Organizing exhibition space
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Almost nothing displayed in museums was made to be seen in them. Museums provide an experience of most of the world's art and artefacts that does not bear even the remotest resemblance to what their makers intended.

And here in a nutshell lies the challenge facing museums in planning both permanent and temporary exhibitions. For although a strict dictionary definition of the word 'exhibition' tells us merely that it is 'showing' or 'display', museums recognize that exhibitions have the further purpose of bringing object and visitor together in a meaningful fashion. Among the broad range of activities now offered, the exhibition is still the motor that runs the museum, and the object remains the cornerstone of the exhibition. Exhibition style can bridge the gap between modern scholarship and public knowledge so as to ensure that museum materials illuminate concepts and insights. In a sense, the very history of museums is the history of how various forms of exhibition installation have changed our perception of what we see. The act of selecting an object and juxtaposing it with others is far from random, carrying with it deeper implications that affect the viewer in a variety of ways.

The past few years have witnessed significant changes in exhibition conception and presentation. The scientific, practical and aesthetic considerations governing the arrangement of items now demand the sharply honed skills of the professional designer, and the role of the curator has come to encompass not only traditional high standards of scholarship but the ability to innovate with regard to exhibition themes and messages. The environment of the exhibition is ever more sensory, encouraging the visitor not only to look and move but to touch, hear, smell and even taste. Frequently designed as sculpture, exhibitions often stand on their own as works of art, exemplifying skilful selection and inspired arrangement in order to convey complex notions and achieve a desired effect. In the words of Michael Belcher of Leicester University, they are conceived as 'three-dimensional compositions which recognize the importance of solids and voids and strive for satisfactory spatial relationships'. At their best, they convey the designer's intention with originality and creativity. In the final analysis, as Belcher points out, they may be considered for their own worth as well as for the worth of the story they have to tell, thus reflecting Marshall McLuhan's famous truism that 'the medium is the message'.

To explore these questions in depth, Museum International turned to Philippe Dubé, Professor and Director of the Graduate Programme in Museology at Laval University in Quebec. He was truly the guiding spirit behind this issue's thematic dossier and we are most grateful for his expertise, insight and unfailing good humour.

M.L.

Notes


Exhibiting to see, exhibiting to know
Philippe Dubé

It is now acknowledged in the field of museology that the exhibition medium is the best means that museums have of both displaying their collections to good effect and transmitting their knowledge. A special issue concerning the utilization of museum space is thus indispensable for professionals who increasingly feel the need to take stock of a question which is in fact at the very heart of museum practice. Philippe Dubé responded most spontaneously to the invitation to bring together a number of specialists who have looked at very different aspects of the mode of communication we otherwise call the exhibition.

It should, first of all, be clearly stated that the language of objects has always been the most prominent medium used by museums. Since very early on, the spatial disposition of the collections which were to be displayed for the benefit of visitors proved to be the most fitting means of transmitting knowledge by providing a simple and direct reading of a given subject or related themes, using material witnesses. Over the past few decades, museologists have been reflecting on this cultural trait which is peculiar to museums, and trying to gauge its theoretical significance. A quick assessment of the ideas prevailing in this vast field of study would lead us to the fairly safe conclusion that, in the final analysis, exhibition signifies presence, presentation and representation.

By presence, we mean the bringing together within a given space of a set of material objects for the greater benefit of the visitor/viewer. This statement implies that we readily recognize the power of the basic materials, namely the objects, being exhibited which impose their own logic in any process of display. This is what Pnina Rosenberg and Susan Pearce explore through very diversified themes which, none the less, have the advantage of throwing light on the expressive qualities of materials which are often perceived as being inert. The objective is thus to see how the elements concerned interact and, once brought together, form a harmonious and, indeed, very expressive whole, creating an impact which is both visual and intellectual.

This assemblage can then be organized in such a way as to expose to view, by means of a presentation aimed either at study or pleasure, a very striking overall arrangement. In point of fact, it should be understood that exhibition enjoys its own idioms, and a greater mastery of the latter's numerous codes could enable us to show greater command of the art of exhibition. Mohan L. Nigam and Frank den Oudsten deal with these aspects, each in their own way, either by purposely creating a context or by stage management. Here, one is free to use any means whatsoever for museum presentation, not merely a rudimentary or banal display but, rather, a spatial organization which aims and knows how to communicate.

This being said, the act of exposing to view encompasses many techniques which not only fashion the spatial dimension of an exhibition but also add to the existing store of knowledge. Thus, John C. Stickler and Michael Stocker inform us of novel exploratory modes which by their very nature bring the exhibition medium up to date and, at the same time, form part of the desire better to communicate. To ensure this latter quality, which is increasingly required of the medium, Jane H. Becno takes stock of a constantly changing profession which has to adapt to an ever-shifting context.

Lastly, we now know that exhibition also means representation, given that the objects brought together deal with subjects which, in the end, reveal the intangible aspects of the assembled whole. We discover thanks to Raymond Monpetit who delves into the capricious pathways of the world of signs as concerns both transmitters and receivers. His overview was necessary in order to appreciate the full potential of the vehicle of knowledge that the exhibition has always been.

Such are the avenues which will be explored in this thematic issue in order better to understand, in all its complexity, the functioning of this museum medium par excellence. The exhibition is created sometimes at great expense and at others with limited means, for better or for worse, and may or may not be to the liking of the visitor. As we shall see, a variety of disciplines are behind the reflection which
began only a few years ago, and a review of these numerous aspects was a prerequisite for a full understanding of the scope of all its different dimensions.

Towards a history of display

A close inspection of the exhibition medium in its present form reveals that it has come at the end of a long evolutionary road taken by museums. On even closer scrutiny, one quickly realizes that present-day museography is based on a heritage which is made up of several historical sequences. Where exhibition relating to the natural sciences, for example, is concerned, the initial picture one perceives is of three major periods which bear witness to as many modes of exhibition.

The first period saw the rule of the showcase which almost exclusively concerned the *in vitro* methods by which collections of curios functioned as an irreducible archetype of this mode of presentation. Next, the quest for the authentic and the taste for a more direct and genuine contact with exhibits led to the specimen being shown alive in keeping with *in vivo* principles, whilst the enclosure, the case, provides a setting for and protects the object, namely the animal, to be observed. Lastly, this great interest in living things inevitably led us to go to original sites where, by what is termed an *in situ* approach, the natural habitat becomes the best place and setting for the visitor to meet the object he or she wants to see.

This historical picture of modes of exhibiting nature shows a sequential — but non-linear — progression through time. During the past few centuries, each period — *in vitro*, *in vivo*, *in situ* — has been the expression not only of new imperatives of presentation but, also, of significant changes in the field of knowledge, the evolution of which, as we are aware, is governed by the pace of scientific discoveries. Science, with its rigorous approach based on empirical inquiry, thus came to exercise great influence on modes of museum exhibition because of its constantly renewed approach to the matter being studied. All of which implies that, to some extent, the cognitive experience governs its mode of presentation and that to establish the history of museography one must look at the whole spectrum of the sciences which constantly foreshadow its renewal, if not its actual replacement.

Such a line of reasoning affords general interest because when one comes to realize that the different modes of exhibition are governed by modes of thought, the study of the way museum space is used becomes an almost philosophical exercise in which thought patterns, through time, underlie new modes of exhibition. In this way, seeing and knowing are, in the end, closely interwoven and the detailed examination of one necessarily tells us about the other.

This invitation to take a retrospective look should not, however, lead us to neglect taking a prospective one as well, as the future holds in store surprising discoveries as far as museography is concerned. This is so not only because of the emergence of new technologies and their use as hypermedia, but more so because of a genuine advance which has taken place in the field of knowledge which will result in a new approach to matter and a new apprehension of the world. We should no longer explain ways of seeing things without explicitly referring to knowledge. This is now an obvious fact which a critical eye can no longer ignore, seeing nothing because of lack of knowledge. Lastly, may this issue provide enlightenment about the museum's most prominent means of communication and thus assist it to establish a more fruitful relationship with the visiting public.
A question of time and space

Pnina Rosenberg

The way in which a work is displayed influences our perception of it and our reactions to it. Pnina Rosenberg explains how the 'language' of an exhibit is the result of its environmental context. The author was for fourteen years curator at the Museum of Japanese Art in Haifa (Israel) and is currently curator at the National Maritime Museum in Haifa. She has written extensively on Japanese art and is now doing doctoral research on the subject of art in the Holocaust.

Visitors to the two oval rooms at the Musée de l'Orangerie in Paris, which are dedicated to Claude Monet's *Nymphéas*, find themselves in the middle of a man-made paradise. They are surrounded by the huge paintings which re-create the artist's famous garden at Giverny. Not only are the paintings masterpieces which leave a deep impression on the beholder, but their mountings and very special environment are the fruit of the artist's initiation and conception. When Monet donated the canvases to France, he repeatedly insisted on where and how his works should be displayed. After many years of negotiations, the Orangerie was chosen as the appropriate place for his works of art, and the two oval rooms were constructed especially for them. Eventually, these rooms have become a reflection of Monet's garden, which in turn was designed by the artist himself to be a source of inspiration for his many series of *Water-lilies*.1

The story of Monet's *Nymphéas* exhibition place is mentioned here to emphasize the importance of a suitable location for museological displays. Until the twentieth century, most museums were not originally designated for this purpose. Some of them, for example public buildings such as palaces, were transformed to accommodate exhibits which were scattered about in a given space. Being a sensitive artist, Monet was very much aware of the importance of the spatial organization of the exhibits, and his approach serves as an example to museum curators, designers, architects and all those who deal with preparation and mounting of exhibitions.

Museologists know that viewing an exhibition is at least a dual process – visual perception and duration; the items on display are always viewed through the visitor's eye and are grasped during a certain time period. Two-dimensional small art objects might be perceived in a relatively short time, whereas a complex three-dimensional *œuvre* inevitably requires more time. This is of course a rough generalization, to demonstrate the complexity of the matter.

Intending to mount an exhibition, a curator takes into consideration various components, one of which is the spatial organization of the items. If the exhibits are of a 'conservative' character, to be viewed from a certain distance, this conception will change whenever the public is asked to be more actively involved, to surround, touch and manipulate the objects.

This categorization is slightly arbitrary because in fact an exhibition depends not only on its components but also on its special and immediate environment. If the exhibition takes place in an established institution, a museum or a gallery, the environment itself already has an implied impact, and communicates in a certain code deriving from its surroundings. This will not be the case if the exhibits are displayed outside of what is supposed to be their conventional establishment. Japanese art treasures, for example, when exhibited in a native shrine will deliver quite a different message than if they are on display in a flashy gallery abroad or even in a museum of Oriental art outside Japan. Hence, the language of the exhibition depends on the environmental context of its display. The desired exhibition hall implies various consequences that necessarily influence the dialogue with the public. These are not the only factors that the curator has to take into account. Other factors include selection of the objects, the potential public, their behaviour and reaction, and clear and easy access to the display.

Let us return to the two oval rooms of the Orangerie. Entering Monet's exhibition, the visitor leaves behind a busy and modern city and finds himself in a calm and

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A question of time and space

meditative environment. The drastic transition is rather like finding a refuge from the daily burden in these huge blue-violet-green-white canvases that envelop the visitor immediately and transform his mood in a way that corresponds to that of the Nymphéas. The visitor can approach them closely and look at the minute details of the fresco-like painting or else he is invited to sit on the benches, which are situated in the middle of each room, and to grasp the various compositions as a unique whole. Each way is complementary to the other. Although these exhibition rooms were inaugurated over half a century ago (1927), the display is still impressive. Once an exhibit is based on a good and sensitive conception, it does not lose its 'touch', even after several decades.

'Hands-on exhibits'

If Monet's exhibition could be categorized as a 'do-not-touch' one, there are also displays of a 'touch me' character, most of them focused on technological and scientific processes and achievements. These exhibitions require another kind of setting. Their goal is to enable visitors to walk through the exhibits, to operate them and to be a full participant. Although both kinds of exhibition intend to grant complete absorption, they differ in their level of consciousness; while the first one is of a more spiritual and meditative character, the other one is more sensuous, and the 'reward' is more immediate.

The Natural History Museum in London and other similar institutions throughout the world create another, more active and busy, kind of environment. The Israel National Museum of Science, Daniel and Matilde Recanati Center in Haifa, is a good example of creating such an atmosphere. The travelling exhibition *Art from the Exploratorium* (San Francisco), which was hosted here displayed natural phenomena as employed by various artists in their works. It illustrated, for instance, the phenomenon of the tornado in an artistic mode that became an art object in itself. The exhibit was situated in a huge room, which enhanced the very striking impression of the natural force. It gave the spectator both an artistic experience and a better understanding of the universe in which we live. The ‘installation’ was centred in a very large room in which the indoor objects transformed the urban space into an extension of Nature. It is interesting to note that the exhibition space had not originally been designated to serve as a museum. It

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I have based my discussion on two extreme examples. Actually, most exhibitions are something in between: art objects are hung on walls and displayed in or out of showcases in the free space of a given building. There is a third category, the 'open-air' museum, whose spatial organization generates other problems: the immediate surroundings in nature should correspond to its features yet not be 'swallowed' by it. The curator who organizes such a display basically confronts many of the problems mentioned above. He also needs to be attentive to the delicate relationship between the objects themselves and the public.

Originally a museum was meant to be a place for the Muses. I believe they have to inspire us as well as our know-how and experience when we museologists intend to mount an exhibition that should serve in several capacities and be *dulce et utile*.

Discussing these two kinds of museums, I have pointed out that their spatial organization is quite different. In the first category, when the objects are hung on walls, the space is almost vacant, and the spectator fills it by moving from item to item, whereas in the other type of exhibition the space is 'populated' both by the objects and the public. Hence, it is the task of the curator/designer to see that the objects (sculptures, installations, etc.), flow in harmony with their surroundings and the spectators, and do not function as obstacles or barriers.

Notes

Structuring the past: exhibiting archaeology
Susan Pearce

An exhibition is in itself an object fraught with cultural meaning and embodying a series of choices and re-interpretations that have as much to do with the mind of the designer as with the artefacts on display. These choices are not haphazard, but obey an inner logic, which is explained by Susan Pearce, Professor of Material Culture at the University of Leicester and President of the Museums Association of Great Britain. She is also the author of such publications as Archaeological Curatorship (1990), Museum Studies in Material Culture (1992) and Museum Objects and Collections (1992), and Editor of the journal New Research in Museum Studies.

In recent years archaeologists have come to recognize their obligations to the public, and archaeological exhibitions are an obvious way in which this debt can be discharged. In general terms, archaeological exhibitions are very popular with the public, who appreciate seeing the results of recent work and enjoy seeing the past unfold before their eyes. But herein lies a range of problematic issues. Whose past is being shown? How is it being interpreted? How are objects selected for display? And, how does the layout of the past within the gallery influence how we understand it?

