed to examine the ways and means of developing or expanding upon the training available to our membership. For some it will be an upgrading of already acquired knowledge and skills, while for others it will be an entirely new experience. No matter how we look at it, our museums will be the beneficiaries.

Many museums exist now, but in the future others are going to come into existence. It is our responsibility to ensure that new facilities do not repeat the same mistakes we made when we were at the same stage of development. The foresight which we share today, will make for a much stronger Association and museum community in the future.

This sums up the nature of our present situation and the basis on which we have to forecast the future. We look to the future with a combination of personal strengths and dedication, and a more secure financial backing.

"We advertise for a person to be a Director/Curator/Exhibits Designer/Conservator/Fund-Raiser/Custodian and we offer $9,000 per year, to work at a stimulating and high-status vocation—nobody applies! Young people just don't have the same motivation we used to have!"

Museums in Paradise

WARREN CLEARWATER
Museums Advisor
Manitoba Museum of Man and Nature

The setting was practically everything I had ever imagined paradise to be—miles of white sand beach, the blue waters of the Pacific gently rolling upon the shore, wind gently rustling through the palm leaves, with countless bronze-coloured beauties attired in the tiniest of bikinis! Suddenly, I was shocked back into reality by a white low-rise building directly in my path marked 'museum'. I rationed that it must be a mirage—what would a museum be doing nestled on the beach of Waikiki amongst dozens of high-rise hotels and apartment blocks? I slowly approached it but it did not evaporate into the atmosphere. It was real. My next impulse was to turn and run. Something just would not let me do it. I had been a Museums Advisor for too long. I had to see what was housed behind those white cement walls.

Ft. De Russy Military Museum

As it turned out, the museum I had stumbled upon was the Ft. De Russy Military Museum. The building in which it is situated is the Battery Randolph, one of the very few low-rise buildings remaining today on Waikiki. It was constructed of hand-mixed cement between 1909 and 1911 and was used as a coast artillery bunker—the oldest in the islands. The museum is situated in an almost ideal location on Waikiki Beach well within easy walking distance of many of the large hotels and condominiums. It is also easily accessible by transit bus.

Large guns of the Ft. De Russy Museum overlook Waikiki
Warren Clearwater

One of the first things I noticed was the well-controlled visitor flow by means of easily visible yellow arrows painted on the floors. By following these, one does not accidentally bypass any of the displays to be found in the maze of hallways and corridors.

The theme of the Ft. De Russy Museum is to depict, by means of various displays, the history of U.S. Army campaigns in the Pacific theatre. Some of these campaigns include the American Revolution, Spanish-American War, Boxer Rebellion, the Philippine Insurrection, World Warr II, Korea, Vietnam, and the U.S. Army during peacetime.

Being a military museum, one would expect to find, and does, several displays devoted to military field pieces, weapons and uniforms. The majority of displays are behind glass with lighting supplied by fluorescent tubes. I was unable to determine if they were equipped with ultra-violet filters. I felt the displays themselves were very well arranged—not cluttered and employing a good ratio of artifacts/photographs. They are colourful and the visitor is not overwhelmed by khaki and military green. Full mannequins, torsos, and individual heads are effectively used to demonstrate not only wearing apparel but various pieces of equipment as well.

Label copy was also well done. All cases have a clearly visible title label allowing the visitor to

Simple but effective display case of the Japanese attack of Pearl Harbor *Warren Clearwater*

Mannequins displaying American military apparel from the Korean War *Warren Clearwater*

know what is displayed from a distance. I did find that some captions below photos were rather small and would be difficult for elderly people to read.

Several displays were particularly well done and seemed to stand out: the scale models of early Hawaiian native forts and defences, the simple but effective display on the Pearl Harbour attack, the Viet Kong weapons composed of American Army discards, and the types of U.S., as well as enemy, wearing apparel.

The painted yellow arrows on the floors conveniently ended in the museum's very well stocked gift shop. Here, the visitor may purchase anything from replicas of Nazi helmets and K rations to suntan lotion and Honolulu bus guides.

I did not speak to any of the museum personnel but did notice that guided tours were available on request. No admission was charged in the museum but donations were accepted.

Bernice Pauahi Bishop Museum

Having visited the U.S. Army Museum from a "tourist" point of view—that being not talking with any of the staff members on such topics as display techniques, internal structuring of personnel, etc., I decided to go the opposite route with another of Hawaii's more famous museums, the Bernice P. Bishop Museum.

The museum itself is situated a few miles west of the Honolulu business district in a primarily residential district of the city. My only source of information on the museum prior to my visit were the numerous short press releases I had noticed in the daily newspapers. They described it merely as "the State of Hawaii's official depository for Hawaiian natural and cultural history treasures". I was also aware that a planetarium existed on the nearby grounds and a ship named the *Falls of Clyde* existed somewhere in Honolulu harbor.

I boarded a transit bus and enjoyed the 45 minute tour of the city before arriving at my destination. I was very much impressed by the size of the main exhibit building which was constructed of stone blocks and reminded me somewhat of the Buller Building at the University of Manitoba. I later learned that the stone from which the museum buildings were constructed was lava rock which had been quarried nearby and the architectural style was known as "Richardson Romanesque". The surrounding grounds were in golf course condition—complete with coconut trees, hibiscus blossoms and several other exotic blooms and plants.

I felt the $4.00 admission charge per adult and $2.00 for youths (6-17) was a little steep but I learned that this also includes the live performance of chants, dances and music or Hawaiian arts and crafts on campus.

The interior of the three-story building is lined with beautifully carved brown wood known as koa wood. The first exhibit area I wandered into was the *Hall of Hawaiian Natural History*. This area contained well over a dozen excellent exhibits ranging from how the Hawaiian chain of islands was formed to displays on the unique biological forms which have developed on the islands due to their isolation. Other exhibits contain plants and animals native to the islands, those brought over by the first Polynesians and those brought over after European contact.

Continuing further upwards on the beautifully carved koa wood stairs, I found myself in another large exhibition hall. On display was an exhibit on the various types of sea turtles—their life cycle which included their problems from the time of birth, through maturity, their migration routes and perhaps their most serious problem—their rapid move towards extinction at the hands of man.

"Richardson Romanesque" architecture of the Bernice Pauahi Bishop Museum *Warren Clearwater*

Displays were colourful and well done. They contained several mounted specimens of various species, large maps of migration routes, photos and artifacts, such as jewelry, derived from the killing of turtles.

From the sea turtle display I returned to the main floor and entered what was known as *Hawaiian Hall.* The hall was a large three-level area with the interior composed largely of koa wood. The first or main level was entitled, "The Legacy of the Past". It contained objects of the stratified social structure which has dominated the Hawaiian way of life from prehistoric times to the present day. Artifacts ranged from everyday household objects of the lower classes to musical instruments and carved religious images. Perhaps the display which impressed me more than the others was that of the feathered cloaks, capes, leis, of Hawaiian royalty. Feather cloaks were the visual symbol of the highest power and prestige and were worn only by male Chiefs. Lesser Chiefs wore capes and leis of similar construction and design. One cape in particular was said to have been fashioned from over 40,000 individual feathers plucked one or two at a time from native Hawaiian forest birds (which were never killed or injured in the process).

The second level of *Hawaiian Hall* was entitled, "Conflict and Consonance". It recalls the main areas of European influence on life in Hawaii—Monarchs, Mariners, Missionaries, and Merchants. Displays include the history of the rise to power of the Kamehameha Dynasty in the 19th century as a result of a blending of the old Hawaiian ideals with those of the English Monarchy and Western World. A large portion of the second level deals with the discovery of the Hawaiian Islands by Captain Cook in 1778. Cook was treated as a god by the natives. His writings of the time and collection of scientific specimens from his voyage are very important in the knowledge of ancient Hawaii by present scientists and scholars. The displays contain personal items belonging to Cook such as early maps, carts, and paintings. Perhaps the most famous, as well as most obvious, exhibits in the *Hawaiian Hall* is that of the sperm whale. The specimen relates to the whaling industry of the early 19th century to which Hawaii owes much of its prosperity. The specimen hangs from the ceiling, is 55 feet long with a live weight of 20 tons. Visitors are able to view the internal structure of the whale from one side and the natural view on the opposite side. Other whaling displays include types of harpoons, model ships, photos, and documents.

The upper or third level is known as "Living in Harmony". It displays the artifacts of the many and varied ethnic groups from around the world which make Hawaii their home today.

At this point, having toured most of the display area, I decided to try and locate a tour guide or curator who could answer some of the technical questions which came to mind as I toured the halls of exhibits. I introduced myself to one of the volunteer tour guides and explained that I would like more information on the "behind-the-scenes" aspects of the museum. She advised me to return the following day and meet with Mr. D. Huffman, the Manager of Operations for the museum.

As scheduled, I returned to the museum the next morning and met Mr. Huffman in his office. I explained that I was a Museums Advisor with the Museum of Man and Nature and wished to discuss some of the problems and technical aspects of his museum to compare them with those encountered at our institution. As Mr. Hoffman gave me a brief

Planetarium dome situated on the Bishop Museum campus *Warren Clearwater* resume of his duties, I began to suspect that the display area of the museum which I had toured was merely the tip of a much larger iceberg. Mr. Huffman explained that he was in charge of all of the activities of the museum and its staff not directly linked to research, education or exhibitions or in other words everything involved with the daily operations of the institution. These operations encompassed departments such as Reception, Gift and Book Shops, Public Relations, Promotion, Advertising and Sales, Security, Maintenance and Bus Tour Operations. The prime function of the Operating Services Division was to provide the mechanics of serving the general public visiting the museum. Another main concern was to raise funds for the museum to support research, education and exhibitions.

I had prepared a list of questions but once we started talking one answer just seemed to lead to several more questions. Mr. Huffman began by giving a brief summary of how and when the museum was established. Charles Reed Bishop was one of Hawaii's most successful businessmen and bankers in the latter part of the 19th century. His wife, Chiefess Bernice Pauahi Bishop, who died in 1884, was the last survivor of the Kamehameha Dynasty or the founding dynasty of the Hawaiian monarchy. Having inherited her collection of ethnographic and historical items, Charles Bishop decided to incorporate these, as well as similar materials left by Queen Emma (wife of Kamehameha IV), and the holdings of the inactive Hawaii National Museum. In the original Deed of Trust of the Bishop Museum it states the museum should be developed as "a scientific institution for collecting, preserving, storing, and exhibiting specimens of Polynesian and kindred antiquities, ethnology, and natural history—and the publication of the results of such investigations and study". It was the intention of Charles Reed Bishop to honour the Hawaiian heritage of his wife and to encourage Hawaiians to take pride in their Polynesian heritage when he founded the Bishop Museum in 1889. He also intended that his museum "rank with the museums of the world".

The first building of the complex now known as the Bishop Museum campus was begun in 1889 with its exhibits opening in 1891. As is common with many museums, collections soon outgrew available space and the three-story "Hawaiian Hall" was begun in 1899 and completed in 1903. Two buildings were later added for research, administration, and housing collections. These were Paki Hall (1910-11) and Konia Hall (1925-26). More recently, Pauahi Hall and the Hawaii Immigrant Heritage Preservation Centre (HIHPC) buildings were completed in 1964 and 1977. The campus also houses a Planetarium and Science Centre, and further construction is planned to provide a adequate space for collections, research, exhibits, visitor orientation, etc. Off-campus activities include the *Falls of Clyde*, a museum ship (the last surviving full-rigged four-masted sailing ship). Built in Scotland in 1878, the ship was once active in Hawaiian waters as a passenger ship, cargo vessel and oil tanker. Today it is restored and moored in Honolulu Harbor. This maritime extension of the museum has been united with the campus since 1972 by means of London double-decker buses.

Having now learned the extent of the museum, my next thought was how is an institution of this size funded? Mr. Huffman stated that originally, the endowment begun by Charles Bishop when the museum was first established fully supported all functions of the museum for many years. However, because of the continued expansion of the museum, the endowment cannot come close to supporting the operations of the museum. Other sources of income are now important. Significant contributions are made by admission fees and sales from the gift shop. Museum staff have been very successful in obtaining federal grants to support research while still other grants support the growing collections. Gifts and donations also contribute to museum finances. In 1975 the Bishop Museum became incorporated as a private charitable corporation with its own Board of Trustees representing the community. Prior to this the Museum had a largely overlapping trusteeship with the Bishop estate but the two were financially and administratively separate. Now the Board (of not less than 10 trustees) sets general policy and has standing committees for areas such as Development, Financing, Executive, Governance, and Buildings and Grounds.

At this stage of the discussion I was beginning to feel I had stumbled upon a South Pacific version of the Smithsonian Institution. Mr. Huffman said that there was a total staff of just over 200 people. Almost half of these are in the research field or related areas such as the library. There are also a number of senior honorary affiliate appointees who regularly work in various departments of the museum. In addition to the 200 plus regular staff, I was informed there are also several dozen volunteers or docents without which most larger museums would practically cease to function—at least programme-wise. He said there was no problem in obtaining volunteers, the problem was more one of turnover. Each volunteer, before beginning, receives an extensive 6-week course in Hawaiian history and culture. The Museum also has its own

Diorama of an Hawaiian village at the Bernice Pauahi Bishop Museum *Warren Clearwater*

Security Guard division supplemented by a sophisticated electronic alarm system.

I found it surprising that there could be that many staff members as well as volunteers working on the premises until we started breaking down the various services and departments. One of the first we discussed with the Technical Information Services. It may be defined as "the divisions aiding the scientists in carrying out the Museums mandate". It consists of one of the three largest libraries and photo collections of the Pacific area. As well as the library, the Pacific Scientific Information Centre contains maps of all the thousands of islands in the Pacific as well as historic and contemporary information on them. Also housed on the campus is the Pacific Regional Conservation Centre. Using the most modern techniques, it provides conservation and restoration services for museums and laboratories in the entire Pacific area. The final division of the Technical Information Service is that of the Bishop Museum Press. Since the beginning of the century, the Bishop Museum Press has been publishing "the results of investigation and study of Polynesian and kindred artifacts, ethnology, and natural history".

Another major service is that of Community Services or the services provided to the public. A major portion of the available space in the museum is devoted to exhibits and other facilities for the public. Naturally, the exhibits concentrate largely on aspects of the Pacific area. Each year approximately 30,000 school students tour the museum exhibits. In 1961, a Planetarium and astronomical observatory was constructed on the museum campus. Special Planetarium programmes are arranged for school classes with several subjects available to teachers. Admission is $1.50 per adult and .75 for children and students (6-17 yrs.). Present attendance exceeds 65,000 per year. Several new exhibits are planned or are under way. Recently, a 60 foot koawood log was gradually carved into a Hawaiian canoe and a *Hall of Discovery* is being designed where experiments in natural and physical sciences may be carried out. The Museum also offers Arts and Crafts instructions in fine arts and practical arts and crafts. It is also restoring the *Falls of Clyde*—the world's only surviving four-masted ship. A recently opened Hall of Discovery encourages visitors (especially children) to touch and examine artifacts.

The final major portion of the Museum discussed will be that of the Collections or Research Departments. These departments may be arbitrarily divided into human history as compared to natural history (Botany, Entomology, Zoology, Geology, and Palaentology). In both categories, only a small portion of the entire collection is on display to the public; the balance is in storage where the temperature and humidity are strictly monitored and controlled. These artifacts and specimens are studied as a research collection by scholars from around the world.

The Anthropology Collection of the museum has grown from a nucleus of the personal collection of Princess Pauahi and her relatives to a present size of 100,000 specimens. These specimens were collected by scientific expeditions to all parts of the Pacific, by donations to the museum by native Hawaiians and by staff members collecting them in Europe and America and were widely dispersed through 200 years of trade. Scientific studies on the cultural history of the Pacific are continuously being carried on in areas such as archaeology, ethnology, linguistics, music and dance. Data and results are published regularly by the Bishop Museum Press.

