Museum International

Maritime museums 2

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Maritime museums: an infinite variety for a variety of publics

Olivier Genin

It has, at last, become a well-established fact: maritime museums are designed for all sections of the public. Hank Dessens, the curator at the Maritime Museum of the Netherlands (Rijksmuseum Nederlands Scheepvaart Museum) in Amsterdam, one of the world's great marine history museums, sets forth what could be called the 'philosophy of the maritime museum'. He describes its role, the choices made in the presentation of collections, temporary exhibitions, and the use of replicas. Everything is designed to suit the psychology of visitors.

Maritime museums need to know their visiting public better. Visitors need not merely be counted so as to justify subsidies, they also have to be analysed. Barcelona's Maritime Museum conducted such an analysis and gives its results. It thus establishes a fact that will hardly surprise museums which have done likewise: in terms of percentages, the museum attracts more visitors from the rest of Spain and other countries than from the town itself, with 40 per cent of school visits coming from France. These data caused the Maritime Museum to redefine its priorities and it is now in the process of developing support facilities for families and activities for retired people and the elderly.

Visitor research of this kind is difficult to carry out as museums are rarely able to afford the services of specialized firms. Visits to some institutions which conducted such research work by themselves show that the most significant point to be established concerns the diversity of visitors. Next, a classification has to be made for comparison with the classification of inhabitants normally provided in official statistics.

Different techniques exist for conducting visitor research. As a very first step, they can be classified according to the types of entrance fees shown by their entry tickets (adults, children, elementary and high-school pupils, university students, groups, etc.). A second step could involve the use of a well-prepared questionnaire for visitors at entrances and exits. Volunteer workers (for example, students) can be responsible for this in order to minimize costs. Visitor research must be conducted on a regular basis, with changing results leading to changes in strategy.

World history is created by exchanges between peoples. Be they peaceful or not, such exchanges took place via the sea and, notwithstanding competition from the air, still occur through the use of boats of all kinds. It is strange to note that maritime museums exclusively devoted to the merchant marine are rare; its story, in most cases, is told in a joint narration with other types of sea services. This gives particular significance to the presentation of the American Merchant Marine Museum by its curator, Frank Braynard, who is also a chronicler of the steamers that linked Europe and the Americas in the past.

Great changes take place as we move from sea to river navigation. Opinions vary as to the relationship between them. Some people think that they are too dissimilar, given the types of boats used and the equipment required, to be presented together in the same museum. Others maintain that waterways are the inland continuation of seaports. They agree that river navigation requires different installations, but point out that ships and canal boats often carry the same cargoes which are transferred from one to the other. They therefore con-

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clude that a joint presentation can be made of their histories. Thus, a description of a river museum is given by Tony Conder, the curator, and Patsy Williams, who is in charge of education, of the National Waterways Museum of Gloucester. While doing so, they emphasize that children and parents together should be provided with information, as they form a pair which is crucial for the general education of the public. It should be noted that the Maritime Museum of Barcelona arrived at the same conclusions and is organizing itself accordingly.

Having seen various aspects of the activities of maritime museums and the problems they encounter, it is interesting to learn how they integrate into the town and the significance they acquire there. This is the subject of Detlev Ellmers's article on the German Museum of Shipping (Deutsches Schiffartmuseum) in Bremerhaven. It should be noted that it also plays an important role throughout the country, having been given a national status which enjoins it to provide advice to public authorities and assistance to other maritime museums.

The subject of Jacques Chauveau's article will perhaps be surprising and even an eye-opener to some readers who are passionately enthusiastic about safeguarding maritime or other forms of heritage. Jacques Chauveau is a businessman who knows the subject well, being a recognized collector of objects belonging to the maritime heritage and, at the same time, responsible for French and international bodies devoted to its conservation. He tells us about collectors, their diversity and the useful and even indispensable collaboration they may have with maritime museums of all kinds.

After reading articles which are so varied in scope, one can only hope that all those responsible for maritime museums, old and new, will draw upon them for useful and practical information and ideas. It goes without saying that had space permitted, many other equally interesting and useful issues could have been raised and addressed. It is now up to readers to think about these and try to find their own solutions, allowing their imagination full play and aided by their faith in the safeguarding of the maritime heritage. ■

From ‘r emote’ to ‘accessible’: the Netherlands Maritime Museum

Henk Dessens

Founded in 1916, the Netherlands Maritime Museum has, over the years, acquired many large and valuable collections, becoming one of the principal maritime museums in the world. In the 1990s, the museum's policies underwent major revision, transforming a traditional establishment with a limited number of visitors into a popular cultural institution attracting broad sections of the public. In this article, Henk Dessens, the museum's curator of ship models, technical drawings and ships, describes how this success was achieved.

The museum has its own department for the restoration of ship-models, a highly specialized profession.

Photo by courtesy of the author

The Netherlands Maritime Museum is the outgrowth of an ostensibly temporary exhibition of ship models and paintings held in Amsterdam in 1913, which led to the foundation of a national maritime museum society (Vereeniging Nederlandsch Historisch Scheepvaartmuseum, or VNHSM) in 1916. Chief among the initiators were Amsterdam shipowners, shipbuilders, merchants, naval officers, historians and collectors. The prewar period saw the acquisition of several major collections as the Netherlands Maritime Museum grew to become one of the main museums of its kind in the world. It remained in private hands until 1971 when the VNHSM gave the collection on loan to the state as administrator of the museum. Almost simultaneously, the Netherlands Maritime Museum moved to new premises in one of Amsterdam's finest and most beautifully situated seventeenth century buildings: 's Lands Zeemagazijn, the former arsenal, once part of the naval dockyard of the Amsterdam admiralty.

This government takeover eventually led to an even greater metamorphosis which began in 1989. Until then, the museum had focused solely on maintaining and administering the collection. A period of expansion in shipping in the Netherlands around 1990 saw a revival of interest in the history of the Netherlands as a seafaring nation and the Netherlands Maritime Museum's directors managed to give the museum a firmer basis in society by making adjustments in every aspect of museum work: collection policy, research, conservation, external policy and presentation. The result of this cultural volte-face was reflected in numbers of visitors, which grew from 85,735 in 1989 to 234,000 in 1993. Before 1989, 44 per cent of the museum's public consisted of unaccompanied visitors, primarily male and presumably specifically interested in maritime subjects (during the 1980s around 60,000 to 80,000 a year). After 1990, only 25 per cent of visitors came to the museum alone, and the number of day-trippers rose from 46 to 61 per cent (as compared to the national average of 30 per cent).

On 1 January 1995 the museum's legal status changed again: in line with national political trends, the Netherlands Maritime Museum (along with many of the other government-run ‘national’ museums) became a private, government-subsidized ‘foundation’.[1] It marked the advent for museum employees of market-oriented concepts and working methods: the museum as a supplier of products to the government. The ‘products’ and the prices paid were laid down in a contract: exhibitions, information services, publications, lectures, events, preservation and conservation policies, etc. After extensive internal discussion, future museum policies

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Photo by courtesy of the author

On board the Netherlands East India Company ship Amsterdam *from March to November, the crew take visitors back to the world of 1749.*

were set out in a series of documents on collection management, presentation and marketing, and public relations. It was decided that the public perception of the museum had to change from remote to accessible, from boring to dynamic and active.

A ‘spirit of social relevance’

This policy change affected all areas of museum work and aimed at extending the museum’s roots in society. It was not just a question of attracting more visitors, the museum also began to explore ways of increasing its own participation in society. Every aspect of museum policy began to exude the spirit of social relevance. Management of collections was rationalized. The contents of the departmental collections were evaluated and a collection report compiled which led to an acquisitions policy focused on the maritime history of the Netherlands in the twentieth century. It stimulated close contacts with contemporary shipyards and shipowners, many of whom were more than happy to contribute to the collection policy.

At the same time, the conservation situation was evaluated. It proved to be in a sorry state. With the support of the national Delta Plan conservation project the museum was able to make good its huge conservation backlog. Rationalization extended to the registration of the collection and its maintenance. The museum also developed policies for strengthening external ties. This conscious decision affected contacts with researchers and the academic and business world, and resulted in numerous national and international collaborations. In addition, public information facilities were streamlined. All this led to the Netherlands Maritime Museum becoming a much sought-after and highly valued partner in exhibitions, small- and large-scale public manifestations, congresses, research projects, advisory committees and numerous cultural events.

With support from government, business and private donations, a replica was built in the 1980s of the eighteenth-century East Indiaman, the *Amsterdam*. The aim of the project was to give young, unemployed people work experience and to train them for jobs in shipbuilding. The museum

Photo by courtesy of the author

Ornament at the bow of the royal barge, with the sea god Neptune.

directors anticipated that acquisition of control and operation of the *Amsterdam* would be a major catalyst for the museum, a supposition subsequent events were to prove correct. Not only did it attract new groups of visitors, the ship was also used on several occasions to generate publicity for the museum and to increase public awareness. The *Amsterdam* was not a true replica as such. Compromises were made here and there between the original structure and today's needs. The result was a ship supremely suited for museum role-play presentations about life on board an eighteenth-century East Indiaman. The *Amsterdam* became part of a three-part display, together with a multimedia show about sailing to the East Indies and a planned permanent exhibition about the history of the East India Company.

On board the *Amsterdam*, museum visitors were able to see sailors, a cook, a surgeon, various officers and mates as well as a female passenger with her maid. In the role-play, the vessel has just returned from the Indies. Almost all the space on board is used, and contemporary theatre (an individual dramatic approach towards the public) is combined with the provision of visitor information – all in contemporary Dutch. In some areas a conscious decision to avoid faithful representation was made, as where modern musical instruments have been used instead of copies of eighteenth-century originals. Twentieth-century longboats are used for the longboat exercise. Here the creation of an atmosphere is more important than the accurate representation of reality. In fact, in this presentation the replica and role-play are not primarily intended to provide an exact imitation of real historical situations: the whole idea of an 'objective representation of history' is impossible. The museum simply attempts to provide an effective, contemporary presentation to help visitors, specialists and laymen alike, to form an image of the past. In this case, it is the harsh life on board ship that is highlighted.

By adopting this approach, the museum has done no more than do traditional curators, who carefully arranged static objects in display cases, or exhibition makers, who use video or tape recorders with sound effects. Conventional display-case shows provide no greater historical accuracy: the effect is as much an 'alienating' one for the visitor as it is an attempt to stimulate reflection and interpretation. For some sections of the public, and particularly children who are tomorrow's museum visitors, traditional static exhibitions are not the most accessible presentation forms. With the 'replica and role-play' presentation, the Netherlands Maritime Museum has managed to attract new groups within society who had never previously been to a museum.

For visitors: choice, context and variety

The Netherlands Maritime Museum collection consists almost entirely of original objects. A ship model or a painting of a ship or some other scene in 1750 actually dates from 1750. Some extremely fragile objects in the permanent exhibition form an exception, as with old construction plans of ships, photographs of which are shown. The best objects are on show in the permanent display, which was originally compiled in the 1970s and is arranged chronologically; visitors are led from hollowed-out tree trunks through twenty-five rooms right up to the 1960s.

For a number of reasons, the museum plans to change this chronological plan into thematic sections. Today’s museum visitors have been brought up with the remote-control television culture, zapping from channel to channel. They want to choose for themselves what they see in museums. The principal objection is that this choice is not currently available, leading many visitors to give up halfway through the display without ever seeing all twenty-five rooms. It would make more sense to divide the exhibition into several themes clearly indicated at the entrance. Visitors would then be able to choose what they wish to see first and, perhaps after a little refreshment at the museum restaurant, what they wish to view next.

A second proposal involves presentation and design techniques for the permanent exhibition. Today’s public are less informed about history and it is a mistake to presume that they are acquainted with the general historical background. Museum presentation should therefore not be limited to objects and subtexts but should tell visitors more about the historical context. The aim is to provide a good, exciting exhibition story. This can be told using a whole range of presentation techniques and attractive design: audiovisual apparatus, sound, light and olfactory effects, evocative displays, etc. The technique should not overshadow the exhibits; it is there to give visitors a better idea of the historical significance of the objects.

In addition to the basic elements of the permanent exhibition and the *Amsterdam*, the museum organizes other events, often in collaboration with external bodies. Some are chiefly recreational, like the annual sea-shanty festival. All provide important publicity and attract large numbers of visitors to the museum. This is increasingly the case for events initiated by companies and for film and television producers who wish to use the museum building or the *Amsterdam* as décor. Public awareness of the museum has clearly grown as a result. The Netherlands Maritime Museum now has the reputation of being a place where ‘there’s always something happening’.

The annual museum symposium has a scientific objective and centres on the publication of a yearbook focusing on a different aspect of the collection. The target group for this annual symposium consists of maritime historians, students, colleagues from other museums, personnel from government and non-government institutions, companies and

The museum has an outstanding collection dating from the fifteenth century onwards but is also collecting objects from the modern age.

Photo by courtesy of the author

private enthusiasts. Educational activities aimed at schoolchildren are planned mainly for the holiday periods.

Each year the museum organizes two or three temporary exhibitions. The space available is restricted and demands considerable creativity on the part of the exhibition designer. Here, too, the museum attempts 'to realize, at a given price, a museum product for which demand exists', which has repercussions on the choice of subject, the content (exhibition story), the display techniques and the design. Envisaging and realizing such exhibitions is a highly specialized skill, involving professionals with a wide range of talents. For this reason the plans and activities of exhibition designers have to be coupled to general museum policy at every stage, not only in the formation and preparation, but also in the realization of the show. The Netherlands Maritime Museum has developed an organizational model which, on the one hand, makes use of specialist expertise and, on the other, allows the directors to manage the process and to exercise control where needed. This ensures that an exhibition intended for a specific target audience actually reaches it.

In just a few years, the Netherlands Maritime Museum has managed to gain a major place in the Netherlands museum world. High visitor figures and greater museum participation in all kinds of areas are the measurable results. This is largely the result of solid preparation by directors and personnel and the ability to achieve internal consensus.

Two aspects of presentation deserve priority for the near future: renewal of the permanent exhibition and greater public participation. Realigning the permanent exhibition from a chronological to a thematic orientation entails major investment and will take time. To complicate matters, the building will at the same time need to be fitted with a climate control installation to ensure the preservation of the objects.

With annual attendance climbing from around 60,000 visitors in the 1970s to some 240,000 in 1995, the Netherlands Maritime Museum is no longer a museum exclusively for those interested in maritime subjects. It is a place for those who enjoy visiting museums and spending their free time indulging their interest in culture. The challenge for future years is to maintain the relatively high percentage of returning visitors (70 per cent) while at the same time reaching out to members of the public who rarely or never visit museums and who seldom take part in what the national culture has to offer, in short, new audiences. In this the Netherlands Maritime Museum is pursuing what has been identified by government as a major national political objective.

Physical expansion has not been ruled out. At present, the museum is actively involved in the development of the Maritime Quarter, the former harbour area surrounding it. Further extension of maritime-historical activities in the vicinity – external exhibitions and historical ships – will help stimulate interest in the museum itself. ■

Note

1. See Steven Engelsman, 'Dutch National Museums Go "Private",' *Museum International*, No. 192 (Vol. 48, No. 4, 1996), p.49.

Two ships named *Rose*

A Museum International *report*

Thanks to the help of the National Maritime Museum in Greenwich, United Kingdom, an eighteenth-century Royal Navy frigate, HMS *Rose*, has been re-born in the United States and in April 1996 set sail for a summer of sail-training and port visits to England, France, Ireland, the Netherlands, Portugal and Spain. The first civilian American tall ship to visit Europe in several generations, the *Rose* is a replica of a frigate that figured prominently in the Colonial and Revolutionary history of the nascent United States.

The re-born HMS Rose.

© HMS Rose Foundation, Inc.

The original HMS *Rose* was built at Hull, England, in 1757 to fight in what in the United States is called the French and Indian War. At that time, the American colonies were still part of Great Britain and a young George Washington wore the red coat of the British army. But when the American Revolution erupted, the *Rose* no longer sailed in the defence of the colonies' interests. She spent most of the war along the East Coast between Halifax, Nova Scotia, and Savannah, Georgia, where she met her end in 1779 when her captain scuttled her across the harbour mouth to block the approach of a French invasion fleet. As a result, the fleet was unable to get close enough to bombard the city, and Savannah was saved from destruction.