These issues can be presented in a number of ways. A substantial body of post-war thinking, which is aimed at elucidating the nature of communication and of our use of signs and symbols in the broadest sense, is very relevant and helpful here, because writers like de Saussure and Barthes (to name only two very influential thinkers) can give us what hitherto we have lacked, that is, a range of fundamental theory about the nature of objects and texts as communication systems, through which the discussion of exhibitions can be articulated. In semiotic terms, exhibitions are clearly a 'language' system of their own, albeit a complex one, which combines objects of all kinds, label texts, graphics, hardware-like cases and agents like lighting, all put together in a specific form. The subject is a large (and fascinating) one, but a taster is offered here of some of the ways in which this analysis might work.

Saussure's original distinctions can be applied very fruitfully to the material culture of the past, interpreted in its widest sense to include structures, environmental samples, and so on, and its subsequent life in a museum collection and exhibition. He showed that each society 'chooses' from the large, though limited, range of possibilities, the forms which its communication systems, like language, accepted 'knowledge', kinship, food, and objects will take. This communication material must, however, be structured according to the society's rules of use in order to be intelligible and useful, so that language is a combination of vocabulary and grammar, food of raw foodstuffs and prepared meals, knowledge of information and interpretation, material culture of objects and their use categories. This structured body Saussure called a society's langue. Each actual event, each spoken or written sentence, each meal, each object put to its own use, is drawn from the langue. Saussure called this usage parole. Any analysis of any sequence of events, or of any society, depends upon analysis of parole, since this is all that is available to us. Our efforts to understand the 'real' structure of an event, or a human group, are bound to be inferences drawn from collected parole, which may enable us to come to a view about the nature of the langue.

So if, for example, we apply this kind of analysis to the lower Egyptian Gallery at the British Museum, with its giant sculptures featuring a head and separate arm from a figure originally intended to represent Amenophis III, we arrive at a number of ideas concerning the relationship between the object and its presence and exhibition in the museum. The range of choices available to ancient Egyptian society included the raw material suitable for creating large sculptures, and the ability to direct workers towards the skills necessary to produce such works. In the langue of this society, the local rules — that is a desire to glorify the Pharaoh in imperishable stone — worked with the available technology to give us, in the parole, the actual sculptures as these were originally created and erected, together with all the other material culture which ancient Egypt created.
A selection of these works has survived to become part of our past, and as such they enter the contemporary langue of the modern world. Here the past is worked upon in the light of contemporary notions about the theory and practices of archaeology, which are themselves drawn from the range of theories and practices available in the current intellectual scene. What emerges is an ancient society, as it is represented in the ‘museum archive’. This archive is the result of a complex interweaving of chance, opportunity, selective excavation, selective dealing on the art and antiquities market, the different interests of scholars, and so on.

This main archive then itself becomes active in a fresh version of the langue of the museum. Here again it is worked on in the light of current museum theory and practice concerning exhibitions, which is itself, of course, drawn from general current theory and practice. The end result of this complicated sequence of events is the ancient society as it is represented in the archaeological exhibition. In the case of the Egyptian gallery, the result of this is to concentrate attention upon one aspect of Egyptian culture, that surrounding the monumental representation of the Pharaoh. We can see that the whole process embodies a series of re-interpretations in which the actual material is party to a range of potential representations.

**Creation and re-creation of meaning**

All this is of crucial significance. The continual creation and re-creation of meaning, by which existing signs and symbols go towards the making of new ones appears to be a fundamental aspect of the way in which humans understand the world and come to terms with their place in it. It is an important part of the imaginative process by which we make sense of our common past and our present activity, and within this museums and their exhibitions play a significant role. It follows that every exhibition is a communication event in its own right, a medium that embraces many different media but in which the whole is richer than the sum of its parts. It is a specific work of culture, a synthesis whose content may be analysed at a number of levels and from a range of standpoints.

Each exhibition is a production, like a theatrical production, and, like a play, it is a specific work of culture with game rules of its own. The seeming obviousness of these points – their apparent naturalness –
should not blind us either to their importance or to their historical particularity as an aspect of traditional modern Western culture. Exhibitions make their statements through their own formal conventions, and these comprise primarily the enclosed space of the gallery. The gallery will have specific dimensions of length, width and ceiling height, and possibly of window positions and sizes if any natural light is permitted. It must have at least one doorway as entrance and exit point. Within this space are the three-dimensional installations which range in complexity from the hanging of modern pictures directly on to four white walls, to the complex display units required to house an exhibition like *Archaeology in Britain*, an important temporary exhibition mounted at the British Museum in 1987. Associated with these installations are the objects themselves, and a range of lights, plinths and two-dimensional graphics including labels.

The nature of museum exhibition, then, comprises an enclosed indoor space, divided into units by display casing which tends, the nature of a room being what it is, to cling to the four walls and to cut up the central space into various shapes. This casing transmits the objects and other display pieces through glass, and does so in vague relationship to the size and scope of the human body. A certain amount, sometimes a considerable amount, of influence can be brought to bear upon the viewer by choosing paint and fabric colour, and above all lighting, which maximize or minimize the impact of all these features, and direct the viewer’s attention.

The way in which the installations are organized within the space, what we may call exhibition morphology, and the implications of this have been the subject of study at the Royal Ontario Museum in Canada and the Bartlet School of Architecture and Planning, London University. Work in Ontario has shown that, since most people take the shortest route between two points, the floor plan of an exhibit has a crucial influence on how much of it most people will see. With this plot in mind, it is possible to create an exhibition plan which links information hierarchy and visitor flow. The conclusions of Peponis and Hesdin at the Bartlet School are more fundamental, and show how the relationship between spaces in a gallery crucially affects the ways in which knowledge is generated, and the kind of knowledge that it is. Three relational properties can be isolated. The first concerns the relative separation of spaces between one display unit and another; this is defined as depth, and the aggregate of space separation shows that some exhibitions are deeper than others. The second concerns the provision of alternative ways of going from one space to another, that is the number of rings in the plan. The final property bears on the ease with which the viewer comprehends the structural planning of the gallery; this property is known as entropy, and the more entropic a gallery is, the less it is structured.

The social connotations of this morphological analysis are important, because the whole process crystallizes what many curators and visitors feel in an intuitive way when they walk round a gallery. To put it rather crudely, exhibitions with strong axial structures, shallow depth and a low ring factor present knowledge as if it were the map of well-known terrain where the relationship of each part to another, and all to the whole, is thoroughly understood. Exhibitions whose plans show a high degree of entropy (or a weaker structure), considerable depth and a high ring factor show knowledge as a proposition that may stimulate further, or different, answering propositions.
A study in contrasts

An analysis of two contrasting exhibition plans shows what this means. For a period the British Museum was showing both the temporary exhibition *Archaeology in Britain* and the permanent display known as *The Early Medieval Room*. *Archaeology in Britain* was an ambitious project intended to present the new approaches to archaeology and the new information which these have yielded, and embraced a chronological stretch from the Mesolithic to A.D. 1600. The subject-matter was broken up into fifteen units, together with the sixteenth, *Lindow Man*, intended to act as the exhibition’s climax in the popular sense.

*The Early Medieval Room* is a considerable contrast. It traces the rise of Medieval Europe from its roots in the Late Antique world, and it does so through display cases.
which include a series on the migration and post-migration tribes c. A.D. 400–1100 (Cases 1–15), a series on the Late Antique and Byzantine World (Cases 16–28), a sequence on the Germans, Anglo-Saxons, Celts and Vikings with a strong British emphasis (Cases 29–50), and a separate section on the Sutton Hoo ship burial (Cases 51–56) which ensures that this will be one of the most popular galleries in the museum. The material on show is predominantly 'fine' work, particularly in metal.

The plan follows a pattern of axials which creates a lattice-work structure within the room, so that from any position a visitor can be attracted to a range of possible movements. At the same time, the plan has considerable depth and offers a very complex series of overlapping and concentric rings. All this means that the chronological sequence is well-nigh impossible to follow and, indeed, it is not greatly stressed in the display content, but that the visitor is encouraged to look at the material as he chooses and to form an opinion, for example, about how classical forms influenced early medieval craftsmanship. The two sorts of exhibition plan offer different models of knowledge and create a different relationship between the curator and the viewer.

The sum of these selective and structuring processes, which emerges as the public exhibition, clearly does not represent a picture of any society which is 'true' in an objective sense, but rather a reflection of the curator's and designer's mind, to be refracted again through the mind of the viewer. Provided, of course, that external facts about the material – dates, provenance, raw materials, characterization and so on – are correct. Provided, in a word, that the curator has done an honest job, how much does the intensely subjective nature of museum interpretation matter? Its character as art should give us a clue. At a fundamental level, artistic creation of every kind supposes that people share a common mind capable of grasping poetic truths about the human condition which are expressed in social artefacts, including material culture (and, of course, in an exhibition itself, which is equally an artefact). If a work of art departs so far from this norm that it makes no sense to a viewer prepared to bring a degree of sympathy to its understanding, it has failed, and so has an exhibition. If, however, the work on show strikes a chord in the viewer's responses, then it has begun to succeed, and it is at this level of common human understanding that our interpretations of past people find their legitimacy.
The exhibition as theatre

Frank den Oudsten

How can theatrical concepts of dramaturgy and narrative be applied to exhibition design? Frank den Oudsten describes an example of this novel approach, which is, however, not without risk for a public unaccustomed to dealing with metaphor and abstraction. The author and his partner, Lenneke Bueller, run a design bureau in Amsterdam; they created the concept for the exhibition described in the following article and are currently working on designing the permanent exhibition for the new Media Museum to be opened in Karlsruhe (Germany) in 1997.

When one is planning an article on the value of theatre or film achievements for exhibition practice, it is impossible to escape the general debate on this issue taking place within the museum world. Over the last decade, at all events in Western Europe, there has been intensive discussion - both within and outside museums - on the quality and effectiveness of the exhibitions on offer. This is a problem for every kind of museum, even though the museum of modern art has not acknowledged any concern with the issue, the assumption being that the implicitly critical character of modern art will have its own effect on museological presentation. The exhibition of modern art is thus presumed to possess sufficient explosive power to catch the public's imagination.

By now we know that this concept is a dubious one. Just as in the case of other museums, the modern-art museum is grappling with the issue of what influence an exhibition can possess as a medium. Here, too, opinions differ between those who regard the museum as a temple, a shrine to art, and those who are more inclined to experiment with the more academic potential of the medium. However, a decided difference between the museum of modern art and other categories of museum is that natural-history-museum or science-museum collections, for example, may well have their prize items but no subjective masterpieces. The collection is no less authentic; it is simply that the museum object does not stand on its own in the same way as a painting. If it is removed from its context, it thereby loses its original meaning and only regains significance for a public when the museum relocates it - presents it anew - in another meaningful context. It is precisely because of this loss of original context that other kinds of museum have to rely on the importance the exhibition designer adds to the museum material. This added value is only generated in a context that is coherent as to content and space. It is precisely for this reason - the fact that the construction of an ad hoc context of this kind is such a complex matter - that creators of exhibitions have to immerse themselves in narrative structures and the laws governing drama.

Talented exhibition designers have, naturally, always experimented with this factor, independently of museum trends and in the shadow of the great crowd-pullers. 'Wayward' exhibitions frequently appear, usually in the art museum or within its field. For the most part the other museums have backed a different horse, or so it would appear. The turbulence surrounding the question of the exhibition is increased still further by the interplay of educational and commercial considerations. The chief result of this has been that the thematic exhibition has become a favourite implement in weaving the desired web of linked insights around a collection. Nevertheless, in practice its success saw a greater discrepancy between content and form. Why is this? Because a focused vision was lacking. Supervision was seldom entrusted to an exhibition creator, who was able to convert the curator's knowledge and sensitivity to authentic material, and the designer's aesthetic gifts into a telling dramaturgically coherent presentation.

From the outset, two different directions were taken in the debate on this problem. Enthusiastic educators said: 'We have to know more about what the public appreciates, in order to achieve a more effective presentation of the content.' Ambitious creators of exhibitions said: 'We have to develop greater vision, and acquire a better knowledge of what the medium can achieve in relation to a particular collec-
The exhibition as theatre.

These two tendencies are more or less diametrically opposed, and we have to ask ourselves whether a compromise is possible, or even desirable.

One exponent of the first concept is the International Laboratory for Visitor Studies (ILVS) at the University of Wisconsin in the United States. *Museum International*, No. 178, devoted a good deal of attention to this. The Camini Foundation in the Netherlands was an exponent of the second concept; after a number of short-lived activities, this organization fell by the wayside, largely because of the subsidizers' impatience. Camini was a conscious reaction against the call for statistics and prescriptions, and envisaged being able to introduce dramaturgy and insight into narrative structures in exhibition practice.

Since our design bureau was closely involved with the Camini Foundation project, I would like to illustrate the typical Camini approach by means of a practical example. Essentially this approach, which consists in developing a dramaturgical concept, is based upon entirely different insights to those underlying the 'visitor studies' approach dictated by didactic considerations. Visitor studies constitute a quicksand for a designer of exhibitions intent on bringing his or her vision of a subject into the limelight in a concise way. This is not because such studies would be ineffectual from the educational point of view, but rather because, in the artistic sense, they can never produce a sharply focused design. Undoubtedly, visitor studies increase professionalism – but they destroy the 'bite' in the work. It is the path leading to the greatest precision, but also to the least surprise-value. Nevertheless, for many museums this is the more attractive route to follow since an exhibition based on Camini principles is always a risky venture.

A dramaturgical approach

On 1 June 1992, an exhibition, entitled *In der Tradition der Moderne: 100 Jahre Metallgewerkschaften (In the Tradition of Modernism: 100 Years of Metal-workers' Trade Unions)*, was opened in an abandoned factory in Frankfurt am Main (Germany). This exhibition was the end-product of a process of creation inspired by Camini ambitions, at all events to begin with. The occasion was the centenary of the influential German metal-workers' union, IG Metall. The three cities of Frankfurt, Stuttgart and Berlin decided to finance an exhibition in celebration of this jubilee, and the art historian Hans Peter Schwartz was asked to set it up. The Naxoshalle in Frankfurt was a good location for a projected Museum of Modernism. Schwartz was a potential director for such a museum, and regarded the exhibition as the first project which would allow him to demonstrate his views on exhibiting objects of this kind. In Schwartz's own words:
An exhibition which is largely angled towards its immediate reception by the public, is obliged to lean heavily on the fascination inherent in the original. This creates problems: there is no Rembrandt of industrial history, no Leonardo of technical development. This is not only a self-evident fact; it can also be extremely interesting when a different kind of exhibition is being created, which does not aim at passive experience of subjective masterpieces, but rather at the active reconstruction of evidence and documentation involving the collective memory. Furthermore, in addition to presenting original items, one must make use of the entire range of means available to an exhibition.