My discussion with Mr. Huffman regarding the natural history aspect of the museum practically left me speechless. The statistics and figures were almost incomprehensible to a layman like myself. I discovered that the Museum is the largest the world-over—collections-wise containing more than 19,000,000 specimens of plants and animals. The flora and fauna collections take in not only Hawaii and the Pacific basins but extend to many other areas. It is these facts that rank the Museum among the major natural history museums in the world. Staffing of the natural history division of the museum consists of approximately 30 research/curatorial scientists, technicians, clerical personnel, and scientific illustrators. In addition to these there are more than 50 scientists with honorary appointments working regularly with the collections.

Even breaking the division down into separate categories—the statistics were still awesome. In Botany there were more than 420,000 prepared plants. Problems of space restrict the Museum from accepting other large collections of approximately 50,000 specimens of seaweed and mosses.

The Entomology section is by far the Museum's largest natural history department. More than 11,000,000 specimens may be found mounted on pins, glass slides or in alcohol. The department is presently working on a grant to curate the collections.

The Zoology collection may be subdivided into further categories such as Ichthyology with 21,311 lots of catalogued fishes; Malacology with 6,000,000 specimens of shells, Invertebrate Zoology with some 20,000 specimens and Vertebrate Zoology (mammals, birds, reptiles, and amphibians) with some 20,000 bird specimens and 15,000 mammal specimens. Specimens of reptiles and amphibians number approximately 7,000. There are also geological collections but there is not an active department in this field.

At this point my mind was practically swimming in facts and statistics—I had written several of them in a notebook and luckily I was able to obtain further literature in the Museum's bookstore which allowed me to describe some of the previously mentioned departments in more detail.

In closing, I would like to express my thanks to Mr. David Huffman for his assistance and "behind-the-scenes" information. I definitely feel the Bishop Museum lives up to the intentions of Charles Reed Bishop that it should "rank with the museums of the world". Should you ever be in the Honolulu area I would highly recommend a visit to the Bishop Museum—it has something for everyone.

Planning Museum Security & Fire Safety

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Editor's Note: *The following article was first published in the British Columbia Museums Association publication* **MUSEUM ROUND-UP**, *No. 80, Fall 1980, and appears with the permission of the editor.*

SCOPE OF SECURITY

May I please define my understanding of the word 'security'.

In our organization it includes a broad range of activities which have to do with the protection of people and other assets from loss, damage or injury due to causes such as fire, theft, vandalism, environmental conditions and accident.

For us this means the safety and protection of the visiting public, our employees, the collections and related research material, as well as our supplies, equipment and facilities.

NATURE OF OUR SECURITY SERVICES

In the National Museums of Canada, which is a large multi-museum organization, the Security Services Branch has both a staff and an operational function. Our operational role is strictly a service function in support of the management of the museum concerned. Since safety and security are an integral part of most museum activities we appreciate that managers and employees have the responsibility for safety and security in their area of control. Accordingly we have made special efforts to see that our Security Branch activity is responsive to museum directors and their professionals and staff.

We have developed a Corporate Security Committee Organization representing all elements of national museums. Its goal is to ensure mutual understanding, consultation, input, coordination and monitoring by the museums, and full accountability and responsiveness by the security people.

Likewise we have developed Corporate and local employee Safety Committees representing both management and employees. Their role is to input and coordinate development of safe work methods and environment.

We have also integrated various functional elements into the local fire emergency organization for each location.

Although the size of our organization tends to require these formal relationships, I feel the same principles of mutual involvement are also a necessity in even the smallest organization.

SOURCES OF SECURITY EXPERTISE AVAILABLE TO YOU

In order to appreciate the adequacy of the resources available to you may I please comment on the security industry in Canada.

First of all going back to our definition of 'security', we find many large companies and organizations have included in their "security services" an even broader range of activities in the same shop including elements such as: risk management; loss investigations; audit; claims adjustment; inventory control; and even sometimes their own fire, police, rescue or medical services.

Of course the diversity of specialities in security is as broad as the diversity of the different companies themselves. For example they have developed security as a specialty in the retail trade, industry, banking, transportation, mass entertainment, and many other types of organizations.

The point that I wish to make here is that a wealth of security related expertise is available in Canada in a wide variety of fields, many of which may be elements of Museums Security.

The commercial security industry and the variety of security products and services reflect this diversity. In Canada the industry is also now being better regulated by the provinces, although the setting of controls and standards by governments still leaves something to be desired. This is especially true in protective security as physical standards are not codified in building requirements. On the other hand the fire engineering industry has been well regulated by the presence of good building fire safety codes.

Likewise most architects are now as much aware of protective security as they have been for fire and life safety.

Some related elements of the industry tend to be somewhat self regulating by their trade organizations. The locksmith trade is an example. Alarm companies with a central station and response service are generally of a high calibre. Suppliers of a wide range of equipment are available and they are generally reliable with good products. One should avoid sellers of security gadgets and should stick to good basic systems sold by reputable firms.

Although suppliers of guard services are often of a high quality, due to the nature of the low bid competition some companies still offer security guard services that are much below an acceptable standard.

One caution we have with use of commercial security services is that you must appreciate that they are in business, and that their purpose is to sell security services. With this in mind, unless you have decided that their particular services are what you want, you should not hire a consultant without an agreement that they will not sell you the services they recommend.

Security is being taught at some local colleges in many Canadian cities, but as yet it has not become a separate discipline in Canadian universities, as has been the case in some universities in the U.S.A. However, in Canada 'security' is often an element of museology courses.

Today we are aware that security is a function of good corporate management. Accordingly, professional security management groups are developing in Canada. They hold professional training sessions open to any person, and have a wide range of specialists in their ranks. Persons with a security role in medium or large size museums can benefit from their services.

In the museum and art gallery field, we have seen an increase in positions identified as a pure security role. More often we see museum managers and professional people taking a special interest in security as part of their normal work activity.

Probably the greatest assistance can be from local police crime prevention officers, and local fire safety officers. They are well aware of the local threat and local security standards, and can often call on outside advice and expertise to help you. Join their 'operation identification' and 'neighbourhood watch' activities, and invite them to be a part of your local museum support organization.

Before leaving this point, I should mention that the RCMP now have units to do physical security surveys. I have one caution, however, which applies to all use of non-museum people. There is usually a need to include operational concerns of museum professionals—as well as fire detection, supression, and public safety into their protective security package. Security specialists in larger organizations in your field can also be of great assistance.

THE NEED FOR SECURITY TODAY

Recent national crime statistics have shown a levelling off or decline in some categories in serious criminal activity.

The following are a few factors that I feel indicate a continuing need to consider security and safety in our museums:

- criminal elements are becoming more interested in the profits to be made from illicit trade in works of art and antiques
- this illicit trade in cultural property is often international in scope
- there has been a general increase in arson vandalism in many Canadian cities
- we also see a general increase in security measures in the community. Obviously those who do not keep up with the general level of security in a community will become the most vulnerable targets for activity such as theft, vandalism and arson
- more complex (and sometimes more hazardous) work methods are being used by museum employees, and they deserve special attention to ensure a safe working environment, especially where they are not fully aware of the hazards or trained in safe practices

So hopefully we can agree that security and safety is still needed and that reasonable and relevant security expertise is readily available in most Canadian communities.

A SECURITY SPECIALIST'S APPROACH TO SECURITY PLANNING

If you decide to use the services of a security planning specialist you will probably note that they will use a particular planning method. The same method may be used in many related fields, including risk management, and crime and fire prevention. Although the jargon may change from one discipline to another the steps are usually somewhat the same.

For my purpose here I have settled on a few basic steps which include an analysis of the risk and the development of suitable security countermeasures. If a new project is being planned this will bear on both the development of concepts and actual specifications; in the case of an existing project there should be an additional data gathering exercise to measure the existing system in order to decide if it should be changed.

One quotation from an authoritative manual I like very much is: 'No security plan or programme can be effective unless it is based upon a clear understanding of the actual risks it is designed to control'. *(Ref. Protection of Assets Manual, Walsh & Healy, Chap. 2.)*

Naturally in the small museum with a small staff, data gathering and analysis will be uncomplicated and need not be formalized, but I honestly feel the same basic principles and approach should apply.

The development of security countermeasures should not be the product of guesswork or uninformed judgment. Thus you may have to seek advice and expertise elsewhere. This may be even more necessary in the small museum where a particular expertise is not available amongst the staff.

If you decide to hire a consultant or a security service, you should do some or all of the following:

- ask for their pedigree and verify their credentials
- what are their qualifications to provide this advice and service?
- check with their other clients
- verify their record with consumer monitoring agencies and local police
- insist that a museum representative accompany them at all times when they are on your property

Whether or not this is a new or existing project it is necessary to ask yourself the following:

- what is to be protected?
- what is the threat or risk?
- what level of risks do I accept?
- what measures do I propose?

RISK ANALYSIS

Threat or Hazard Identification

Some sources of data are:

- information from existing employees
- records of complaints, security incidents, and previous surveys
- information concerning security in the community at large, including similar public institutions
- information from the Police in respect to criminal trends and methods

For example, some of the common threats can be:

- factors such as unintentional vandalism or damage by visitors
- problems such as failure of building or community utilities
- problems such as illness, injury, epidemics, disturbed persons
- crimes such as trespassing, grafitti, vandalism, assault, arson, burglary, disorderly conduct, pilferage, robbery, sex offences, shoplifting, and theft
- natural disasters such as storms, lightning, floods, landslides, earthquakes, forest fires
- civil disturbances such as labor unrest (even in nearby plants), riots, sit-ins
- industrial disasters such as major fires, explosions, train accidents, widespread pollution

Occurence Impact/Criticality/Vulnerability

Once you have identified all probable threats:

- rate the threats in order of probability (i.e. from the least likely to occur through to the virtually certain)
- their expected frequency of occurence
- rate them in order of seriousness (will the consequences to the organization be tolerable, serious, critical or fatal?)

The results of weighing these factors will be a clear idea of your vulnerabilities and an identification of the threats that you must deal with.

Normally we say each risk may be accepted, transferred, reduced or eliminated. You must decide which and to what degree for each risk. For example, you may decide to leave artifacts uncovered and be able to put up with the moderate risk of wear or accidental damage due to the proximity to visitors, but you could not survive a large fire in the silent hours. You will probably decide some consequences are too serious not to consider and some are not worth the cost of prevention.

COUNTERMEASURES

You should now consider some possible measures or combinations that will maintain the level of security wanted. For example—have you considered various combinations of hardware, people and procedures (such as the use of security lighting, better door and window hardware, better key control procedures, better display methods, improved signage, a burglar or fire alarm system, a security guard presence or a patrol or alarm response service, better property control procedures, or simply more insurance coverage. You may also decide that guard costs will dictate how many public entrances there will be or what the public hours will be)?

May I please mention that any reference made to 'guard' should be interpreted as any museum person such as guides, or receptionists that have an element of protective security or public control in their work.

Should you **make** or **buy** this service? This refers to the difference between hiring your own security services such as a guard or alarm services, or contracting for these services. Before leaving this point might I just comment that in the National Museums of Canada we have found that a **combination of make and buy** to be very effective.

In a smaller organization you will tend to look at each area separately and then consider them in the development of a whole package for that particular building.

Countermeasures must be cost justified. You should reason out various combinations and develop a rationalized plan if your package is to be considered worthwhile. In the final analysis it is the senior executive or the governing body that must accept the remaining risks and provide for adequate security.

AN ON-SITE SECURITY SURVEY

In a study of an existing facility we often recommend that a detailed checklist be used as a tool to ensure a comprehensive and organized data collecting exercise. Although examples are good to use, most often the best checklist for you is one you develop yourself. If you do not use an actual checklist consider using the sequences I propose.

Most good security texts contain checklists. Local police and fire departments often have homeowner's checklists which can apply to the small museum or historic building. ICMS is also soon to publish a checklist as a companion to their book "Museum Security".

In order to make the survey effective two elements are needed:

1. There should be consultation with senior management of the museum to ensure their support for the study and to agree on terms of reference. It may also be appropriate for a circular letter to go from the Director to all employees advising them of this.
2. No security survey is meaningful unless there is a real input from the various operational elements of the organization being studied.

THE CHECKLIST

The following are some elements that should be included:

1. If any one of the survey team is not a part of the museum staff, or if the data is to be used by non-staff to develop the countermeasures package, then a preliminary list must contain general details of the museum governing body, organization and management policy, details of the collections, attendance figures and so on.
2. One sublist would detail the security manpower system including the head of security, guards and others with a security role, and the use of regular museum personnel or guides, etc. with a security, fire and safety related role.
3. You would then list the various control procedures in effect including key controls, inventory and other property controls, personnel security measures, such as identification cards, silent hour access, and so on.
4. One list would identify the nature and volume of assets to be protected.
5. Include a 'checklist' covering each layer of security. In security work we sometimes compare these layers of security to the layers of an onion. *Ref. Geo. Hawkes, CSIS Form; 'The Onion Skin Concept')*. The outer layer could be the property line; the next layer could be grounds adjacent to the building; the next could be public access areas, such as foyer or hallways; and in our case subsequent layers could include areas such as galleries, work shops, labs, offices, utility areas and so on.
6. You can also develop checklists along functional lines, ie. Registration, Shipping and Receiving, or fire detection and protection, or burglary detection and protection. This list can either replace or compliment the above checklist of layers of security.
7. You should include a study of local support services such as police, fire and medical services as well as their response times and service capabilities.
8. Finally you would study each point where valuables are protected. An example could be a display cabinet which may require redesign or alarming.

Although I have tended to concentrate on protective security you could easily have considered fire protection, public safety or occupational safety as the subject for your survey, and all of these can be a part of any general management review you may be undertaking.

SPECIAL NOTE
CONFIDENTIALITY OF SURVEY DOCUMENTS AND REPORTS

Once you have identified the security weaknesses and analysed your security measures, treat these documents and the final report as **highly confidential.** *Aside from being a potential embarrassment in the wrong hands any such document can easily be a blueprint for criminal activity.*

From a careful study of this you can probably see for the first time a clear view of the strengths and weaknesses of your system. Even the small museum, with 2 or 3 employees, will often be surprised to discover many problems and develop some obvious solutions they had not previously considered.

For example, if we take the layer consisting of the shell of the building in an older building you could find problems such as the following:

- Some aluminum ventilation ducts may have been affixed from the outside with screws. By using a screwdriver they can easily be removed and access gained into the building.
- Door hinge pins may be easily removed from outside allowing the locked door to be opened.
- An old unused coal chute cover may provide easy access to the basement area.

It is usually a simple matter to affix exterior mounted vent covers with one way screws; to weld unused coal chute covers; and burr, pin or weld the hinge pins. Often the problems and solutions are no more complicated than that!

When considering your options keep in mind factors such as:

- Cost and need for continuing service, maintenance and repairs.
- Reliability of equipment.
- Response time once an alert is signalled.
- Company reliability record.
- Additional administrative workload for museum management.
- Cost of fringe benefits for employee guards,
- and constraints imposed by Museum operations, public image, historic design, or budget.

For example: In an alarm system aside from basic costs ask:

- Who else uses this system?
- How reliable is it?
- Do you rent, lease or buy?
- Who will monitor, respond, maintain, repair?
- Are supply parts readily available and at what recurring annual cost?
- What is the response time once an alert is made?
- What is the false alarm rate?
- Will it impede normal museum operations?
- What is the life span of the system?
- What happens if there is a power failure?

If you are preparing your report for the Board of Trustees or the Senior Museum Executive, justify the needs by showing examples of losses by others and their causes. Cost each measure and set down a schedule of implementation.