The present *Rose* was built in 1970 using original plans obtained from the National Maritime Museum in Greenwich. She is an exact replica in outboard profile, but much has been modified within the ship to bring her into compliance with modern safety standards. Today, the *Rose* is the largest active wooden tall ship in the world, measuring 179 feet (approximately 54 m) in overall length and boasting a 130-foot main mast (approximately 39 m). She is the only Class-A size tall ship in the United States to be certified as a sailing-school vessel by the US Coast Guard. As such she boards participants of all ages to 'learn the ropes' as she sails to various ports. The 1996 summer venture was the most ambitious voyage of her (second) career. ■

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Capturing new publics: the Maritime Museum of Bar celona

Mireia Mayolas Créixams

Major changes in the structure and functioning of the Maritime Museum of Barcelona were undertaken with the specific aim of creating a new body of visitors. This involved not only revamped exhibitions but a totally revised education and information policy and the development of marketing strategies inspired by commercial enterprises – all of which have begun to bear fruit. The author began handling the museum's cultural information activities in 1991 and in 1994 became head of its newly created information service.

The Maritime Museum of Barcelona is housed in the building of the royal naval dockyards. This architectural complex – a unique example of thirteenth-century secular Gothic style – was initially used for building vessels for the Crown of Aragon-Catalonia. Its history is intricately connected with that of Catalonia's medieval navy and the expansion of the Crown of Aragon in the Mediterranean. From the eighteenth century onwards, after successive improvements and extensions, the naval dockyards were used for military purposes.

A plan to demolish the installations at the end of the nineteenth century threatened their very existence. However, the town's cultural associations waged a successful campaign to save the building, which the army yielded to the town in 1935. In 1941, the Deputation of Barcelona opened the Maritime Museum to house collections of ship-models, paintings, figureheads, navigation instruments, maps and nautical charts, all bearing witness to the evolution of the Catalan navy.

In February 1993, the museum became a member of the consortium of naval dockyards of Barcelona, a locally administered body constituting a legal entity comprising the Deputation, which owns the museum, the Municipality, which owns the building, and the Ports Authority of Barcelona. The Consortium's objectives are: (a) the management and preservation of the museum's maritime heritage; (b) the encouragement and promotion of exhibitions, studies and research, which contribute to the knowledge of the history and present situation of the various maritime sectors; and (c) the broader dissemination of the country's maritime and oceanographic culture, with particular attention being given to programmes aimed at schoolchildren and students.

The Consortium inherited a museum which counted an average of 8,200 monthly visitors, 34 per cent of whom were schoolchildren, 36 per cent individuals, and the remaining 30 per cent retired people and students. A 1990 survey showed that the

Photo by courtesy of the author

External view of the Maritime Museum, located in the old royal naval dockyards of Barcelona, and considered to be one of the most important secular Gothic buildings in the world.

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majority came from Barcelona and the provinces of Catalonia, with 11 per cent from the rest of Spain and barely more than 2 per cent from abroad. The survey also pinpointed seasonal trends. Schoolchildren, for example, usually visited between March and May, the period during which their curricula dealt with subjects concerning museum heritage. Individual visits, on the other hand, tended to be concentrated at weekends and during the Easter and summer holidays. It should be borne in mind that the museum had suffered a loss of 150,000 visitors during the three years preceding the establishment of the Consortium, when restoration work on the building considerably reduced exhibition space. One of the Consortium's priorities was thus to create the conditions for making the museum known to all sections of the community in order to increase the number of visitors.

In 1994, the museum drew up its museographic project which was aimed at adapting exhibition themes and messages to the most advanced communication techniques. An information service was also created to plan and implement a communication policy designed to promote its interests.

Modernizing exhibitions

The restructuring of the permanent exhibitions was a three-fold project:

The first step was the renovation of the sectors already in existence, with the incorporation of fresh elements and the creation of new exhibition spaces in order to convey a more instructive message, thus facilitating multiple readings (ranging from the evolution of seafaring during the course of history to the different types of shipbuilding techniques).

The second was the installation of *The Great Adventure of the Sea*, a new interactive exhibition sector that combines real and re-created objects, and depicts some of the most important aspects of Catalan seafaring history. Here the museum opted for a new exhibition formula which had been used successfully by other museums. It combines the display of original objects and replicas in the context of specially designed presentations, and also incorporates audio visual and sensory effects (winds, smells), so as to create settings which conjure up images of the past. Headphones are available to provide visitors with explanations (in four languages) as well as special sound effects.

The third innovation was a large temporary exhibition, opened in April 1995, entitled *Catalonia and Overseas, Power and Business in the Spanish Colonies, 1750–1914.* As a result of these actions, the surface area of the museum exhibitions was increased to 5,000 m^2.

The restructuring of the museum was not limited to changes in the exhibitions. A number of improvements were made in order to make visits easier and more pleasant. For example, visiting hours were lengthened and now continue uninterrupted from 10 a.m. to 8 p.m. (previously, the museum was closed from 2 to 4 p.m.), and the entrance fee is less on weekdays than at weekends, so as to encourage visits by individuals on working days. A cafeteria and a combined shop and bookshop have also been opened. An information project is now being worked out which will establish policy guidelines for integrating the museum into the fabric of society by organizing special activities to encourage the participation of all sections of the public in the maritime heritage.

The Royal Galley of Don Juan de Austria is a replica of the one built in these same dockyards in 1571 to serve as the flagship of the allied Christian forces at the Battle of Lepanto. It is undoubtedly the museum's most symbolic object.*

Photo by courtesy of the author

Emphasizing education and communication

The first priority of the new information service for 1994 was the preparation of an education project emphasizing activities aimed at attracting the school-age public. These began in May 1995 with the provision, on a small scale, of guided tours (until then, school groups enjoyed no such service). This practice has now been extended to cover almost the entire museum, with a wide range of guided tours specifically designed for each school level, and the creation of a nautical world and a workshop on the Royal Galley, in addition to the optional visit of *The Great Adventure of the Sea*. In order to ensure the success of the educational activities, they are now aimed at a broader public beyond the confines of Catalonia. In future, we shall endeavour to extend them even further to cater to other sections of the community.

Another innovation adopted to facilitate school visits was the creation of a single admission ticket valid for the museum and other neighbouring cultural centres, such as Imax and the Aquarium, which were recently opened in the old port.

In addition to the reorganization of the exhibitions and the creation of educational programmes, a communication plan was designed to increase public participation. The mass media (television, radio and the press) were marshalled so as to transmit our message to all sections of the community. Data from a public opinion poll conducted in 1995 showed that 30.2 per cent (almost half of whom were Catalan) had learnt about the renovation of the museum and the opening of *The Great Adventure of the Sea* from television, 29.6 per cent from someone they knew, and 27.6 per cent from the press. In the case of foreign visitors, principally from Europe, tourist guides represented the main source of information (40.3 per cent).

Streamers are a traditional communication medium in Barcelona, where they are used principally to convey information about cultural events. To bring the image of the museum to a greater number of people, we placed ours in the busiest parts of town. The same message was disseminated out of town in specific places such as petrol stations, tourist hotels, travel agencies and information bureaux for young people. Collaborative agreements were signed with the Catalan Consortium to Promote Tourism and the

Photo by courtesy of the author

Setting of the Sebastià Gumà*, in* The Great Adventure of the Sea*, where the trade between Catalonia and Cuba in the eighteenth century is narrated.*

Tourist Bureau of Barcelona, which agreed to provide information about our activities in all their promotion events.

Another aspect of our communication strategy is to present the museum to all the public bodies that might influence people to visit. Special days were thus organized for various professional sectors such as travel agencies, taxi companies, the staff of other museums and journalists. Immediately before and after the summer holidays, all teachers in Catalonia were invited to a meeting where the educational possibilities of the permanent exhibitions were demonstrated and a detailed information folder provided.

It is too soon to be able to draw definitive conclusions about the effect of the museum's restructuring on the visiting patterns of the different sectors of the public. None the less, the data already obtained are starting to be significant enough to indicate major future trends.

The various communication campaigns have resulted in a tripling of the monthly average of visitors to more than 25,000. It should be pointed out that, according to the data obtained between May and October 1995, the most significant increase took place in visits by individuals. When the months of May and June 1990 are compared with the same months in 1995, it is observed that the number of individual visitors quadrupled, increasing from 42 per cent to 67 per cent of the total. This in no way implies that visits by school groups decreased (in absolute figures, they increased by 9,000 visitors). August also showed the same trend, with individual visits increasing, albeit to a somewhat lesser extent.

All of this leads us to believe that the publicity campaigns have had their greatest impact on visitors from Spain. The slight decrease for the month of August 1995 (when most Spaniards are on holiday), was not compensated for by foreign visitors, and this is partly due to the fact that it was not possible to launch a promotion campaign through tour operators in other countries during the first three months of the year. We can thus envisage that, with current promotional activities, the coming seasons should witness increases in the number of foreign visitors.

The response from schools is difficult to assess because it is governed by other factors. The campaign to publicize educational activities for the 1995/96 school year began at the end of June, and it was only at the beginning of September that it had its most direct impact on teachers. Nevertheless, in absolute terms, the figures for schoolchildren increased from 1,873 in 1990 to 7,585 in 1995, in other words, a quadrupling of this section of the visiting public as well.

Although the restructuring was completed only in 1995, the figures for visitors are substantial enough to warrant the conclusion that many of the goals that the museum set itself have been greatly surpassed, with the number of visitors far outstripping previous figures. But quantity is not the sole criterion in our assessment of the museum's success, as witnessed by the results of a quality survey conducted on visitors to *The Great Adventure of the Sea*. These show that 98.6 per cent of respondents were satisfied with the new exhibition techniques used and said that they would recommend a visit to others. The school response to the educational activities also exceeded expectations. From May to October 1995, and notwithstanding the three months of summer holidays, almost 31,000 schoolchildren visited the museum. Our objective for 1996 is to have a greater impact on schools in Barcelona, which represent a traditionally low proportion (some 16 per cent) of the total number of visiting schoolchildren. This may already be under way: by mid-November 1995, the number of school reservations was so high that there were many days in March, April and May 1996 when morning hours were all fully booked.

Photo by courtesy of the author

School groups prefer guided visits, where a variety of instructional aids are used to ensure a greater degree of collective participation.

Thus, the museum's use of the same marketing strategies traditionally employed by commercial enterprises has had a very positive response. In the space of seven months in 1995, more than 150,000 people visited the museum, in contrast to 1994 when the total number of visitors barely reached 101,000. Future efforts will be aimed at consolidating this success by tapping into sections of the public which are less represented among today's visitors and, of course, by reinforcing efforts towards those sectors which provide habitual visitors. This will be accomplished by designing specific activities for each target group and by continuing the communication strategy which has thus far given us such good results. ■

Families first: the National Waterways Museum

Tony Conder and Patsy Williams

Treating a serious and technical subject in such a way as to attract family visits and strong public support was the challenge facing the National Waterways Museum in Gloucester (United Kingdom). The innovative approaches adopted are described by Tony Conder, one of the museum's founders and its present curator, and Patsy Williams, education officer.

Museums at the end of the twentieth century feel many pressures. The curator has become a manager and has joined a complex new world of marketing, profit centres, flexible staffing and 'right sizing', alongside the traditional tasks of collections management, presentation, research and information provision. Today's museum must strive to keep true to its roots as a collector and preserver but must also live with the politics of supply-and-demand and market forces.

The family as a unit is also being pushed and pulled from all directions. At a time when there are so many stimuli, so many solitary activities and for many an easier life at home, getting a family together as a group can become a rare event. Yet it is the family that many museums rely on as one of their main markets. Thus the National Waterways Museum was always designed with families in mind, but it was also conceived as an introduction to the subject of canals for all ages. Fulfilling these two missions has posed two main problems which the museum has had to overcome so as to generate the interest of the public and the income for survival.

First, it wished to be a museum in the full sense of the word and not just an adventure centre, information point or a display of historical objects. Second, its subject was canals and inland waterways, which lack a large broad-based level of support. If the museum was to succeed it would have to join the new world of interesting displays, accessible information and cost-effective collections management. It would also have to draw its visitors from as wide an area as possible beyond the natural supporters of inland waterways.

Its permanent galleries are designed to attract people to the subject, assuming that most have no knowledge of it. The displays must provide enough information so that visitors understand what they are looking at, but should also stimulate a thirst to find out more and a desire to know the rest of the museum. The purpose is to create

Photo by courtesy of the author

Two young people re-living the past on the narrowboat Northwich.

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Photo by courtesy of the author

Visitors looking at the ship that was recently converted to represent The Earl of Pembroke*, the original name of Captain Cook's ship,* The Endeavour.

excitement and curiosity so that at the end visitors will buy books or borrow them from a library, explore waterways in their own area and become committed to the canals. One of our purposes is to help canals themselves to increase their market size: the slogan 'Use them or lose them' still has a ring of truth for canals which have lost their natural transport market.

The sequence of displays follows a straightforward route through the museum. Each area of the permanent galleries offers information at a complex series of levels: headlines on display boards present easy summaries; labels add information and context, but with few hard facts and figures; photographs, archives and objects are displayed together telling further stories (in the case of archives, literally so); captions to photographs and objects allow further depth of information. In the most effective displays these levels of information are enhanced by moving images which are powerful evocations of a time past, of people and objects at work or of the context of the canal. The type of visitor interaction varies from a simple push-button, through models which can be worked, to touch-screen manipulation. The overall balance permits a family group to progress through the museum at the same speed while at the same time allowing different members to view different parts of a display, with some reading and others playing. Exterior exhibits outside the main building provide a host of choices, also with varying levels of information and interpretation.

In line with this family-oriented policy, museum texts were all written for an average twelve-year-old reading age, and the Education Department was involved in simplifying language to make it accessible. We have on occasion left in unexplained technical words and hope that this will stimulate inquiry from books or even from the many well-informed staff and volunteers available at the museum. With this in mind, considerable time has been taken to broaden the staff's knowledge of canals. This includes a programme of days out on a narrowboat where every permanent staff-member learns to work locks and to steer. Training in visitor care is an ongoing preoccupation to ensure that visitors are well received and looked after. As comment and survey have shown, the displays and staff match most visitors' aspirations.

Marketing and ticketing also play their part in attracting the family. The museum's main leaflet has featured an 'ideal' family for several years to illustrate the museum's appeal for both sexes and all ages. Publicity photographs, press releases and video tapes back up this presentation, with 'children having fun' as a frequent theme. The pricing structure, when compared with the full price for single visitors, gives families a good discount incentive to come together. Single-parent families are also encouraged with their own price structure. Discount ticketing is featured in the many tourist shows and travel fairs which the Marketing Department visit each year.

Adding an 'extra dimension'

Much of our effort for families is concentrated in the school holidays when the Education Centre becomes a family-based Activities Centre. Our aim is to add an extra dimension to the normal museum displays to encourage repeat visits and to give the family increased stimulus.

The usual pattern is to begin with an introductory quiz centred round the museum display, which highlights a specific theme linked to a temporary exhibition or activity based in the Education Centre. These quizzes perform a valuable function by making learning an amusing challenge but they also ease the passage through the museum and add information to a visit. The quiz sheets duly completed help form a database of information on visitors and a winning sheet becomes a prize draw, gaining publicity at the end of the event.

The exhibitions and events housed in the Education Centre offer interactivity and the chance to explore in more detail an aspect of the canals or a scientific subject. In the last twelve months themes have ranged from 'the women of the waterways' to 'folk art of canals' and 'the wheel'. When there is no exhibition to focus on, a range of other hands-on activities is available in the Activity Centre: art, sculpture, paper craft, model-making, badge-making, rubbing images, rag-rug-making and many more activities that are overseen by museum staff. Many of the traditional crafts are re-created, but with modern materials: rag rugs, for example, which many of the older generation remember having in their own homes as children, evoke memories, and the stories told to grandchildren who are trying their hand at this past craft are both fascinating and informative. Just outside the Education Centre a model waterway network with boats, waterwheels and lock gates attracts many visitors, some for hours at a time, and leaves grandparents wet but content! A crèche facility is not offered so as to ensure that families work and play together, which they do most successfully.

A major area of our work is in technology. Canals were one of the first users of cast iron and their mechanisms contain a vast number of applications of pulleys and cogs. Canalside structures and the bridges, tunnels and aqueducts which carry the canal through the countryside were among the most advanced of their time. This technological theme allows a very different angle to be taken for school events, family holiday activities and weekends throughout the year.