Schwartz wanted an exhibition that would be determined by more than the subject alone. The medium itself ought to unfold into a story in which the history of the trade-union movement would not only be told in a linear manner but would also demonstrate a complex linkage with other areas of life.

However, in contrast to its ambitions for presentation, the proposed 'content' approach pointed in the direction of a conventional exhibition – this was because its art-historian's analysis, and the resulting themes and suggestions, did not anticipate a presentation of the trade-union movement sufficiently dynamic as to render it impossible for the visitor to escape the narrative of the exhibition.

The spatial dimensions of the exhibition location were a determining factor, since in principle an exhibition is a spatial phenomenon, usually absorbed in a non-linear way by visitors, at a tempo they themselves choose. We had to deal with a hall roughly 80 metres long by 20 metres wide and 16 metres high: an ocean of space. In view of the fact that we deliberately did not want to bring every square metre of this space into play, we suggested an approach in which the theme would be developed in a number of more or less autonomous presentations. Each of these was to be housed in an individually designed exhibit space or compartment – exhibitions within an exhibition as it were – which had to be coherent as to content, yet not seamlessly interconnected. On the contrary, it was precisely the vacuum between the compartments that could suggest unspecified relationships. Thus, with a network of invisible threads, a small archipelago of 'associative islands' would be created in the midst of the 'ocean' of the old factory.

In order to achieve this, the choice of the right metaphor was strategically important.
The exhibition as theatre

Such a metaphor would provide us with indications for form and content, and enable us to give full weight to every part, and guarantee the coherence of the whole by means of an intriguing, albeit hidden, structure. With this end in view, we employed a reasoning based on nothing more than a series of brainwaves and intuitive observations. This kind of 'hop-skip-jump' deductive method may be utterly objectionable from a scholarly point of view, yet it is none the less useful here, since it serves no purpose beyond that of offering a meaningful perspective. In our view, this perspective was of crucial importance in ensuring the alignment of all the efforts being made during the preparatory stages, without cancelling out the various designers' room for manoeuvre. I shall clarify this reasoning in broad outline; this is all one can do within the restricted compass of this article, but I hope it will be enough to provide the necessary insight into the idea underlying our project, along with the 'hinge points' in our dramaturgy.

Hop-skip-jump and the leaking garden hose

The fascinating aspect of changes within complex systems is that the mainstream of a development never stands alone. It is always accompanied by a series of predictable and fortuitous side-effects, desirable or otherwise. Here the image of the gardener comes uppermost; he plants a young tree on barren ground, and waters it every day. The tree thrives, but the garden hose leaks and, unintentionally on the part of the gardener, other crops are also brought to germination in the vicinity.

If one regards the industrialization process as the main current in the creation of modern Western society, then the development and emancipation of the working class; the rise of the metropolis; the fascination with mobility; the anxiety about — and adoration of — the machine, and so on, must be counted among the side-effects posited above.

This complex of side-effects ought to be the starting-point in our exhibition for an implicit and up-to-date commentary on this main current.

Since the title of the exhibition, In the Tradition of Modernism: 100 Years of Metal-workers' Trade Unions (Schwartz's title), suggests a number of cross-links, all relevant to the concept of modernism, it seemed to us important to render this concept manageable by means of the schema presented below.

The process of industrialization set in motion a development we have called 'progress'. Modernism represents the idea that technological progress also results, more or less automatically, in social progress. For a long time, optimism that such progress is possible was an important driving force, yet 'progress' is a reversible notion. Now that there is no longer an unswerving faith in technological culture, our observation must also be modified. What was regarded as progressive a century ago must now be considered as retrograde, on other grounds.

This assembly of organizing principles constituted the foundation for an exhibition plan consisting of an 'overture' and the elements we describe below. An 'allegory of metal' would emphasize the fascination of the material itself. A multimedia opera entitled Alle Räder steHen still (roughly translatable as 'All the Wheels Come to a Stop') would present the creation, development and future of the labour movement. In the 'inventors' gallery', the 'myth
of the machine' would be told, with stories about work machines, human machines, and mechanized humans. A row of some twenty different makes of motor-car (German, of course) would constitute the compartment for 'motor-car mobility'. The vehicles would stand in a row with their lights on. Each car would be a personal cinema, in which the visitor would be able to choose from a collection of film programmes touching on the theme of mobility. The 'metropolis' compartment would consist of two stories, presenting the contrast between the potential of the city and the impossibility of governing it. In the 'modernists' visions' compartment, the electronic equivalents of ideologists and futurists from trade-union, business, scholarly and political circles would debate the future of work, technology and society.

We were fascinated by the complex of rational and irrational factors which appear to have determined all the themes mentioned above. Even more marked, these factors appear to be inseparable, making the metaphor of the leaking garden hose such a useful one because here two views of reality have been united in one image.

For the actual entry to the exhibition, we proposed a specially commissioned piece of monumental entrance machinery which would consist partly of turnstiles, of the kind in the Paris Métro. In fact the installation was intended to evoke the image of a giant mechanical calculator or clock mechanism, driven by a transmission system that included countless shafts and driving belts, in the same way that a single steam engine powered an entire 'machine park': one movement to which all other movements were related.

On the other side of the entry space, a large-format projection of the film Der Lauf der Dinge (roughly translatable as 'The Course of Things') would attract the visitors' attention. This film, made by the Swiss painters Fischli and Weiss, lasts thirty minutes, yet each five-minute span is, roughly speaking, representative of the whole. Der Lauf der Dinge is a poetic variation on the well-known domino effect. Within a linear arrangement, consisting of a series of wobbling, ungainly constructions, the first element is set in motion to produce a chain reaction governed by the laws of physics and chemistry. Since chance also plays a role here, this process (or rather the filmed record of the process) provides a witty and stimulating commentary on cause and effect.

With this contrast between the two sides, the Overture would thus constitute a pas de deux between rational and irrational machines. The predictability and causality of the older mechanistic worldview would be
The exhibition as theatre

overtaken by the irrational process embodied in Der Lauf der Dinge, which demonstrates the paradox of the 'deliberate coincidence'. It was necessary that this contrast should reveal the dynamic of the exhibition: the history of the trade union would be highlighted in the way it deserved. In other words, its story would show the relationship between the creation of the proletariat in the nineteenth century, and the social effects of the spread of knowledge and capital in our era.

Neither fish nor fowl

When the exhibition was opened, there was general agreement that the theme had been highlighted in a remarkable and highly individual manner. Yet many visitors found the exhibition incomprehensible, even barely legible. The whole entity only regained its eloquence by means of the guided tour. What had gone wrong? The answer is simple: the exhibition was no longer an exhibition. When we presented our concept to IG Metall in February 1991, it was clear that the organization experienced difficulty where the plan (or rather its level of abstraction) was concerned. Although there were reservations in regard to the principle of free association, the main problem lay elsewhere. People who are unaccustomed to thinking in images appear to experience immense difficulty in giving concrete form to abstract concepts in their imagination.

The multimedia theatre employs slide and video projections to illustrate the opera Alle Räder stehen still.
In itself, this comes as no surprise. It only constitutes a problem for the dramatist who has only words at his disposal in the initial stages. The presentation was of course backed up by a maquette and other visual material, yet the union was not entirely won over. The position taken by IG Metall was that the history of its organization ought to be presented in a more classical and direct way. This heralded the beginning of a series of concessions and adaptations, the result being that, conceptually, the exhibition was no longer fish, fowl or good red herring. The whole still possessed great associative power, but where experience was concerned, it remained an amalgam of more or less exciting fragments. The Overture, sowing CO&-sion as it did, was largely responsible for this.

The borderline between the exhibition and the world outside it was now signalled by a passage evoking memories of the factory gate. To the left, the first film images ever made, by the Lumière brothers, showed workers leaving a factory in 1895. To the right, one found a typology of the architecture of the factory entrance as a fortress, a city gate, a triumphal arch, a modern functional entry, and so on. The actual entrance was flanked by two large zinc statues: a metalsmith with his hammer, and a metal caster with his ladle. The entire section possessed atmosphere, yet gave the impression of having found itself in an historical exhibition.

Once inside the exhibition, this idea was reinforced for the visitor by an apparatus largely based on the Overture, it is true, yet producing a completely different dramaturgical effect. Here, the idea of the monumental mechanism was combined with a new historical element: a musée sentimentale intended to compensate for the scepticism shown by IG Metall. A hundred of the clothes lockers so characteristic of the factory told the story of a century of union history (a locker for each year) through the workers' personal possessions. Some of these lockers were mounted in clusters on mechanisms that moved in varying patterns. Yet since the musée sentimentale dominated the reception area for the public, the idea of the historical exhibition was considered here, as well. There was certainly a mechanistic element, yet this did not reveal itself as such, particularly in view of the fact that the original counterpoint, Der Lauf der Dinge, was housed in another part of the exhibition as an independent section.

What happened in this exhibition is what one so often finds in museum presentations: the metaphors remain literary ones. Many of the concepts are presented metaphorically, but in the final presentation one needs to search long and hard for these splendid metaphors. The problem is a dual one: either the metaphors are wrongly chosen, or it is clearly a hellish task to locate them within an adequate form.

In either case, a dramaturgical approach can produce a solution. In the version In der Tradition der Moderne seen by the public, new metaphors were subsequently inserted in order to lend coherence (with retrospective force) to the exhibition. At the opening, Hans Peter Schwartz described his work in the following way:

Our exhibition can best be characterized as a kind of de-constructivist tour of the factory. In other words, we have taken the factory to pieces, reducing it to its constituent elements, and thereafter rebuilding it in accordance with our criteria. And, as you can see, our de-constructivist factory is once more producing things – no longer commodities, but (one hopes) meanings, or at all events feelings.
Creating a context: a challenge to Indian museums

M. L. Nigam

Museums in developing countries must cater to a public that is frequently semi-literate or even illiterate. M. L. Nigam shows that although traditional Western methods and techniques may be successfully adapted to create scientific and technological displays, they can be totally inappropriate in exhibiting art and archaeological objects. The author is a leading Indian museologist and former Director of the Salar Jung Museum in Hyderabad. He has twice been elected President of the Museums Association of India and is currently President of the Congress of Indian Art Historians. He has published a dozen books and more than forty articles in Indian and overseas journals.

'A museum,' Colbert wrote, 'like an iceberg, is to a large degree, not discernible to the casual eye.' Exhibitions are the most effective tool to interact with and to enlighten the visiting public. It is through exhibitions of objects that museums reflect and reinforce the people's collective memory so as to make them culturally conscious. Museum objects, being the mute testimony of the past, need a multi-disciplinary approach to bring out the multi-dimensional knowledge relating to the overall development of human society. The information/knowledge thus acquired forms the message which has to be communicated to visitors. A museum exhibition, therefore, deals primarily with three things: museum objects, the message and the people who are at the receiving end.

Most exhibitions are based on a theme that helps to define the 'message'. The goals and objectives of an exhibition are largely dependent on the kind of message it is intended to transmit. As the source of all human knowledge is objective reality, the concrete and perceptible objects that are the evidence of the historical development process are therefore of considerable importance.

In order to establish a dynamic relationship between the museum and the public, it is necessary to analyse the objects, the public and the most effective display techniques. The objects selected have to be studied so as to reveal their intrinsic and explicit qualities, their origin and provenance, their relationship to similar objects, and their role in nature and society within a given space and time. Their manipulation and the choice of exhibition techniques will be largely determined by the message to be communicated.

Most museums in the developing world, based on early European models and following exhibition principles imported from the West, fail to highlight the social values and traditions underlying museum objects. The emphasis here is often laid more on the description, provenance, period and dynastic affiliations of the objects. This is, no doubt, essential for the history of art, yet the social significance of the objects, their role and function, are also of utmost importance and must be emphasized so as to understand the culture of the community or region which a museum ultimately stands to serve. The new meanings acquired by an object after its incorporation into the museum collection, its changing role, alien influences, and the growth and decline of its use, should all be part of the knowledge to be communicated.

To cite an example, Indian bronzes, terracotta figurines and objects of decorative art, apart from their aesthetic value, are bestowed with individual socio-cultural roles and meanings in the everyday life of the people. They tend to lose this significance once they are removed from the total architectural scheme of a temple and are exhibited in air-tight showcases under artificial lighting. Moreover, the stone of Indian sculptures is meant to be viewed under direct sunlight where it gradually changes its shade. Artificial lighting falling from the top makes an Indian sculpture look flat. It loses not only its initial social context and function but its aesthetic quality as well.

Attracting the casual visitor

Museum visitors can broadly be divided into two groups. The first includes scholars, specialists and researchers who are motivated and often come prepared for their visit. The second category consists of the large number of casual visitors who come just to explore the museum more or less.
less at random, looking for things that interest them. They interact with exhibits with little background and with no one to help them interpret what they see. The situation is more acute in museums of developing countries such as India, where more than 60 per cent of visitors are illiterate and semiliterate. The real problem is to communicate with these unguided, casual visitors. With an unprecedented boost in domestic tourism, thousands of them pass through museum portals every day with scant academic knowledge and with very low and vague expectations. A museum exhibition must, therefore, present a synthesis of two decisive factors, imparting, first, knowledge and experience, and, second, sensory pleasure in order to satisfy the maximum number of visitors.

Exhibit planners are often ignorant of the actual audience that eventually comes to view their exhibitions. They are basically academicians and specialists who are too close to their specialized knowledge of the subject and often fail to understand the ordinary visitor's point of view. Hence, their scholarly orientation generates unrealistic expectations. The result is an information overload which creates more confusion and makes the visitor uninterested. The tendency of curators to plan thematic displays of objects of history, art and archaeology in chronological sequence meets with indifference and disenchantment among illiterate and semiliterate visitors. People only recognize and become interested in the objects, phenomena and processes with which they are already familiar. Experience has shown that the thematic presentation of objects often fails to catch the attention of the casual visitor for sheer lack of familiarity. On the contrary, if artefacts familiar to the beholding eye are featured in the first part of an exhibition, they are bound to attract the visitor's atten-
Creating a context: a challenge to Indian museums

Once interested and motivated, the visitor is sure to discover the unknown phenomena with greater inquisitiveness and vigour.

A detailed audience analysis relating to visitors' academic background, attitudes, expectations and preconceptions about the prospective exhibit's content is equally vital in the early planning stages to make the exhibition more effective and meaningful. Most visitors are attracted to public exhibitions because of their informality - the freedom to choose routes, topics, approaches and pacing. Therefore, whenever possible, it is important that visitors feel no obligation to see everything. Hence, the enforcement of routes should be used with caution. Free exploration and social interaction are important natural elements of human behaviour in museum environments and are among their major attractions. The challenge is to link communication objectives, and the learning that should result from carefully planned exhibit content, with the enjoyment of these intrinsic exploratory, social and recreational interests.