SUMMARY

If museum professionals and administrators are considering reviewing their fire and security measures:

1. they would be well advised to consider approaching the problem from a security person's point of view
2. they should also use the technical expertise readily available locally
3. and finally they should possess security safety and fire protection knowledge in their bag of personal skills.

Editor's Note:

For further information on current security activity and sources of information, or a copy of Mr. Traynor's bibliography, contact the Museums Advisory Service, 190 Rupert Avenue, Winnipeg, Manitoba R3B ON2.

Prehistoric Southern Manitoba

HENRY ISAAK
Morden and District Museum
Morden, Manitoba

Editor's Note: *The following paper was presented by the author at the Association of Manitoba Museums' Annual Seminar held in Brandon in the fall of 1980.*

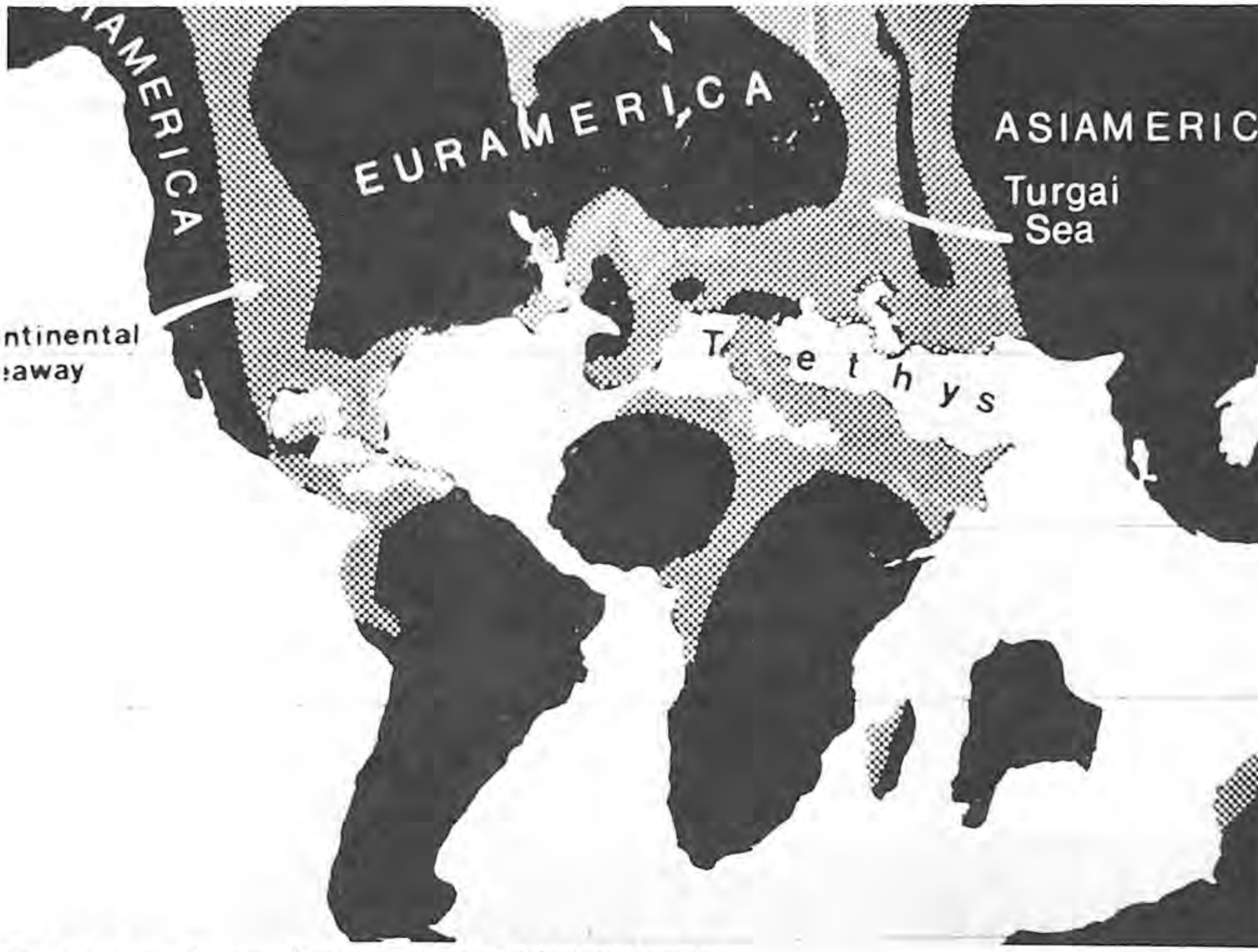
Few people would perceive of prehistoric Manitoba as an environment for huge swimming reptiles, gigantic turtles, and ferocious sharks. Yet upon examination of the fossil record, those are exactly the types of animals that were to be found. They are evidence of a time, long ago, when all of southern Manitoba was covered by a shallow ocean.

Since the summer of 1972 our museum has been collecting the fossil remains of these aquatic animals. It began quite by accident when a local farmer mentioned that the bones of some large animal had been uncovered in an open pit mine south of Morden. A friend and I went to the site thinking that they were probably the bones of some cow or horse, since we had never heard of any fossils being discovered in this area. Upon arrival at the mine, most of the bones had already been removed by visitors and local residents. We collected what remained and with the cooperation of the local residents managed to locate most of the missing pieces. Since our knowledge of fossils was very limited, we took the bones to the Manitoba Museum of Man and Nature in Winnipeg. Dr. George Lammers immediately identified the bones and told us that we had found the remains of a large swimming reptile called a plesiosaur. The specimen we had consisted of the skull, three flippers, and some vertebrae. Dr. Lammers provided us with some literature on the fossil, which showed us what the animal would have looked like and the fact that it existed approximately eighty million years ago. He also showed us how to properly collect any future finds. With our interest greatly aroused, we returned to the mine to see if we could find other specimens. In the next several days we managed to uncover the remains of another large reptile (which we later learned was a mosasaur), several fish, part of a turtle skull, and the leg bone of a fossil bird.

In our conversations with the men working at the quarry we soon learned that finding fossils was not at all a rare occurence. Mining for bentonite, a type of volcanic ash, had been going on in the Morden-Miami area for more than forty years. During that time, the men told us, hundreds of skeletons had been uncovered and subsequently destroyed. The mine operators had done their best to interest museums and universities to come out and collect the fossils. However, save for two specimens collected by the National Museum of Canada in Ottawa in the 1930's and some collected by the Manitoba Museum, the finds were largely ignored.

It was hard to imagine that so valuable and irreplacable a resource had gone uncollected for such a long period. During the remainder of the summer we returned to the bentonite quarries in our spare time. We collected many more specimens which we stored in our basements and garages. The quarry operators were glad to cooperate with us and gave us time to remove each fossil as it was uncovered by the heavy machinery. By the following summer, as our basements and garages overflowed with fossils, we decided that they properly belonged in the Morden Museun which had opened. A room in the museum was set aside to house fossil displays and the basement was given to us for storage and preparation. The museum applied for, and received, a federal grant in order to hire five university students to continue collecting fossils.

Over the next six years, our collection of fossils grew and grew until the museum was no longer able to contain them. Our original aim was simply



The Earth during the Upper Cretaceous Period—80,000,000 years ago

to preserve the fossils and prevent their continued destruction. As the collection increased in size, the museum felt a new building housing the fossils, and a series of displays telling what fossils are, how they are collected, and reconstructions of the various animals, should be constructed.

With the assistance of the National Museums of Canada, our new building was completed in the fall of 1978. The storage rooms of our new museum are already nearly filled with fossils. The display areas of our new building were not completed under the original construction grant. They are presently being completed and it is hoped that they will be ready by the spring of 1982 in time for Morden's Centennial celebrations.

Over the past eight years we have learned a great deal about the types of animals that once inhabited our area and what their environment might have been like. The fossils we have found are all from the Upper Cretaceous time period approximately eighty million years ago. At that time the earth was much different than it is now (fig. 1). Europe and North America were still joined together and the Mid-Continental Seaway split the North American continent in two. This ocean flooded what is now southern Manitoba. It is in the sediments deposited by this shallow sea that our fossils were buried. To the west, in what is now Montana, there was a now extinct range of volcanic mountains. These mountains produced the volcanic ash, which over time was transformed into bentonite. These layers of ash covered all of western Canada. In the Pembina Mountains of southern Manitoba the bentonite layers are very close to the surface. Through the cooperation of Pembina Mountain Clays Ltd., a company which strip mines for bentonite, we have been permitted into the quarries and allowed to excavate the uncovered fossils. The layers of shale that contain the fossils are located above and between the bentonite beds, so that in the mining operation the bulldozers uncover the fossil remains (fig. 2).

Removing a fossil from the ground can be quite a difficult task, particularly if the heavy mining equipment has shattered the bone into hundreds of fragments. Repairing a fossil is like putting together a jigsaw puzzle without a picture to go by.

The first step is to determine the extent of the fossil by carefully brushing away all the loose shale and then slowly removing the undisturbed sedi-

Figure 2

Figure 4

ment, thereby uncovering the bone. When the entire fossil has been exposed, it is photographed (fig. 3) and each bone is plotted on a diagram of the site. The specimen is then given a field number which is attached to each part of the fossil as it is removed. Bones found close to the surface are often very soft and fragile so consolidants must be poured onto them to harden the bone and help glue it together. If the specimen is too large to remove in one piece, it must then be divided into smaller blocks that are more easily handled. A deep trench is dug around each block extending at least six inches below the bones. Then the block is undercut so that the fossil is sitting on a pedestal of earth.

Next a layer of wet paper towelling is placed over all the exposed bone. This is to prevent the plaster that will be applied from sticking to the

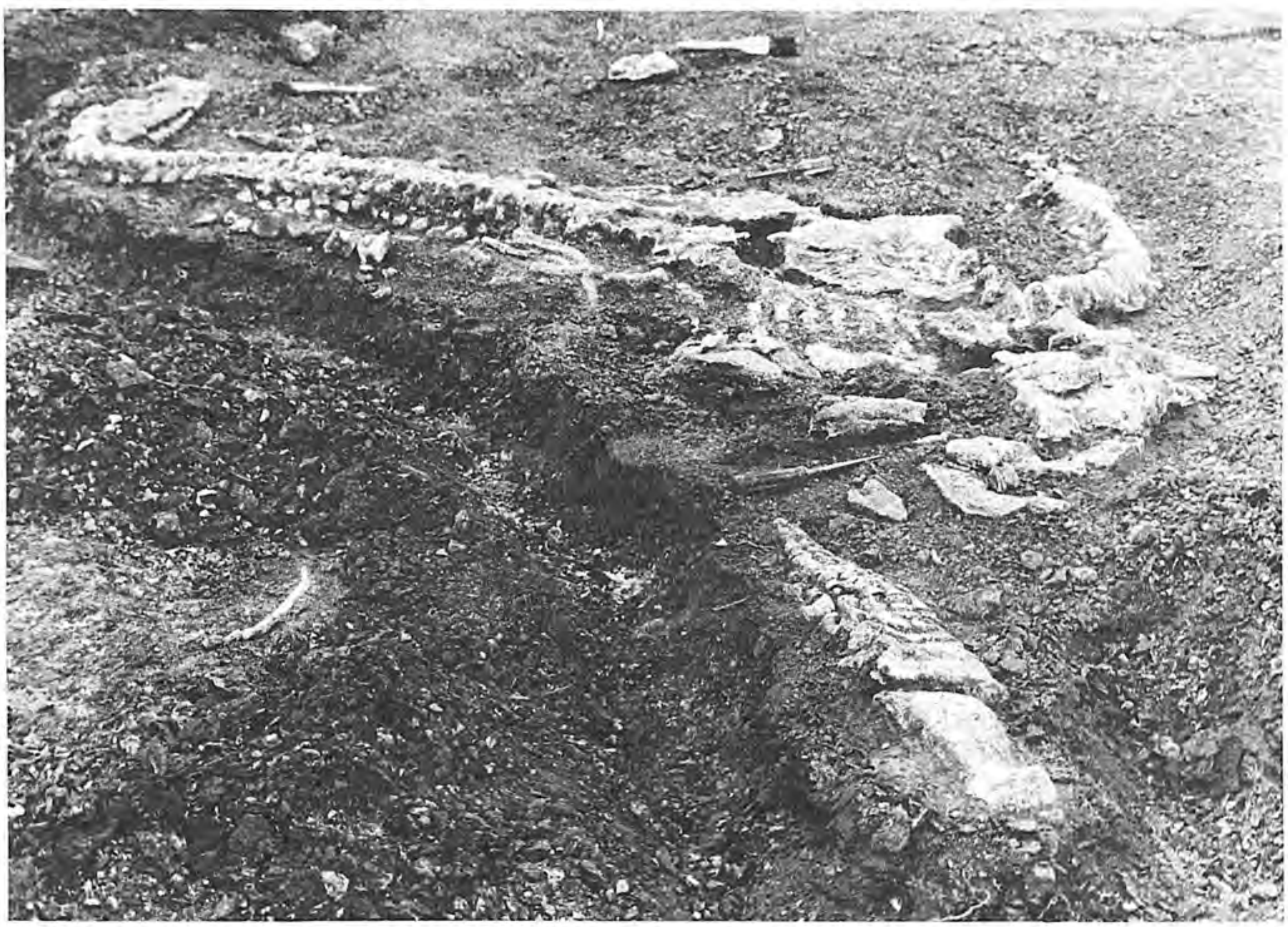


Figure 3

bone. Strips of burlap, about six inches wide, are then soaked in plaster of paris and wrapped around the block of earth containing the fossil. At least two layers of burlap strips are used to completely encase the block (fig 4). If the block is very large then sticks will be embedded in the plaster for added strength. After the plaster has dried, long chisels are driven under the block separating the pedestal from the ground. Now the completed 'field jacket' is quickly turned over with the bones safely encased inside.

The field jackets are then taken to the museum where the shale is carefully removed from the underside of the fossil. Once the fossil is completely freed from the sediment it may then be removed from the field jacket. Often the bone surface is covered with selenite crystals. These crystals adhere closely to the bone and must be removed with the use of dental tools, a very slow and tedious job. If the bones are broken they are carefully pieced together and then glued. Finally the bone surface is cleaned with a small sand blaster to bring out all the small details. We have collected so many fossils recently, that there are many, many years of preparation ahead.

Once the specimen has been fully prepared it is given a permanent catalogue number and an information card is completed giving the date of discovery, locality, geological horizon, collector, general description, and the location of the fossil within the museum. Only the very best specimens are placed on display, the rest are stored in trays for future study (fig. 5). At present we are in the process of computerizing all of our museum records. This will give us instant access to information about any fossil or artifact in the museum.