Learning for young and old

The Educational Department works hard to encourage a full range of visits from schools during term time. Primary and secondary schools, colleges and universities visit, all with their own focus. The displays and teacher information dovetail with the national curriculum and may also be used in a cross-curricular fashion. In our world of hi-tech, television, computer games and virtual reality, there is often the need to take a step backwards. Handling historic objects, using original documentation and looking at great works of art can have a huge impact on young people's minds,

Photo by courtesy of the author

'Roses and Castles': painting in the Activity Centre.

stimulating their curiosity and broadening their horizons. Naturally, the museum is seen by many as a history show, and indeed a major purpose is to tell the history of the inland waterways. We do prefer however, to look at it as a story rather than a history and try to remember always that people are as important as things.

The practice of focusing on various parts of the presentation has led to the development of a series of special 'weeks' for schools. Some, such as 'Maths Week', are based on presentations by travelling specialists. Others are home grown, for example, 'Victorians', 'Music' and 'English'. In each case an element of the curriculum is exploited and the waterways element added to it. Interactivity is again very important. Children and teachers together explore a subject, explore the museum and have an expert to fall back on. 'Victorians' relies on the stimulus of old objects presented and handled, supported by theatre and song. Dressing up in replica costume and using role-play is put into context by the use of a real boat cabin to imagine something of family life in a past age.

To develop these activities further in 1996 both 'Maths' and a new 'Science' presentation based on physics will be kept open for a weekend as we have found that a school trip is a stimulus for a whole family to return for a visit. It is also a wonderful opportunity for parents to discover how their children approach two of the national curriculum core subjects. Both 'Maths' and 'Science' offer a hands-on approach with many puzzles, problems and experiments creating a time of discovery, of shared experiences and of fun and learning enjoyed together.

We also organize adult learning days, when small groups can join a course run by experts associated with the museum. Knot-tying and fender-making, blacksmithing and canal art have all attracted attention. Many families have enjoyed living a day in the life of Peter, the shire horse (a well respected museum staff-member!); grooming, harnessing and general care of a working horse make this a day to remember. Perhaps most successful has been tug-driving, run by volunteers using the two small tugs based at the museum. The course lasts a day and explores elements of maintenance, steering and general watercraft. The many visitors who attend these courses take away new skills, happy memories and even the required 'Certificate of Achievement'.

One of the highlights of a day at the museum is a short cruise along the Gloucester/Sharpness canal on *Queen Boadicea II*. During their time on the boat, visitors are treated to historical commentaries from the skipper, which extend their knowledge of the canal system both locally and nationally. 'Boadie' as she is affectionately known has her own place in history. She was one of the 'little ships' of Dunkirk whose services were used in May 1940 during Operation Dynamo when she took part in the evacuation of troops from the beaches of Dunkirk.

In addition to families and schools, the bulk of our visitors is made up of senior citizens and canal enthusiasts. The most difficult problem to overcome is finding sufficient detail for the expert visitor. True, many are satisfied by seeing, and in many cases touching, objects from history, but we do in some areas lack a real depth in the information we provide. In future we hope to overcome this with considerably more computing power and a full database. This will allow access to most of the museum catalogues and information. Too much 'writing on walls' and too many labels put many visitors off museums. Flexibility in information provision that only the computer can provide is of major importance.

It is only possible to organize this broad range of activities and events on the foundation of a healthy museum. We need the skills of curators to present the collection, maintain operating equipment and provide specialist knowledge. We need a cheerful and organized volunteer body to operate historic items and assist with the management of special events. Specialists in education, administrators and service providers (shop, café and boat trip) need to work together to make activities successful, cost-effective and even profitable.

Permanent displays cannot hope to cover an entire subject. What our family events do is to take the permanent displays into fields where they cannot go by themselves. They broaden both the information we provide, help remove the bias of pure history and, most importantly, add an atmosphere of sheer fun, which emanates from people who are truly enjoying themselves. ■

A mission to inform: the American Merchant Marine Museum

Frank O. Braynard

A unique museum designed to tell the story of a little-known aspect of maritime life in the United States, the American Merchant Marine Museum at Kings Point, New York, is the home of an unusual collection and an even more unusual approach to its public service role. The author is the museum's curator, and one of its most enthusiastic fans. He was founder and programme director of the South Street Seaport Museum in New York City and has enjoyed several careers – as artist, author and counsel to the maritime industry – all based on his lifelong love of the sea.

We have a real problem at the American Merchant Marine Museum. With a few exceptions, such as graduates of the US Merchant Marine Academy and the several state maritime academies, no one knows what the merchant marine really is. The merchant marine, we should state at the outset, is an industry representing private American companies operating private ships of all types. Any ship whose basic purpose is commercial is a merchant ship. Sad to say, ever since the Civil War, the merchant marine has been sadly neglected and misunderstood. We have nothing to do with the US Marine Corps but we are continuously referred to as 'merchant marines', although the correct name for a man or woman in the merchant marine is 'merchant mariner'. As a museum, our aim has always been to try to break through this wall of ignorance.

We at the museum have three very good things helping us in this long-range goal: some of the world's finest ship models, a magnificent location overlooking the Throgs Neck Bridge with the skyline of New York visible except on foggy days, and one of the most beautiful museum buildings, a structure filled with the ghosts of Thomas Edison, Henry Ford and others who have walked its halls. It was originally the home of William Barstow, a wealthy inventor. Its ground floor and parts of the second floor have been assigned to our use by the Merchant Marine Academy, which is responsible for the building's basic upkeep. The museum is indeed most grateful for the Academy's help, although we are incorporated as a private entity and must raise funds for our very small staff of four part-time people and could not operate without our fifteen dedicated volunteers.

The museum owes its creation to the dream of Captain Charles Renick, Academy graduate and long its Director of External Affairs. At first he conceived of spaces in various cellars of the academy buildings and then, to his joy, the Alumni Association bought the Barstow estate across Steamboat Road. At first we were allotted only the ground floor but in subsequent years we have slowly managed to obtain the use of about half the first floor. The other half is still needed by the Academy for visitors' guest rooms, although we hope to obtain this space eventually to establish special galleries dedicated to oil tankers, inter-coastal trades, the Great Lakes and the inland waterways.

How crowded we are is demonstrated by the museum vestibule. It is devoted to the greatest advance in merchant ship design since steam replaced sail: 'the container revolution'. This innovation first took place on American merchant ships and has now been adopted by almost all merchant shipping in the world, completely transforming seaports of all sizes. Malcolm McLean, the founder of Sealand Lines, is credited with the idea of the container ship and our small display is a tribute to him and to early container carriers. The Grace Line, with its *Santa Magdalena* class passenger-cargo ships, saw the importance of container ships and should also be given credit as a pioneer in this thundering new concept in maritime transportation.

The vestibule gives directly on to a foyer featuring a beautiful staircase leading to the second floor and doors which open onto Gallery No. 1 and to the War Room on the right. The foyer's chief exhibit is one we are proud of but which requires some explanation to each visiting group. It is the double steering wheel from the fabled 'Old Ironsides', officially known as the USS *Constitution*. We want to hammer

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home immediately the fact that the museum is for the Merchant Marine, and not for the US Navy. Since 'Old Ironsides' is still in service as a navy vessel, we feel bound to note that her seamen were almost to a man former merchant mariners. There was no navy to speak of when 'Old Ironsides' was built – her seamen received their early training and love of the sea from privately owned merchant ships.

Spreading the word

Before taking this story into a description of the various museum galleries, this might be a good moment to pause and explain two of our most successful efforts at making the broad public aware of what we are trying to do and what the Merchant Marine is. We hope to tell our story to people who may never be in the

Photo by courtesy of the author

The main gallery of the museum.

Photo by courtesy of the author

The collection of teacups and saucers from many steamship lines.

Kings Point area and will thus never visit the museum.

The first such project is our National Maritime Hall of Fame. The idea was to honour both famous people and ships. A sixty-person selection committee reviews candidates which, for the first decade of the project, were divided into the following four geographical areas, each to have a winning ship and a winning person: deep sea, coastal, the Great Lakes and shipping on our vast inland waterways. Anyone may nominate a person or a ship as long as background information and photographs are provided. In 1993, it was decided that as the principal historical figures had all been honoured, we would henceforth have only one prizewinner per year. The award can only go to ships that have been out of service or scrapped for at least five years, and to people who have been dead for the same length of time. Sponsors of various persons or ships may send out their own 'electioneering' documentation to members of the selection committee, although this is only rarely done. By the end of 1995, a grand total of thirty-nine ships and thirty-nine people had been elected to the National Maritime Hall of Fame.

Our second major project, which has done much to make the museum known throughout the Untied States, is the National Maritime Scholar of the Year Award, now commonly called the Bowditch Award in honour of Nathaniel Bowditch, famed American sea captain and one of the world's greatest mathematicians. The most recent winners have been John Maxtone Graham, well-known shipboard lecturer and author of a book entitled *The Only Way to Cross*; Fr. Edward J. Dowling, S.J., Great Lakes maritime scholar and author of the standard work on Great Lakes ships, and William Miller, author of thirty books on liners. We have found that for winners of the Bowditch Award, and for ships and people chosen for the National Maritime Hall of Fame, award ceremonies do the most good for the museum if they are held in the home town of the winning person and ship. In small towns out west the story is often a page-one feature with photograph!

Drawings, models, teacups and badges

Many visitors are overwhelmed by the magnificent museum building, the huge mirror over a fireplace in Gallery No. 1, the beautiful hand-carved African mahogany screen at the northern end of the Music Room, and the plaster ceiling in the Leviathan Gallery just off the northern end of the Music Room. To take visitors on a walk through the museum we usually begin at the east end of the building in the Pompeiian Room, whose walls and ceiling are all hand-painted in the style of ancient Pompeii. This is the only room in which we have regular display cases, and they are perfect for a small exhibit which will be kept in place for only two or three months. At the time of writing the display consists of some thirty fine pencil drawings done during the Second World War by Milton Garfield, a seaman aboard a Liberty ship in the North Atlantic. We hope to reproduce at least one of his excellent studies in *The Manifest*, the museum's quarterly publication.

Moving west from the Pompeiian Room, we come to the War Room, which contains a model of a P2 troopship. It was built in peacetime colours by the Maritime Administration to show shipowners what could be done with a large troopship when the Second World War ended. The model provides me – or whoever is guiding the visitors – with the opportunity to note the ship's propeller (one of two) on the model and then to look out of the window and point to the huge genuine P2 propeller just outside the museum's front entrance on a mound of grass. And it is fun to tell the listening group that the real propeller makes 180 revolutions per minute!

The War Room also contains a fine model of a cargo ship whose forward half is in peacetime colours and whose after portion is grey, as merchant ships are painted during wartime. And here I like to recall a favourite memory that makes an interesting point for visitors: on 31 August 1939, I attended the launching of the liner *America* in Virginia; the next morning, returning on

Photo by courtesy of the author

A genuine P2 propeller graces the lawn before the front entrance of the museum, which has been designated a Historic House by the Society for the Preservation of Long Island Antiquities.

the Old Dominion Liner, *Robert E. Lee*, I was approached by the captain who was carrying a small black box that was making sounds, my first experience of a portable radio. He said, 'World War II has begun. Hitler has just invaded Poland.' The following morning as our coastwise liner entered New York harbour, I saw the *Queen of Bermuda* sailing out. She was now all in grey. Her crew had painted her the day before at her New York pier and she was off to the war. Only a coat of paint distinguishes a peacetime merchant ship from a ship vital in war.

At the northern end of Gallery No. 1 is a small separate area honouring the two ships named *Savannah*. The model of the first *Savannah* (the first vessel to use steam in crossing the Atlantic as far back as 1819) is in gold leaf and was created for use as a dining-saloon decoration on the second *Savannah*, the world's first nuclear powered passenger-cargo ship.

Moving through the Music Room with its model of the great liner *Washington* – 17 feet (5.18 m) long and perfect in every detail – we arrive at the teacup room, so called because of its remarkable collection of ship teacups and saucers, one from each of a large number of shipping lines. The cups were acquired by two academy graduates who were pilots on the Panama Canal. The room is formally known as the *Leviathan* Gallery because of two huge oil paintings of this famous ship, our most illustrious troopship in the First World War and flagship of the US Lines for many years in the 1920s. Two heavy bronze plaques taken from the ship when she was scrapped in 1938 are also on display.

Our newest gallery – and the end of the tour – houses the navigational instruments display. It contains many items loaned to us by Carroll Bjornson, recently chairman of the board of the museum; our current chairman is David O'Neil, president of Seaworthy Systems.

Another new display, which will be considerably enlarged when we obtain more space, consists of colourful merchant marine officer-cap insignia badges. We also have a washbasin from steerage class, a device that hangs on the wall and can be unfolded. And last – but far from least – we have a marvellous three-dimensional diorama showing Mark Twain at the wheel of a Mississippi riverboat, spittoon and all.

So, you can see what fun it is to work in a maritime museum that has a real purpose – to tell the story of the American Merchant Marine. Come visit us one day and I will give you the tour in person. By then we hope to have a new and much enlarged National Maritime Hall of Fame. Personally, I cannot wait. ■

A waterfront witness to history: the German Museum of Shipping

Detlev Ellmers

Rarely has a museum been so wedded to its surroundings as the German Museum of Shipping in Bremerhaven. Set in the heart of a busy modern harbour, it has become the hub of a thriving maritime complex where the old and the new complement each other in a highly original fashion. Detlev Ellmers, Director of the museum, explains how this pioneering venture came about.

'Even a brief visit is enough to understand why the very name of Bremerhaven makes the museum lover's mouth water.' Those were the words of a reporter writing in the Netherlands newspaper *Het Vrije Volk* on 19 August 1978, just seven and a half years after the founding of the German Museum of Shipping and at a time when not all its departments had even been opened.

Germany's latest and northernmost national museum lies on the waterfront in the heart of the harbour town of Bremerhaven. It opened in 1971 on a very small scale after only five years of preparatory work. The museum was set up as a civil law foundation with three clearly defined tasks relating to all aspects of the history of German shipping: to establish historical collections, conduct scientific research and present displays to the public. The quality of the first small steps was exceptional and resulted in three pioneering achievements in the German museum sector, which enabled the new establishment, from the outset, to rival the most outstanding shipping museums anywhere in the world.

It all began with the opening of Germany's first open-air museum of shipping history in Bremerhaven in 1967. The old *Bremer Hafen*, or Bremen harbour, was made available by the municipality to moor floating veterans of the seafaring world. It had been built in 1827–30 on the British model as Germany's first dock harbour for the booming merchant marine of the Hanseatic city of Bremen. The growing town of Bremerhaven went on to take its name from this first dock. The new museum therefore had the benefit of an important, albeit heavily refurbished, monument dating from the early days of the Industrial Revolution in German shipping. The conservation of maritime monuments logically became one of its main research and study functions.

The second step was taken when the city of Bremen donated its most important maritime treasure to the new establishment: the *Hansekogge*, built in 1380. In 1962–65, the Bremen Provincial Museum had excavated this ship from its resting place in the River Weser, below the old medieval city of Bremen, making this Germany's first achievement in marine archaeology of international ranking. Since then, this branch of archaeology has been a focal point of research and work in the new museum.

The third step was the construction of a new hall for indoor displays, which gave Germany for the first time the possibility of preserving for posterity all kinds of small boats from its waters (including those used for traditional fishing, duck-hunting, peat transport, sea rescue and sport). Research and systematic presentation of these boats and the techniques employed to build them became another emphasis of museum work here.

These three areas – an open air shipping museum, marine archaeology and indoor boat display – were new in Germany; their aim is to preserve original vessels and accessories which have survived the ravages of time or been brought to light from still earlier periods by marine archaeologists. The open-air museum also provides space for original technical equipment erected on land in the service of shipping. In other words, shipping is no longer presented merely through models, illustrations and small objects.

The maritime environment

These new museum spaces are unusually attractive because they are set in the heart

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The wooden barque Seute Deern*, built in 1919, is moored in the museum harbour. In the background is the main building of the German Museum of Shipping.*

of the thriving maritime activities of a modern harbour town where many witnesses to an innovative shipping history have survived the destruction of war and the postwar years.

In the early days of the Industrial Revolution, Bremerhaven was founded with the sole purpose of serving the needs of merchant shipping under the new conditions of a free world market. It has performed that task with total dedication, under constant pressure to keep up with the fast pace of technical progress. Each important phase in that development has left a visible mark on the Bremerhaven waterfront which visitors can see for themselves today:

1827–30. The first German dock harbour, now the museum harbour ('Old Harbour').