**Seeing and learning**

The approaches and strategies adopted in the exhibitions of Indian museums today are twofold: taxonomic and thematic. In the former approach, the material is displayed according to classification of objects. The latter method adopts a storytelling technique whereby visitors are expected to follow a guided path in order to understand the evolution of the theme. Nearer to this approach is the situational display where the objects are arranged in a reconstructed naturalistic context (Period Rooms). The purpose is mainly to popularize the scientific knowledge of a particular field by guiding the visitor to make connections between the exhibited objects and to follow the development of the theme as it evolves in the exhibition. All these approaches are, no doubt, known as traditional and are used in most developing countries. Here the aim is purely didactic, to communicate specific knowledge. It presupposes that visitors do not know about the objects. Hence, more textual information is supplied to educate them. The main defect of these approaches is that visitors are forced to accept the interpretation given by the museum; they are not given a choice to view objects independently, to experience them and to draw their own conclusions.

It is, however, known that most visitors frequent museums and galleries to relax and enjoy their leisure. As the primary interest of such casual visitors is towards visual exploration of the exhibit environment, more dynamic and dramatic exhibits that promise 'fun' appeal to them and, if properly motivated, they will learn from their visit. Objects that are unique and that move or invite sensory involvement (touching, manipulation), easily attract their attention. Yet, the element of entertainment...
or amusement must be used as a means to an end and not as an end in itself. Exhibits in science centres and museums of natural history and technology, unlike those in art and archaeology museums, are mostly reconstructed and do not contain original works. The knowledge so disbursed is already known. Here it is the physical form of the objects and their functional aspects that count. It is more a matter of seeing and learning rather than of dealing with human sensibilities. Hence, traditional exhibition methods to popularize the subject-matter are still valid in science and technology museums. New technological devices and animation programmes are fully utilized here.

In museums of art and archaeology, where the objects act as symbols to communicate an idea or a custom which is the core of culture, traditional exhibitions fail to bring the desired results. An object of beauty is not beauty itself but the reflection of that beauty. The object as a symbol which reflects beauty has also undergone numerous changes in space and time which reveal the gradual development of society. Thus, the latest trend in organizing art and archaeology exhibitions in most of the developed countries is to strive for the reflection of reality through objects rather than to popularize knowledge of art history. It is more an emotional approach. Museums should not only communicate information but should allow visitors to come in direct and intimate contact with the objects, to view them and thereby draw their own inferences. In such exhibitions, the effort is made not to highlight any single object but rather to establish a close relationship between the objects so as to reveal the totality of a social environment by creating an original atmosphere. These new types of art exhibition do not differentiate between original and supporting evidence.

In order to create contrasts and heighten tension, the designer tries to take full advantage of space, light, colours and even audio animation. Space plays an important role in designing an exhibition as the shape and size of objects in relation to space have an emotional impact. Lighting is also extremely important in the perception of things. It illuminates shapes, textures and colours to create visual images. Visitors can form their own imaginary shapes or concepts according to the play of light which manipulates shadows and generates different feelings and attitudes. As Roland Barthes the French semiotician pointed out, the nature of the lighting establishes the intensity of the experience. Similarly, colours have an emotional impact on people. They can play a meaningful role in bringing contextual relationships to the exhibit through warmth and coolness. Thus, an art exhibition is an imaginative process which deals with human emotions to arouse the viewer's inner sensibilities. It is not so much a question of learning but of visualizing, experiencing and enjoying the real content of art, that is to say, tradition, beauty and ultimate reality.
Exhibit sound design

Michael Stocker

Sound is becoming an increasingly important element in exhibit planning and design. As Michael Stocker points out, it may enhance an exhibit by reinforcing the message of the objects on display, or it may in itself be considered a museum ‘artefact’ well worth preserving for future generations. The author is a consultant on exhibit sound production and is a principal of a technical facilities design firm in California whose clients include the United States National Holocaust Museum in Washington, D.C., the Museo Papalote in Mexico City and the Lawrence Hall of Science in Berkeley, California.

When asked to describe a museum, most people will start by speaking of dioramas, display cases, sculptures and paintings. If asked what they learned from a museum exhibit, they might recall what they have read on one of the display labels or information panels. If asked what impressed them most about a museum, an entirely different descriptive language will come into play. This language is one of emotional involvement, and may travel into the finest detail of a sample of textile, or it may explore the grandeur of the museum’s architecture.

These different descriptions may not even seem to speak of the same place. What will be common to all of them, however, is that they will use sound in the form of language to illuminate and share an experience. Through sound, the meaning of this experience can be conveyed to another individual far removed in space and time, or broadcast instantaneously to millions of people around the globe.

What is perhaps most amazing about sound is that if it is simplified by removing the constraints of language, its sheer expressiveness can transmit the emotional impact of an experience to almost anybody who can hear. Since the medium of sound is so effective in conveying impressions and information, it is advantageous to evaluate carefully the use, content and quality of sound when designing a museum, whose primary intention is to impart impressions and information.

Sound has many facets of form and application. It is so prevalent that we sometimes take it for granted. Sound can be used to convey information in facts and figures, transform moods, attract friends or repel enemies. It can act as a vehicle of information between tribes, nationalities and even between species. Once a sound is made, it can disappear completely in just moments, but it can leave an impression that will last for generations. In its recorded form, it is the only ‘original’ material that may be removed from a museum without depleting the collection.

Sound can be changed easily to modify the context of an exhibit. This may be done to update an exhibit as more accurate information is revealed about the subject, or to link one exhibit to another as the current topic changes. Sound recorded or produced for museums can be edited and reassembled to enhance video and movie productions sponsored by the museum, or performance rights may be sold or granted to outside production companies or institutions for use on independent productions or academic research.

When describing ‘useful’ sound, we most often place it in three categories — music, narrative and ambient sound. These three categories are equivalent to the music, dialogue and sound-effects used in film production. Any of these three elements may stand alone to create a complete impression, and they all may be used to complement and enhance the meaning of a visual presentation.

We categorize ‘useless’ sound as ‘noise’. Although a designer generally tries to avoid noise in the production of exhibit sound, it is an element that must be considered and may actually prove beneficial in some settings. This aspect of noise is especially true when considering the ‘psycho-acoustics’ of an exhibit space, which will be considered later in this article.

All categories of sound can either be produced specifically to suit the design intent of an exhibit or can be recorded from living examples. Sound produced specifically for an exhibit may serve as a
The careful application of acoustical treatments assisted in the apparent expansion of exhibit space at the United States Holocaust Memorial Museum, Washington, D.C.

'Signature' element that is owned solely by the museum and may be used as a promotional tool or even repackaged and distributed as a fund-raising item in the form of tapes, records, compact discs or broadcast productions.

Sound recorded from living examples is part of a body of cultural, spiritual, natural and scientific information. This material may have significant value as part of a museum's collection. Properly archived, it can prove an invaluable resource in the future reconstruction of currently endangered or evolving natural habitats, cultural traditions and empirical knowledge. Though reproduction rights of living sounds are usually owned by the sponsoring party, and as such may be used as a vehicle to generate revenue and disseminate knowledge and information, the 'ownership' of the traditions that these sounds represent truly belongs to the body of human experience and natural phenomena.

While all forms of sound will induce an emotional impact on the museum visitor, music can be produced or presented to create a mood with the most predictable results. As a background element, music can tie together larger exhibit areas under the umbrella of an exhibit theme. In the foreground, it can propel the visitor into the sense of the accompanying exhibit. This may be especially true of music composed to focus thematically on the intent of the exhibit.

Music recorded 'in the field' can convey volumes of information about the culture of the performers. A simple wedding song may illustrate the language, gender roles, musical instruments, rhythmic, tonal and structural sensibilities, and emotional mood that the representative culture associates with marriage. The overall sound may clearly illustrate the differences between the subject culture and the listener's culture, and the beauty of the song may very simply convey their similarities.

Narrative may be presented in many forms. These include scripted narratives, theatric-
Exhibit sound design

cal presentations, readings from literature, ‘interactive’ dialogues with the museum visitor and ‘oral histories’. There is no clear or specific advantage of one form over another and the choice of the most suitable form will depend on the type and quantity of the information to be conveyed. What should be borne in mind is that a few well-placed quotations or words may easily open many doors of perception for visitors, whereas a litany of facts and figures may drone on beyond the reach of their imagination. This is not to say that a ‘wordy’ presentation should be avoided; on the contrary, if the story is compelling, or the sound of the voice is interesting or comforting, much value can be obtained from a small amount of museum space and a modest exhibit investment by using a story alone.

Preserving the past with sound

Oral history clearly represents the highest level of narrative presentation in terms of lasting and manifold use. The advantage of oral histories and ‘living stories’ over a scripted production is that they transmit subconscious information rather than a mere ‘list of facts’. Oral history is also valuable in that it is unique and precious information which becomes an integral part of the exhibit. Catalogued properly, it can be archived and used for research and education to further the intent of the original exhibit.

We are fortunate to be living at a time when there are people still alive who remember some of the most transforming events in history. They have seen sailing ships and hand-cranked telephones give way to supersonic jets and satellite-transmitted voice and data. They remember schools of tuna measured in days, not kilometres, and a time when smallpox and polio were common threats to life. These witnesses to history need to be recorded. It is not just the words that they speak, but the sound of their voices that will impart the full meaning of their experience.

Just as recording the legacy of the human experience can help preserve the traditions and wisdom of our cultures, the recording of the sounds of natural habitats may help preserve our disappearing wilderness. When people hear the beauty of a dawn chorus in a spring meadow or the mystery of the night sounds in a tropical rain-forest, a whole new respect for these habitats is awakened. It is a constant treat to observe how a static model of a natural habitat, which museum visitors may just look at, is transformed when accompanied by an audio reconstruction of authentic sounds; it comes alive to such an extent that visitors actually watch models of birds or frogs as if they were about to move. Since even in the remote jungles of South America or the deserts of the North American West, scarcely ten minutes pass without hearing the noise of a chainsaw or an aircraft, the importance of preserving the sounds of nature has become painfully clear.

Presenting sound

When considering the presentation of recorded sound in a public setting, many elements need to be evaluated. These include the playback methods and control technologies, the types of sound transducers or speakers used, and the acoustical setting or environment in which the sound is to be presented. The factors that will influence the final choices should take into consideration whether the sound is to be a feature of the exhibit or a support element, if it is to be used to convey information or to create an ambiance.
Michael Stocker

Concealed loudspeakers present the living tales of the indigenous California Miwok people in a replica of a historic Tulé hut.

There are so many possibilities in playback and control systems available today that many trade publications are dedicated to their promotion and understanding; the same holds true for sound transducers and speakers. It is obviously beyond the scope of this article to explore all these possibilities, but suffice it to say that attention to audio fidelity and considerations of durability required for continuous public use stand out as very important design objectives when specifying a sound presentation system.

Perhaps the most neglected aspect of exhibit sound design is the acoustical design of the exhibit environment. Conditions of excessive reverberation, poor speech intelligibility and background noise may all detract from the potential impact of an exhibit. In this respect, acoustics will play a role in an exhibit even where sound is not a presentation element. For example, if a replica of a natural woodland habitat were created inside a masonry, glass and steel building replete with long audio reverberation times and crowd noise, a visitor would experience merely a constructed model of a woodland habitat inside a large building. If, however, the area surrounding the habitat were treated acoustically to attenuate the noise and the aural effects of the reverberation, the visitor would not be distracted by the sounds of the larger building. Should the subtle sounds of a brook and a few insects then be introduced into the setting, visitors would more likely imagine themselves in a woodland grove than in a contemporary building.

The effect of this type of acoustical design is called 'psycho-acoustics', which refers to the psychological effect produced by the acoustics of a given space. Although people receive from their immediate environment strong direct visual cues which provide them with an empirical view of their surrounding space, acoustics, like smell and peripheral vision, will set the subconscious cues that give visitors a sense of where they are. In planning public space, psycho-acoustic design can be used to create 'waiting areas' by allowing people to feel at ease, or it can encourage traffic flow by influencing a sense of motion and activity. More importantly for exhibit settings, the creation of acoustical spaces that contradict – or complement – the visitor's visual experience may open 'windows of perception' that allow the experience to permeate into the subconscious.

Although sound design has historically been considered in a supporting role in the museum setting, it nevertheless comprises many aspects that are ripe for development. This may be particularly true in more industrialized countries where museums are competing for the public's entertainment allowance with 'home entertainment centres', dazzling theme parks, and sensational films and video games. Given the flexibility and potential impact of a well-designed sound presentation, a thorough evaluation of incorporating sound into an exhibit design is always warranted. Sound can act as more than an enhancement to the visual elements of an exhibit. If thoughtfully and carefully recorded and produced, it may serve as a distinct feature and an added asset to a museum's unique collection.
A small group of students have been studying the discipline of museum exhibition planning and design at the University of the Arts since 1990. Their work is done under my tutelage, with a faculty of experts drawn from specialities represented in the curriculum, including members of regional museum staff, specialist consultants and members of the university's other departments. The first students earned their Master of Fine Art degrees in 1992, and four further entering classes have followed them. The 1994 entering group of nine included a Taiwanese director, an industrial designer, an exhibition designer, an arts administrator, a film-maker and a jeweller from the United States. About the only thing these students have in common is their possession of undergraduate records and experience showing their intellectual and conceptual strengths and their willingness to explore new ideas and experiences. They engage in a rigorous, tightly structured, full-time programme which takes a minimum of two years for completion, during which time they take a number of set courses dealing with a mix of theory and skills practice, undertake at least one three-month museum internship in an exhibitions department and produce a formal thesis on a subject of their choice germane to exhibition planning and/or design.

The distinction made between planning and design in the context of exhibitions may be unfamiliar to some readers. It reflects historic change in the ways in which exhibits are developed and an understanding of current standards of practice. To be effective, contemporary exhibits need to be based on careful planning, structured so that the visitor need not struggle fruitlessly to find some meaning in the experience. This planning must be supported by design judgement and the ability to utilize effectively the physical potential of exhibit elements.

The origin of this unique programme goes back to 1981 when a group of museum exhibition directors and independent...
exhibition designers met at a meeting of the American Association of Museums to form an association of exhibition practitioners. This group, which called itself the National Association for Museum Exhibition (NAME), set out to define the profession of museum exhibition planning and design, and to advance it to some kind of parity with other professions within the museum world. One of the requirements for this professional definition was the identification of the particular combination of training and experience that would provide the necessary base for professional competence. NAME conducted informal surveys and meetings over several years to develop a consensus within the field on standards for such training. The University of the Arts expressed interest in establishing a graduate programme based on these guidelines. In consultation with NAME, a curriculum was developed. As a long-time member of the board of directors of NAME, and an academic already heading a graduate design programme, I found the concept of a Master of Fine Arts Program in Museum Exhibition Planning and Design profoundly exciting and, in 1990, I accepted the directorship and we enrolled our first student cohort.