As mentioned, all of the fossils we find are the remains of marine animals. The most common type type of fossil discovered is that of a large swimming reptile called a mosasaur (fig. 6). These animals somewhat resemble modern alligators in outward appearance, although they are not related to them. The only living relatives of the mosasaurs are the large monitor lizards or Komodo dragons of East India which have reverted to life on land. Mosasaurs had long, laterally compressed, tails which were their main means of propulsion. Their flippers were used as stabilizers and for steering purposes. Mosasaurs were highly specialized for their marine existence. Their skulls were very

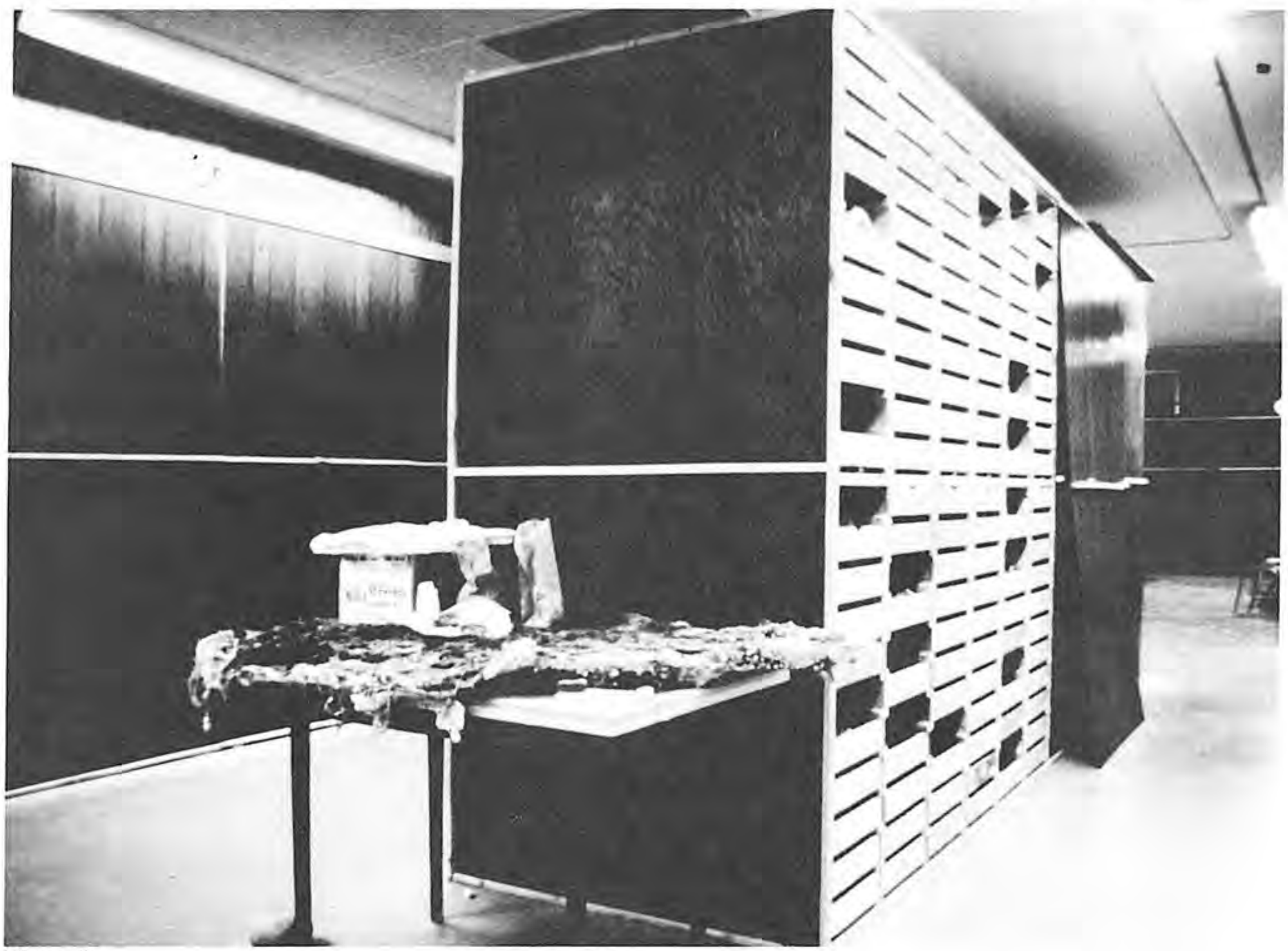


Figure 5


Figure 6


Figure 7


Figure 8


Figure 9

flexible allowing the upper and lower jaws to slide by each other and saw their prey into smaller pieces. They also had hook-like teeth in the roof of their mouth to hold the prey while the large teeth in the jaws ripped the food apart. These were voracious animals feeding mainly on fish, but some species fed on squid-like cephalopods and ammonites. Some mosasaur fossils show severe wounds probably inflicted by others of their own kind. Adult mosasaurs ranged in length from twenty to over fifty feet.

Next in abundance in the fossil record are the plesiosaurs (fig. 7). These unusual looking animals have no living relatives, although some people believe that the Loch Ness "monster" may be a plesiosaur. They have been described as "a snake threaded through the shell of a turtle". The body was very broad, flattened and inflexible. Since the trunk was rigid and the tail not well developed, plesiosaurs 'rowed' themselves through the water with powerfully developed paddle-like limbs. One type of plesiosaur, the elasmosaur (fig. 8), had a very elongated neck reaching up to twenty-five feet in length. The long flexible necks could be easily turned to dart the head at the prey. Other plesiosaurs had short necks but very long skulls with rows of sharp teeth to catch fish. Plesiosaurs could attain lengths of fifty feet but most were much smaller.

Fossils of marine birds are also represented in our collection, although the fragile, hollow bones are rarely preserved. We have found the remains of two different types of birds. One type, Hesperornis (fig. 9), was a large flightless bird similar in appearance to modern loons. Since the legs were well developed for swimming, leg bones are the part of the skeleton most often found. The second type, Ichthyornis (fig. 10), on the other hand was much smaller, only about eight inches high, and a powerful flyer not unlike modern terns. Both of these birds were quite primitive and retained teeth in their jaws unlike modern birds.

Figure 10

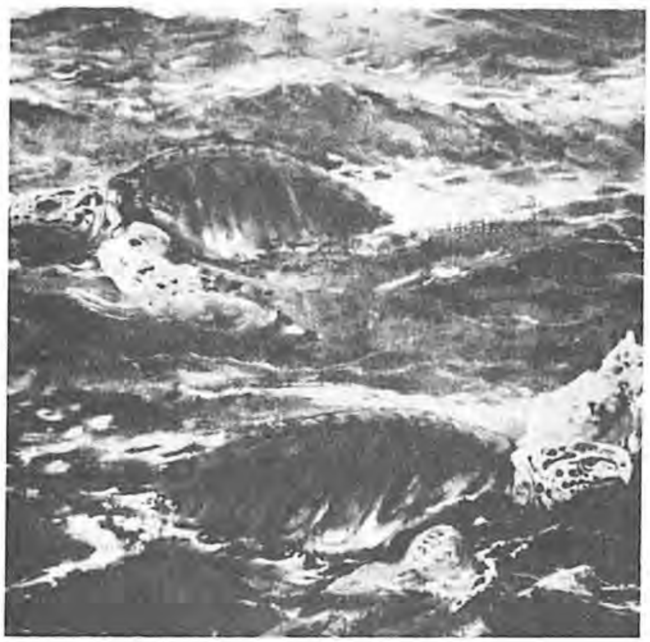


Figure 11

They both fed on the abundant fish population in the sea.

Turtles are another rare discovery. We have uncovered two kinds of turtles to date. One is probably the giant marine turtle archelon (fig. 11). Archelon is known to reach lengths in excess of twelve feet.

Fish remains are numerous in the fossil beds. Mostly they consist of isolated vertebrae and teeth. Numerous species are represented. Only a few partial skeletons or skulls have been found. Sharks are much less numerous. They are represented by only a few isolated teeth and one partial skeleton about ten feet long.

Recently we have discovered fossil evidence of ancient squids. The size of the fossil remains indicate squids up to fifty or sixty feet in length.

Our new fossil exhibit area, designed by Bill Little, will enable people to see the various types of fossils we have collected along with relevent information about each type. The exhibits are divided into nine units: introduction, origins, geology, bentonite, what are fossils, mosasaurs, plesiosaurs, birds, fish and sharks, and a diorama which will have reconstructions of all the various animals.

We hope everyone will take the opportunity to view these interesting specimens at our museum when it opens next year.

All photographs courtesy Henry Isaak

Figure 6
A Vanished World – The Dinosaurs of Western Canada
Author – Dale A. Russell
Artist – Eleanor M. Kish

Figures 7, 8, 9, 10, 11
Life Before Man
Author – Zdenek V. Spinar
Artist – Zdenek Burian

The Socratic/Directed Questioning Method of Interpretation

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Beware all ye who abandon yourselves to questioning! After all, you must remember, Socrates himself was indicted and presented with his cup of hemlock for the very crime of 'corrupting' Athens' youth. Such is the power of the question. If seems as if some very serious results can arise from encouraging people to think!

According to much of the museological wisdom, past and present, the ideal educational role of the museum is one which is provocative rather than expository; discovery-oriented rather than didactic. Indicative of how much easier such an ideal is mouthed than carried out, however, is the distinct impression that the majority of museum interpretation efforts being carried out today rely on one-way expository communication from docent to visitor, with the museum object in the background.

The following will hopefully stimulate some further interest in the use of the question as an important interpretive alternative, or at least help to confirm the gut feeling of many of us that it is a method that is not only important, but which is also one that works!

First, a (mercifully) short digression into some foundational educational philosophy. As a broad generalization (hopefully without the destruction of all meaning), education can be described as inducing some sort of change within the learner. One way in which such change can be accomplished is by introducing into the mind of the learner what is referred to as 'dissonance'. Dissonance, very simply, is the result of confronting the learner with his/her own lack of knowledge. The attendant frustration, or dissatisfaction, felt by the learner becomes a very strong motivation (one which is intrinsic rather than laid on) to actively seek out information to solve, or at least ease, the internal dilemma.

Obviously, one effective way to establish dissonance is by raising a direct question. It is to the theory and practice of this process which we now turn.

Why use questions in the museum? Isn't it more educationally efficient just to tell the visitor significant facts? Why play the 'I-know-but-I'm-not-telling–you-have-to-guess' game at all? The answer here, of course, is not quite as simple as these questions might suggest.

Granted, the expository method is more "efficent", but (and this is important), only on an extremely limited basis. Facts, per se, often are more efficiently communicated by lecture. However, the stated objectives of modern museums go much beyond the transmission of purely factual information. Indeed, the very ability of the museum to maintain a basis in simple factual accuracy comes into question in light of the "knowledge explosion"; contrasted with the real shrinking of support (financial and otherwise) for the continuing documentation of change in the world.

Many museologists believe that museums must aim beyond facts alone toward such ambitions as the development of visual awareness, critical thought processes, and problem-solving skills.

In addition, given the right attention to atmosphere and the input of serious planning, the questioning technique is not at all an arrogant "Ha-Ha-I-know-something-you-don't" approach, but one which truly involves the visitor in significant mental activity based on examination of the museum object. The key here is that the mental activity engendered by the question can more easily be moved into the higher levels of the cognitive, hopefully to result in more meaningful learning.

The questioning technique also helps to "learner-center" museum activity to a greater degree. By avoiding the straight line interpretive model, which sees docent interposed between object and visitor, the "reformation" of museum interpretation requires that the docent step aside and allow the visitor to focus directly on the museum object in order that they might "know" it more fully. When questions are used in this triangular model, there is an inevitable decrease in the "distance" between the visitor and the museum. The sharing of thoughts through question, answer, and discussion helps to establish a warmth and rapport between learner and institution which is missing from traditional guided tour relations.

Another important value of the question is in its focussing potential. In this the age of celluloid and video, we have all seen the effects of the popular media. Children, who are now imbued with vast audio-visual experience, enter the museum and, if allowed some freedom, rush from exhibit to exhibit without really looking at the objects. They are obviously utilizing McLuhanistic impressionistic skills honed in front of a television set. Children are so accustomed to movement and the high ratio of "jolts per minute" that they seem compelled to create their own movement since most museum objects don't move. Indeed, even for adults, how much difference is there between watching television and taking a typical guided tour through a museum? The only major difference seems to be that it is the audience, rather than the image, which moves!

In order to counteract this tendency, the museum must create visual and mental "hooks" which will hold the visitor long enough so that he/she is actually motivated to **study**, not just look at, the museum object. Again, one worthwhile way of accomplishing this is by establishing a question in the visitor's mind. It is the question which focusses attention on the object; and it is the museum setting which allows for real observation and reflection not possible in front of a television screen.

The use of questions in museum interpretation also helps to restore a more natural order to learning. Adults undertake personal learning projects because they need some particular information or skill in order to solve a problem confronting them. Schools and teachers, however, often tend to reverse this logical order by saying in effect..."This is what you should know...Be ready for the question tomorrow (on a test)."

By first raising a question, and then by providing the means through which answers might be approached, museums can contribute a great deal to the fundamental understanding of just how to go about learning in a natural, non-contrived manner.

By employing the questioning technique museums also help visitors to assume responsibility for their own learning, thereby freeing him/her from dependence on the docent, and enabling the development of an attendant self-confident, autonomous and empirical, rather than prejudice-dependent, approach to learning.

Of course, the fundamental reason for using the question is not to confuse or humble the visitor but, as Socrates had originally intended, to **clarify** thinking. Again, the question forces the learner to confront dissonance and to become active in reducing this internal discomfort by using the museum object as a resource.

Given acceptance of the above rationale, the next question, of course, becomes just how does one go about developing and using questions in the museum setting? The method described below is neither strictly a Socratic nor enquiry approach, but one which is an eclectic combination. It is perhaps best described as focussing, not on testing a specific hypothesis (as in the Socratic method), but on clarifying thought. On the other hand, this method is more directed than a true discovery-enquiry approach, as it requires more intervention by the questioner.

How then does one actually go about designing an effective questioning strategy? The process obviously demands more than a liberal sprinkling of Who? What? When? Where? Why? and How? throughout a tour.

The key to the whole process is found in detailed and thoughtful pre-planning. The would-be Socrates must know exactly why questions are being asked. This implies an awareness of museum and specific programme themes, goals and objectives.

The task then becomes one of designing questions which will help the visitor to focus on the established themes. This is done by examining the artifacts on exhibit and considering how each relates to museum and programme goals. Questions are then designed so that they can be answered by observation of the artifacts.

Because most museum interpretive programmes are limited in both time and scope, it becomes necessary to establish in one's own mind what is important and which questions will tend to focus on these aspects. The interested docent should engage anyone who is willing to help sort out these considerations; and perhaps the most effective way this can be done is on paper.

Once the basic concepts are established, the formulation of the actual questions becomes relatively academic. Of course, questions should be clear and concise. They should be formulated on the basis of: the course and dynamics of the particular programme; consideration of visitor needs, abilities, and desires: and most importantly, they should incorporate various levels of cognitive skills.

There are various ways of classifying types of questions according to the level of cognitive activity that is required to answer. Most, however, are based on Bloom's taxonomy of cognitive tasks which range from the lowest level of memory recall through translation of information, interpretation of relationships, application to problem solving, logical analysis, synthesis of previous learning for creative solutions, and finally, evaluation. Questions can also be structured on the basis of whether they demand convergent (focussing toward a single answer) or divergent (encouraging varieties of answers) thinking.

Once the types of question levels are understood, it is important that various levels be used in a logical sequence. Questions such as "What is this?" will stimulate only so far.

If we were to diagram the use of questions, many questioners would be represented by a straight horizontal line. Some questioners never go beyond factual recall or observational questions. Many others could be diagrammed with a zigzag line, since they may use a variety of question types, but in no logical sequence.

The ideal is a regularly-stepped profile, where questions are first asked at the factual/observational level and then progress through information processing (comparing and contrasting, etc.) into application (problem solving) questions. We might suspect, however, that such an ideal is an unobtainable goal for the structuring of a complete tour in a museum. More realistic perhaps, would be an attempt to use the stepped model at each exhibit stop in the tour.

It is only common sense that questions posed at the end of tours should ask for summations of themes and a synthesis of learning.

In the end analysis, however, the important idea is to rise beyond the exclusive use of lowest-level memory and observation questions. We should not worry unduely about a lack of emphasis on facts, since the higher levels involve application of all the types of cognitive tasks below them, including factual recall.

The atmosphere under which questions are posed is another critical factor in their success or failure. Many questions in the classroom setting tend toward the relatively threatening type such as "I-taught-this-yesterday-and-you-should-know-it".

Questions in museums, on the other hand, should be used in as relaxed, cheerful, reassuring, non-threatening manner as possible. Wording should be informal and conversational. After all, we also want a museum tour to be an enjoyable experience!