1847 onwards. The first passenger steamer line between Germany and the United States. The New Harbour, with its outer dock, wide sea lock access (for sidewheel steamers) and old lighthouse, was built for this purpose.

1849–52. Home port of the first German war fleet. The ships were anchored in the roadstead in front of what is now the German Museum of Shipping.

Gilded figurehead of the 1906 Deutschland*; carved by Eugen Börmel, it was the last female figurehead of the German navy.*

© Egbert Laska, Deutsches Schiffahrtsmuseum

1862 onwards. The first rail spur to serve a German sea port. Quay, sheds and shunting yard on the landward side are preserved to the north of the open air museum.

1868. The return of the first German polar expedition to Bremerhaven. The expedition ship *Grönland* now lies in the museum harbour.

1881. The first German fast steamer sets out from Imperial Harbour 1.

1882–85. The first German offshore structure prefabricated in Imperial Harbour 1 and erected as the Rotersand lighthouse in the Weser estuary.

1885. The first German steam fishing-boat sails out of the estuary of the River Geeste (the first fishing port). The quay, fish auction halls and 1935 monument have all been preserved.

1896. The Imperial Lock, at the time the world's biggest lock chamber.

1898. The first German liner to win the Blue Riband for the fastest Atlantic crossing. German ships went on to hold the Blue Riband until 1907.

The two world wars left deep scars on the development of German shipping. But in the intervening and subsequent years Bremerhaven was once more the scene of exceptional achievements:

1927. The Columbus Quay and railway station opened on the sea front.

1929–33. Bremerhaven liners win the Blue Riband again and keep it for four years.

1957. The first German stern trawler sails from Bremerhaven fishing port.

1966. New port facilities opened for container shipping. Competition from air travel reduces passenger shipping to a handful of cruise liners.

1985. German fishing fleet scaled down to just a few vessels for lack of access to rich fishing grounds.

Apart from these visible landmarks in the history of German shipping, many facilities still operate today in the museum environs to ensure smooth shipping operations in a harbour town. They include the two pilot stations, the Water and Shipping Office, which is responsible for navigation, the 1876 Tonnenhalle building and the 1965 radar tower, the 1898 Sea Office and the swing bridges with their machine rooms, lighthouses and the sea-bathing quay, all of which are still working today. Other buildings have been put to new uses, such as the Emigrants House of 1849 (now Bremerhaven University), the 1897 customs building (now a restaurant), the 1862 dock sheds (now part-warehouse, part-restaurant) and the 1960 grain elevator (now a restaurant).

Even the scientific establishments in Bremerhaven are all connected with shipping activities. Apart from the museum, they include the major national Alfred Wegener Institute for Polar and Marine Research, and Bremerhaven University. Courses have been developed here in marine engineering and food technology based on fish-processing, together with systems analysis for the needs of combined land-sea transport. The main buildings of all three institutions were designed by prestigious modern architects (Hans Scharoun, O. M. Ungers, Gottfried Böhm) and set the

© Egbert Laska, Deutsches Schiffahrtsmuseum

The smithy of a German shipyard in the late nineteenth/early twentieth century.

tone of the modern urban environment through their immediate proximity.

Finally, there can be few places on the German coast from where a greater variety of ships can be seen sailing by than the Outer Weser shipping lane, directly in front of the museum. They range from small eel-net fishing boats, shrimp cutters, sailing yachts, pilot launches, water-police boats, river ferries, lifeboats, harbour launches, fire-fighting and buoy-laying vessels to inland-waterway ships, barges, fishing boats, freighters, container ships, pleasure boats and warships.

Where indoors and outdoors meet

The famous German architect, Hans Scharoun (1893–1972), managed to harmonize the main building of the German Museum of Shipping with this complex environment so effectively that windows in several different designs give a prospect of the surrounding shipping activity which deliberately enhances the quality of the displays. Scharoun knew exactly what he was doing because he himself grew up within sight of the museum dock.

The long but relatively flat building, with its structures reminiscent of ships' bridges, reflects the architecture of ocean liners. Inside, the galleries are laid out like the promenade decks of a passenger liner. Visitors can take a relaxed walk along the 'rail' and enjoy the view of various departments or the outside world. The circular windows lining the walls recall portholes, thus highlighting the maritime character of the architecture.

The exhibitions give an overview of the history of German shipping from its earliest known beginnings to the present day. Shipping operations from ports in what is now Germany played a leading international role at three different periods in history: the Roman Empire, which extended as far as the Rhine (from about 50 B.C. to A.D. 400); the heyday of the Hanseatic League (thirteenth to fifteenth centuries), and the nineteenth and twentieth centuries, after industrialization. (In the intervening periods, shipping tended to be of essentially regional significance along the German coasts; in pre-Roman days, the main evidence is of inland-waterway navigation, which continued to play a key role in transcontinental cargo transport on the relatively dense network of waterways until the railway took over in the nineteenth century.)

All three periods are well represented in the exhibits: the bronze bow ram of a Roman river galley of the kind stationed by Emperor Augustus on the Rhine to protect the borders (only two other museums possess an ancient ram of this type); the *Hansekogge* of 1380, which has survived almost intact from the days of the Hanseatic League and which has no equivalent in any other museum; the 75-metre-long wooden barque, *Seute Deern*, built in 1919 in the industrial era, which is one of the two large wooden sailing freighters in the museum's care. This ship lies in the Museum Harbour but is moored in the line of sight of the main building so that it plays an important role when viewed from several points in the relevant department.

The exhibition is divided into temporal segments, beginning with the prehistoric department. Here we find a life-size reconstruction of the oldest boat ever to have been excavated anywhere in the world: a hide boat used by hunters of the late Ice Age to fish and hunt swimming reindeer. The replica is based on a fragment of a 9000–8000 B.C. deer-antler boat rib found at Husum, Schleswig-Holstein. Ore samples, metallurgical slag and casting scrap prove that copper was already being mined in the early Bronze Age on the North Sea island of Heligoland, which was an important metal-trading port for the northern Bronze Age region. Rock paintings and models show that copper was probably transported in bark canoes.

Rhine shipping flourished in Roman days. It is represented not only by the galley bow ram mentioned above but also by many castings or depictions of ships on tombs. When the Franks put an end to Roman domination in the fifth century, the Middle Ages began (roughly A.D.

400–500). As trade and commerce dwindled so, too, did shipping. This period is represented by a small cargo boat of the *Oberländer* type (seventh century). Its structure is typical of inland-waterway vessels of the time. A tree-trunk was split lengthwise, the two halves separated and two keel planks inserted between them to give a wide, flat-bottomed boat.

Other excavated inland-waterway vessels join the famous *Bremerkogge* to form a 'medieval fleet' and give an idea of shipping in the Hanseatic days which is not conveyed by any other museum. The ship portraits carved in oak taken from the market frontage of the Guild House of the Flanders Voyagers of Hamlin (around 1500) represent the late phase of the Hanseatic League. The strong Dutch influence on German shipping in the years between 1570 and 1800 is illustrated by the blue and white-tiled cabin of a German sea captain who sailed in Dutch service.

The 'navigation routes' department follows next. Here, sea charts and nautical instruments are grouped together round a large optical system taken from a lighthouse, while a sea chart in relief explains the shipping lane on the outer Weser, which can be seen through the window. A fire-fighting vessel in the museum port rounds off this exhibit.

The industrial era is subdivided into a succession of thematic departments. The transition from sail to steam and wood to steel in merchant shipping is illustrated by the contrast between a wooden sailing lifeboat and a steel paddle-wheel steamer. The interior fittings of passenger ships, the machine and reactor control stand for the nuclear-powered cargo vessel *Otto Hahn* (1968), together with shipyard installations and harbour dioramas, are other highlights of this department, which is complemented in the open-air section by original harbour cranes, quay installations, motor tugs and the large sailing freighter, *Seute Deern*.

In the navy department, pride of place is given to submarines, which were Germany's principal naval weapon in both world wars; original vessels and equipment are on display. In the museum harbour, a Type XXI submarine (1945) and a fast patrol boat of the German navy complete the exhibit.

A new building is now being constructed for the Marine Research and Marine Resources department. It will illustrate the German contribution to polar and marine research, together with the development of high-sea fishing and industrial whaling and the utilization of the mineral resources of the sea. The Nordic yacht *Grönland* (the sailing ship used by the first German polar expedition in 1868) and the whaling steamer *Rau IX* (1939) are moored in the museum harbour.

The presentation of the boat collection is also due to be reorganized in the new building. The exhibition centres on an extensive collection of local wooden boats which were still being used around the mid-twentieth century by fishermen and farmers between the Mondsee in the South and the Schlei in the North. Sports boats and rescue vessels were developed from them.

Nearly all the departments are structured around the original vessels, accompanied by readily understandable information about their construction, uses, the forms of organization needed for their operation

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and the people who worked for them or sailed in them. Several special exhibitions are organized each year to present an in-depth view of specific aspects of German and international shipping. They are enhanced by a wide selection of materials in various media and a library of maritime literature. ■

Above: *Model of the* Hansekogge *of 1380; the original is currently undergoing the last phase of conservation.*

Right: *Dutch tiles characterize the quarters of a 1780 north German sea captain.*

© Egbert Laska, Deutsches Schiffahrtsmuseum

Museums and collectors

Jacques Chauveau

Jacques Chauveau is a French businessman, well known for his outstanding maritime collection and for his work as President of the Association of Friends of the Maritime Museum for the Atlantic (AMERAMI). He is a member of the board of directors of maritime museums and is vice-president of a provisional association working for the creation of a national foundation for the maritime and fluvial heritage. His long years of experience as an avid collector and an equally fervent museum-goer have led to the following reflections.

Couples are not all necessarily either perfect or diabolical. Some of them are even almost normal and reasonably harmonious. This latter definition can be applied to the couple formed by museums and collectors. Collectors, as the name implies, are first and foremost amateurs. They appreciate what they consider beautiful, rare, romantic or, better still, all of these combined. The museum, for its part, is an organized body dedicated to the preservation of heritage, the cult of history, safe from the excesses of passion but subjected to what are often fairly stringent regulations.

The type of museum we are concerned with here is the one that is nearest to collectors. The Museum, with a capital M, is far removed – in all its glory – from individual collectors, however good their taste or great their culture. Thus, we are concerned with, for example, maritime, automobile and printed-fabrics museums, rather than with the Louvre, the 'Met' or the Hermitage.

The amateur can become increasingly informed and end up by catching the collector's syndrome. On the other hand, people who pile up works and art objects on the basis of available cash and market prices are basically speculators. Lastly, those who 'buy' a collection are *parvenus*. Their wealth is ostentatiously displayed, despite the talent of the inevitable decorator. A collection – a genuine collection – can only become one after a long period of waiting, often of sacrifice, and always of a desire fulfilled at last.

As is normal with all couples, the interaction between the two is what enriches the life of each partner. With the couple in question, it is obvious that collectors and museums have everything to gain from exchanges which should be as extensive as possible. The initial inspiration for the collector's vocation is often stimulated by a museum. A visit provides the opportunity to discover and, subsequently, to acquire a taste for a particular subject whose very existence may have been previously unknown. Serviette rings carved out of nautili are very uncommon collector's items. None the less, the pretty little museum at Aland (in France) possesses large numbers of them, many of which are very attractively sculpted and carved. Starting from an initiatory discovery, the hapless beginner's journey to the underworld or ascension to heaven is going to take shape and gain momentum.

There are no advanced institutions of learning for discriminating collectors, so they normally have to be self-taught. The discovery, desire for and acquisition of an object, piece of furniture or painting give undoubted pleasure, but one still needs to make sure that one has made both the right choice and a good choice. And what better way can there be of doing this than by comparing it with what already exists in a museum? Perseverance being the hallmark of collectors, their ever-growing knowledge will quite naturally enhance their taste. This evolution can lead to some degree or other of diversification: the main subject one is interested in can have so many different aspects! 'Mainstream' collectors usually concentrate on their principal interests, knowing that universal knowledge is in short supply and that resources are usually restricted. Knowing or doing everything is a practical impossibility! So, inevitably, many collectors go through this renunciation process, failing which the collection will expand into a cabinet of curiosities. And, great as the charm of the latter may be, it implies a betrayal of the collector's vocation.

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Various objects belonging to a private collection. On the table, a model of La Servanaise*, which sank in 1929, and in the background, a model of an early-twentieth-century British pilot cutter.*

Collectors are, by definition, difficult beings. They cannot easily be classified into families and categories. They remain individuals. Some of them will refuse to see an interesting item in a 'colleague's' possession so as not to have to reveal details about their own collections in return. This shows the extent to which their relations with museums can be diverse and unpredictable. Some collectors almost identify themselves with their museum and its grandeur. Sometimes, they even give away or bequeath their collections. This is an act that can create serious problems of conscience, given that – to be frank – the value of some collections lies solely in the eyes of their creators. Museum reserves are usually too full to accommodate 'just about anything', especially now that, with the current fashion, museums and collectors are increasingly faced with the problem of copies and fakes. Other collectors are envious of the museum which they wrongly see as an unfair competitor.

At the same time, collectors must be credited with other qualities. They can and should provide museums with valuable information. Collectors are always in the act of searching and ferreting about, but cannot – indeed have no desire to – bite off more than they can chew. They frequently possess information on subjects which they cannot or do not wish to embark on themselves. This gives them the opportunity to play the useful role of providing information. Museums, great and small, all have financial problems. Their 'needs', desires and possibilities cannot always be met or brought to fruition. It is a consolation to see a work or an object acquired by a collector in its country of origin rather than see it taken away, often for ever, to faraway places. It is here that the museum's essential role and quality should be recognized: that of educator and guardian of heritage. There are hundreds of museums with very different purposes and of very different types. But there are very many more collectible items and, consequently, collectors. A museum often springs from private initiative or individual ambition. Perhaps it might have come into being sooner or later but in the context of heritage, wealth is fragile and fleeting. There are abundant examples of private collections becoming museums. They are very different in nature and scope, and bear witness to the diversity of points of departure as well as the achievement and importance of the ultimate goal of being a museum.

Taste, passion and perseverance

The sumptuous and famous collection of Farnese paintings (among so many others) is a fitting reflection of the nature of origin of such treasures, provided by the taste as well as by, nowadays unimaginable, the fortunes of the great patrons in the history of art. When such great amateurs die, their collected works are housed in museums specially created for them. 'What would the Palace of Capodimonte be without the Farnese Collections?' a high-level civil servant in France's Ministry of Culture recently asked.

In a very different context and on a much more modest scale – but to each period its type of collection! – there is Mulhouse's Automobile Museum. At a time when Bugatti automobiles were being thrown on the scrap-heap, the Schlumpff brothers – secretive and morbidly engrossed in their passion – devoted themselves to a pursuit in which nobody else was interested. Their initiative and skill led, single-handedly, to the creation of a French museum of international significance.

For the Fishery Museum at Concarneau, it was the reverse. It was created by a couple blessed with a sense of, and taste for, communication. By dint of perseverance and skill, this private initiative has come to assume particular significance for a subject that the couple was the first to approach in this way in France.

After furnishing the initial inspiration for a vocation, a museum can play an educational role in regard to it and even benefit as its natural heir. Some people might want their collections to be put back into circulation after their deaths. This is one of the conditions for fresh vocations. Indeed, this is in no way a contradiction with the wish to have a given object put in safe-deposit or, better still, donated to a museum. An individual can legitimately consider himself or herself to be a mere depositary of a piece of heritage which should be given permanent protection. Incentives – often in the field of taxation – exist to encourage this. A favourable system has been established in France, but only state museums benefit from it.

Of course, interactions between collectors and museums hinge primarily on individual relationships. Although collectors are usually rather individualistic, their vision of the museum should nevertheless be frequently taken into account. They constitute an active element among the museum's public. Their knowledge and interest can produce positive criticisms and suggestions. The director of the museum is akin to the collector: they are both used to functioning in their individual contexts, and tend to see their own trees rather than the forest. Conversely, exchanges between collectors and museums can be richly rewarding to both sides. Encouragement should therefore be given to symposia and meetings between these natural partners.

In difficult times characterized by harsh economic constraints, it can thus become necessary to establish full-fledged partnerships between collectors and museums. Both no long accept to witness – because of lack of resources – the loss of the coveted object and will have to pool their resources, skills and, in the case of museums, their credibility. One such example is a French association with a 'wealth' of

Scale model of a tuna boat in the Fishery Museum of Concarneau, which was created as a private initiative.