The University of the Arts is a unique institution, a true, albeit small, university focused entirely on the arts, with a distinguished history and international recognition. The formation of the exhibition programme, and a sister programme in museum education, represented a decision on the part of the university to expand its activities into specialized areas, particularly those addressing the new and developing modalities of communication, and to create very specific, focused 'niche' graduate programmes.

Combining theory and practice

The original plan immediately underwent some changes. The university’s initial intent had been to accept only students with undergraduate training in the fine and applied arts, and the original curriculum focus was almost entirely on skills development, with the execution of an exhibition ‘project’ as the student’s terminal task. The rapid changes in American museum philosophy and aims suggested to me that a broader approach should be taken, both in choice of students and in the curriculum content. When I accepted the directorship, it was with the university’s agreement to accept students with a strong academic undergraduate background, even though lacking in formal visual-arts training, and to enlarge the curriculum to include a greater focus on audience studies, conceptual process and learning theory. The final project was expanded and combined with a written thesis, no longer limited to the execution of a formal museum exhibition (though not excluding this as a choice). Overall, I felt it was important to focus primarily on process, not product, but with a recognition that exhibition professionals must have a basic grasp of the skills utilized by practitioners as well as the theory. Students with no design experience acquire basic ‘drawing board’ skills, including a familiarity with typography, a working knowledge of drafting, design drawing, computer-aided drafting (CAD), and a number of computer word- and image-processing programs. They also acquire a physical and intellectual grasp of the effects of space, light, psychokinetic experience, and the effects of perceptual/sensory experience. Studio courses address environmental design, wayfinding, graphics, lighting technology, traditional collections installation, access issues, materials and methods of construction, and electronic media. Lecture courses
Training for a changing profession

and symposia discuss museum history, administration law, ethics and visitor studies. The core course, a three-semester, twelve-hour a week studio, directs the students in a progression of projects from simple three-dimensional concepts, through the development of thematically based, small interactive exhibits and larger, collections-based exhibits. It ends in a semester-long project in which students work in larger teams with a regional museum to plan and design an actual exhibit, producing exhibit drawings, a formal proposal, budget figures, schedules and the necessary documentation that goes into exhibit production.

The training seeks to give every student a fundamental understanding of the process of creating meaningful exhibitions by including a strong theoretical element covering semiotics, the effects of space, physicality, light, symbolic imagery, experiential media, written and spoken text. It teaches them to recognize the integrity of content and collections, and to understand the importance of the context which the visitor brings to the experience. Seminars address structure and metaphor, the relationship of arts and society, and criticism. The training is divided into the traditional course structure of the university, but the course materials are integrated so that a project will be addressed simultaneously in several classes: CAD technology is learned by drawing floor plans and exhibit components, graphic approaches are addressed in another course, and basic issues of content and direction are the core of the major studio experience. The first year primarily deals with the conceptual and planning process, and the acquisition of basic skills, and the second year includes a practicum in which all students act together on a team basis. Throughout the three-semester major studio sequence there is an increasing focus on team-based, collaborative projects. After one year of study, students enter an internship which requires that they be actively engaged in departmental activities in their host institution and not simply observers. Most internships have been remunerated, and the hosts have included a number of distinguished American art, science, history, and children's museums, and some less traditional museum venues, such as ecumuseums, zoos, botanical gardens and

Thesis model for an exhibition, Dragons: Beasts of the Imagination, based on the worldwide existence of the dragon as a mythical cultural element.
aquariums. Several students have returned to their internship institutions at the end of their studies to accept permanent employment. For students with no prior museum experience, a second internship is encouraged. Although course work and the required museum internship are completed in two years, and the thesis may be completed simultaneously, the majority of students remain in residence at least a further semester to complete their work and prepare themselves to enter (or re-enter) the profession.

An emphasis on innovation

The combined thesis and project is the single most demanding element of the entire programme. Students are required to identify and focus on an issue or need that has not been fully addressed in museums. Simple redesign of a basic exhibition concept which already exists in the literature and/or on the museum floor is not sufficient, and most have risen to meet this challenge. The power of the fresh, young (and sometimes not-so-young) mind of the graduate student, paired with the time to do appropriate research and to engage in the necessary reflection, has produced a number of very exciting, fully worked-out exhibition scenarios. Thesis students are not required to follow traditional research protocols in developing their exhibit content (though scrupulous attention to generally recognized factual bases is required), and it is expected that informal front-end studies will be utilized to test the initial premise. Strong writing skills are demanded of students, reflecting the expectations of the profession. In the United States, a museum is typically required to include very comprehensive written materials in any exhibition plan as a basic criterion for seeking funding, and the programme prepares students to undertake this responsibility.

The theses have taken many forms. An art historian student with personal knowledge of relevant collections included specific curatorial identification and attributions for the artefacts displayed in an exhibition plan for a thematic exhibit on dragons, which was unique in incorporating experiences designed for children within the formal exhibition. A thesis produced by an architect addressed the historical architectural content as well as the exhibition scheme, while structuring a process by which a city could interpret a range of external historical sites. Some of the strongest theses represented exploration into subject-matter entirely unknown to the author. A student with a theatrical background proposed a potentially effective exhibit on waste and re-use, designed for a science museum, incorporating programmatic elements to encourage behavioural changes in the audience. A historian developed a thematic exhibit on the emotional and cultural effect of the development and use of the atomic bomb. An early thesis used the book *Alice in Wonderland* as the narrative basis for an exhibit on scientific concepts relating to perception. Another detailed a scheme for incorporating temporary museum exhibits within the permanent core of a shopping mall. One thesis presented a careful analysis of the needs of smaller museums for a system for displaying temporary exhibitions and designed such a system, carefully considering storage, re-use and the ecological implications of display materials. Another focused on the development of standards for graphic information display in exhibits. We are now exploring the possibility of some collaborative component in the thesis process, looking for opportunities for working with other disciplines.

The programme has now been in existence for four years, and the basic premises are still being tested, modified and reworked.
Certain interesting patterns have emerged in the experience of the first three groups of students to complete their degree requirements, some predictable, others more surprising. One of the most optimistic results has been the student success in obtaining professional positions in the museum exhibition field, despite the sluggish American economy and its effect on museums. I believe this is because our students graduate with a greater ability to address intellectual content and a deeper understanding of theory than most designers, and, conversely, more practical skills than most graduates of academic programmes. Each year, quite without conscious planning, the student group has taken on a distinct character of its own. The first students to enter, in 1990, came from an arts background, with two trained in fine art, one in photography, one in art history, and three in the applied arts. Three had prior experience working as relatively low-ranking museum staff-members. All are now working in museums or with design consultancies. The second group to complete the programme was more diverse: a theatrical-set designer, an interior designer, a museum graphic designer with an undergraduate degree in political science, a construction foreman with a graduate degree in theatre/dance, a naturalist and an art historian who had spent some years out of the work-force. The builder/choreographer is now director of exhibition planning and design at a museum of life sciences; his graphic designer/political science classmate co-ordinates exhibits at a museum of health and medicine; the interior designer works with a major design firm; the set designer manages exhibits at a science centre; and the art historian is acting as registrar for a collection of historical archives while completing her thesis. The third group to enter is only just beginning to look for places in the workforce. Only one, an architect, has completed her thesis, and she is currently employed with a design consultancy that plays a major role in the design of zoo exhibits.

So, what pattern is emerging? Students clearly do not change entirely when they enter the Museum Exhibition Planning and Design Program. Their ultimate success is a product of the combination of skills, experiences and native intelligence they bring with them, and their training in museum exhibition creates a framework for utilizing these very individual attributes in the museum world. In the two or more years they spend in Philadelphia, they acquire an understanding of the process of museum exhibition development, a process that the profession itself is still defining. It is too early to try to estimate the effect which the programme itself will have on the museum exhibition profession, but our alumnae provide an exciting glimpse of the potential.
How can contemporary exhibition design be integrated into older buildings without seriously modifying or destroying the original architecture? This all-too-common problem found a most uncommon solution at the new Primates Gallery installed in the Natural History Museum in London, a richly decorated high Victorian building.

The gallery site on the first floor of the main hall is bounded on one edge by a balustrade and on the other by magnificent stained-glass windows. It formerly housed a series of tall dark wooden cases containing stuffed animal specimens, which blocked the view of the double height stained-glass windows from the central hall and presented bland case backs to the eye.

The first task was to open out this space by re-siting the cases elsewhere in the museum and to deal with the new work in as transparent a manner as possible.

The result is an exhibition, approached by the main stair, which sits upon a new raised deck running the full 36-metre length of the balcony aisle. The six existing bays which comprise the balcony aisle set up a rigorous architectural order and define the rhythm of the exhibition, each bay concentrating upon a particular subject within the overall theme.

The deck, built in dark slate to match the colouring of the banded terracotta of the existing building, provides a zone for organizing the cabling and the complex projection systems which are an innovative feature of the gallery. Glass steps linking the deck to the existing mosaic floor, punctuate the bays at each of the principal existing structural lines, reinforce the rhythm and give access to a series of vantage points overlooking the magnificent main hall. Bronze, glass and stone are the materials used, referring to those of the existing building, and are expressed in a minimal and contempo-
The Primates Gallery: tradition meets innovation at the Natural History Museum in London

The new architecture reflects the tradition of the building while setting itself apart as a clearly separate insertion.

The exhibition is intended to work at several levels of interpretation with one side being organized in a more familiar museological manner of display cases, lecterns and text, artefacts, casts, illustrations and interactive displays. In contrast, the stained glass window wall lays down threads of humanity’s creative role through artistic endeavour, the introduction of poetry and specially commissioned pieces of sculpture. The notion of the traditional display case is updated to today’s technology by using 3.6 m high, minimally supported glass panes in their place. The panes support sloping glass lecterns which carry film sequences projected through the free air via a complex optical glass sandwich and mirror system. These tall screens echo the scale of the existing architecture, while allowing the quality of the stained-glass windows to remain apparent, and are overlaid with ‘supergraphic’ subject titles. Specially composed music and sound patterns tie the entire exhibition together.

The whole composition may be seen as a meeting point of two traditions: the architectural tradition set by the original gallery and the museological tradition of the Natural History Museum. Through the series of exhibition bays, principles such as physical characteristics, learning ability, communication, social behaviour and conservation are examined. By making comparisons between humanity and other primates, the visitor is no longer merely an external observer but an onlooker engaged in self-observation as well, thus gaining a sense of proximity to fellow primates. Although drawing much of its inspiration from the past, the new exhibition may be seen as experimental and forward looking.

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Total immersion: new technology creates new experiences

John C. Stickler

New construction materials and electronic media have changed the face of museum exhibits throughout the world. The days of the passive spectator are long gone, says John C. Stickler; and museum visitors are increasingly drawn into the very heart of an exhibit, where they must participate and react. The author writes books and articles on business and travel topics from his adobe home in the Arizona desert. His interest in the artificial environments created by a neighbouring company inspired this article.

How can today’s museums compete with television? Viewers are captivated by the action and excitement on the TV screen while museum visitors face only static exhibits in glass cases.

It is a challenge being faced and met by museum administrators worldwide who see the need to keep their visitors entertained while presenting the unique form of education that only museums can provide.

Two key words, ‘immersion’ and ‘interaction’, combine with newly developed technology to allow today’s museums to hold their own with television, films and video games. If the diorama is the stereotypical example of traditional museum presentation, the ‘immersion’ concept takes away the viewing window and allows the public to walk right into the exhibit.

Historically, institutions of ‘recreational’ public learning interpreted their collections within fairly narrow boundaries: zoos displayed terrestrial animals, aquarium tanks were filled with fish, botanical gardens grew plants, while museums focused on human history, culture and science. The exhibit techniques were also limited: zoos had cages, botanical gardens had greenhouses and museums had dioramas. This is no longer true.

Today, these categories are expanding and the lines between them are overlapping. Museum administrators find that they can borrow good ideas from zoos and gardens, from playgrounds and theme parks (like Disney World), to improve greatly their power to educate while significantly enhancing the enjoyment of their visitors.

‘Much of the progress in naturalistic exhibitry is a direct result of advances in scientific and biological knowledge, as well as the availability of new technologies and construction materials’, according to Daniel Kohl, vice-president for design of the Larson Company in Tucson, Arizona. This American company is a pioneer in the creation of realistic, natural environments for zoos, gardens and aquariums around the world.

Advances in exhibitry, Kohl points out, can be credited to new construction materials such as urethanes, vinyls, acrylics and epoxies and the latest electronic technologies of computers and robotics, fibre optics and lasers.
Exploration, discovery and analysis

The Fort Worth Museum of Science and History in Texas has 2,800 m² of indoor exhibit space and some 1.1 million visitors each year. It is one of nine American museums validated by the National Science Foundation. The administrators wished to add exhibit space without incurring a major expense, and they wanted something interactive - an exhibit where visitors could do something and somehow involve themselves in the educational process.

Don Otto, director of the Fort Worth Museum, relates:

In 1988 dinosaur remains were discovered in a creek bed in North Texas, a new species from the Cretaceous Period, 113 million years ago. We wanted to capitalize on the excitement which swept the area. The formal entrance courtyard of the museum enclosed 9,000 square feet [approximately 840 m²] of open space, which gave us room to construct a 4,500 square foot [approximately 420 m²] sandbox with an artificial stream and Cretaceous limestone outcropping along one side.

The project, a very interactive concept, opened in May, 1993. It was designed and constructed by the Larson Company at a cost of $500,000.

Filled with sand, 1 metre deep, the sandbox became the 'Dino Dig'. Artificial dinosaur bones of various sizes were buried in the sand: a 2-metre-long femur, a vertebra chain, a leg bone and a skull, each from different species. Visitors, mostly children, are given lucite tools to dig with and become 'palaeontologists'. As they uncover the bones, museum staff help them identify their discoveries.

The dig is tied to the indoor Palaeontology Hall where preserved dinosaur skeletons match re-created dinosaur sculptures outside. 'We also salt the "bone bed" with small stone fossils, which are plentiful in the Fort Worth area', Otto adds. 'The children identify them and may take them home as souvenirs. They love it.'

This activity takes participants through the three stages of the scientific method: exploration, discovery and analysis. It is therefore a much more meaningful, and memorable, experience than peering through a glass case - or watching television.

Access to the outdoor Dino Dig is only through the museum and is controlled by staff members. Otto reports that an average of 1,000 visitors a day visit the sandbox, some staying as long as two hours.