Another important factor in achieving such an atmosphere seems to be pace. All too often, the questioner simply moves along too fast to receive thoughtful, detailed answers (if any at all). The questioner's anxiety about not being able to "cover everything" (questions do take time to answer) should be set aside in favour of an equally strong desire to deal with a few ideas in sufficient depth which are meaningful to the learner. Many museologists believe that the opportunity to practice the more time-consuming higher level cognitive skills is much more important than a quick exposure to a list of the "important facts to know" about the artifacts.

A further key aspect in developing an appropriate atmosphere in which questions can be successful is the quality of the response given to answers. It is crucial that this response be an accepting one. Beyond the passive "That's right", or "okay", the questioner should take an active role when responding. In this light, "No, I'm sorry that's not quite right." should be accompanied not only by a smile but by an explanation of why the answer may not have been correct. Even better, however, is the active probing of unacceptable answers by using further clarifying questions. Comments such as "Why do you say that?", or "How does your answer fit with the artifact we're looking at?" help the slightly off-base learner to look again and clarify his/her thoughts. Another strategy is to involve the rest of the group in the clarification by asking for further comments or explanations.

The learner must be made aware that his/her ideas are valuable. One way of accomplishing this is by further probing their answers as cited above. Correct aspects of partial answers can be salvaged and restated or summarized. The extra time spent in such activity is not at all wasted, but pays dividends in the levels of thinking and quality of answers elicited in the future.

While on the subject of time, it is also important that the questioner wait for an appropriate length of time for answers to be formulated. Often questioners wait no more than one second before proceeding to give the desired response, or to redirect the question. It is truly part of the art of teaching, rather than the science, to know exactly how long one should wait for an answer. It is important to remember, however, that the museum has been established for reflection, not a "Reach For The Top" reaction.

Another aspect of the ideal accepting atmosphere for the directed questioning technique is the flexibility demonstrated in accepting questions from the learners themselves. Remember, the whole point of the exercise in the first place was to raise questions in the visitor's own mind! Such questions need not be answered directly by the docent. Indeed, the docent must become comfortable in saying "I just don't know" rather than attempting to bluff a response. Very often the question will be more profitably answered by redirecting it back to the museum objects, or to the other members of the group.

The literature dealing with using questions in the museum setting has identified a number of guidelines and situations to avoid when employing the technique.

First, the "Do's":

- It is important to make sure that the learner understands that it is the process of thinking and the manipulation of ideas, not the "right" answer or facts, which have first priority. The goal is to develop the independent reasoning skills of the learner, not to improve his/her listening or memory skills. In addition, the learner should be encouraged and allowed to make his/her own conclusions. Questioners should encourage creativity and "thoughtful guessing", as long as the speculation is based on the exhibits.

- When at all possible, the learner's own experience should be associated with the subject at hand. Such an attempt to make the learning "relevant" will aid immeasurably in developing the motivation to pursue the learning.

- Finally, a very positive value is placed on flexibility. Indeed, in some cases it just might be more "educationally efficient" to drop initial targets and follow directions of more immediate learner interest.

Now for the "don't's":

- One thing docents must do away with is the fear of silence. We must begin to realize that the dreaded silence after the posing of a question is precisely the time when thinking and real learning take place! In this light, don't be too quick with an answer or change of strategy. Allow time for significant thinking and learning to occur.

- Don't be trivial. Questions must be significant and challenging enough to warrant the risk of being wrong. One suspects that part of the reluctance to answer simplistic questions is the increased risk of embarrassment for an incorrect answer. The harder the question, the less face one loses by being wrong. If a truly accepting atmosphere has been established, truly creative responses will not be inhibited.

- In this regard, don't avoid the tough or even the unanswerable questions. On one hand, the learner should be significantly challenged, and on the other be aware of the confidence in his/her own ability to think and answer. This is engendered in the mere asking of the question.

- In very practical terms, avoid designing questions which can be answered with one word: don't stick only to the simple factual type, don't dialogue with only one or two quick answers, and finally, don't ask rhetorical questions. There is no way of checking whether the inevitable answer, so very clear to the questioner, is clear, or even understood, by the learner. In other cases, an undesired and very "smart" answer may be forth-coming when it is least wanted.

The above theory is all well and good, but what if it does not work as it should? Of course, one of the most dreaded consequences of asking a question is not receiving an answer at all. What do you do when you cannot get the slightest suggestion of an answer to build on. Again, the art rather than the science of docentship enters in.

Assuming that all the preconditions established above have been met, absolute and continuing silence can be countered with several strategies. Depending on the nature of the group in question (or is it under questioning?), cultural (language or ethnic background) and social (adult or high school status) factors may come into play.

In general, strategies which may help to overcome a lack of preparation or knowledge on both parts begin with the maintenance of a relaxed and friendly attitude. The situation will only deteriorate with a stiffening of the questioner's resolve to extract an answer one way or another. The threatening nature of the situation can be reduced by asking for group responses, which take the pressure off individuals who may shy away from being singled out for attention. A simple show of hands in answer to a question is one way to help to break the ice.

If no response to a question is forthcoming after an appropriate wait, the wording of the question might be changed, the cognitive level reduced, or cues given as to how the observable objects may furnish an answer.

Knowledge of the learner's background, gained before the tour commences, can help the docent to relate the question to the visitor's own experience. Hopefully, "starting where the learner is" will help to stimulate a response.

As a last resort, the questioner might have to answer his/her own question, but not without clarifying how the answer was arrived at through the object. This is important to help the learner come to feel more confidence in his/her own powers of observation which more than likely had developed an answer in the first place. Approaching the leader or class teacher for help or suggestions might also be worthwhile.

If it seems appropriate, given the particular age and experince of the reluctant learner, and if the questioner him/herself feels comfortable in doing so, the situation can be increasingly personalized if the docent reduces the distance to the learner and perhaps establishes physical contact. An accompanying recognition of the fact that the questioner is confident that the learner just might have a good answer, and an appeal based on the questioner's own feelings "I'd feel very happy if you told me the answer you're thinking of" may help to elicit at least a whispered response.

The commonly-used cajoling or competitive-based appeal often may not be the most effective approach. Of course, it all depends on the particular situation and the group you are dealing with. It is up to the questioner to be sensitive to their needs.

In the case of reluctant junior high or secondary students, it is absolutely essential that all parties involved be well prepared and fully aware of what is to be expected in order for the questioning to be successful. Fear of potential embarrassment from the demands of the unknown is seen as one of the most significant inhibitory factors to participation by these age groups.

For adults who are much more self-motivated, self-directed, problem-oriented learners, questions have to be more closely related to their present interests and problems than questions for small children, who largely expect to be directed in their learning. In most cases, the average heterogeneous group of tourist visitors probably is not the most appropriate for responding favourably to questions. Special interest groups, unions, or various club memberships, in which common interests and problems are more focussed, might be more fertile ground for the questioning technique.

The bottom line to all of this is that use of the Socratic/directed questioning technique is as much an art as it is a structured body of strategies. For this technique to be really effective, the docent must be committed to the value of the question and accept the focus being elsewhere than on facts. After all, it must be remembered that the original intent of Socrates was not to predetermine, but to stimulate and clarify the learner's thought. Museums can only hope to emulate this goal.

In closing, this writer would like to gratefully acknowledge Nancy Vincent and the docents at the Manitoba Museum of Man and Nature for their help in a preliminary thrashing out of these ideas. Hopefully I have been more articulate in print than in person!

BIBLIOGRAPHY

Biehler, R.F., Psychology Applied to Teaching, Houghton Mifflin, Boston, 1974.

Estabrook, D., *Helpful Hints for Conducting Inquiry Tours* and *Questioning Strategies.* Smithsonian Institution Conference Papers, 1980.

Krockover, G.H., *Training for Docents: How to Talk to Visitors.* Technical Leaflet 125, American Association for State and Local History. History News 35/3, 1980.

Lowery, L.F., A Personal Training Program For Docents. The Oakland Museum, Oakland, 1976.

Sanders, N.M., Classroom Questions: What Kinds? Harper and Rowe, New York, 1966.

Western Canada Pictorial Index

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Western Canada Pictorial Index

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Educators should view media as enabling tools of access and research that should not be overlooked, but always regarded as tools rather than ends in themselves. —Symons Report.

When the Commission on Canadian Studies was formed in 1972 by the Association of Universities and Colleges of Canada, its mandate was to assess and make recommendations on the state of teaching and research in fields related to understanding Canada. The first part of this study appeared in 1976, and since has become known as the Symons Report, so named after Professor Thomas H. B. Symons, chairman of the commission, and principal author of the first two volumes. A concise paper-back, The Symons Report, became a popular seller, confirming the ever-widening circle of public interest which had been noted at the commission's hearings. There were more than 1,000 briefs and some 40,000 letters.

The study, which began as an academic examination involving 65 educational institutions, was expanded to accommodate thousands in all walks of life, and Professor Symons appropriately entitled the survey, "To Know Ourselves."

This definition could easily encompass a thousand topics but Professor Symons refined them to manageable proportions. He presented us with a number of avenues, suggesting exploration along his convenient guide-posts, and that's what must be done to see the subject whole. But sufficient for appraisal of this article, one need only read the Symons' chapters on archival resources and visual history to decide whether the Western Canada Pictorial Index is a step in the right direction. Professor Symons found visual support to be in the embryonic stage in Canada.

The teaching potential of audio-visual media attracted the attention of a few Canadian educators two decades ago but it was not until the 1960's that many institutions of higher education chose to experiment seriously with audio-visual techniques. — Symons Report.

Whatever experiments had been undertaken in the 1960's they were of modest proportions as measured by volume, for the commission found that 79 percent of films and audio-visual aids in Canadian schools came from foreign sources. By coincidence, at the time the commission was conducting its investigation, an experiment was underway at the University of Winnipeg. There, Ron Riddell, Administrative Assistant to the President, had launched the Media Department on a project known as "The Winnipeg Experience". This was a plan to recount the history of the City of Winnipeg, about to celebrate its 100th birthday, through an avalanche of pictures to be screened by a battery of projectors. All the components were to be harnessed through computerized controls, with lights, sound narration and lots of action. Riddell enlisted radio station CJOB to look after the sound, and Info Research organized the historical appraisal. The whole package was put together on a no-cost basis by Lionel Ditz, Director of the Media Department.

A judicious use of electronic media can take some of the dullness out of the ditch water too often characterized as the way Canadian History is taught. Film or tape can communicate more of the drama and majesty of Canada... — Symons Report.

The Experience could rightfully claim to be an antidote of the ditch water school of history. Once Lionel Ditz pushed the starter button, the history of Winnipeg came tumbling out with astonishing innovations. The epitome of the majesty of Canada was achieved when Louis Riel was propelled by the computer into the line-up of the Blue Bombers. Although somewhat puzzling to the authors upon occasion, The Experience was popular with the crowd at Manisphere where it fought for attention on the midway. It won a prize as a creative social adventure.

And this is what it was, social adventure, because over a period of months, it had involved many people in a persistent search for pictures to illustrate the city's history. About 2,500 pictures were found, identified and catalogued during the search, and one third of them got onto the screen. All of these pictures were related to one another in some way, and the decision was made to keep them together for future use. One thing was apparent: pictures in an isolated state were just so much cardboard, but when brought together, they could provide proper support for history programming. The hard work—and the cost—was in bringing the pictures together. Thus was found the Western Canada Pictorial Index.

A great deal of irreplaceable material suitable for use in Canadian studies has been destroyed over the years because of the lack of an adequate repository...comprehensive policies are needed for acquiring, storing, distributing and using audio-visual materials. The word should be spread around on the availability of such materials. —Symons Report.

The best way to find pictures is through projects. This was the basic dictum of the Index from the beginning, the stimulus for research came from creating rather than merely collecting. The next step was to provide an adequate repository. The Index chose the cabinet display system which permits 5,000 pictures to be exhibited in each unit. These slide transparencies, arranged in trays containing 100 pictures—not just pictures, but related pictures. Through this system a researcher may select pictures on a comparative basis to achieve the best visual support for the subject.

The Media Department now operates six dis-

This faded photograph from the collection compiled by the Oblate missionaries in the North West Territories shows Indian leaders of the Qu'Appelle Valley, all of them veterans of the buffalo hunt. Although damaged by time, the photograph provides valuable clues to the history of the last days of the Old West. Copies of the individual portraits also included in this article are now being circulated throughout the area seeking to have these hunters of the plains identified, and undoubtedly some of them will be.

play cabinets for visual support programming, and three of these are employed exclusively for western Canadian history. The others contain a variety of topics, including art, architecture, maps and general history. The total volume of slides on display changes from time to time as topics are rearranged. Other slides, not on display, are filed and readily accessible through the Index's reference system.

In theory, a media centre is an administrative unit organized within the university to provide university-wide comprehensive and technical services in the use of instructional media to improve learning. In reality, however, most of the media centres at 33 universities are no more than repositories for the collection of media materials. They do not produce materials themselves, they do not conduct programs to help teachers learn to use the media or to select the most appropriate medium for a specific task, nor do they provide adequate support personnel to facilitate the use of such materials. – Symons Report.

The resources of the Index are open to anybody attempting to widen knowledge and understanding of western Canada through education. Most of the pictures are in the public domain, and the Index encourages wide exposure. Other pictures are held privately under copyright, but permission to use them is invariably granted for educational purposes.

Just as there are black holes in the Universe, so are there black holes in history which the Index seeks to repair. The biggest black hole is the 30-year gap discovered by historian James H. Gray when he was researching his book **The Winter Years**, the story of the decade of the 3 D's–Depression, Dust and Drought. Looking for pictures in the 1960's of an event which occupied the 30's, Gray was told of many occasions that the old depression pictures had been thrown out with the garbage. The second generation didn't consider those pictures to be of much interest, "not old enough to be history and too recent to be interesting".

If a picture somehow survives for 50 years, then its continued existence is relatively assured for it will be revered as genuine history, and someone probably will get around to sending it to the archives. But short of 50 years, and in the twilight




Photos courtesy the Western Canada Pictorial Index zone when current events are in transition towards becoming history themselves, that is when photographs are an endangered species. It is in that area Index research concentrates, on anticipating the history needs of tomorrow. One thing learned from James Gray is that history cannot wait for people to bring pictures in, someone must go out there and find them.

There are two fundamental and closely related tasks that will determine the future of Canadian archives. The first has to do with public awareness, awareness of the importance of archival resources, of the location and potential development of these resources and of the skills required both to establish and to make full use of these resources.

The second concerns the development of a national and regional plan to coordinate archival activity, to serve as a frame-work for archival diffusion and to promote collections development in a rational manner throughout the country. In both of these essential areas of activities, the universities of Canada and the wider Canadian public have an indispensable role to play and important responsibilities to assume. —Symons Report.

As noted by the commission, there was very little Canadian audio-visual material available to schools at the beginning of this decade, but at a modest cost it was possible to purchase a wide variety of subject coverage from foreign sources. The Roman Empire, the Industrial Revolution, topics on the broad panorama of world history, or on the smaller stage of eastern Canada were on the market, but western Canadian topics were sparse, almost unknown. Even in public television, the increasing thirst for western history was difficult to satisfy because most of the programs were using recycled photographs. Curiously, the pictorial record of the West was atrophying in the age of the camera, a stronge anomaly, in view of Manitoba's abundant illustration of the past all the way back to the pictographs on the cliffs overhanging dozens of wilderness lakes. There we still may see a partial record of man's activities before the arrival of the Europeans, and through that primitive record we are still learning about a life style which we once thought had been lost forever.

"Of all of our national assets archives are the most precious: they are the gift of one generation to another and the extent of our care of them marks the extent of our civilization."

—Sir Arthur G. Doughty, one time federal archivist, quoted in the Symons Report.