Above: *Objects with a maritime theme from a private collection. The two small model boats in the centre were built by French prisoners taken on board British ships during the Napoleonic wars.*

Below: *A collection of Arab astrolabes from the Musée de la Marine in Paris.*

ninety boats representing the lives of maritime people and objects in the twentieth century. The closer ties it has established with the Musée de la Marine should breathe renewed life into a collection which, though of undeniable value, has remained hidden from the public because of the difficulty of staging a fitting exhibition.[1]


Musée de la Marine, Paris

It may be that all the preceding reflections come from an 'amateur' who judges both collectors and museums in a minor key. It may be that what one should do is to advocate that museums should concern themselves with great and beautiful works, and collectors seek out unique objects – the world's most beautiful diamond – which put all others in the shade. For most collectors, however, happiness lies at the heart of their universe; a universe which is heavily populated. Each and every collector is not necessarily given to contemplation and asceticism. Some collectors who are absolutely addicted to their passion do indeed cure themselves by giving up their beloved objects, but they are in the minority.

In the end, collectors adapt very well to living with museums, and thus derive full satisfaction from their passion. ■

Note

1. This concerns the AMERAMI Association and the creation of the maritime body called the Espace Maritime de Caen in Normandy.

Safeguarding the underwater cultural heritage: UNESCO moves ahead

Lyndel V. Prott

In the last issue of Museum International *we described the concern of the international community at the lack of a legal instrument which would ensure the protection of the world's underwater cultural heritage. Lyndel V. Prott, chief of the International Standards Section of UNESCO's Division of Cultural Heritage, reports on the results of a recent meeting of experts, which took further steps towards filling this gap.*

Thirteen internationally recognized experts met at UNESCO Headquarters in Paris from 22 to 24 May 1996 to discuss the issues that would have to be dealt with in any legal instrument designed for the protection of the underwater cultural heritage. Designated in their personal capacities by UNESCO, the United Nations Office of Legal Affairs/Division for Ocean Affairs and the Law of the Sea and by the International Maritime Organization, they came from Argentina, Australia, China, Denmark, Mozambique, the Netherlands, the Philippines, Tunisia and the United Kingdom, to share their views on the key questions of archaeology, salvage and jurisdiction. Although such expert meetings are usually private, there was such a high level of interest among governments that a number of them sent observers (France, Greece, the Islamic Republic of Iran, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, Turkey, the United Kingdom and the United States). It was clear that the participants, coming from different professional as well as geographical backgrounds, had much to learn from one another.

Among the problems discussed were the type and breadth of definition of the underwater cultural heritage, the possibility of salvage incentives (though, the experts agreed, these could risk having the unwanted effect of encouraging the dismantling and destruction of historic wrecks), the need to respect the special status of warships and memorial areas (such as that of the *Estonia*), the kinds of methods of enforcement that could be used in areas beyond the national control of the coastal state, and how to ensure control over areas of the sea-bed not adequately covered by the minimal provisions of the United Nations Law of the Sea Convention of 1982. The view was expressed that it was not necessary to create a new zone to ensure better protection, but there was clear agreement that better control was urgently needed. The participants also discussed the ICOMOS Charter for the Protection and Management of the Underwater Cultural Heritage, and asked UNESCO to consider various ways of relating its principles to the new instrument, such as by inclusion in the text, annexure of the Charter or other means.

Several important themes emerged. It was unanimously agreed that an instrument should be prepared and that UNESCO was the appropriate body to do so. There was also a consensus that UNESCO should monitor activities being conducted on the underwater cultural heritage and act as an information resource in this respect.

While experts on the law of the sea and salvage stressed the need for the drafters of the new normative instrument to be well versed in the existing rules of freedom of the sea and state control of activities at sea, the archaeologists present emphasized the cardinal importance of protecting unique sources of historical information. They noted that the decreasing costs of appropriate technology and its consequent availability and use had led to increased exploration of the sea-bed at considerable depths, creating a situation of unparalleled urgency: unless effective control measures are taken soon, they argued, this non-renewable resource, which has proved to be an irreplaceable repository of data on unknown periods of human history, would be destroyed in our lifetime.

The meeting requested that UNESCO prepare, for further consideration, a reference document on the basis of the International Law Association draft Convention, the Council of Europe draft, the comments made at the meeting and any other relevant documents. The document will then be submitted to the Executive Board and General Conference of UNESCO, which will decide whether to proceed with the drafting of an appropriate international normative instrument. ■

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‘Memory of the W orld’: pr eserving our documentary heritage

Abdelaziz Abid

‘Memory of the World’ is a new UNESCO Programme to safeguard endangered documentary heritage, democratize access to it, increase awareness of its significance and distribute, on a large scale, information products derived from it. It represents an innovative approach designed to complement the Organization’s traditional activities in the field of preservation and conservation of archive and library holdings. The author is on the staff of UNESCO’s General Information Programme and is responsible for co-ordinating the ‘Memory of the World’ Programme.

The collective memory of the peoples of the world is of vital importance in preserving cultural identities, in bridging the past and the present and in shaping the future. The documentary heritage residing in libraries, archives and museums constitutes a major part of that memory and reflects the diversity of peoples, languages and cultures. But that memory is fragile.

A considerable proportion of the world’s documentary heritage disappears through ‘natural’ causes: acidified paper that crumbles to dust, leather, parchment, film and magnetic tape attacked by light, heat, humidity or pollution. Floods, fires, hurricanes, storms, earthquakes, etc., the list is endless of disasters whose effects are difficult to guard against except by taking preventive measures.

The sheer scale of the effort needed to preserve this heritage calls for a consistent protection programme which will pool efforts and make use of state-of-the-art technology. With this in mind, UNESCO launched the ‘Memory of the World’ Programme in 1992, with four specific objectives: (a) to encourage the preservation of the world’s documentary heritage by the most appropriate techniques; (b) to facilitate access to it for all types of user; (c) to increase worldwide awareness of its existence and significance; and (d) to promote the programme and its products to the widest possible public.

Although the programme is primarily concerned with documentary heritage of worldwide significance, it also encourages the preservation of works of national and regional importance. By seeking to develop products such as high-quality text, sound and image banks, which could be made available on local and global networks, as well as reproductions such as compact discs, albums, books, postcards, microfilms, etc., the programme will ensure both broad access to a wealth of documentation sources while at the same time maintaining the originals in the best possible conditions of conservation and security. Any proceeds from the sale of related products will be ploughed back into the programme.

A ‘Memory of the World’ register

The scope of the programme is thus quite vast and involves a variety of partners, ranging from students, scholars and the general public to owners, providers and producers of information and manufacturers of end products. So as to assist UNESCO in this task, an International Activity Committee has been set up to guide the planning and implementation of the programme as a whole and to make recommendations concerning fund-raising, the allocation of funds and the granting of the ‘Memory of the World’ label to selected projects. A ‘Memory of the World’ register, similar in some ways to UNESCO’s World Heritage List, will be compiled so as to inventory all documentary heritage which has been identified by the Committee as having worldwide significance. (However, the nomination and registration of documents under the ‘Memory of the World’ label will have no legal or financial implications.) The register, a compendium of documents, manuscripts, oral traditions, audiovisual materials, library and archive holdings of universal value, will be a significant document in itself, as well as an inspiration to countries and regions to identify, list and preserve their documentary heritage. It will serve as an important tool in raising the awareness of governments, non-governmental organizations, foundations and the public at large, to the importance of their heritage and will provide an incentive to obtain funds for its preservation.

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The Committee has established a set of specific criteria so as to assess the cultural value of documentary heritage; they concern *influence, time, place, people, subject, form or style*, and *social value*. Thus, documentary heritage would be considered as having world significance if it had a major *influence* on world history, transcending the boundaries of a national culture; if it reflects in an exceptional way a period of momentous change in world affairs or makes a significant contribution to our understanding of the world at a particularly important *time* in its history; if it contains substantial information about a *place* – a locality or region which had a crucial influence on major developments in world history or culture; if it has a special association with the life or works of a person or *people* who have made a unique impact on world history or culture; if it documents in a noteworthy manner a *subject* or major theme of worldwide importance; if it is a telling example of an outstanding *form or style*; if it has marked spiritual or cultural and *social value* which transcends a national culture. In addition to these seven major criteria, two secondary criteria will be taken into account which, though insufficient in themselves to establish significance, may help to enhance it: a high degree of integrity or completeness of the documentation, and its uniqueness or rarity.

Pilot projects

Seven pilot projects are currently under way within the 'Memory of the World' Programme; they are briefly described below.

A digitization programme was launched by the *National Library in Prague*, in co-operation with a private firm, Albertina Ltd. A demonstration CD-ROM was first published in 1993, featuring some of the most precious manuscripts and other documents in the National Library's historic collections, with annotations in Czech, English and French. In addition, a CD-ROM series was begun with the release of the first two discs in early May 1995. Digitizing the most beautiful manuscripts and old prints of the National Library will facilitate access to these treasures without exposing the originals to heavy use, thus contributing to their preservation. Moreover, while colours and ink react with paper, parchment, silk and other traditional media, digital information does not fade with the passing of time and could be easily transferred from CD-ROM to more durable media in the future.

Written in old Russian, the *Radzivill Chronicle* is a monumental work which reveals through more than 600 colour illustrations the history of Russia and its neighbours from the fifth to the early thirteenth century. Known to the scholarly community according to its ownership in the seventeenth and eighteenth centuries, the Radzivill (or Königsberg) Chronicle is the most ancient surviving example of the art of Russian illuminated manuscripts. It is a fifteenth-century copy of a thirteenth-century archetype held by the Library of the Russian Academy of Sciences in St Petersburg (BAN). The Radzivill Chronicle's combination of text and illustration places this work in the company of such acknowledged masterpieces as the Madrid copy of the Greek Illuminated Chronicle of Ioann Scilipa, the Vatican copy of the Bulgarian Translated Chronicle of Konstantin Manassia, the Budapest copy of the Hungarian Illuminated Chronicle, and the copies of the great French chronicles. Among these, the Radzivill is distinguished for the richness and quantity of its illustrations.

Photo by courtesy of the author

The Radzivill Chronicle in the Library of the Russian Academy of Sciences in St Petersburg.

The text of the manuscript has been published many times. However, the illustrations have been published only once, at the turn of the century, as part of a black-and-white reproduction of the entire Chronicle. In the centuries since its creation, the manuscript has sustained significant damage. Its binding has been replaced several times, the edges of the leaves have been cut, and the painted miniatures have been worn by age and use. The Radzivill Chronicle was restored on two occasions in this century.

The increasing fragility of the original manuscript, together with its pre-eminence in Russian literature, has left BAN to share a dilemma faced by all libraries charged with the care and wise use of cultural treasures. Handling of the Radzivill Chronicle must be restricted to preserve its material well-being. At the same time, the scholarly and scientific enterprise to which the library is dedicated argues for access to this important document for serious research. For this reason the library has turned to a digital medium to display the manuscript in full colour while preserving the original. A prototype photo CD is being produced with the support of UNESCO and the Library of Congress in the United States as a pilot project and a demonstration of the use of digital media in the service of preservation.

Devised by a group of Bulgarian and French writers, the *Saint Sophia project* is an attempt at a multimedia edition of Bulgarian manuscripts on an interactive compact disc. The disc evokes the symbolic figure of St Sophia, patron saint of the Bulgarian capital, in Bulgarian history, literature and civilization from the eleventh to the seventeenth centuries. The documents selected include primarily the facsimile reproduction, in the form of digital images, of Bulgarian manuscripts, including the oldest one known: the eleventh-century Book of Apostolic Epistles of Enina. They are supplemented by reproductions of illuminations, frontispieces and decorative motifs, and by photographs of various historic and archaeological sites. There are also printed transcriptions in Old Bulgarian of some manuscripts and their translations into modern Bulgarian, English where such translations exist, and French.

In 1972, heavy rains caused the collapse of a section of the wall of Yemen’s Great Mosque of Sana’a. Work on the roof brought to light manuscripts which had been concealed in the ceiling in ancient times. The *Sana’a manuscripts* are parchment and paper fragments representing approximately 1,000 different volumes, the oldest of which date back to the first century of the Hegira. Most are extracts from the Koran and are of considerable interest for the linguistic, religious and palaeographic study of the literature of the early centuries of the Hegira and of the Arabic language. The fortuitous and extraordinary discovery of these documents and their unique character make this find a remarkable event which will mobilize efforts and expertise on an international scale. Thanks to the active participation of Germany, a plan of work on the fragments was begun, which led to the construction of a House of Manuscripts, the restoration of some 12,000 fragments of parchment (out of 15,000), their storage, identification and classification, and the training of Yemeni restorers and photographers.

Research work on illuminated fragments and bindings was carried out with a grant from the Getty Institute and has revealed just how remarkable the collection is. The Yemeni authorities concur in the view that the collection is the equivalent of a historic building of exceptional heritage quality. The historical, archaeological, scientific and documentary quality of the manuscripts is so rich that their status as a ‘Memory of the World’ project is unquestionable and a National Committee for the project has been set up to identify the most suitable documents. A demonstration disc based on a selection of manuscripts, including some of the Koranic fragments, has been published, in co-operation with the Regional Information Technology and Software Engineering Centre (RITSEC) in Cairo. This CD-ROM offers an introduction to the Arabic calligraphy illustrated by the manuscripts, especially the Koranic fragments. Descriptions and comments are provided in Arabic, English and French.

In November 1992, the Asociación de Bibliotecas Nacionales de Iberoamerica (ABINIA) submitted a project called ‘*Memoria de Iberoamerica*’. A pilot stage is concerned with protecting examples of the nineteenth-century press in Latin America and improving access for historians and interested members of the public. It has led to the drawing up of a computerized inventory of some 2,000 newspaper titles and other press organs, in co-operation with the national libraries of Brazil, Colombia, Costa Rica, Cuba, Nicaragua, Puerto Rico and Venezuela. The second phase of the project will be to arrange for the conservation of the listed collections and their transfer to microfilm, with a view to exchanges between national libraries, the organization of exhibitions and special publications.

The preservation of the *Manuscripts of the Kandilli Observatory*, a collection of about 1300 works on astronomy in three languages (Turkish, Persian and Arabic) held in the Library of the Kandilli Observatory and Earthquake Research Institute at the Bogaziçi University in Istanbul, is now under way. UNESCO’s contribution covered the preparation and publication of the catalogue of these manuscripts, its maintenance in a computer-readable form and the production of a CD-ROM consisting of the catalogue and sample pages from most of the manuscripts.

The ‘*Memory of Russia*’ project deals with preserving and improving access to the collection of fifteenth- and sixteenthcentury Slavic manuscripts held by the Russian State Library in Moscow. It also includes the archives of many of the major Russian authors such as Dostoevsky and Pushkin.

All these projects were funded by UNESCO, which has also provided assistance to a number of others, including the safeguarding of manuscripts of Antonín Dvořák and Bedrich Smetana, held by the Museum of Czech Music in Prague; provision of equipment and training in Algeria, Cuba, Poland and Venezuela; reproduction and repatriation to Antigua of historical records held in foreign repositories; publication of the *Libro de los Pareces de la Real Audiencia de Guatemala 1573–1655*; reproduction on CD-ROM of the hand-written card file of the eleventh-to-seventeenth-century Russian language, etc.

Photo by courtesy of the author

A fragment of the Sana'a manuscripts.

Some thirty new preservation projects are under consideration, for example, 7,000 hours of audio materials of Chinese folk music, Tamil palm-leaf manuscripts in India, Vietnamese films, Laotian manuscripts, a collection of Jewish music in Kiev, manuscripts of ancient cities in Mauritania, etc.

Establishing a technical framework

Two sub-committees have been set up, the first to make regular assessments of the technology that might be used by the programme, and the second to study methods for marketing and selling the programme's products throughout the world. Work has already begun on examining the digitization of documents by reviewing recent developments in the field and preparing preservation standards and technical guidelines which indicate the recommended digitization standards for each type of carrier (texts and still images on the one hand, and sound and moving images on the other). The use of Hypertext Markup Language (HTML 2.0) as the basic presentation tool for manuscripts and old printed material was suggested in order to provide the widest possible access.

As to the preservation of the originals, a series of six brochures is in preparation, covering paper, leather, parchment, palm-leaves, etc.; photographic, micrographic and audiovisual material; electronic records; and electronic publications. Each brochure will discuss the general problem, present the list of relevant standards (relating them to each other and pinpointing gaps), provide implementation guidelines and checklists, and explore Third World issues such as climatic and financial conditions, grassroots and traditional preservation techniques and minimum standards.