Security is not a question for the facilities and sculptures inside the fence, but the 12-metre replica of Acrocanthosaurus (a carnivorous relative of Tyrannosaurus Rex) in front of the museum posed a problem. Not long after its installation, night visitors began breaking off and stealing its 13-cm fangs, despite a protective barrier of thorny holly bushes. The problem was solved with the installation of motion-sensors in the trees above the dinosaur. If anyone approaches the beast, they trigger the water sprinklers in the ground. No replacement teeth have been needed since.

Botanical gardens

Botanical gardens are assuming more and more of an educational role, evolving from lovely, formal English and European rose gardens to elaborate, living, arboreal show-
cases of rare flora and fauna. The 20-million-dollar *Trail of Evolution*, completed at the Brooklyn Botanic Garden in 1988, was inspired by the earlier *Jungle World* at the New York Bronx Zoo. The Royal Gardens at Kew, in London, are now in the planning stages of an immersion exhibit which will be a similarly complex, enclosed educational space interpreting the development of plants.

These glass enclosures have evolved from simple greenhouses to twenty-first century environments able to replicate natural conditions from billions of years ago. Visitors are immersed in natural history, plunging into a rain-forest of vegetation and plants which became extinct before the dawn of mankind.

The Houston Museum of Natural Science in Texas, provides an example of state-of-the-art natural exhibitry. With 2.3 million visitors in 1993, the museum ranks fourth in the USA in numbers of visitors. During 1994, the museum added 8,300 m² of exhibit space, at a cost of $19 million. Inside is a 2,500 m² Butterfly House/Tropical Rain-Forest exhibit housed in a conical glass structure 17 metres high.

‘It is an immersion environment,’ says Hayden Valdes, Director of Exhibits. ‘We want to transport the visitor to another place.’ The rain-forest includes a waterfall over 12 metres high, a replica of an ancient Mayan temple, a grotto water feature, tropical flowers, medicinal plants, a huge (artificial) canopy tree, live Piranha fish, blind cave fish, and ‘thousands’ of butterflies. It is designed to handle 6,000 visitors a day.

Visitors will enjoy not only the visual experience of being inside a rain-forest, but also the humid atmosphere, natural odours and sounds of the jungle. Visitor-activated sound systems, controlled by computers, will ensure that anyone returning to the same spot on the path will hear different jungle noises than before.

Museum spokesperson Terrell Falk reports that visitors may actually walk through swarms of colourful butterflies in the natural habitat. The butterflies come from Asia and Central and South America. ‘We are raising one-third of them ourselves,’ she boasts, ‘in our own butterfly hatchery.’

Another jungle will soon open in the neighbouring state of Oklahoma. The Tulsa
Zoological Park, called a ‘living museum’, attracted 500,000 visitors in 1993. It is also constructing a rain-forest exhibit, planned to cost $5 million and to occupy 1,700 m² under one roof 15 metres high.

According to Zoo director David Zucconi, ‘This will be an immersive type of exhibit, plantwise, it will be a complete jungle experience. The vegetation will be exclusively Central and South American, with fish, reptiles and animals. In this exhibit, the human inhabitants will be given key play.Too many botanical displays omit the native peoples. Our visitors will see extensive cultural ruins in the rain-forest.’

Zucconi speaks highly of the new science available to museums: ‘Any exhibit can be enhanced with new technology. We try to incorporate the latest audiovisual equipment in our new installations. In the fall of 1994 we are opening a new elephant exhibit; it will tie in with our diorama of ancient mammoth kills by Palaeo-Indians in this area. We are developing a robotically controlled elephant trunk which the visitor can operate. You know, there are 40,000 nerves in an elephant’s trunk.’

Thanks to the new technology, museum visitors can also be ‘immersed’ in outer space. Where Next, Columbus is an exhibit at the National Air and Space Museum (NASM) of the Smithsonian Institution in Washington, D.C. Opened in December 1992, it is one part of the ‘Exploring New Worlds’ section of the gallery and includes a realistic simulation of the surface of Mars. (The NASM averages 8–9 million visitors a year.)

Using imagery projected back to Earth from the Viking orbiters and landers, a reddish ‘rock’ landscape was created of urethane foams to duplicate precisely the sizes, shapes, colours and textures of a section of Kasei Valles, a steep canyon on the red planet. It even appears to be coated with a thin layer of red Martian dust. A 27-metre mural and special soft lighting create the ambiance of a sunrise on Mars.
Visitors walk on to the simulated Martian landscape and can choose two paths. One leads to a human habitat with a live hydroponic garden, built into the rock surface, which grows lettuce, strawberries and tomatoes from seeds supplied by NASA. The other path leads to a twenty-four-seat theatre where three films on space exploration are shown continuously.

Project Manager Victor Govier reports that discussions are underway with the Government of Spain to duplicate the Mars exhibit in that country.

'As they leave the gallery,' Govier points out, 'visitors are given an opportunity to participate in a poll by touching an interactive computer screen. They are asked if the United States should continue space exploration, and whether it should be done by humans or robots. Overwhelmingly, the answer is yes, and they want live explorers out there.'

**Total immersion**

A dramatic application of the concept of immersion would be to put the visitors under water face-to-face with the fish. Thanks to modern technology, Sea World is now doing just that at its popular aquarium/park in Orlando, Florida.

The *Terrors of the Deep* exhibit leads visitors through a clear acrylic tube, right into large sea-water tanks of live sharks, Moray eels and barracuda.

'It takes people into the ocean environment,' says Jerry Goldsmith, vice-president of Sea World. 'Before entering the tube, visitors watch a four-minute movie. Then the screens lift up to reveal the sharks waiting for them. Under the water, speakers play mood music as they walk through. Each day, 30,000–40,000 people pass through the exhibit, which cost $6 million to construct.

'The sharks are a Hollywood touch to get people's attention,' confesses Goldsmith. 'We trick the visitors into listening to an environmental message. Systematically, we dispel many of their fears of the sea and then advise them that the greatest “terror” would be to destroy these marvellous creatures through man's carelessness.'

The Larson Company was instrumental in the design and installation of the five state-of-the-art facilities mentioned above. Larson's vice-president Kohl concludes, 'The interwoven complexity of the natural world demands that our exhibits be a synthesis of technologies and an integration of Nature's subplots into a comprehensive story.'
Exhibitions obey an inner logic that goes beyond the mere study of the objects on display. Increasingly inspired by narrative techniques common to the media, they often follow a 'scenario' designed to deliver a clear message to a well-defined public. The author is director of the Master's Degree Programme in Museology at the University of Quebec in Montreal.

Exhibitions: objects, displacement

The first condition that has to be met for a museum exhibition to be organized has to do with space; objects have to be moved and brought together in a new environment, the display area. For the time being or for the foreseeable future, the objects on display are no longer in their usual environment, that is, where they would be expected to be found in everyday life, where they might logically be deemed to serve a functional purpose. While the demands of curiosity and study make such culling necessary, we know, too, that, when museums are being set up, the removal of monuments and works of art gives rise to controversy. Some see their relocation as an appropriate and necessary means of preserving them in the interests of knowledge and transmission to future generations, whereas others regard their transfer as a subtle form of 'vandalism', since it undermines the real meaning of these objects by removing them from their original environment and thus preventing them from exercising the function for which they were intended.

The museum environment asserts itself by neutralizing the object, severing it from its original meaning and function, putting it to a different use. On the one hand, the object is thus reduced to its visible properties and, on the other, being freed of its initial associations, it can serve purposes that will convey new meanings. Exhibitions arise out of such displacements or transfers of the objects collected 'out of their original environment' to a different spatial setting.
Exhibitions arise out of such displacements or transfers of the objects collected out of their original environment. ... Arched window from the cloister of the Great Carmelite Monastery in Limoges (Grandes Carmes des Arènes), France, thirteenth century, on display at the Phildelphia Museum of Art.

There are two crucial stages in this process: when the objects are collected and when they are actually put on display.

The order of the collection

For a long time the exhibition was the collection; there was little difference between exhibiting and collecting; forming a collection automatically involved its arrangement and display in the space available. This meant that the exhibition, the visible aspect of the act of collecting, was simply seen in terms of the space in which the collection was laid out, the place occupied by the objects assembled and the meanings suggested by that juxtaposition.

Transporting, collecting, naming; transposing, exhibiting, suggesting; these acts formed a dynamic sequence conferring new meaning on the displaced objects in the eyes of collectors and their guests. For example, the numerous objects kept in early private collections and cabinets of curiosities were arranged less for the purpose of making each and every one of them clearly visible than according to the rank assigned to them in the symbolic and secret order of this 'world theatre'. Similarly, in the seventeenth and eighteenth centuries, the arrangement of natural-science specimens for display was based on known taxonomic principles. The physical space in which the objects were displayed was thus just as meaningful as the objects themselves. The observer, who was one of the initiated, familiar with the principles of this underlying order, was able to see both the objects themselves and their spatial distribution, both the material substance and the invisible order inherent in the overall view presented by the exhibition.

The logic of the exhibition

Of continuing relevance today is the second aspect of the removal process, when the presentation of objects is dissociated both from the collection and from the principles inherent in the various branches of knowledge. Exhibiting now obeys a different logic from that of collecting, it no longer means installing a collection somewhere permanently. In fact there can no longer be any question of displaying the entire collection. The bulk of the collection will go into the reserves, while another space, the museum area that is open to the public, will house the exhibitions. Exhibiting objects means selecting those associated with a subject decided on by the exhibition organizer. Two distinct orders
then come into play, the order in which the collection is stored away in the reserves and the order of display, which is quite different and follows a logic applicable only at one particular moment.

Display is thus distinct not only from collection but also from established orders and categories of knowledge, for it is not based on any pre-set arrangement. The use of space no longer suggests or follows a secret natural order of things, any more than it is dictated by definitions and categories of knowledge related to the nature of the objects. Even though an exhibition is based on the findings of research on history, art history, archaeology and other sciences, these branches of knowledge no longer determine the way in which the exhibition space is used and items are arranged within that space. The display obeys a logic of its own, determining the way in which the selected items are to be arranged according to the messages that are to be conveyed.

A key feature of exhibitions is the fact that they are increasingly designed to appeal to everyone, as a public place open to the community at large. Consequently, they are partly inspired by stories told elsewhere, in the popular press, on television and in the cinema. They tend to follow a kind of 'scenario', with an introduction, an exposition set out in parts, and a conclusion. The aim is to enable all visitors to grasp immediately the principles governing the overall distribution of space and the assemblage of objects in particular groups. In rather the same way as the pages of magazines are laid out with headlines in block capitals followed by summaries in bold type and narrative texts in smaller print, the objects in an exhibition are given a higher or lower profile, attention being drawn to major items that set the tone of the room whereas others are more discreetly placed and provide more detailed supplementary information. The display thus follows a logical sequence...
that is used by other media and familiar to the public, while preserving the specific characteristics of a simultaneous presentation of objects to the view.

Two major principles govern the selection of objects for display. The first is to assemble a series of objects that have some feature in common, such as their function or the material of which they are made, that illustrate a chronological sequence, or belong to the same region, culture or period; they may be associated with the same person or be works by the same artist, products of the same artistic movement or relate to the same theme. The second principle is that of the so-called context groupings, when objects are arranged to simulate real, recognizable environments. These groups of objects are arranged as they were in their original setting, the purpose of the exhibition being to recreate a complete 'decor', as in 'period rooms' or other reconstituted scenes from life, and to try to make visitors forget that the objects are no longer in their original setting.

A social environment and repository of our heritage

Exhibitions are held in a public place, they are events on the cultural and social scene, and, increasingly, great care is taken over their promotion. The other media – the press, radio and television – cover exhibitions and reproduce some of the objects on display, while catalogues, posters and other souvenirs prolong their life-span. All this gives such events a much more far-reaching impact than their duration or the actual number of visitors would indicate, since this media coverage reaches out to non-visitors who, without having seen the exhibition, are aware that it has taken place and have some idea of its content.

The organization and holding of exhibitions are social acts and can be seen as one form of the social management of messages. The exhibitions organized undergo a selection process and must meet the criteria that determine what a community decides to select and display, what it is able to think and represent to itself, in short, what it wishes or is able to talk about. Michel Foucault has described how the production of messages is controlled, selected, organized and redistributed by means of a number of procedures. The messages conveyed by exhibitions, too, are governed by these rules. It is not only the objects on display that must be taken into account, but also social imperatives such as sponsorship, commissions, international diplomacy, marketing, the museum's public relations, national and international celebrations, etc.

Exhibitions are very much part of a cultural policy which sets out their major objectives within broader targets and goals that go well beyond the mere study of the objects themselves.

We believe that much of the current revival of interest in exhibitions and their renewed popularity is due to the fact that they help to define and to transmit to a community ideas and values that are necessary for that group to maintain its self-image. Exhibitions help to explain things and events, placing them in the context of history and other cultures; they propose a meaning for human enterprise and make people aware of being part of it, at a time when other forms and means of cultural transmission are losing their effectiveness and potency.

Like a number of other sectors of contemporary culture, the exhibitions held for the benefit of a community bring into play several frames of reference with which
visitors can identify. Some appeal to visitors as members of a local group – a village, city or region; others place them in a national context, their own or that of other cultures, now or in the past. Yet others place their visitors within the perspective of humanity as a whole, appealing to a universal consciousness that is brought more sharply into focus by issues like human rights and the rights of peoples, or the environment.

The exhibition's function of giving tangible expression and shape to loyalties of various kinds, placing visitors at the centre of cultural worlds of varying dimensions, seems fundamental to us today. Through it the exhibition plays a key role in bringing home to us the sense of belonging to groups of broader scope, providing, within a particular group's social environment, a physical space within which global realities that concern it can be perceived and established. Exhibitions are thus the tangible expression of, or a metaphor in, space for the 'global village', the fact that everyone, while belonging to his or her own culture is affected by the universal. Because the heritage of each individual is not only local, regional or national, but also contains elements from even further afield, exhibitions bring these distant elements within reach and present them as the heritage of all.

Like other reproduction media, exhibitions move things from one place to another and bring them closer: they put the universe within our reach by enabling us to feel the heart-beat of all our different heritages. If we think of exhibitions as presentations in space we would be inclined to define them today as flexible, accessible environments that help us continually to broaden the scope of our heritage and to keep in close contact with it.
When people talked to stones

Serge Ramond

The Musée des Graffitis Historiques, in the village of Verneuil-en-Halatte in France, is the only graffiti museum in Europe. Thanks to a technique of stamping and moulding, these messages from the past have been reconstituted and preserved from corrosion, erosion and vandalism. Covering more than 3,000 years of history, the collection of some 3,500 plaster casts is the result of a quarter century of tireless research spearheaded by Serge Ramond.

The stones of buildings carry messages in their various incised markings and signs, and these immutable witnesses to the passage of time are to be found scattered about in churches, towers, mills and ancient gaols. You have to get as close to them as possible in order to begin the search for a very special and mysterious world: that of the people of the past.