Manitoba's earliest archives are the pictographs such as we see along the cliffs of the Nelson river, and the petroforms in the Whiteshell also are a gift to the present from the far distant past. Although often erratic, the illustrative archives continue to the present day, and at the Index, the past and present are related to help fill in the profile of Manitoba for the researchers of tomorrow.

Over the past year a number of private collections have made significant contributions to the resources of the Index, and the chief sources were:

James A. Richardson Archives: Compiled by the late James A. Richardson and his associates in the operations of Western Canada Airways Ltd. and Canada Airways Ltd., this collection covered much of the history of aviation in the northland from 1926 to 1941. More than 700 pictures were added to the Index showing types of aircraft, freighting operations, and many of the pioneer bush pilots.

Selkirk Marine Museum: This unique museum at Selkirk is housed in the famous lake ships, the Keenora and the Bradbury, both now in permanent dry dock. In connection with this project, volunteer researchers hunted down hundreds of pictures recording lake and river shipping over a period of 100 years. Many of the pictures are on display in the museum, but the entire collection is stored for safe keeping on a negative file at the Index. Some 250 pictures are displayed in the Index cabinets.

Tribune Sports Hall of Fame: For many years the Winnipeg Tribune's Sports Hall of Fame was an ornamental gallery of nostalgia at the Winnipeg Arena. The pictures, which recorded Manitoba's athletic achievements back to 1872, are now in storage awaiting decision on a new display area. All of the pictures are recorded on the Index file, and 300 are on display.

Oblate Missionary Archives: From 1880 to 1940 the Oblate missionaries were active photographers of the passing scene in western Canada. They caught the spirit of the last days of the Old West up to the turn of the century, and then recorded the changing profile of the West up to the Second World War. This collection was made available to the Index through the permission of Father J.P. Aubry, provincial superior of the Order, and 500 pictures were selected for the Index.

Campbell Brothers Collection: North of 53 was the home territory of the late John A. Campbell, sometimes M.L.A. and longtime commissioner of Manitoba's northland. With his brother Charles, he compiled a photographic record along the route of what was to become the Hudson's Bay Railway, in the years 1910-1919. These pictures are of the true pioneer days in the North, and the series terminates with the derelict ruins of Fort Prince of Wales—before the restoration. The entire collection is in the Index.

Manitoba Co-Operator Archives: Over many years, the Manitoba Co-Operator, the leading weekly farm newspaper of the province, has featured an old time picture and brief story in almost every edition. These vignettes of farm life accumulated to form a valuable chapter of history in themselves. William Morriss, editor of the Co-Operator, made these pictures available to the Index, and the agricultural section received an influx of farm life in acute refreshing detail.

In addition to these large collections, the Index has received a large number of pictures from rural museums and individuals who have given considerable help in filling out the numerous categories. The chief classifications are: Agriculture, Biography, Buildings, Immigration and so on, as a catalogue of general topics. These topics almost grow by themselves unattended, but specific research effort is directed into history topics.

At the present time the Index is using about 20,000 pictures through its display cabinet system, and the target for tomorrow is for a total of 40,000. On this number, it is believed the Index would be able to provide comprehensive visual support on almost any regional subject, from the Lakehead to the Rockies. The Index is not a numbers game—it is seeking the best pictures obtainable to illustrate the West, and it intends to make those pictures available to anyone interested in telling the story.

The same story, it seems, Thomas Symons wishes all of us to tell.

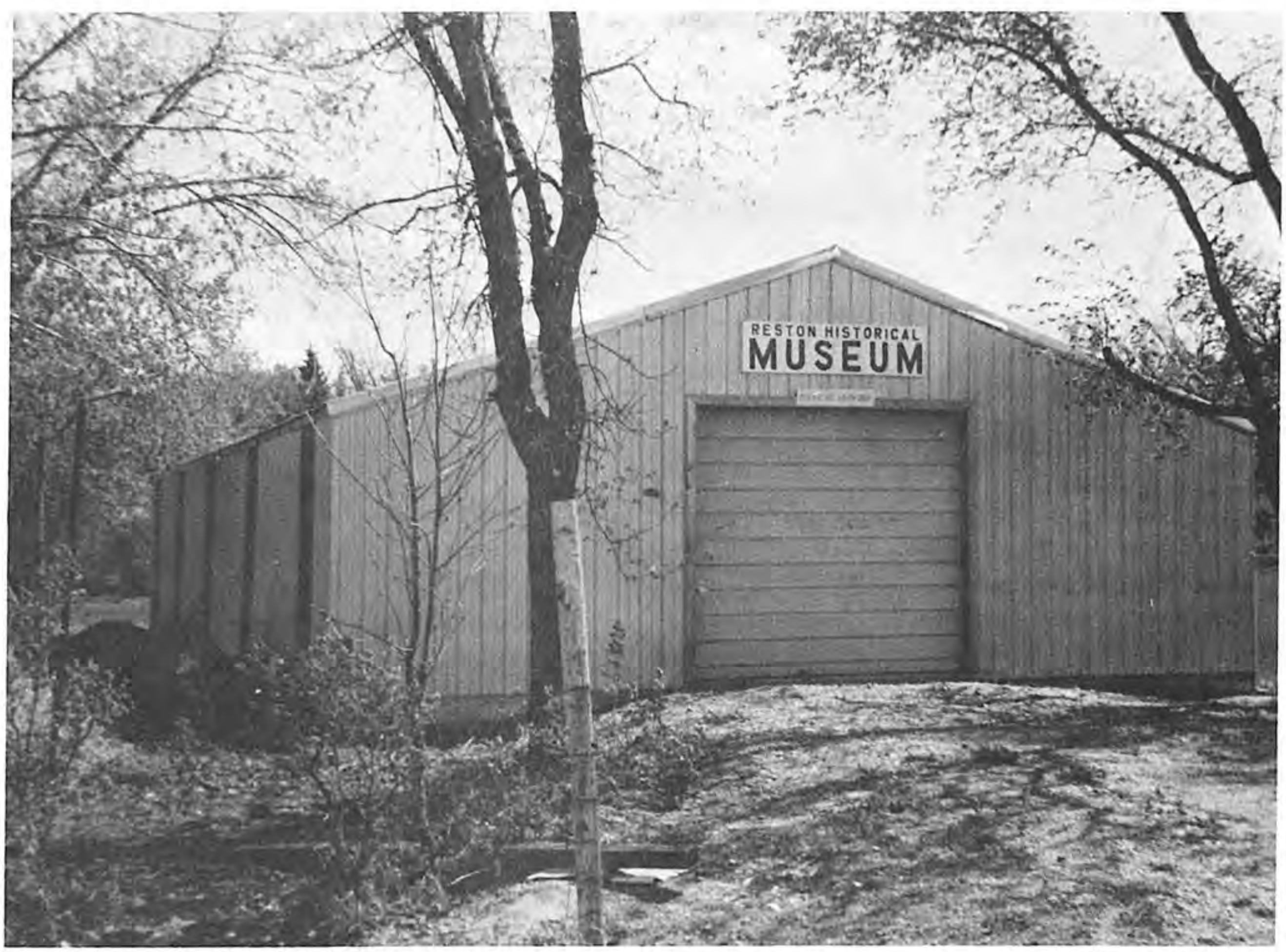
Reston and District Historical Museum

DAVID L. BRADDELL
Reston and District Historical Museum
Reston, Manitoba

Rural museums generally have small and private beginnings. It is an interesting fact, however, that the exception to this general practice occurred in Reston. Even though private enterprise played a good part in the promotion of a museum in our town, its establishment was institutional in plan, size and scope.

It all began in the spring of 1966 when Joe Ashley approached certain citizens of Reston to consider the organization of a museum. He and his brother Charlie had many antiques, collected in the district, that they wished to see housed securely and displayed in Reston.

These citizens offered to help such a project



Reston and District Historical Museum *Warren Clearwater* only indirectly. Joe Ashley solicited the Reston Lions Club for support. Joe and his brother offered the Lions a total of $1,800 if they would construct a building in which the artifacts would be safe and on public view.

The Reston Lions accepted the Ashley offer in July, 1966, being convinced by a study committee consisting of Edison Berry, Lew Traill, John Abbey, Doug Watt and Art Smith that a museum in Reston would be an educational, recreational and economic asset to the community.

Sites and contractors for the project were discussed, and not without some contention. However, consent of the Reston Park Board led to a majority approval of the north-east corner of Reston Park as the location, and Beaver Lumber as the contractor of the museum.

On August 2, the Reston Lions began a very successful canvass of town and districts, including Pipestone, Sinclair and part of the R.M. of Albert, resulting in approximately $2,000 being contributed. In September the museum foundation was dug and the footing poured. One of Mr. Ashley's terms was very definite: "No cement floor; no artifacts." Under the supervision of Bob Moore, construction of the Museum took place in October 1966. Labour was donated by the Reston Lions Club, some of whom were Lee Jackson, Art Smith, Corporal Lyall Marshall, Reuben Johnston and John Pickett.

The building measures 30' x 60', with straight walls and a roof of corrugated metal, steel supports for the roof every twelve feet of its length, and a smooth concrete flooor. A standard access door in the centre of the south wall serves as a main entrance. To permit access by service vehicles, a garage-style door about 10 feet wide, on an overhead track, was centered in the north wall. Along their lengths each of the north-south walls have five corrugated, translucent fibreglass panels serving as windows. In this way a fair amount of natural light supplements that from a row of standard light bulb bases along the peak of the ceiling.

From a public and operational viewpoint, it was initially agreed that washroom facilities were essential to the Museum. Costs, however, postponed installation of these services to a future date.

In April 1967, the Reston Lions Club reported that $3,361.16 had been raised for the Museum project. Part of this amount was a generous donation of $250 from the Reston Branch of the Royal Canadian Legion.

Arrangements were made for the staff to receive and display articles donated to the Museum. The Reston Lions Club approved the formation of a Receiving and Scrutineer Committee, comprised of Alvin Lazenby, Reg Berry and David L. Braddell (Chairman). This Committee was made responsible for receiving articles and deciding which were to be kept and displayed. Actually very few donations were rejected, most being of local family or community significance and therefore valuable to the Museum. An Operational Policy was decided upon without delay stating that only outright donations be accepted (whereby the donor gives up all rights to the article); articles be displayed in the Museum in groups of similar use (not in groups of donor family or by community grouping), and (that full acknowledgement be given to the donor.)

In April 1967, the Reston Lions Club laid the cement floor with equipment through the courtesy of George Toews, Ev Lockhart, Bert Cummings and George Deleau. In May the Museum acquired a display case and shelving and the Scrutineer and Receiving Committee was authorized to manage the Museum with help, as needed, from the Lions until further notice. By early June, the Museum had a cement step at its front door, put in by Art Klassen, and part of the Ashley collection of pioneer articles from home and district families, had been moved into the building. Soon many other donations were received and much of the remainder of the Ashley trove followed. On June 14, 1967, a group of the Reston Lions organized the artifacts into exhibits.

In the meantime, administrative plans had been drawn up and on June 6, 1967 an official Board of Museum Directors was elected. This Board consisted of 15 members, 9 of whom represented the Reston Lions Club. They were Chairman Lee Jackson, Secretary-Treasurer Boyd Berry, Reverend H. Dykman, Arnold Leech, Russell Manning, Lyall Marshall, Reg Muskett, Cecil Paddock, Burt Pierce, Mrs. J.D. Ready, Art Smith, Doug Watt, David L. Braddell, Reg Berry and Alvin Lazenby. On June 12, 1967 the Museum Board gave the Reston Historical Museum its name, unaware at the time that "District" was an essential part of the Museum's correct name.

Amid Canada's Centennial Day celebrations in Reston, the Museum opened to the public for the first time on June 20, 1967. Joe Ashley, the person chiefly responsible for initiating the formation of the Museum, was an honorary guest.

From the Museum's inception the Reston Lions Club assumed the responsibility for insuring the Museum building, but insurance on its contents is still a matter requiring attention.

It was also agreed that until circumstances would permit insulating the building and installing heating and plumbing facilities, the Museum would be open to the public only for the eight to ten weeks of summer. This plan has been in effect to date. However, weather permitting, the building has remained accessible to interested persons by arrangement with members of the executive of the Museum Board.

Displays in the Museum consist of a wide variety of artifacts from numerous sources. At first articles from the senior Ashley family, collected by the Ashley brothers in the district, formed a major portion of the collection in the Museum. Approximately 1,000 items in the Museum now represent the contributions of at least 115 donors. Businesses, families and individuals, a few even outside of Manitoba, have been contributing to the pioneer heritage in our Museum.

The Museum actually has more artifacts than is apparent, partly because a good museum doesn't display all of its possessions at one time, but mostly because of the increasing shortage of display space. Some artifacts are in storage and others are being researched. The artifacts being researched are mainly pioneer life photographs, of which the Museum has over 200, that photographers Boynton and Eaton took early in this century in southwestern Manitoba. Other Museum artifacts range from pioneer farm and home objects; commercial, medical and military items; and Indian artifacts and specimens of natural history. In another category is the prized petrified neckbone of a mosasaur, a very large marine reptile that lived in seas covering much of Manitoba 70,000,000 years ago.

The means for maintaining the Museum were initially modest. Revenue consisted of collections from the donation box in the Museum, private donations and an annual grant of $100 from the R.M. of Pipestone. In 1968, means for revenue increased with the sale of individual memberships in the Museum at $1 each, the charging of admission, and the sale of unwanted books (15 cents). Since then, annual revenue has increased due to a couple of changes in the admission scale, one in the price of unwanted books, and also with the holding of raffles, spring teas and strawberry socials. With the aid of the $1,000 bequest from the estate of the late Joe Ashley in 1969, and Provincial grants successfully applied for since 1974, revenue has increased considerably. In 1981, Museum membership was adjusted to reflect current financial trends, individual memberships were raised from $1.50 to $2., and a family membership of $5. was established.

Over the years, the administration of the Museum has gone through several changes. In May 1968, Rev. H. Dykman was appointed as Secretary, and David L. Braddell to the new office of Vice-chairman. At that time the need for governing rules was realized. D. Braddell drafted a Constitution, Chairman Jackson and D. Braddell revised and expanded it, and in October the Board ratified it. This included an amendment on the reduction of the size of the Board, as it had become evident that a 15-member board was not only cumbersome but unnecessary. Accordingly, at the Annual Open Meeting of the Museum Board on May 8, 1969, a new 5-member Board was elected: Art Smith, Chairman; Mrs. Inez McMorran, Vice-chairman; and Mrs. Joyce (Turner) McMurchy, Secretary-Treasurer; and Mrs. Dennis (Mable) Smith and David L. Braddell. The Board was also recognized as the governing body of the Museum and as an independent organization. The Reston Lions Club, however, continued to have representation (two members).

In 1972, upon resignation of Mrs. Turner, Mrs. McMorran was appointed Secretary-Treasurer, followed by David L. Braddell until April 15, 1974, when Mrs. Cathy McIntosh became the regular Secretary-Treasurer. At the same time, Art Smith having intended to step down from "chair", was authorized to continue as chairman of the Museum Board.

In 1973 the Board undertook a new venture by acquiring two local high school students to help supervise the Museum on special occasions. Rhonda Russell and Melanie Heath set in motion a pattern of help or employment in July that was to continue through the following years.

In 1974, a possible amalgamation of the Reston Park Board and the Reston Museum Board was considered, however, the union was finally seen as too impractical, and was later dropped. The Annual Open Meeting on April 29, 1976 resulted in some administrative changes. Mrs. Cathy Schurman retired from the position of Secretary-Treasurer and Ben Kroeker was elected to the position. Art Smith was re-relected as Chairman, and Alex Watt was elected as Vice-chairman. With the election of six other Directors, for three, two and one-year terms, a more effective Board of nine members came into being. This was considered a necessary step to enable more committees to act. Because of his managerial training and experience, Mr. Kroeker contributed a valuable service to the administration, plant operations and secretarial duties of the Museum. In addition, he laid excellent foundations for the future development of the Museum.