Lastly, so that UNESCO can play its role to the full as co-ordinator and catalyst, three inventories in the form of regularly updated databases are being created in co-operation with the International Federation of Library Associations and Institutions (IFLA), the International Council on Archives (ICA) and other competent professional bodies.

The inventory of library collections and archive holdings which have suffered irreparable damage since 1900, to be published as *Lost Memory – Libraries and Archives Destroyed in the Twentieth Century*, is an attempt to list libraries and archives in more than 100 countries that have been destroyed or that have suffered irreparable damage due to natural or human-made disasters. This inventory will not be a sort of funerary monument but is intended to alert public opinion and sensitize the professional community and local and national authorities to the disappearance of archival and library treasures, thus drawing attention to the urgent need to safeguard documentary heritage at risk.

The world list of endangered library collections and archive holdings reveals that the most endangered carriers are not necessarily the oldest. For example, the International Association of Sound Archives has conducted a survey that shows that substantial numbers of acetate discs and tapes are lost each year. To date, more than sixty countries have proposed collections and holdings to be included in this list.

An inventory of ongoing operations to protect documentary heritage is being prepared with the help of the IFLA Preservation and Conservation (PAC) network, and will list major preservation activities currently in progress. A survey of libraries with collections of national significance has thus far received more than 200 responses.

This database, as well as the previous one, running on CDS/ISIS, will be updated regularly and the data analysis facilitated by the use of IDAMS, a statistical package developed by UNESCO and featuring an interface with CDS/ISIS. The two lists, along with the 'Memory of the World' Register, will constitute the indispensable basis for the programme and will eventually be made available on the Internet.

Finally, with regard to financial support, an international fund is being set up within UNESCO to finance some of the programme's efforts, with emphasis on projects with an international or regional dimension. Other projects which meet the agreed criteria could use the 'Memory of the World' label without necessarily receiving aid from UNESCO or the fund.

As soon as it was launched, the 'Memory of the World' Programme began to arouse great interest. Requests for assistance and appeals for help regularly reach UNESCO. The twofold aim – securing the survival of and access to this collective memory so that it is within reach of as many people as possible – necessitates new approaches to funding, particularly through co-operation with the private sector, and a new global vision of our common documentary heritage. It is a daunting task and only the mobilization of all the parties concerned can translate declarations of intent into a vast worldwide workshop to rescue, reproduce and disseminate these endangered treasures. ■

Note

For further information, readers are invited to visit UNESCO's Web site: http://www.unesco.org/cii

Policy writing: a blueprint for the future

Bev Dietrich, Robin Etherington and Talitha Laurenson

Expanding the boundaries of traditional museum services and functions requires both painstaking scrutiny of accepted practices and procedures and an imaginative look at the future. In Ontario, Canada, the City of Guelph's museum complex, comprising the Guelph Civic Museum and McCrae House, undertook just this approach when it decided to recast its policies covering every aspect of museum work. The authors are curator, director and programme co-ordinator respectively of Guelph Museums; they describe the time consuming but rewarding process that resulted in a new view of their museums' place in society.

Policy writing. Most of us shy away from it, preferring to 'do' another programme or catalogue, another artefact or mount another exhibit. Yet, policy writing is more critical for the well-being of museums than ever before. It affords us an opportunity not only to review our accepted activities, but also to redefine our purpose and direction. Given this opportunity for insight and creation, policy writing is exciting. It is the basis for radically rethinking not only museums but also the process of putting together and conveying museum mandates, strategies and direction.

Policy research, development and writing entails preparation for the museum's future, and for that matter, the future of the museum profession. It enables museums and museum professionals to think through the process of envisioning where they plan to be in the short term and how they intend to get there. It merits a considerable investment in time, thought and experience for it defines what we do and why, and can place museums in the forefront of a society in constant evolution and change. In other words, it is no longer enough to 'do' another programme or exhibit without knowing how and why it contributes to the local community and to the ever evolving global society.

Over the course of the past two years, we have systematically rethought and written anew all of Guelph Museums' policies, as well as operational procedures. The process was based on the staff's many years of accumulated professional work experience, as well as on research and consultation with other organizations, not necessarily museums. In fact, most of the philosophy and procedures articulated in the policies are *de facto* practised and respected by Guelph Museums' staff, as it is the staff themselves who write the policies to enshrine the high professional standards they practise, and to put forward the direction that they foresee for Guelph Museums and for museums in general. When the Board members review the policies for approval, they have already observed most of the steps in practice, as well as the resulting dynamism of the museum complex.

In order for policies to be respected and consistently applied, they need to be written by staff in a team effort so as to reflect their opinions, expertise and visions. This teamwork provides a sense of 'ownership'. Each professional staff member chose a policy that was of particular interest to him or her, then researched and consulted about content and implications and, finally, submitted a draft to the rest of the staff. We all reviewed the policy draft and made suggestions, thoroughly discussing all points until everyone's concerns and considerations were addressed. The team member then re-wrote the draft, incorporating the recommended changes, and another review took place.

This process was applied to each of the policy documents, ensuring a complete staff review and agreement before the policies were submitted to the board, where they were again discussed before approval was granted. Recommendations were incorporated into the policies before they were printed and distributed and placed in the policy manual.

Teamwork, innovation and anticipation

The team approach facilitates policy writing, as the work and responsibility are shared. It allows for brainstorming, fun and comradeship as the work proceeds, and for staff to claim responsibility for the results. It involves grassroots policy development, instead of staid, top-down policy

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dictum. Although this team-writing process takes time, the result is a set of well-written policies that have been thought through from all aspects of museum operations and that include all professional perspectives (curatorial, programming, public relations, maintenance and management). The policies are respected by everyone because they reflect everyone's ideas and visions. They have both staff and board approval.

The policies are innovative because they were conceived by people who were encouraged to think radically about their organization's future, and about their own. They are flexible and strong as well, capable of accommodating changes and new needs. They recognize that, first and foremost, Guelph Museums hold artefacts and information in 'sacred trust' for the entire community and that the ethical and professional implications of this trust must be acknowledged and articulated in policies which not only respond to the standards and expectations of the 1990s, but also anticipate those of the next century.

One innovative and unique component of Guelph Museums' *Conflict of Interest Policy* is the recognition of ethical responsibility with regard to computerizing museum records and operations. The section entitled 'Ethics of Computerization: Electronic Information' details 'ethical guidelines *vis-à-vis* the creation, use and distribution of electronic information'. We are living in an information society and in order for museums to have relevance, they need to respond to the increasing demand for information and interactive museum services. For museums to be leaders, they need to be responsible and ethical in the care of information and in the creation of museum-based information services. Today, volunteer work is growing and if non-profit organizations can provide increased and improved services, it is often due to the number of volunteers who give their time and expertise. Guelph Museums' *Volunteer Policy* is written in a question-and-answer format, because we want all our volunteers to read it and to understand their rights and responsibilities. Volunteers at Guelph Museums are respected and receive training and supervision. They are encouraged to develop new skills and to try new ideas, all of which are essential for a successful volunteer programme. However, they do not run the museum and it is important to specify exactly their role so that they comprehend and accept it before they are taken on board. The museum must also ensure that it has the temporal and human resources necessary to provide volunteers with proper guidance and with professional development opportunities. These issues are addressed in both our *Volunteer Policy* and *Professional Development Policy*.

The responsibilities and learning needs of the staff and board members are also addressed in the *Professional Development Policy*, which recognizes that the organization has to provide on-going training and actively encourage people to pursue professional development opportunities so as to enhance their effectiveness and professionalism. It also acknowledges the fact that the director is responsible for pointing out these opportunities with regard to staff training and career advancement. This is a unique and bold avowal in a museum policy, however the responsibility is real, especially if the museum profession is serious about being relevant and vibrant in the future.

The *Research Policy* encourages staff and everyone associated with the museum complex to conduct research not only in historical subjects, but also on far-reaching museological issues. It reflects the philosophy that it is critical to preserve the past not merely for its own sake, but rather as a basis upon which to make decisions about our future.

Guelph Museums takes seriously the public trust of the community's historical material. The *Collection Management Policy* ensures that nothing can fall between the cracks. In other words, it puts forward detailed and accountable guidelines for the ethical and professional management of artefacts and of the collection as a whole. By merging policy and procedure, we have guaranteed that every aspect of collection management is addressed and professionally handled, and that the individual artefact and the entire collection are respected and provided for.

Linking policy and procedure

We realize that merging policy mandate with procedure is spirited and uncommon. Yet we have done so with all our primary policies, which include those mentioned here and others dealing with *Program and Education, Exhibition* and *The Museum Shop* (additional policies concern board activities and responsibilities, as well as those specific to ongoing museum operations and activities). Such a step gives us the ability to say what we do and how we are to do it, and the authority to act. In other words, it gives us more leeway and responsibility to do what we do effectively and efficiently. It enhances the team approach taken not only with regard to the development and implementation of policies, but also with all of our work and services. We wrote the policies differently so that they are comprehensive, radical, flexible and authoritative, qualities that need to be developed and expressed in all museum work.

In truth, the manner in which we conceived the policies and the radical ideas incorporated in them are no more than the reflection of the way we function at Guelph Museums: we wrote as a team because we work as a team; we wrote for the future because we work towards it every day with innovation, confidence and hope. Structure, format, standards and ideas which we integrate into our daily professional work are now clearly set down on paper, providing a pathway into the future.

We cannot overemphasize the importance of writing detailed and innovative policies that guide a museum through the constant changes and turmoil of today's society. The real goal is to set standards that make a museum relevant in contemporary communities, and to write policies that are flexible enough to allow it to become a leader in future societal development.

Fresh and radical thinking is essential if we truly intend to redefine the museum's *raison d'être* and provide services oriented towards individuals and the community. We started with policy writing that verges on the polemical, because it is healthy to discuss controversial ideas and visions about museum activities and purpose. Without new ideas, without provocative thinking, we shall never expand the boundaries which define museum services and with which we may have become all too comfortable. Yet, if we fail to do so we preclude a visionary future for museums and a leadership role for museum professionals in the twenty-first century.

Guelph Museums has taken the first step in this direction. Join us. ■

The growth of science museums in India

Romain Maitra

An emphasis on science and research from the early days of independence has transformed India into an important industrial and technological power. The growth and spread of science museums have played a key role in creating a social climate responsive to the rapid pace of scientific progress, and the history of this experience – unique in the developing world – is well worth recounting. The author is a freelance consultant and journalist with broad professional experience in India.

It is quite a global paradox indeed that although science has developed at an ever-increasing pace since the turn of the century, the gap between the so-called advanced and developing countries has widened more and more. Although it is widely recognized that one of the most powerful means for a society's transformation is ushered in by the advances in, and the use of, science and technology, it is no less true that such transformation has its ultimate roots in the development and shaping of scientific temperament among the members of that society. And while many of the differences across social groups have waned and even vanished with the implantation of expanded distribution channels and the spread of education and effective communication networks, some diehard social taboos and superstitions still linger on, however.

After the independence of India in 1947, a burgeoning science policy was formulated aimed at a new ideological framework that would integrate with social thinking and evolve a viable science tradition. Pandit Jawaharlal Nehru, India's first Prime Minister, had an abiding faith in science and the great role that science and technology could play in national resurgence. He wanted to make science and technology a part of Indian culture. When inaugurating the National Physical Laboratory in the Indian capital on 21 January 1950, he said:

> In a sense, we all worship at the altar of science and yet I often wonder if science is not going to meet the same fate as religion did in older times. That is to say, people were very religious, they talked in terms of religion but seldom behaved as religious men. . . . Science is not a matter of merely looking at the test tubes and mixing this and that and producing things big or small; science, ultimately, is a way of training the minds and of the whole life functioning according to the ways and methods of science, that is, the whole structure, social or otherwise, functioning in the spirit of science.

In the earlier stages of independence, the national policy-makers in India gave priorities to spheres like agriculture, food production and rehabilitation. Then an upsurge for rapid industrialization shifted the priorities to primary industrial potentials such as electricity, water power, steel and so on. Pandit Nehru himself took over the portfolio of the Department of Scientific Research and Natural Resources to indicate its importance, and initiated the Science Policy Resolution in Parliament in 1958 to accelerate the process of utilization of science and technology for national development. He also involved scientists in the nation's decision-making machinery.

The Resolution brought to the fore the 'inherent obligation of a great country like India with its tradition of scholarship and original thinking and its great cultural heritage to participate fully in the march of science which is probably mankind's greatest enterprise today'. It focused specifically on measures such as promoting science in all fields, maintaining an adequate supply of scientific and technical manpower and research equipment for the laboratories and encouraging individual initiative for the discovery of new knowledge.

The planners were sensitive to these issues and introduced a number of innovations in science education which modernized the curricula and exposed primary and secondary schoolchildren to science in a meaningful way. Further, it was because of the dire need to demonstrate science and its applications as a dynamic aspect of modern life that science museums came into being.

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Boosting science at all levels

During the 1950s, while Pandit Nehru gave a tremendous fillip to scientific research, the First Five Year Plan gave importance to the industrial development of India and the foundations were laid for various national laboratories related to research in physics, chemistry, fuel, technology, metallurgy and biochemistry. Science was not only given a boost in the systems of higher learning and formal education, it was also popularized among the general public so as to raise awareness and improve the quality of life. In such a way, two small nuclei were formed in the 1950s: the Birla Institute of Technology and Science in Pilani and the National Physical Laboratory in Delhi.

The pioneer industrialist G. D. Birla, on behalf of his educational trust, established the Birla Institute of Technology and Science in Pilani, his home town in western India, for higher education in science and technology. In 1954, the Central Museum was also set up in two of the halls of the engineering college and offered displays of models and exhibits. The dioramas in the museum presented the industries and business enterprises being run by the Birlas and made use of improvised wooden pulleys, strings and makeshift arrangements. Within the next decade, the museum enhanced its objectives and activities and turned itself into a modern museum of science and technology, which was later housed in a new building.

Another nucleus of a science museum grew in the venue of the National Physical Laboratory in Delhi. Some 560 m² of space was provided on the ground floor and

A view of the new gallery on 'Man and Machine' in the Nehru Science Centre in Mumbai.

One of the three Mobile Science Exhibition buses travelling through rural areas with working exhibits on science related to everyday life.

mezzanine of the laboratory with necessary infrastructural facilities. In addition to this, the UNESCO travelling exhibitions *Our Senses and Knowledge of the World* and *Energy and its Transformation* toured extensively in India with instruments and tools to teach the principles of the senses and of vision. However, the laboratory was worried about the effect on research activities in its working space due to the flow of visitors to the museum, and its museum component was therefore closed down, its exhibits being dismantled and distributed to other museums and institutions. Nevertheless, these two museums in Pilani and Delhi were the first instances of science museums in India.

The idea of starting a full-scale science museum in Calcutta materialized when the Birlas gave a part of their property to the Indian Government. With their previous experience at Pilani, they were more keen on extending the idea to that of an industrial museum; however, the national planners wished to widen the scope still further to present the various stages of production and its different processes. At a meeting in January 1957, the museum committee brought forward its resolutions to present recent advances in science and technology, and to assess the contribution of technology to the industrial development of India.

This museum in the family estate of the Birlas in Calcutta came to be known as the Birla Industrial and Technological Museum (BITM). It consisted of 12,600 m^2 in two plots connected by a 90-metre-long passage. The BITM projected in sequences the story of scientific and technological development in various domains through the use of dioramas, models and exhibits of objects such as engines, machinery and equipment, all with an eye on the comprehension level of the average individual. The installations of the BITM were followed by training and recruitment of mechanics and electricians for handling in-house maintenance, repair and preservation of exhibits.

When the BITM opened its doors to the public on 2 May 1959, the Education Minister Professor H. Kabir remarked:

> In ancient times science was the exclusive possession of a minority while for the vast majority it was a mysterious affair which hardly ever touched their daily life. Technology was confined to simple techniques which were within the understanding of the most average of men. The marriage of science and technology is perhaps the most significant fact of the modern age and has brought in its wake industrialization and far-reaching social changes.

Since then, the BITM has carried out a very large educational and extramural programme with mobile science exhibitions touring remote rural regions. Its educational programmes have incorporated thousands of students in urban and rural areas, especially in eastern India, by virtue of display and animation.