Graffiti, so much deplored today and often with good reason, have been a medium of popular expression since the most ancient times, as people have always deliberately left traces of their existence on the flat surfaces of their surroundings and dwellings. Even if defined as a popular act which is circumstantial, gratuitous and non-academic, leaving graffiti is none the less a form of vandalism! One can well imagine that seventeenth- and eighteenth-century clergy or the civil authorities of the time were not pleased with all this damage to the stones of their buildings in the form of notches and, at times, deep incisions which could not fail to impair the beauty of buildings and could therefore be regarded as irreversible damage.

Today, however, these engraved traces are of unquestionable scientific interest by virtue of the vivid information that they provide about contemporary concerns, attitudes, customs and behaviour. They represent the transmission of a collective memory which has become a fragile heritage and which, today, is already fast disappearing.

The omnipresence of fleeting moments of existence, frozen in stone, is, indeed, fascinating, and often moving in the case of graffiti made by long-term prisoners. The engravings worked at every day by scraping away at the stone have become sculptures whose naïve character is indissociable from authentic art brut.

Although the symbolic markings frequently have a Christian or ritual connotation, their ludic, votive or esoteric aspects still constitute a real puzzle. These often naïve forms of expression, most of which are engraved on churches, were long ignored by those in charge of historic monuments. A few researchers became aware of the graffiti phenomenon and began to carry out local or thematic research work in various regions to order to write a memoir, a thesis, or merely an article.
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Graffiti cannot be considered to include stone-dressing marks known as 'de tâcheron' (jobbers' marks) or the guild members' signs which medieval stone-masons were accustomed to make, either to show the location of the assemblage of stones or to claim authorship of a constructed section. It was ironically in 1968 that my eyes were opened to the evocative force of graffiti. While the walls of the student hostels were covered with graffiti-slogans such as: 'La Culture est l'inversion de la vie (Culture is the opposite of life)'; 'Fuir sans entrave (Unrestricted pleasure)'; 'Ne travaillez jamais (Never work)'; 'Consommez plus, vous vivrez moins (Consume more, live less)', I was discovering different graffiti, much more eloquent and aesthetically interesting. For the first time, the walls of a church became artistically fascinating in the long beams of the setting sun on a stone engraving worn away by the very fact of standing there for six centuries. This is how our quest for the little details of people's past lives began, and still continues today.

The first intention was to reproduce images or writing using the impressing process of stamping, and we had to devise a methodology. After much trial and error with various materials, we arrived at a practical technique. We would use plasticine to make an imprint of the engraving, and then make a plaster cast, sometimes in duplicate. One of these would be used for printing (on paper), thus avoiding the need to soil the original stone. The second plaster cast would be placed in the museum in optimum conditions for enhancing its historical significance. To achieve this, the graffiti should, as far as possible, be set in a very specific context and associated with a historical event.

This museographical decision posed a problem of choice of presentation. How was this disconcertingly varied crop of documents to be classified? The imprints were taken site by site and monument by monument, thus contributing to the establishment of a general inventory. This site-by-site inventory had to be supplemented by a thematic one. For the museum, we chose

Serge Ramond in his workshop, making a plaster cast.
to display them according to site, to facilitate individual dating.

An Inquisition scene, a trial, a burning at the stake, jousting knights or, more simply, a ship or an epigraph, are all thematic subjects that must be placed in a temporal context. To achieve this, a number of parameters must be respected, including the age of the building on which the graffiti were found, the style of the engravings, costumes, objects, type of architecture, etc.

The date can be established within fifty years or so. This difficulty partially disappears between the sixteenth and eighteenth centuries, during which period dates are clearly shown beside figurative representations and patronyms.

But this is not always the case. Collections of plaster casts which have acquired a faint patina create the illusion of being original stones. They are 380 metres long, situated along a wall and carefully lighted from a source near the floor. Their history stretches from before 1800 B.C. to the beginning of the present century. They are milestones on a journey of discovery, revealing people with their fantasies, their boredom, their suffering, their protests and sometimes their hatred as well as their love. But who were the graffiti artists?

They were people of the Palaeolithic who painted and carved in caves. During the Bronze Age, they were shepherds and farmers. In order to exorcize evil spirits or to ask the heavens to protect their herds, they notched amazing scenes and symbols on rock faces exposed to the sun, thus participating in a magic ritual representing hunting, farming and warfare. This type of rock graffiti was predominant throughout the Alpine chain as far south as Italy, and likewise on the west coast of Sweden. In Pompeii, the gladiators in their barracks recorded their victorious feats on the plaster coating of the walls. During elections, others would denounce their opponents on walls. On the road to Santiago de Compostela, pilgrims would record their journey by making horse-shoe incisions on the limestone of buildings. Similarly, sev-
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teenth- and eighteenth-century journey-
men stone-masons would record their guild
patronym: 'L’Espérance le Berrichon', 'La
Verdure Le Picard 1656', 'Joli Cœur de
LOUDUN 1648', and so on. Other masons,
specialized in roofing, also left traces of
their passage and, sometimes, of a signifi-
cant event:

R. NOVLE/MAITRE COUVERLE/DE CITE ROCUE/
A. ESTIN LE HU/DE SOY LA FOUME/26/6/1712.1

Visitors and, often anonymous, passing
amateurs expressed a whole range of
Christian-inspired or profane symbols
which often defy rational thought, in the
spiral staircases of the church towers
and on the southern walls of churches.
In thirteenth-century prisons, powerful
images of religious themes, cheek by
jowl with political subjects, gradually
filled the feebly lit walls.

The Verneuil Museum re-creates the whole
shut-in atmosphere, preserving and bring-
ing together these important universal ves-
tiges, as a tool of analysis and study for
students of the humanities, and as a verita-
ble library of stones for artists and chasers
of dreams.

Visitors cannot fail to be impressed by a
visit to the museum. Many groups belong-
ing to associations avail themselves of the
guided tours, which last three hours and
cover more than 3,000 years of history on
four exhibition levels. When they leave, it
is with feelings of wonder and awe, and
they often return.

The museum has a modest operating
budget, receiving a subsidy of 9,000 francs
from the commune and another of 15,000
francs from the Regional Council.2 (The
Ministry of Culture, incidentally, has com-
pletely ignored the museum, even at the
regional level!)

Between 2,000 and 3,000 visitors a year,
only half of whom pay to enter, together
with the seventy registered associations
which are members, contribute to the
'wealth' of the operating budget. This budget
covers, inter alia, the various administra-
tive expenses, research trips, documenta-
tion and museography. The building that
houses the collections dates from 1935. It
belongs to the commune, which is respon-
sible for its maintenance. In return, the
commune will inherit all the collections. At
present, an employee of the commune acts
as a watchman every Sunday. Security is
not guaranteed, as there is still no fire
alarm, nor is there closed-circuit television
or proper surveillance of the plaster casts
directly on display to the public.

The only staff are the curator and his wife,
who work at the reception desk and con-
duct guided tours. In future, commune
staff should also provide assistance and
manage the museum, which could be
opened to the public several days a week.

To visit the Museum of Verneuil-en-Halatte,
steeped in memories, is to revisit different
periods of history, individuals and cul-
tures. Those who go there will trace a path
through historical landmarks: unques-
tionably a magical place!

Notes

1. A reference to a fire that broke out under
the spire of Amiens Cathedral.

2. Approximately, $1,600 and $2,600,
respectively – Ed.
Exploring the meaning of life: the St Mungo Museum of Religious Life and Art

Mark O'Neill

Scotland’s newest museum has excited criticism, controversy and vigorous praise. By presenting a wide-ranging overview of a number of the world’s major religions, it delivers an avowed and outspoken message for mutual understanding and respect. The author is Senior Curator of History in Glasgow Museums and led the team which created the St Mungo Museum. Before joining the city museum service in 1990, he was curator of the independent award-winning Springburn Museum, acknowledged as ‘the first real community museum in Britain’.

Nature, according to Immanuel Kant, devised two ways to separate peoples – language and religion. It was the task of civilization to reduce these divisions, which produce ‘mutual hatreds and pretexts for war’. Until very recently many Europeans would have felt that this civilizing had actually taken place. When the idea of a museum of religion was suggested in August 1990, some people felt that it would be an affirmation that religion was safely in the past in a secular society. In Glasgow however, close as it is through geography and ethnic links to Northern Ireland, most people were aware of its continuing power. The tragic events in Central Asia and in former Yugoslavia, along with the resurgence of anti-Semitism and xenophobia in a unified Germany and the countries of the former eastern bloc, testify however to the need for constant vigilance in the maintenance of tolerance for difference, whether racial, religious, cultural or linguistic.

St Mungo’s is not an ‘objective’ museum. It exists explicitly to promote a set of values: respect for the diversity of human beliefs. It aims to do this by showing how important religion has been in humanity’s struggle to find a meaning for life. It ranges over five continents and over 3,000 years, from Neolithic times to the present. It does not however aim to be comprehensive. Given the many thousands of religions that have existed and still do, this would have been impossible. It does however hope to offer a meaningful sample of the religious experience of humanity.

The museum is not the result of systematic collection of religious objects, but draws upon Glasgow Museums’ great reserve collections of anthropology, fine and decorative art, and local history. It goes beyond these disciplines, by trying to display the objects in such a way that they retain some of their spiritual power, blurring the boundary between the disciplines and between secular and sacred. Nor is the project itself the result of long-term planning but, like many museums, of a problem building. A half-completed visitor centre next to the medieval Cathedral of St Mungo ran into financial difficulties and was rescued by Glasgow City Council. The idea of using the building for a broad survey of the religions of the world seemed very exciting and the city’s politicians, fully aware of the potential dangers of the subject, were instantly supportive. It met a number of their requirements. It would be a world-class tourist attraction, to join the Burrell Collection and Kelvingrove Museum and Art Gallery. It would serve local people, for all of whom religion was part of their cultural background, even though many were no longer believers. For the staff it was an opportunity to display some of our most powerful objects, but not in an anaemic way. It would allow us to combat racism, by showing some of the glories of the cultures of the city’s ethnic minorities in a world context. It would allow us to explore a fascinating subject rarely addressed in museums – the meaning of life itself!

With very few models to work from there was no obvious way to tackle such a huge subject. After much discussion we agreed on three main divisions. The main room would be the art gallery, where we would show objects that communicated something of the meaning of the religions they represent directly through their aesthetic power. This created startling juxtapositions, with Salvador Dali’s Chirist of St John of the Cross in the same room as an ancestral screen from the Kalibari people of Nigeria, a seventeenth-century Turkish prayer rug and an Australian Aboriginal dreamtime painting. The room was shaped by the architects so that, even though the objects were of greatly different scales and...
visual qualities, all were seen to be treated with equal respect.

Problems of balance were even greater in the Life Gallery, which aimed to show how religion pervades daily life, from birth through coming of age, sex and marriage, health, religion and politics, missionaries, war, peace, persecution and death. Here objects from across time and space were gathered together by theme. Isis and Horus share a display with the Virgin Mary with the Christ Child and Guan Yin; a book of Tarot cards, a Yoruba smallpox figure and a holy-water bottle from Lourdes share another. Joan of Arc and a suit of armour from an Islamic Jihad are shown alongside a headhunter's shield from Borneo and a twelfth-century Crusader's sword. For persecution we decided to use a single example, the Holocaust, which challenges the West's claim to 'civilization', displaying a prayer book donated by a concentration camp survivor who lives in Glasgow today. The objects are accompanied by small photographs putting them in context. Interpersed with the curatorial labels are quotes from Glaswegians of many faiths who were interviewed about their beliefs. The designers respond to the challenging complexity of the material by making plinths which were sculpted to hold each object in a space which by its shape or relationship to other spaces was calculated to reveal the meaning of the object.

Down the centre of the Life Gallery are displays on the six main faiths in the world – Buddhism, Christianity, Hinduism, Islam, Judaism and Sikhism. The centre also has a display on the afterlife, the single largest section, with a procession of funerary figures from ancient China, Egypt and Peru, an Egyptian mummy, a number of judgement figures (a Ming statue of Yenle and a bronze Osiris) leading to sections on Heaven, Hell and reincarnation, and on go-betweens (angels, saints and demons).

The Scottish Gallery is thematic rather than chronological, and looks at Keeping the Faith (how religion is passed on from generation to generation), Protestants and Catholics (the story of the Reformation in Scotland, and conflict with immigrant Irish Catholics from the nineteenth-century onwards), Charity, Missionaries (especially David Livingstone) and People and Places (how Scottish people's identities can include affection for a far-off place, be it Rome, Amritsar, Jerusalem or Mecca).
The museum is introduced by a short video, which shows local people of many faiths talking about what their beliefs mean to them. In the courtyard of the museum, a leading gardener from Kyoto has created a Japanese Zen Garden. Against the backgrounds of the Cathedral and the nineteenth-century necropolis, this austere garden looks as if it has been there from time immemorial.

Involving the community

After much discussion we decided to call the museum after the sixth-century saint who founded Glasgow. Like many aspects of the museum, this was the subject of consultation with various religious communities within the city. Some felt it was too Christian, while others felt that it was wrong to use a Christian name for a multi-faith display. Most agreed however that it was a good name, as it referred to someone all children learned about in Glasgow schools, and reflected the importance of religion in the life of the city. Our marketing department advised us that it was more friendly, memorable and interesting than simply 'The Museum of Religion'. The second part of the title - 'of Religious Life and Art' - reflects the fact that the museum could only approach the spiritual domain through works of art or objects used by people in their daily lives.

Given that the museum opened two and a half years after its conception and sixteen weeks after the building was completed there were practical limits to these discussions. These were also limited by our non-negotiable principles, which were that as city employees it was not our place to make judgements as to the merits of the various religions, either implicitly or explicitly, and that the museum existed to promote respect for beliefs different from one's own. Though the museum's overall purpose was to celebrate humanity's spiritual quest, we also felt that we had to reflect the negative aspects of religion, especially with regard to war, persecution, the treatment of women and the destructive aspects of missionary work.

We approached the communities individually rather than attempting to set up a committee. We needed to find out how they wished to be represented and to become sensitive to issues of concern to them. But we had to take responsibility for the overall structure and balances within the museum. Most groups participated enthusiastically in the project. The Jewish and Sikh communities were very helpful in finding key objects which we did not have in our collections. The Hindu community performed a blessing ceremony for a statue of Ganesha which we commissioned from India. The Education Adviser from the Central Mosque helped clarify the section on belief in the Life Gallery. He felt that the mixing of objects in the surrounding cases would be much more acceptable if each of the main religions also had its own space.

What was originally intended as a display on comparative iconography became a series of introductions to each of the six main faiths, as near as possible as it was conceived by believers.