An important step under the administration was the commitment to campaign more intensively for operational grants. In 1977, a curator was hired for the months of June, July, August and September, as the result of receiving two Provincial grants. David L. Braddell, who had stepped down from the Directoral group, was hired to serve as the Museum curator-historian.

In March 1977, a special committee composed of Art Smith, Ben Kroeker, Burt Pierce, David L. Braddell and Maurice Ludlam met with Mr. Alix Hector, Prairie Regional Representative for National Museums Canada, to discuss possible future Museum developments under Federal funding. Mr. Hector approved much of what the Committe had proposed, but recommended that further detailed planning and groundwork be done in the Museum before Federal aid might be assured. Unfortunately, the change of Provincial government, cutbacks, and rising inflation defeated the Museum Board's plans.

The Reston and District Museum was represented at the Manitoba Regional Museum Seminars in 1977 and 1978 when Mr. and Mrs. David L. Braddell attended the functions, held under the auspices of the Association of Manitoba Museums, at Melita, Shilo and Killarney. Much useful information about museum operation and technical work was gained.

In 1978, the administration felt the need to upgrade Museum operations. Membership was raised to $2 a person, a Life Membership of $100 was established, and free admission was extended to senior citizens. Additional changes made were that the Annual Open Museum Board Meetings would be held in late October; that the organizational year would coincide with the calendar year; that David L. Braddell would continue to be recognized as receiver and recorder of Museum artifacts, on a voluntary basis; and that Ben Kroeker's resignation be approved with regret. Grant Schiltroth was elected Vice-chairman, and Doug Ott and Myles Van Damme, directors for a three-year term.

Two developments in 1979 were the initiation of a Promotion Committee, (an annual means of gathering, evaluating and correlating ideas and plans to publicize the Museum), and a Capital Improvement Committee, (designed to aid Museum operation and expansion). Despite earlier official change and personal intention, Ben Kroeker was appointed Secretary-Treasurer, and Art Smith, Chairman. Bert Smith was elected Vice-chairman.

Despite inflation and organizational set-backs, the Museum administration, with careful management, survived the financial problems of 1980 and was able to present a healthy budget at the Annual Public Meeting of the Museum Board on January 26, 1981, under the capable management of Mrs. Florence Birnie, Secretary-Treasurer as of June 1980.

As a result of the Annual Meeting, the administration experienced change, with the election of Bert Smith, Chairman and Art Smith, Vice-Chairman. On the new Executive, Mrs. Birnie continued as Secretary, but Miles Van Damme was elected Treasurer, this post being considered too important not to be filled by a member of the Executive.

An interesting sidelight of the Museum's administration was the holding of meetings. The Reston Museum Board may be unique for the number of locations at which regular, executive and annual open meetings were held. At first in the Reston Golf Club House, the meetings shifted according to expedience among the following locations: Reston Collegiate Library, the Museum, the United Church Manse, Eng's Cafe, the United Church, the Weed Control Office and the Memorial Theatre. These places certainly offered a wide range of comforts and temperatures and cause for a variety of comments.

Through the use of Provincial grants, offered under student employment or Tourism, Recreation and Cultural Affairs programs, and the annual $100 grant from the R.M. of Pipestone, operation of the Museum was carried on each summer since 1973 by Reston High School students. Grateful acknowledgment is made to the girls named earlier and to the following who served as receptionists, recorders, clerks and supervisors: 1974—Rhonda Russell and Beth Curtis; 1975—Beth Curtis and Ann Milliken: 1976—Barbara Gulas and Shelley Milliken; 1977—Shelley Milliken and Janice Elliott (substitute); 1978—Colleen Mayert; 1979—Elaine Vandenberghe and Barbara Birch; and 1980—Lori Vandenberghe and Valerie Hooper. Mrs. Gladys Patmore and David L. Braddell also provided occasional supervision in 1978.

Special credit, however, belongs to the group of ladies who pioneered supervision of the Museum during the summer of 1969. In 1968 visitors had access to the Museum by getting a key from a member of the Executive or from Tom Lockhart, who lived close to the Museum. As this arrangement proved inefficient and inconvenient, the Board solicited volunteer supervisors in 1969. In response, Mrs. Alex Watt, Mrs. Frank McMurchy, Mrs. Ross Gould and Mrs. Frank Harrison supervised the Museum, one day each from 2 to 5 p.m. for four days per week through July and August. The Museum Board thanks those ladies especially for their loyalty and fortitude, like that of the pioneers, in the face of heat, dust, insects and other inconveniences. Assisting in this program were Mrs. Doris Robinson, Mrs. Gladys Mason and David L. Braddell.

Over the years the Museum took part in some special events that added meaning and enjoyment to community life. First, its official opening on May 25, 1968, when Joe Ashley, wearing authentic Indian Headdress, buckskin jacket and smoking a calumet, cut the ribbon and opened the Reston and District Historical Museum. Municipal councillor Jack Guthrie, Chamber of Commerce Chairman Henry Claussen, Reston Lions President-elect Jim Walker, members of the Museum Board and guests witnessed the event. The day ended with the first of the annual spring teas in aid of the Museum.

Reston Fairs and Parades were not complete without the late Charlie Ashley's 1929 Plymouth, dressed up as a float, being driven by Dennis Smith to ribboned honours. In 1975 an old Case steam engine proudly joined the parade. In 1977 Roy and Kendon Campbell's Museum float attracted attention and honours, as did the Museum special, with Barbara Birch and Elaine Vandenberghe in 1979.

At both the Reston Fairs and the Hospital Aid Fun Fairs, the Museum drew interest and contributed locally with displays of artifacts and pioneer photos, the sale of postcards, souvenir spoons, raffle tickets and memberships in the Museum.

Some notable developments in and about the Museum through the years were: placement of the old Case steam engine on permanent location east of the Museum, just across the road; painting of doors and shelving in 1974 by OFY Group students Dale Nash, Jackie Guthrie and Randy Nash; addition of the long, glass-panelled 1902 display case donated by the G.S. Munro Co.; caulking of the roof to seal out rain, dust and pollen; and the installation of a telephone and a small fan in the south wall. An office area was arranged with equipment donated by the T. Eaton Co. and a culvert was laid in the Museum's north access which greatly improved the entrance facilities. The work of the clerks and curator, especially in 1976 and 1977, resulted in the recording, cataloguing, labelling and rearranging of a great number of artifacts.

In honor of the significant efforts and contributions of the Ashely brothers, a bronze plaque was hung in the Museum in 1970, and permanently mounted on the south door in 1977. A large sign recognizing the Reston Lions Club for establishing and constructing the Museum as a 1967 Centennial Project, was hung in the Museum, August 1, 1980. The Westman Tourist Association's Award of Merit certificate was an honor received by the Museum in October of 1976 for significant museum development.

Some notable factors which helped to increase interest in the development of the Museum were the Museum's membership in the Canadian Museums Association (for dominion-wide publicity and access to federal grants), in the Association of Manitoba Museums, a very helpful organization, and in the Westman Tourist Association. The Museum drew attention also through the valued services of CKLQ and CKX Radio and TV, the **Reston Recorder**, the Reston Lions Club Corner, *Museum Memos,* which began in 1977 and written by David L. Braddell, and through the *"You Name It"* mystery photo contests conducted in the **Reston Recorder** during 1978 and 1979, with photos courtesy of Doug Ott.

The Museum is not without its Honor Roll. The Board herewith pays its respects to the memory of the man who contributed greatly to the founding of the Museum, Joe Ashley, who died, January 20, 1969, and to his brother Charlie, who died, March 7, 1975. Also to the memory of Mrs. Dennis (Mable) Smith (died, September 3, 1976), Mr. R.G. (Bert) Stratford (died, September 20, 1977), and Mrs. William (Lily) Miller (died, August 3, 1978), all of whom worked hard and contributed to the development of the Museum. How can anyone forget the labor, talent and time that Bert Stratford devoted to reservicing artifacts and collecting and framing close to 100 pioneer pictures, which are now located in the Museum?

The Board extends many thanks to members of the Museums Advisory Service, Manitoba Museum of Man and Nature, for special courtesies, information and other valued assistance over the years. Grateful thanks are also extended to the many organizations, groups and individual members of the community for their loyal support, services and many contributions in the form of artifacts, money, editorials, constructive criticism and encouragement. To all who have served on committees, cleaned up the Museum, arranged displays, organized and served at the teas and strawberry socials, helped supervise the Museum or cut down the old trees beside it, earnest appreciation is expressed.

This is the short story of the Reston and District Historical Museum now in its 15th year of growth—a $15,000 capital investment to be nurtured and protected for the pioneer record, the recreation and the inspiration it may provide for future generations.

Turn-of-the-Century Hairstyle Trends

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Introduction:

Just as hairstyles have changed so have the tools used to produce these styles. This paper will examine the late 19th and early 20th century history of hair grooming and related beauty artifacts with special reference to the growth of the Beauty industry in Winnipeg and artifacts in the collections of the Manitoba Museum of Man and Nature.

It took five thousand years and the aid of electricity to bring the art of fashionable hairstyles to the average woman. As far back as the days of ancient Egypt, women of wealth applied everything from herbal rinses to mud packs to their hair in an effort to curl and beautify it. Over the centuries, those who could afford to indulge in frivolous pastimes, created fads for elaborate styles of coiffure for both men and women.

At the end of the 19th and the beginning of the 20th century, tools and processes were developed that became the forerunners of modern hairstyling methods. Along with these new methods, the art of hairstyling became more of a business than ever before. Beauty was an industry by the 1920's. It was built by reaching out to the average woman and offering her the chance to have stylish hair, a commodity that had once been a privilege only of the rich.

In the late 1880's, Marcel Grateau, a Frenchman, began to experiment with the use of hot curling irons. In his work as a groom, he used the irons to add curl to a horse's tail. Later he tried a modified system on his mother's long hair. After more experiments, he invented his famous Marcelling iron and the techniques for using it. Marcel's method was the forerunner of today's curling wands and electric rollers. Waved hair produced with the use of the Marcel iron became so fashionable that he retired at an early age as a millionaire. His marcelling process soon spread from Europe to North America and was practised in fancy salons from New York to Toronto before World War I. The first Marcel irons were heated in the fire or over the stove. This primitive method of heating the tongs was soon replaced by electricity. The electric marcelling iron of the 1920's was very similar to the curling irons of today.

An even newer invention was the permanent wave machine developed by Charles Nestle in London in 1906. Use of the first machine required gas to heat the chemical solution which was put on the curler-wound hair. The process was done in stages and took about 12 hours to complete. Electric machines were soon developed to heat the solution-saturated hair and induce the change that would leave the hair permanently curled.

In turn-of-the-century Winnipeg, as well as elsewhere in North America, most women did their own hair without the benefit of a salon. It was not until after World War I that marcelling and the permanent wave began to reach the average woman.

Heated waving tongs were known and used even in rural prairie homesteads before 1900, but true marcelling, and especially the permanent wave, had to be done in a salon by trained professionals.

In Winnipeg, in 1920, there were just a handful of operators who knew how to create a true Marcel wave style, and fewer still who could operate the first electric permanent wave machine that arrived in the city about 1921.

After World War I, a dramatic change took place in the world of hairstyles. More and more women began to bob their hair. The new short hairstyles revolutionized the ideal of feminine beauty and at the same time, lead to great controversy. The twenties was an era of general social upheaval. Short hair became a symbol for all that was fresh and modern; as well as for all the perceived ills of society and the younger generation.

Perhaps the social implications and the hairstyles of the 1920's can be better understood with a brief historical review. For decades a woman's long hair was considered to be her "crowning glory". The beauty ideal of the 18th century was the classic Gibson girl with her hair piled high on her head in a pompadour style. Those whose hair was not naturally thick or coarse enough to wear this style, resorted to the use of false pads to give height and form to their hair.

Every woman kept a little bag or special dish by the dressing table into which she placed hair shed during combing and brushing. This hair could be taken into a shop specializing in hair goods and formed into pads, puffs and other false hairpieces to create the hairdos.

During World War I, long hair and elaborate piled-on-the-head styles were impractical for women who worked.

The change that took place when women began to bob their hair was much more than a simple change of fashion. It signaled the changes that were taking place in almost every aspect of the average woman's life.

Electric appliances, indoor plumbing and other home conveniences took much of the drudgery out of life. There was more time to think about fashion and styles. A number of trend-setters had begun to bob their hair as early as 1910, in places like Paris and New York. During the war ordinary women, who went to work in factories, also began to cut their hair. The trend had been slow in developing. However, by 1924 the rage for short hair was a permanent part of the new lifestyle in most urban centres and was spreading to smaller towns. Just how bobbed hair developed as a social phenomenon, is a study in itself.

Orrin Klapp, in his book *Currents of Unrest* has explored the theme of fashion and fad as a style search. He concluded that women's bobbed

Not unlike the women of the 1980's, a young girl having her hair blow-dried and curled, circa 1915 *Manitoba Archives* hair of the 1920's, and their smoking, was a "case of legitimation", in that a group with less prestige did not copy the group of higher prestige, but struggled to get its own style accepted by the majority. In this case they were successful. Dancers, actresses and arty-types found that women of wealth and distinction followed their lead towards short hair and marcels or permanent waves.

The hardships of World War I, had a great influence on the changes that were to come later. After the war there seemed to be a need for a release of tensions and there was a freeing up of almost everything. Clothing styles changed, especially for women. They no longer wanted to be confined to tight and uncomfortable clothes. New fabrics were light-weight and softer. Women wanted more freedom in every respect—from what they wore to what they did with their time. Dresses became short, arms and legs were often uncovered, corsets were done away with, and less underwear was worn. Pajamas were worn at night and the boudoir cap became a popular way of protecting short hair styles at night.

For many women, bobbing their hair was an expression of confidence in themselves as men's equals. Most men did not want women to cut their hair, but bobbed hair became a vote of assertiveness that was carried by women across the land. There was a great uproar at first; the clergy preached against it, husbands divorced their wives, and family discord was created. In one well-known U.S. divorce case, a woman lost her children when the oldest daughter told the judge, "We don't believe mother is a Christian woman, she bobs her hair.".

Marceling iron and heater *Maurice Mann*

Some medical men announced fears that the bobbed hair would lead to a great increase in women's baldness. But no husband, doctor, or clergyman was able to stop the short-hair movement.

The new feminine ideal was to be bright and cute, but also assertive. It was very out of date to be graceful and demure. Young women in their twenties wore hairstyles that were almost boyish. They acquired male habits, went autoing with men, drove their own car if they could afford one, and smoked cigarettes and drank cocktails.

It mattered a great deal to be fashionable in the 1920's—though clothes tended to be dull in color, with grays, blacks, and browns being most common. Simplicity and practicality became the word on dress and hairstyles. Hats also changed. The small close-fitting cloche hat was as much a symbol of the day as was shorter hair. Women loved the small close-fitting hats. For some, the hats alone were reason enough to cut their hair. The cute little hats simply couldn't be worn with long hair.

Prairie Hair Trends

In Winnipeg, and on the prairies in particular, the change to the new styles lagged behind the metropolitan centres of the East. There was generally a bit more conservatism here. By 1924, bobbed hair was the rage in New York. That year 2,000 heads a day were being bobbed and the image of short-haired women as the radicals and freaks of society was waning.

In James Gray's book, *The Roar of The Twenties,* there is an excellent chapter, "A Blow for Women's Lib" that documents the changes in hairstyles on the Canadian prairies. According to Gray, a young woman, Vivian Maw, was the first woman at the Winnipeg Grain Exchange to bob her hair. When she went out to get it cut on her lunch hour at Christmas 1922, she had already spent months agonizing over the decision. Certainly she was a trend-setter for the building, if not for the city. At the time, she was one of the few women in Winnipeg who had taken the giant step. Newspaper ads that year show a few women with short hair, but many have long hair done up or flowing down the shoulders.