On 7 July 1965, another significantly large museum, the Visvesvaraya Industrial and Technological Museum, was opened to the public in Bangalore. In the beginning it consisted only of an electrotechnical gallery, but has since added many more galleries and initiated multifarious activities while drawing people from all walks of life. The museum organizes a series of programmes wherein young entrepreneurs are trained in crafts and various trades which would later facilitate self-employment.

Reaching rural communities

The success of the two museums in Calcutta and Bangalore convinced the Indian Government that such interactive science museums could very well be used for non-formal science education in a country still plagued by low literacy. In 1973 the Planning Commission of the Indian Government set up a task force of renowned scientists to create a scheme for developing a nationwide network of science museums with three specific objectives: (a) to create a scientific temperament in the community; (b) to inculcate creative facilities in young minds; and (c) to supplement science education in schools, both curricular and non-formal. In order to reach the deep rural interior, the task force recommended decentralization of the science-museum movement. At the national level, they called for four science museums in four zones of the country – Calcutta in the east, Bangalore in the south and two new museums at Bombay in the west and Delhi in the north. At the next levels, the task force suggested eight regional museums in state capitals, twenty district science centres in district headquarters and a large fleet of mobile science exhibition buses to travel through the interior areas. The government set up an umbrella organization under the name of the National Council of Science Museums (NCSM) to develop and run this network of science museums. The NCSM at a later stage undertook further decentralization by setting up more than 400 small school science centres with the aim of increasing this figure to 1,000 during the next Five Year Plan period.

In addition to the policy of well-planned development for reaching the interior, Indian science museums are characterized by their self-reliance in exhibit development. The NCSM has been able to build up a team of experts for conceptualization, design and fabrication of almost all its exhibits. In addition to furnishing its own science museums in the country, the NCSM is now developing hands-on exhibits for several other countries in Asia and Africa.

The first science park was set up in the Nehru Science Centre in Bombay in the late 1970s. Since then the exhibit designers of the NCSM have developed nearly 200 park exhibits which have been installed throughout India. They all use participatory techniques to impart an effective experience of science, especially to children so as to motivate them to explore and discover. These exhibits have provided opportunities to study visitors' reactions and remedy maintenance and other problems. Such experiences have helped form new design criteria for park exhibits mainly in the fields of concepts, display and hardware.

A good exhibit encourages visitors to test their physical and mental skills, to receive stimuli, to witness the unlikely happen and finally to respond to the what, why and how of a chosen topic. The science centres in India are not meant to be a passive depository of exhibits but are intended to help nurture a rational mind free of blind faith and superstition. The NCSM has already completed twenty-three hands-on science centres all over India and more are in the offing. The most important of them is the 60,000 m^2 Science City spread out on 20 hectares of land in Calcutta.

Museums in the past have been characterized by, and appreciated for, the richness of their collections. Today they are judged more and more frequently on the basis of their activities. The numerous programmes of science museums all over India do not claim to magically transform societies. However, they have very effectively helped to reach directly the public at large. The innovative methods of museum education call for interactive and participatory programmes to augment their popularity among visitors. Such efforts have produced a sustained energy to spread the zeal for knowledge and awareness in the active visitor's mind.

Note

Our thanks to Saroj Ghose, President of the International Council of Museums and a pioneer in the Indian science museum movement, for providing additional information and guidance for this article. – Ed.

The Holocaust museum concept

Terence Duffy

The Holocaust, grounded in the tragic experiences of the Jewish community, has acquired an increasing centrality among those opposing the worldwide derogation of human rights. Dr Terence Duffy, head of Peace Studies at the University of Ulster, argues that a new generation of Holocaust museums, primarily in the United States, challenges traditional thinking by placing the concept in the van of global human rights concerns. In his view, this process entails a movement from 'Jewish possession' of the Holocaust story towards acceptance of the universality of the experience and its resonance for all who challenge human rights violations today.

In the past few years, inspired equally by the impact of Steven Spielberg's sensitive filmography and the serenity of wartime commemoration, the European Holocaust has become a truly 'popular' concept. The international media have transformed the Holocaust event so that its resonance for world society is universally understood. The suffering endured during the years 1933–45 has inspired research by all who oppose the abrogation of human values. Among museum curators, the increasing treatment of Holocaust materials alongside other human rights issues marks the transformation of the Holocaust concept in museum programming.

The European memory of the Holocaust is enshrined in the series of interpretative centres in the former concentration camps. One thinks, in particular, of Dachau, Buchenwald, Bergen-Belsen, Auschwitz-Birkenau, Natzweiler, Treblinka, Terezin, and also of the remnants of Jewish communities across Russia and Eastern Europe. The ruins of the crematoria and gas chambers constitute fragments of a physical heritage of suffering. In the same tradition is the Anne Frank Museum in Amsterdam, which explores the daily life of a Jewish family entrapped by the Nazi occupation. However, it is encouraging that this museum is increasingly concerned with contemporary intolerance, focusing on Europe's extreme right-wing political movements.

As museums, the former concentration camps offer a primarily descriptive approach to the Holocaust. The staff often include survivors, but visitors complain that nothing is said about the relevance of the camps to contemporary human rights. One hopes that with growing interest in tracing the Holocaust through the concentration camps of Europe, the connections between this horrific experience and the question of global human rights may be reinforced.

A lasting memorial and a tribute to the Diaspora

For the world Jewish community, Jerusalem's Yad Vashem commemorates the greatest tragedy in their history. It was felt that only Israel could discharge this historic task and in 1953 Yad Vashem was established to preserve the memory of 6 million Jews annihilated by Nazi Germany. At the museum entrance, the massive bas-relief by the Israeli artist Naftali Besem symbolizes Yad Vashem's preoccupations, for its panels depict the Holocaust juxtaposed against the Israeli homeland. Yad Vashem exhibits the artwork of victims and survivors while its Hall of Names records more than 3 million victims. The Wall of Remembrance and the Monument to the Victims of the Death Camps evoke Holocaust suffering. The help of Gentiles is acknowledged in the Avenue of the Righteous. Yad Vashem is a powerful symbol of the importance of the Holocaust in Jewish life and of its overwhelming centrality in Israel. The memorial staff organize the national day of remembrance conducted throughout Israel and among Diaspora communities across the world.

Yad Vashem represents the self-conscious perpetuation of the Holocaust memory in the psyche of the entire Jewish community. It offers a critique of the historical roots of anti-Semitism, and it seeks to transmit this information to future generations. The combination of commemoration, education and research makes it a unique institution. The impulses that it articulates are still the dominant ones in Jewish thinking about the Holocaust, and have substantially influenced the image of the Jewish community in the international world.

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© Alan Gilbert; courtesy of the United States Holocaust Memorial

Israel's Beth Hatefutsoth (Nahum Goldmann) Museum of the Jewish Diaspora opened in Tel Aviv in 1978. It is still the only museum devoted to the Jewish Diaspora and a radical departure from the accepted notion of a historical museum. Beth Hatefutsoth drastically alters the view of museums as custodians of authentic objects. The underlying principle of its permanent exhibition is 'reconstruction'. This approach evolved out of a realization that it was impossible adequately to assemble the physical heritage of the Diaspora. Instead, it sought a 'visual re-creation' using audiovisual and electronic techniques. The museum thus adopted a historiographic approach then unique among Jewish historical museums. All historical museums have a natural prejudice towards the national past and in Jewish museums the history of the Diaspora and Jewry is often described solely in terms of persecution and pogroms. The planners of Beit Hatefutsoth have sought to offer a balanced reconstruction of the Jewish past so that the Diaspora can also be viewed as a remarkable achievement.

The culture of Yad Vashem and the Museum of the Jewish Diaspora is echoed in Jewish museums across the world. It is subtly present in the impressive New York Jewish Museum on Manhattan's Fifth Avenue. Although this museum is a living history of Jewish traditions, its exhibition programming reflects Holocaust preoccupations, relying frequently on the curators of Yad Vashem. Indeed, the Holocaust is integral to Jewish life and therefore, *ipso facto*, it is a prime ingredient of Jewish museums. The key issue is how it is portrayed. Traditionally the tendency has been towards introspection, but many curators are experimenting with the Holocaust experience in the context of global suffering. Evidently, the New York museum is now embarking on this latter approach.

The three-storey Tower of Faces in the United States Holocaust Memorial Museum contains more than 1,300 photos taken in the 1920s and 1930s in the Lithuanian town of Ejszyski; nearly 90 per cent of the town's 3,000 inhabitants were killed in September 1941 by a Nazi death squad.

A concept metamorphosed

The first institution dedicated to the Holocaust to be built outside Israel is Detroit's Holocaust Memorial Center, which opened in 1984. Proposed some twenty years earlier by prominent Holocaust survivors, it reflects a mutual obligation to remember and learn from the tragedy. The Center not only documents the horrors of this period but highlights the rich history of the Jewish people. Nevertheless, the themes are primarily those of Yad Vashem. Its entrance diorama (representing the historical persecution of the Jews) echoes Yad Vashem's bas-reliefs, while the galleries are scale versions of the exhibitions in Jerusalem.

The founder of the Detroit Memorial Center, Rabbi Charles Rosenzveig, conceived the idea from a concern that the Holocaust was not fully recorded in documentary form in the United States. The United States Holocaust Memorial Museum, which opened in April 1993, is a more innovative product of such commitment. The US Holocaust Memorial Council was established in 1980 by a unanimous act of Congress and was mandated with the task of creating 'a living memorial to the six million Jews and millions of other victims of Nazi fanaticism who perished in the Holocaust'. These are key words, for the Holocaust Memorial Museum represents a significant departure from traditional views. This major national museum, occupying a prominent spot along Washington's 'museum mile', articulates a less introspective perspective on the Jewish tragedy.

The museum is centrally concerned with relating the Jewish experience to the persecution of other minority groups by the Nazi regime. Its permanent exhibition tells the story of state-sponsored genocide of Jews, Gypsies, Poles, homosexuals, the handicapped, Jehovah's Witnesses, politi-

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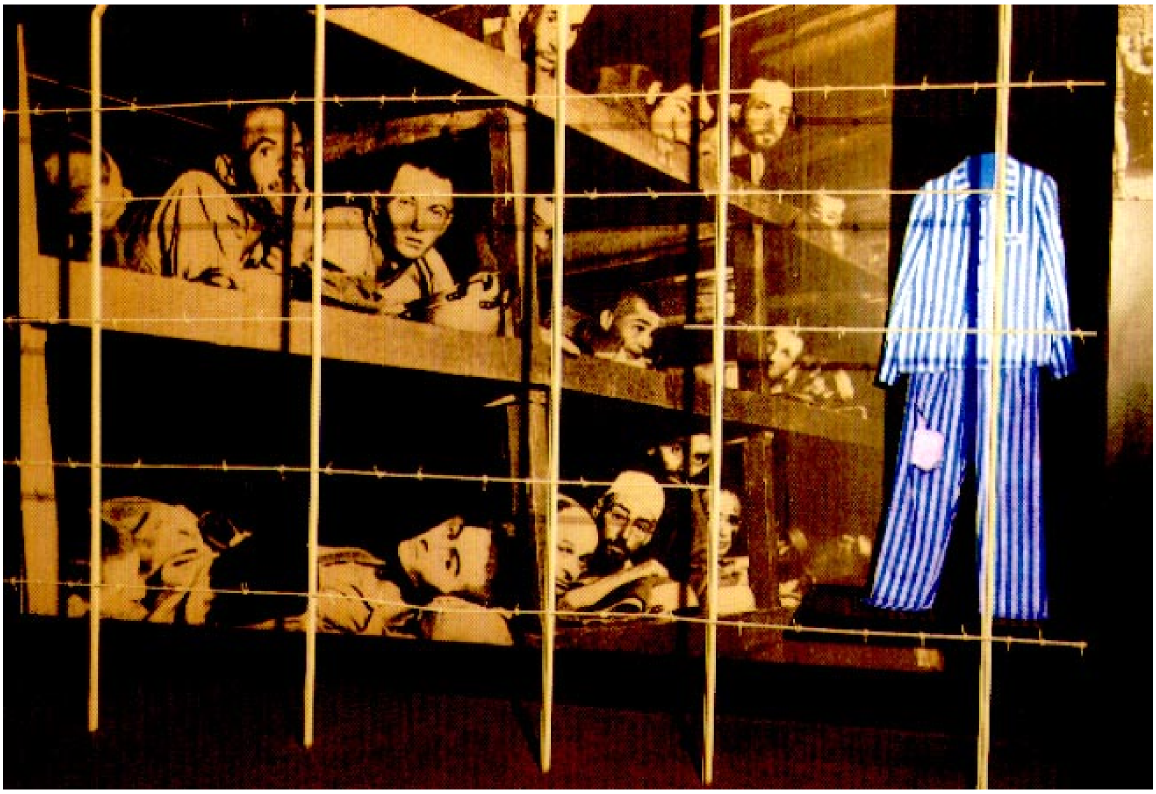
The Civil Rights Wall in the Beit Hashoah Museum of Tolerance in Los Angeles.


© Nathan Meron, Israel

In Buchenwald Concentration Camp after its liberation – a scene from Yad Vashem in Jerusalem.

cal and religious dissidents and other minorities. Although the central theme is the destruction of the European Jews, their tragic story is told through the broader lens of Nazi persecution. Visitors who enter this museum will learn that many groups, along with Jews, were systematically excluded from society in Nazi Germany. Whereas Yad Vashem is principally envisaged as a shrine, the Holocaust Memorial paints a broader tapestry. As its first director Jeshajahu Weinberg puts it: 'The Museum is not intended to be a Jewish museum … there were millions of other victims. Their stories will be told as well.'

Weinberg insists that the universality of the Holocaust is one of its important lessons and museum staff hope that visitors will respond. In April 1991 the Holocaust Memorial Council appealed to the President 'to stop the slaughter of the Kurdish minority by the Iraqi government'. In 1992 the Council wrote to the Acting Secretary of State protesting about German deportations of Gypsies, and issued a statement condemning the actions of the government of Serbia. In that year the museum was the site of a rally organized by Jewish organizations protesting about war atrocities in Bosnia-Herzegovina. The Holocaust Museum has been at the forefront in opposing oppression throughout the world.

The stress on transposing concern with the memories of the Holocaust into a broader platform of human rights issues is even more apparent in the Beit Hashoah Museum of Tolerance in Los Angeles. Dedicated in February 1993 to international acclaim, this World Center for Remembrance and Vigilance is part of the Simon

Wiesenthal Center. As President Clinton said at its inauguration: 'This internationally renowned human rights organization . . . has stood up to hatred and bigotry . . . that is embodied not only in the Holocaust but in the continuing problems we have today with racial and religious and ethnic bigotry.'

A similar view was expressed by the Director-General of UNESCO, Federico Mayor: 'I would have hoped that this museum recorded a past which was now closed and no longer of immediate relevance to the world we inhabit. This is not the case. Intolerance, narrow-mindedness, prejudice, bigotry, anti-Semitism and all forms of hatred persist here and around the world.'

The Director-General went on to characterize the new museum as a 'superb teaching tool, perhaps the most advanced research and educational facility in the world on all forms of intolerance . . . a fitting tribute to the life and work of Simon Wiesanthal'. For although Simon Wiesenthal spent a lifetime locating Nazi war criminals, the museum's strongest emphasis is on the achievement of international dialogue and peace. It conceives of tolerance in the broadest terms and attempts to move the Holocaust from a singular event to a worldwide concern with genocide prevention.

The museum is a hi-tech experiential centre which focuses on two primary themes – the dynamics of racism and prejudice in the United States, and the Holocaust. Its film programme covers genocide around the world and thereby seeks to emphasize the universality of human suffering. Through the latest in touch-screen technology and multimedia learning, this museum makes a poignant appeal for tolerance, nationally and internationally. It is not a museum preoccupied with the insularity of the Jewish experience, but with translating the horrors of the Holocaust so that they have resonance for the promotion of world tolerance today. As Wiesenthal himself puts it: 'I hope that visitors to the Museum of Tolerance will realize that to all they can see here, there is only one alternative: tolerance towards all mankind.'

The Holocaust museum concept of today is grounded equally in the tragic experience of the Jewish community and in the worldwide movement for human rights. The metamorphosis of the concept so that it has moved towards a fundamentally universal concern has marked a sea-change in thinking. With the Holocaust Memorial Museum, the Beit Hashoah Museum of Tolerance, and in the museums that will follow their example, the Holocaust experience has quickened the heart of the international community without losing any of its integrity in the unique culture of the Jewish world. ■

Note

Readers interested in exploring this topic further might wish to consult the following publications:

Yad Vashem: The Holocaust Martyrs' and Heroes' Remembrance Authority, Jerusalem, Yad Vashem, 1990.