A few years later, prairie women in great numbers began to bob their hair and join the craze.

In Calgary, in 1926, several student nurses defied the hospital rules and went out to bob their hair. When the management tried to dismiss them, the rest of the nurses bobbed their hair within a week. Women's independence continued to assert itself. Many young women assumed that they should be out in the work force. They thought it was better to spend some time working before marriage in order to be a better wife and mother. The woman who was out in the working world was thought to make a better home manager, and it was also a way of meeting more men and widening the choice of husbands. But inspite of the trends, it was also a ambiguous time for many women on the prairies. No doubt a large number were confused about just what their role should be; there was change but also contradiction to contend with. Because of the turmoil of decision, many women, especially in Canada, did cling to the more traditional values and institutions for both stability and security.

There was much talk about the new woman, the flapper, but people in general still seemed to assume that women were by nature passive, feminine and innocent. Women still had a different political and economic role because of their sex. Hair cuts may have been a symbol of change and a new order for Canadian women, but in reality it was often an empty gesture. With the exception of their short hair, many prairie women continued in the same roles as before. It was the few women who worked who were the greatest threat to the status quo. In 1921, Canadian women represented about 15.5% of the labour force over the age of ten. Many of these women worked as domestic servants. Some found clerical jobs, or worked in factories, a few went in to the professions of teaching and nursing. Of the Canadian women who worked, 97% were single. The three per cent who were married, and the singles in search of a husband, were the backbone of support for the growth of the hairstyling industry. Even girls who got married and dropped out of the labour force had acquired a taste of what it was like to be out earning their own money to do with as they pleased. It was doubtful that many marriages could be happy if the wife was not allowed to indulge at least occasionally in some of her single-day freedoms. Going to the hairdresser became almost a weekly ritual for many working women. After a woman married, a man's status still depended on his ability to keep her at home. To keep her happy, many husbands were glad to have their wife go out to the beauty shop.

Even women who had never worked found that going to the beauty shop was a good way to get away from the dull household routine. The beauty shops, with all their advanced and scientific machines, made her feel part of the new modern age, while at the same time it was an acceptable outlet. As many of the magazine articles of the day were quick to point out, even women who were successful in business were still women at heart in spite of their success. Going to the beauty shop helped insure a woman's femininity.

Soon after the rash of hairbobbing, the women learned that short hair was not necessarily any easier to keep neat and styled. The only thing easier about short hair was washing it. Women by the thousands found it difficult to maintain their short hairstyle without help from the hairdresser. Short hair seems to be directly responsible for the phenomenal growth of the new hairdressing industry. There were, of course, home-use curling irons. To achieve good results, however, took more skill than most women had developed. If the iron was too hot, it could scorch or burn the hair, and if it was not hot enough, it would not work. It took special skill to turn the wrist and twist the tongs to have waves and curls look good.

In Winnipeg and across North America, the new beauty industry was underway. The October 1921 issue of the **Manitoba Free Press** had an article titled *Beauty Aided By Electricity* which described the new scientific beauty parlor.

Beauty today is scientifically and systematically practiced...The tired business woman stops at one of these places of beauty and is ushered into an immaculate white tiled room equipped with a reclining chair, a mirror with shaded light over it and a sanitary cupboard for combs and brushes. She reclines in the chair, while her face is rejuvenated and her complexion recreated with an electric vibrator. She goes in looking any old age and comes out feeling like a flapper. Electric breezes are wafted about her with an electric fan, a small square iron disc stove heats the irons that wave the hair, which has been shampooed and dried very quickly by an electric drier.

Manicuring is done with the aid of a small motor that drives the various files and polishers for the nails. Permanent waving is done electronically in many establishments. Beauty culture is not a fad, but a scientifically developed art.

Certainly the shop that was described was not the typical establishment. In 1921, there were only a few hairdressers in the city. These could be grouped into three catagories. First were women who worked out of their homes, second were shops located either in a hotel or in the downtown area, and third were the hairgoods stores that created wigs and hair pieces for their clients. These stores did hairdressing as an added service in addition to fitting hairpieces and wigs.

The 1920 Henderson's Directory lists only eleven hairdressing establishments in Winnipeg. By 1924, the number of shops in Winnipeg had grown to twenty. The doubling of the number of hairdressers in town is interesting in light of eco-

A photograph from the Foote Collection of a girl having her hair dried in 1913 *Manitoba Archives* nomic conditions. Between 1920 and 1924, Winnipeg suffered from a post-war depression. The fall in the value of the European dollar was bad for international trade. Exports from Canada, especially wheat from the prairies, declined. The result was a depression of the prairie economy. Yet beauty salons thrived. The beauty salon business began to grow even faster in 1925 when employment and industrial output rose sharply. In Winnipeg, the prosperity of good times gave a healthy start to the beauty shop industry of the 1920's. By 1928 there were more than 81 shops listed in the telephone directory, so many that the Henderson's Directory refused to list the shops in the main directory. Instead readers were reminded to pick up a special supplement on hairdressing salons from their main office. During the four years between 1924 and 1928, hairdressing really took hold in Winnipeg. The early beauty salons in Winnipeg were not the glamorous-looking salons of today. Some of the shops, especially those in hotels, were quite fancy with wall paper and curtains, but most tended to be plain bare-walled establishments.

Going to get one's hair done was still a private affair. Women were ushered into a cubical, or they were closed off from the rest of the shop with closed curtains. By 1924, many Winnipeg women still had not taken the step to have their hair bobbed. But models in newspapers and magazines, as well as film stars, all sported short hair.

At the same time cosmetics were heavily promoted. In 1921 Ponds Cold Cream was advertised in full page ads in the Manitoba Free Press. Up until about 1915, cosmetics such as lipstick and rouge were sold from under the counter. But in Winnipeg of the early 1920's, it was still a rather daring young woman who wore rouge. Lipsick was almost out of the question.

Face powder and eyebrow pencils were just starting to appear. In the salons beauty facials and masks started to become popular. Makeup, and more concern with the face, was one of the adjuncts to the short-hair movement.

By the end of the 1920's beauty parlors had sprung up in the large cities and small towns. The department stores also got into the act. In addition to Cosmetic Departments, they also set up special sections for beauty treatment. By the early 1930's, beauty was finally democratized and brought within the reach of the vast majority of women. It was during this time that the permanent wave was made into a streamlined and easier process. As a result, most shops began to equip themselves with permanent wave machines.

In the years before the war, many of the women who could afford a permanent were afraid of the monstrous-looking machines. Many refused to give the machines a try, no matter how beautiful the end result. They stuck with their marcels and avoided the attempt to make curls permanent. After the war, women became braver. The younger women lost their fear of the machines. The shorter hair was no doubt easier to consign to the machines than the reams of long hair that were still found on the heads of older women.

New developments in the 1930's made the machine-made curls relatively inexpensive. When the electric permanent wave machines were first brought to Winnipeg, the curls were very expensive. Only the elite of the city could pay a dollar a curl to expermiment with permed hair. With the increased popularity of marcelling and permed hair, a great demand was created for trained beauticians, capable of styling hair on a full-time basis in newly-opened salons. To meet the staffing requirements, the first Beauty Colleges were opened.

Another result of the short hair movement, was the secondary industry that developed around providing peripheral hair notions such as combs, barrettes and other hair ornaments. Because hair combs used with long hair would not work with the short styles, the bob helped to spur the creation of new items. Many Winnipeg beauty shops carried a glass case with ornaments to decorate the hair. The bob was also a boom to barbers, because many women preferred to get an experienced barber to do the actual cutting.

Salon work demanded a greater variety of pins and clips. Hair pins changed shape for the first time in centuries. A small invisible hair pin was developed for use with short hair locks. The bobby pin also made its appearance as the new stay-put pin that could be used to make and hold curls overnight between trips to the hairdresser.

In the 1920's, women were just beginning to improve their personal hygiene. Many women familiar with the problems of trying to wash long hair, did it only once a month or less before the 1920's. The problem with infrequent washing was even more evident with short hair. Numerous advertisements promised cures for dandruff and itchy scalps.

The permanent wave lead to even more problems. The old overhead electric machines were hard on the hair when used by the most skilled operators, and terrible consequences occasionally resulted from abuse by untrained personnel. Dryness was a real problem, in fact, at first the electric permanent waving machines were thought to be the perfect cure for greasy hair. Other side effects of the waving were brittleness, breaking and dandruff. Women were advised to shampoo more than once a month. Breaking and discoloring of hair took place after the second and third waves. In 1927 a new process of selective permanent waving was developed. It waved the new hair and left that which was already waved alone. This helped stem some of the problems. Oil treatments and the use of steamers was another solution to restore over-processed hair. Steamers were standard equipment in Winnipeg beauty shops by about 1935.

It would be a mistake to think that every woman in Winnipeg followed the dictates of style and had her hair done in the mode of the day. Many women did not follow the changes dictated by the fashion setters. Women in Winnipeg tended to be fairly conservative, certainly there were a number of women who stuck to their marcels and never bothered to go to have their hair permanently waved. Women from first generation ethnic groups ignored the fashion trends completely.

In one of the leading fashion magazines of the day, women were advised; "Adopt a style of coiffuer that makes the most of you...and unless you are very young, or very beautiful, it is best not to conform to every puff of the fashion wind...." Prairie women especially seemed to heed this advice.

Whatsit?

DAVID BRADDELL
Reston and District Historical Museum
Reston, Manitoba

To my attention has come a skillfully-crafted combined tomahawk/peacepipe of wood, silver, and stainless (?) steel. It measures almost 21 inches long with a dedication inscribed on one face of the tomahawk blade:

From
Augustus d'Este
to
Ka-kiwe-guun-chi

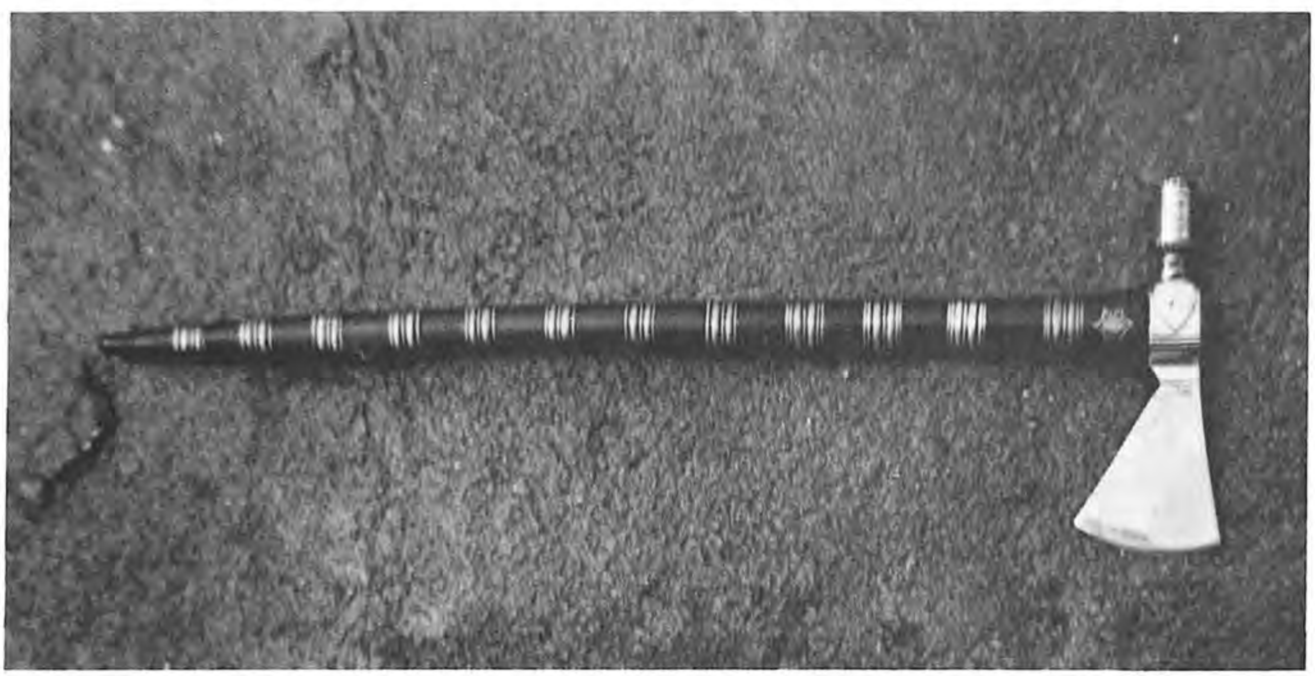
1858

The top three lines of the dedication are in flowing script.

In this case we know what the item is, however, we would like to identify the two people named in the inscription. Was d'Este a Hudson Bay officer, trader, surveyor, or was he a free merchant? Was the Indian a chief or notable tribesman who had done d'Este a great service?

Apparently Ka-kiwe-guun-chi turned the artifact over to E. Dixon who was the secretary of the Miriam Lodge in Vernon, B.C. Prior to 1955, he turned it over to Sylvanus Dixon of the Pipestone District of southwestern Manitoba.

If you can provide any information, please contact Mr. David Braddell, Reston and District Historical Museum, Box 304, Reston, Manitoba.



Notes to Contributors

We invite you to submit articles for publication in the **Dawson and Hind**. We would appreciate if you would bear in mind the following guidelines:

1. We would prefer all articles to be **typewritten** and **double-spaced**. We realize this is not always possible; and under such circumstances we will accept handwritten articles only if they are legible and double-spaced.

2. As a rule of thumb, articles should be a **minimum** of four double-spaced pages; or a **maximum** of 20 double-spaced pages.

3. If possible and appropriate, we welcome photographs to complement articles. Black and white photographs are the most suitable for reproducing although colour photos can be used.

4. Please **do not cut or crop** photographs.

5. All photographs must be identified.

6. Photographs will not be returned unless requested, in writing, by the contributor.

7. Should an article include a bibliography, please list author, title, publisher, location and date of publication (as well as name of journal, if applicable).

Please address all articles and correspondence to:

The Editor
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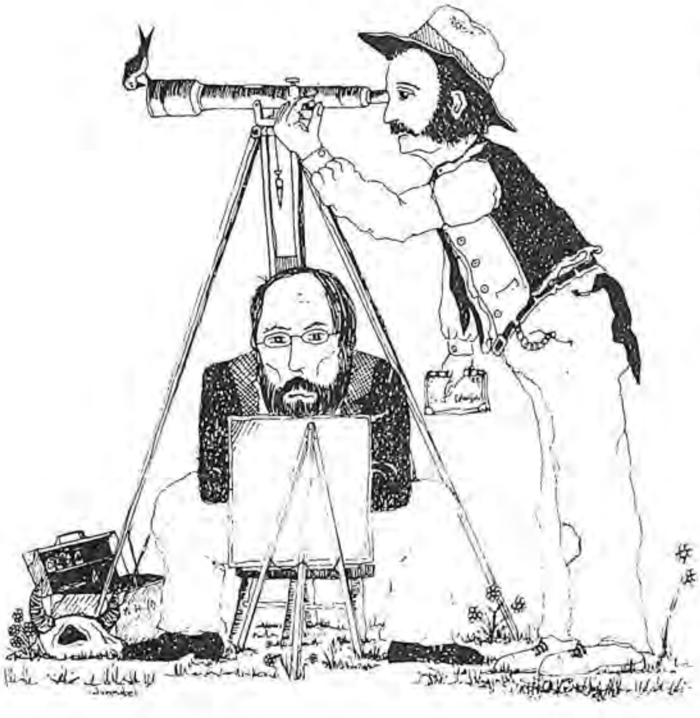
Winnipeg, Manitoba R3B ON2



S.J. Dawson and W.G.R. Hind