M. Berenbaum, *The World We Must Know: The United States Holocaust Memorial Museum*, Boston, Little Brown, 1993.

Beit Hashoah Museum of Tolerance, Los Angeles, Simon Wiesenthal Center, 1994.

The Art of Memory: Holocaust Memorials in History, Munich/New York, Prestel-Verlag, The Jewish Museum, 1994.

Forum

Kenneth Hudson, Director of the European Museum of the Year Award and author of fifty-three books on museums, social and industrial history and social linguistics, continues to set out the major issues confronting museums today. We welcome reactions from our readers on the topics presented as well as suggestions for future themes.

Kenneth Hudson's viewpoint on: *the museum as a public forum*

A high proportion of the world's museums are cursed with buildings quite unsuitable for the tasks facing a modern museum. Until fifty years ago the average museum was considered to have three functions: to collect and conserve material which would otherwise not be available; to display some of this to the public and store the rest, and to carry out research which was more or less based on the museum's collections. It was a scholarly kind of place, where members of the public went to broaden their knowledge and in the process to obtain a special kind of enjoyment.

During the past twenty years an increasing number of people in every country have been showing signs of wanting to use museums in quite a different way as places where they can ask questions about the information they are given and where they can challenge the official view. To stimulate discussion, rather than to provide information, has become the principal task of the museum.

One reason for this change of function is that opportunities for the interchange of ideas on important public issues and on new technical and scientific ideas are extremely limited. In many cases, museums have the field to themselves but, with rare exceptions, they have neither the money nor the staff to take advantage of the situation. Their buildings, too, present difficulties. The architecture does not easily lend itself to debate and adaptation is difficult and expensive. However, new types of museum are now being designed to meet the needs of what is being called the Questioning Age. IMPULS, the new National Museum of Science now under construction in Amsterdam, is a leading example of this trend. It will be characterized by an exceptionally large number of comfortable chairs and by careful attention to cafés and restaurants. Tomorrow's public forums will take place sitting down in small groups in museums.

Dr J. Patrick Greene, Director of the Museum of Science and Industry in Manchester, and President of ICOM's International Committee for Science and Technology Museums, comments:

Museums certainly do have the potential to become forums for public debate, and encouraging starts have been made. Science museums, natural history museums and some progressive art galleries are increasingly presenting contemporary issues to their visitors. Social history and archaeology museums have been slower off the mark. Museums have three clear advantages over other forums: popular museums can reach a very broad public; museums are generally seen to be authoritative and dispassionate sources of information, and museums can provide a historical dimension which can assist understanding and encourage a better perspective.

There are also three challenges that I can identify: Can museums respond quickly enough to facilitate topical (i.e. in today's newspapers) discussion and debate? As reliance on sponsorship increases, will museums be perceived as less independent sources? At a time of

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restricted budgets and reductions in staff numbers, how can museums organize their resources to make the most of the opportunities to stimulate debate?

Michael M. Mbago, Director General of the National Museums of Tanzania, comments:

Kenneth Hudson suggests that museums should have flexibility in order to meet changing public needs. He would like to see the traditional functions of museums maintained while at the same time advising museums with enough facilities and trained staff to satisfy visitors' needs, which are identified as opportunities for the exchange of ideas.

In fact, Tanzanian museums have carried out the three traditional functions cited by Kenneth Hudson, but they have also tried to expand their activities in the suggested direction. Some evidence of this exists in our Village Museum, where small huts have been allowed to co-exist for leisure purposes, for example, as drinking places where people can discuss various issues. Also, in the Dar es Salaam Museum a canteen has been sanctioned to operate, offering workers a chance to mix with outsiders and share views on different topics of mutual interest. None the less, as Kenneth Hudson correctly observes, lack of money and well-trained staff pose a big problem for proper analysis of changing trends in order to initiate appropriate plans for exploiting existing opportunities.

Lastly, I am optimistic that Amsterdam's IMPULS and similar efforts to meet the needs of the so-called Questioning Age will offer experience to countries like the United Republic of Tanzania which also need to add something to the traditional functions of a museum.

Readers are invited to address their comments (which should be no longer than three paragraphs) to: Editor-in-Chief, Museum International, UNESCO, 7 place de Fontenoy, 75352 Paris 07 SP (France), Fax (33.1) 45.68.55.91, referring to Forum on the Museum as a Public Forum.

Books

Interpreting Objects and Collections, Edited by Susan M. Pearce (London/ New York, Routledge, 1994, 343 pp.)

Now that Professor Susan M. Pearce of the Programme on Museum Studies, Leicester, United Kingdom, has published *Interpreting Objects and Collections*, it can be seen how very useful it is to gather together a series of articles acknowledged as fundamental in museology with the aim of shedding more light on the meaning of objects and the nature of collecting, from the specific point of view of interpretation. *Interpreting Objects and Collections* was published as one of six in the Leicester Readers in Museum Studies series. Divided into two main parts, 'Interpreting Objects' and 'Interpreting Collections', these thirty-eight papers by some thirty different writers carry out a wide-ranging review which every student and professor of museology will now have to take into account. The list of contributors is impressive. Michael Ames, Edmund Leach, Christopher Tilley, Ian Hodder, Jules Prown and, of course, Susan M. Pearce, to name just a few, have written for the section dealing with objects, while in the section on collections, among the bevy of experts, we find Krzysztof Pomian, Carol Duncan, Susan Stewart, Eva Schulz, Annamma Joy, Russell W. Belk and again Susan M. Pearce. In sixteen significant papers, these writers all take us into the fascinating universe of restricted budgets and reductions in staff numbers, how can museums organize their resources to make the most of the opportunities to stimulate debate?

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To return to the overall content of the book. In the first part, the aim is to see how it is possible to interpret the object of the past, the present and the future and to establish a clear line between a thing and an artefact. Initially, questions of method are dealt with, in which narratology, functionalism, structuralism and symbolism together make up a system of analysis. The culminating point of this theoretical review is the article by Christopher Tilley entitled 'Interpreting Material Culture', in which the French school of post-structuralism is widely cited for obvious reasons bound up with its all-embracing approach. In addition, notions of value are necessarily discussed so as to mark the often thin boundary between commercial and political areas. An appraisal is made of the treatment of the exotic object in our societies and how the 'other' sees himself or herself in relation to the appropriation that is made of his/her heritage recognized as indigenous. Three models of analysis and interpretation are then proposed; firstly, one which is based on the historical perspective; secondly, that of Professor Pearce, 'Thinking about Things', which increasingly stands out because of its strong archaeological foundation; and thirdly, the more subjective approach of Prown, 'Mind in Matter', which tries to unveil the soul of things. Part 1 ends with an interview questionnaire which re-establishes the sense that familiar objects take on over three generations by offering, in addition, a way of classifying them in a socio-economic perspective.

In the second part, collecting is discussed as a particular cultural form which lends itself rather well to a variety of critical approaches. First of all, Pearce, Pomian and Schulz establish, each in their own way, the origins of this social phenomenon and take a highly illuminating look at the cultural fact specific to Western societies and found here and there across time and even space. The psychological dimension is also explored in depth when attempting to determine whether the practice of collecting is gender-specific or even if the desire for an object does not ultimately mean the opposite, that is, fear of its fetish aspects. Further on, an attempt is made to go into the anthropology and ethnology of the process of collecting, enabling us to arrive at a better understanding of human behaviour, a field that more often than not has to do with social ritual. Of course, the economic and political aspects also lead on to some powerful theoretical propositions linked to the concept of a lasting heritage while elsewhere popular culture is seen and understood through action in the popular context that directly conflicts with the notion of erudite culture. The report of a sociological survey also describes the situation of contemporary collecting and, as a result, reveals an attitude necessarily linked to consumerism. In conclusion, Ruth Formanek looks into the deep motivations of collectors with the help of psychoanalysis, which notes that, beyond the construction of a personal identity, the regular collector shows a certain addiction, not to say a profound dependence.

This is a series of significant papers which now cannot be ignored, given the vastness of the field covered by viewpoints that are as varied as they are original. Wider circulation of 'reader'-type publications – which are somewhat unusual in the French-language publishing world – would be more beneficial than the authoritarian imposition of anthologies that are often likely to age badly. We should mention in passing the other excellent publication in English, written along the same lines, *The Cultures of Collecting* (312 pp.), published by Reaktion Books in 1994 and edited by John Elsner and Roger Cardinal, who managed to bring together a wholly different but equally distinguished group of writers. For her part, in addition to gathering together articles that are remarkable for their substance, Professor Pearce thought it a good idea for each one to be preceded by an abstract, which plays the part of the compendium to which one regularly refers in scientific works. Perhaps the absence from this publication of French-language writers and others whose mother-tongue is not English somewhat weakens the quality overall, but it must be remembered – and this publication attests to this – that the most active museological discussion, in the sense of the unfolding and development of new ideas, takes place above all in English whether we like it or not. We are looking forward to the rest of this series of 'Readers', as museology extends into the fields of education, administration and, most recently, space exploration as a determinedly interdisciplinary field of knowledge.

Book reviewed by Philippe Dubé, Professor and Director of the Graduate Programme in Museology, Laval University, Quebec, Canada.

Professional news

New publications

Mercator's World and *Biblio* are two new specialized periodicals launched by Aster Publishing, Grosvenor House, Central Park, Telford, Shropshire TF2 9TW (United Kingdom).

Mercator's World is intended for map collectors around the world, reflecting the interest of serious students and archivists. It features illustrations of fine reproductions from the great collections and explains both modern electronic mapping techniques and the spectacular voyages of early explorers, providing guidance on building collections of maps, atlases, globes and surveying and position fixing instruments. *Biblio*, for both novice and experienced book and manuscript collectors, features authoritative articles on all aspects of managing a collection, as well as on printing and binding techniques, the materials and artistry used in etching, wood cuts, typesetting, and the ways in which the printed word has been disseminated throughout the centuries.

Muzeum, Vol. 2, 1995. Published by the Slovak National Museum Museological Information Centre, Vajanského nabr. 2, 81436 Bratislava (Slovakia).

This special issue devoted to museums in Central Europe features articles from Austria, the Czech Republic, Germany, Hungary, Poland, Slovakia and Slovenia, and highlights such diverse subjects as the Centre of Japanese Art and Technology in Kraków, the transformation of the National Technical Museum in Prague, and the Roman Lapidarium in Komarno, Slovakia. Articles are written in English or German, with summaries in the other language.

The Journal of Conservation and Museum Studies. Published on-line under the auspices of the Department of Conservation and Museum Studies, are original. Wider circulation of 'reader'-type publications – which are somewhat unusual in the French-language publishing world – would be more beneficial than the authoritarian imposition of anthologies that are often likely to age badly. We should mention in passing the other excellent publication in English, written along the same lines, *The Cultures of Collecting* (312 pp.), published by Reaktion Books in 1994 and edited by John Elsner and Roger Cardinal, who managed to bring together a wholly different but equally distinguished group of writers. For her part, in addition to gathering together articles that are remarkable for their substance, Professor Pearce thought it a good idea for each one to be preceded by an abstract, which plays the part of the compendium to which one regularly refers in scientific works. Perhaps the absence from this publication of French-language writers and others whose mother-tongue is not English somewhat weakens the quality overall, but it must be remembered – and this publication attests to this – that the most active museological discussion, in the sense of the unfolding and development of new ideas, takes place above all in English whether we like it or not. We are looking forward to the rest of this series of 'Readers', as museology extends into the fields of education, administration and, most recently, space exploration as a determinedly interdisciplinary field of knowledge.

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The Journal of Conservation and Museum Studies. Published on-line under the auspices of the Department of Conservation and Museum Studies, Institute of Archaeology, University College London: http://www.ucl.ac.uk/archaeology/conservation/jcms/. Created to serve as an academic World Wide Web publication to disseminate information to the global conservation and museum communities, it contains papers and articles resulting from the research undertaken by conservation and museum studies students from around the world. It incorporates images, tables and graphs. First issued in May 1996, it will continue publication on a twice yearly basis.

Museums: A Place to Work – Planning Museum Careers. By Jane R. Glaser with Artemis A. Zenetou. Published by Routledge, New York, 1996, 320 pp. (ISBN 0-415-12256-2, clothbound; ISBN 0-415-12724-6, paperback.)

A guide to museum practices, professional positions and job-hunting, this book is designed to aid both the uninitiated and the practising professional. It covers such topics as the importance of ethics and professionalism, legal concerns, descriptions and requirements of thirty professional positions, staff/volunteer relations, and training and preparation; it also features interviews with noted museum professionals. Jane R. Glaser is Special Assistant and Artemis A. Zenetou is Museum Associate, both at the Smithsonian Institution.

The Dictionary of Art. Edited by Jane Turner. Published by Macmillan Publishers Ltd, 4 Little Essex Street, London WC2R 3LF (United Kingdom), 1996, 34 volumes, 32,600 pp. (ISBN 1-884446-00-0.)

The most complete reference work ever published in the field of art, this thirty-four-volume work integrates into a single publication all forms of visual art from the beginning of human history to the present. Reflecting unprecedented international co-operation, it is the result of fourteen years of effort by 6,700 scholars from 120 countries. With 41,000 articles and 15,000 illustrations, it presents new approaches in scholarship by examining works of art within the social, cultural, historical and economic context in which they were created, making available in English for the first time the work of many major art historians. Organized in alphabetical order, it boasts an index containing 670,000 entries to further facilitate consultation.

Letters

On behalf of the Professional Association of Museologists of Spain (APEME), I should like to thank *Museum International* for providing this opportunity of taking part in the debate, sparked off by Aurora León's open letter, on the situation of museology and museologists in our country (*Museum International*, No. 184, 1994). Since the very existence of this association bears witness to a reality other than that described by the writer of the letter, I think it would be better to begin by introducing the association rather than taking up specific issues.

APEME has been in existence since 1994, but it meets a need that is widely felt by a large number of museum professionals who are aware of the necessity of reconciling the emerging specialization of the various museum services (research, documentation, conservation-restoration and communication) with the existence of a common language.

The museologist, as this association sees it, is a professional who is well versed in general museum theory, the procedures involved in each of its functions and their practical application, and who – at

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The museologist, as this association sees it, is a professional who is well versed in general museum theory, the procedures involved in each of its functions and their practical application, and who – at the same time shares certain standards and attitudes deriving from an understanding of the symbolic and social value of the museum's collections. Accordingly the association's aim is to bring its influence to bear on the definition and recognition of the professional profile in the various museum specializations, on academic programmes and further training courses and on the qualifications applicable to the selection of personnel.

The association acts as a forum for debate, collective thinking and exchange of information with a view to combining efforts, establishing common standards and defending the profession. This very process will help to update and develop the theoretical and technical contents of museology as the fundamental discipline for all museum professionals. The publication of these contents is one of the objectives we envisage to make good the lack of reference works deplored by Aurora León, on which we are in general agreement.

Lastly, I think I should point out that admission to membership of the association is open to applicants who hold a higher university degree and are gainfully employed in any branch of museum work. At the decision of the board of directors, membership has been granted, as an exceptional measure, to persons who did not meet the latter requirement but who furnished proof of former training or professional activity in the field. Our large membership suggests that the concept of the curator (basically a scientific expert) as the sole museum professional in charge of all activities has been superseded and replaced by that of the professional with expert knowledge of both theoretical and practical museum work and a share in responsibility for its functioning.

In connection with the foregoing, the association organized its first Seminar on Museology in April 1995, on 'The Training and Selection of Museum Professionals'. The proceedings are to be published shortly as the first issue of the review *Museo: Revista de la Asociación Profesional de Museólogos de España*. The next seminar was held in June 1996, and further seminars on mainly technical subjects will be organized periodically. In addition, the first National Congress on Museology is being prepared for 1997.

The association welcomes contributions from all its members since it considers that one of its main tasks is to promote and give wider currency to the work they are doing for the good of the profession. Further information about our objectives and the statutes may be obtained from the association's headquarters at: C/Alfonso XII, 28014 Madrid.

Angela García Blanco
President of APEME

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Correspondence
Questions concerning editorial matters:
The Editor, *Museum International*,
UNESCO, 7 place de Fontenoy,
75352 Paris 07 SP (France).
Tel: (33.1) 45.68.43.39
Fax: (33.1) 45.68.55.91

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