The museum opened on 4 April 1993. Many religious groups found aspects of the
museum not to their liking and wrote to us, but most welcomed the museum in principle. The majority of the criticisms related to omissions of denominations or aspects of religious life which could not be represented with objects. Others argued that particular faiths were not given enough prominence or were diminished by the inevitable brevity of museum labels. The most public criticisms came from the Church of Scotland which argued that its role as the national church was not sufficiently acknowledged. The museum was also accused of both under- and over-emphasizing the amount of conflict caused by religion and was picketed by feminist groups for the way in which it interpreted female genital mutilation.

It was praised by media as diverse as the left-wing Workers' Press which felt it 'wasn't half bad', and the right-wing Spectator, which said that 'in terms of interpreting and inspiring society afresh, the St Mungo Museum is probably the most important museum to have been opened in Britain since the V&A [The Victoria and Albert Museum, 1852]'. One critic felt that it redressed the imbalance in religious history which prefers the written word, when since time immemorial most people, being unable to read, found in objects pointers to the divine. Others found that it was 'courageous' and 'fascinates at spiritual and temporal levels'.

We had been expecting a dramatic response, but the storm of negative criticism was still something of a shock. Although some embarrassing errors in the museum's Guidebook weakened our position, we adhered to our original intention of accepting all comments as contributions to a review at the end of our first year and we will make changes that make the museum clearer, fairer and more accurate. We felt that this time for reflection was essential in such a complex subject. Perhaps more consultation would have removed some of the controversy, but it might also have undermined the civic values of respect and tolerance, and weakened our ability to tackle the negative side of religion.

In our first six months St Mungo's has won three awards and received 150,000 visitors. This includes over 80,000 Glaswegians, about one-sixth of the city's population. Some 84 per cent of all visitors thought the museum was very good or excellent; 79 per cent professed a religious belief, and of these 84 per cent felt that their own religion had been treated fairly.

Many museums provide a long perspective on the present, or an escape into realms of peaceful contemplation of beauty. Others challenge by addressing difficult or painful issues. St Mungo's integrates all three approaches, in a way that reflects the fact that cultural and religious identities are not just interesting subjects of study but matters of the deepest significance and, in some cases, matters of life and death.

**Note**

1. The author would like to thank Elizabeth Carnegie, Patricia Collins, Harry Dunlop and Antonia Lovelace for their help in compiling this article.
Collectors and their museums: towards a specific typology

Dolors Farró Fonalleras

'The small, intimate museum whose existence is often due to a single person' is how Museum described the phenomenon of the 'single-parent museum' (see Museum, No. 172). Dolors Farró Fonalleras argues that although each of these museums is characterized by its striking individuality and the idiosyncratic vision of its founder, common tendencies do exist which set them apart from more mainstream institutions. The author began her museum career in the National Art Museum of Catalonia in 1974 and joined the Museu Frederic Marès in 1985 as conservator; she became its director in 1986.

There are some museums that have come into being as a result of donations, and their founders' names, instead of being lost in anonymity, survive in places that retain the unitary character instilled into them by their founders, those called 'authors' museums', 'single-parent museums' or, somewhat imprecisely, 'collectors' museums'.

It is difficult to see a specific museographical typology for such museums since, in spite of the prestige some of them enjoy, there is, for example, no international committee covering their activities, and reference to them in guide books appears only under the heading of 'other museums' or in connection with the discipline corresponding to the majority of the exhibits in their collections.

However, considered globally, it is easy to see that they constitute a special sector of museology, which furthermore can be very interesting if we consider the variety and specificity of such museums. Let us, for example, take those closest to the world of artists. Here we will find, to mention but a few, the Ingres Museum at Montauban, France – the artist's house or workshop in which his own collection is displayed; the Poldi Pezzoli Museum in Milan, a house converted into a museum to display the collections; the Wallace Collection, the museum originally established in the house of the illegitimate son of the Marquess of Hertford in London; the Nissim de Camondo Museum in Paris; the houses, palaces and castles that are open to the public; and the collections set up in public buildings or bequeathed to an institution as was the Dulwich College Picture Gallery in London.

In the present article we shall set aside those that are simply artists' workshops or homes that have been opened to the public and outline a few thoughts about some that make up the particularly homogeneous model created in Europe in the mid-nineteenth and early twentieth centuries.

In this group, in addition to the museum of Count Poldi Pezzoli (1881) and the Wallace Collection (1900), could be included the Musée Guimet (Paris, 1888), the Isabella Stewart Gardner Museum (Boston, 1903), the Musée Jacquemart-André (Paris, 1913), the Musée Cognacq-Jay (Paris, 1929) and the Frick Collection (New York, 1935). Another museum having much in common with these is the Museu Frederic Marès, which was created in 1946–48 in Barcelona and which we describe below.

But the museum that was the precursor and model, the one that became a compulsory target for all collectors of the era, was the Musée des Thermes et de l'Hôtel de Cluny, which was opened to the public in 1844. The bulk of its exhibits came from the collections of stone carvings bequeathed by the municipality of Paris and above all from the private collection of Alexandre Du Sommerard, who had taken up residence in the palace beside the Thermes in 1832. As well as sculptures and paintings, his collection included ceramics, secular and religious furniture, gold and silver work, crystal, clocks and watches, weapons and locks, enamel work, ivory, Neapolitan figures, carpets, fabrics and embroidery, that is, all those items that would constitute the basis of many future collectors' museums and without which a collection was not considered complete.

Collectors' museums today, with their atmosphere of private houses and little interest in the outside world, are still striking by the accumulation of works that reflect the principal object of their founders. Visitors, at first somewhat overwhelmed but soon soothed by the tranquility of the exhibi-
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...tion halls and by the feeling of having 'discovered' a museum that seems to have been tailor-made for them, are filled with admiration for the person who thought of offering them such delight.

Every collector's museum has 'its own public', which cannot be in the majority, for that would imply a contradiction in the collector's wish to show his treasures only to those who could appreciate them.

Whatever the legal formula adopted for the donation, these museums still carry the connotation of 'something different' and maintain a certain independence with regard to the museographical trends in fashion. The collector not only defends the form and essence of his or her collection but also — so long as it has not been bequeathed — actually comes to be a powerful part of the collection's attraction.

The way of displaying the collections does not correspond to scientific systematization but to an initial decorative scheme (emphasized by the names of the rooms) in which there may abound walls covered with paintings or collections of objects, the arrangements always guided by an aesthetic sense reflecting the creativity of the collector and a latent wish to impress the 'spectators'. Sometimes a monumental staircase appears, and it is not uncommon to come across a room in which many of the most valuable exhibits of the museum are concentrated.

Marked by the historical and contemporary development of the cities in which they are established, collectors' museums remind us today of a specific artistic market and the reasons for its existence; they illustrate what was indigenous and what appeared as a result of external influences and interchanges. For example, they allow...
us to reconstruct the intellectual structure of a city or the economic position of a country and even the changes introduced into aesthetic trends and the history of art by those recognized central figures of the world of the arts.

The legacy of a pragmatic romantic

In 1944 Frederic Marès i Deulovol gave the first public presentation of his collection and announced his decision to offer it to the city of Barcelona; the city council responded by making available a set of buildings in the process of restoration that had formerly housed staff of the medieval Palacio Real Mayor. The official inauguration was held in 1948.

A number of collectors' museums were already to be found in Spain: the Biblioteca-Museu, donated by the politician, historian and poet Victor Balaguer to Vilanova y la Geltrú (Barcelona) in 1900, which is probably among the oldest; in 1916 the collections, mainly of the applied arts, of the Counts of Valencia de Don Juan, which were established in Madrid; the Museu del Cau Ferrat, which the painter and writer Santiago Rusiñol left to the city of Sitges (Barcelona) was inaugurated in 1933; the Museo Lazaro Galdiano (Madrid), another of the most characteristic, which was inaugurated in 1951.

Frederic Marès had such a long life (1893–1991) that he had more than enough time to complete his work, which was inspired by romantic idealism but carried out with the indispensable pragmatism that also characterized him. A sculptor, militant academic and essayist, he directed the Higher School of Fine Arts (which he transformed into a faculty) and that of Applied Arts and also gave classes in them. He had come to Barcelona at the age of 10. His father opened two shops there in which antique books were bought and sold. That was the source of his love of books and of his collections, which expanded rapidly. The financial resources of the family were limited, and he invested his intelligence, tenacity and powers of persuasion in dealing with successive government departments and above all the fruits of his career as a sculptor in building up his collections.

He thus succeeded in building up two different sets of collections. The first of these was inspired by the purest tradition of European collections in the mid-nineteenth and early twentieth centuries. This
Collectors and their museums: towards a specific typology

collection of collections (which today totals over fifty) contains, for example, paintings, ceramics, works of wrought iron, fans, clocks and watches, furniture, coins and medals, and a large number of objects, some perhaps rather out-of-the-way, like the collections of amulets, objects made out of hair and the phototypes given away with matchboxes. The second large collection was made up mainly of Spanish sculptures from pre-Roman times to the nineteenth century and is of remarkable scope.

When Frederic Marès set up these collections he was guided by the same principles that have governed many collectors' museums, though the poetry of the collection is much more obvious in the way in which the first, which he called the 'sentimental museum', is displayed. For the collection of sculpture he preferred a more sober arrangement and was concerned with symmetry and the linear positioning of the different works in galleries of a certain neoclassical style.

However, in addition to the exhibition rooms, the museum must be viewed as a whole. We then find precise references that remind us of the development of taste and the treatment of the collections and also of the principles of exhibition, since private collections came into being as a type of culture in modern times. Briefly, then, we shall mention the various exhibits that formed a small marginal 'natural history' collection (with complete skeletons of animals or fragments of bones, fossils, shells, some representations of natural objects worked by goldsmiths, and so forth); catalogues with a wealth of qualifiers and hyperboles aimed at arousing the curiosity of visitors; a miniature studio with books; the inner patio-garden with sculptures, relief work, some shields, and so on.

In the Museu Frederic Marès this also has the characteristics of 'archaeological reconstruction' with fragments of various provenance that would link up with the ideas evoked by Alexandre Lenoir (1761-1837) in his Musée des Monuments Français and, of course, would be in harmony with the Musée de Cluny, including incidentally, the placing therein of a fountain, which we do not consider fortuitous, in spite of what appearances suggest.

Like all collectors, Frederic Marès expressed his personal view of art in his collection and created his ideas of museums in real surroundings. His ideas may be subtly hidden, but they are always there.

Efforts have been made on many occasions to ensure that these ideas remain unchanged, but many promises to perpetuate those that the collector himself, with philanthropic ideals, thought would satisfy his needs for eternity have also been broken. 'One cannot sufficiently deplore the original arrangements destroyed in the course of the century', A. Mottola Molfino recently complained with reference to the oft-cited Musée de Cluny.3 The reforms carried out, the transfer of the Renaissance collections to Ecouen and the depositing of other exhibits in other museums have indeed succeeded in blurring an eloquent forgotten statement, that 'the formal undertaking repeatedly made by the minister that the Du Sommerard collection would be preserved as a whole and not dispersed in the other public collections'.

Collectors' museums are much more difficult to maintain in their original state than are other types of museums. Upkeep may sometimes be seen to lag behind after a period of stagnation during which, in addition to the usual technical problems (concerning installations, environmental control, public areas and so on), those that may be inherent in the museum's typology (the presentation suggested by the founder...
Engraving by A. Godard, published in Les Arts du Moyen Age by A. Du Sommerard, representing the so-called 'François Premier Room' in the Musée de Cluny in 1839.

being altered, the way of displaying exhibits, the lack of documentation, the diversity of collections, etc.) make the technical work difficult. This is when drastic or partial problems can occur, from a lack of knowledge of or interest in the original order resulting in its being reduced to a disordered and incomprehensible message or even in its losing its original meaning.

In 1985 we tried to correct some of the problems encountered in the Museu Frederic Marès. We prepared documentation on the collections and published the first catalogue in 1991, provided the public with supplementary activities and made small improvements in the installations, etc.

In 1992 we set out to work on a global 'state of the question'. We organized discussion meetings to be concluded by the drafting of a document, Remodelado. Primeras indicaciones museológicas (Remodelling, First Museological Indications). As the work advanced, the need for revisions and new possibilities appeared. We realized, however, that the starting-point that seemed the most appropriate was always the one that, far from distancing us from the model, helped us to rediscover and revive it.

This led us to believe that the future option for collectors' museums might be that of working on their renewal while respecting their original shape and form, that is to say, of knowing how to concentrate on essentials (the exhibits and appropriate and effective technical functioning) without conforming too much to the consumer option or to the current trend of replacing the 'private view that has to be discovered' by the 'immediate and rapidly intelligible', leaving these microcosms founded on individual temperaments to continue to be what Mario Praz wanted them to be, 'another centre for fantasy, a fertile soil for intellectual escape'.

Notes

1. The dates given are those of the dates of opening to the public.
2. His memoir El mundo fascinante del coleccionismo y las antigüedades (Barcelona, 1977) are of particular interest with regard to the topic we are dealing with.


Protecting cultural property

UNESCO reviews The Hague Convention

At the end of 1992, UNESCO and the Government of the Netherlands jointly commissioned a comprehensive review of current international humanitarian law relating to the protection of monuments, museums and other cultural property during armed conflicts of all kinds (including civil wars and internal insurrections and not just international wars in the traditional sense). The growing international clamour for such a study and for the strengthening of international law was, of course, prompted particularly by the many dozens, if not hundreds, of cases of apparent cultural atrocities and of alleged cultural 'ethnic cleansing' in former Yugoslavia, though both international organizations and specialists in the field had been concerned for some considerable time about such issues.

The main focus was the Convention on the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 1954 (usually known as The Hague Convention). However, earlier international law initiatives and regional agreements were also examined. It was important to try to discover the reasons for the apparently deliberate destruction of the cultural symbols of the actual or perceived enemy, whether an international one or just one of a different cultural or religious community within the same country.

The report, submitted to UNESCO at the end of May 1993 after a period of extensive consultations, makes it clear that very few of the governments who have ratified The Hague Convention have made any serious attempt to meet their obligations under it. The main text of the report begins with an historical review of the evolution of concepts of cultural protection in times of war over many centuries through to the Second World War. It then analyses, subject by subject, both the detailed provisions and the perceived problems of application of current international law, including questions of definition, that is, the concepts of 'protection', 'safeguarding' and 'respect for cultural property', as these terms are applied in international humanitarian law. The chapter on peacetime preparation for the application of the Convention clearly demonstrates that its effectiveness depends very much on the obligation of states parties to take appropriate action well in advance of any prospect of war. This should include preparation for the physical protection of monuments, museums, major libraries and archive repositories and their collections in the event of any possible armed conflict, whether international or internal.

Unfortunately, since 1954 only a tiny handful of states, such as Austria, Switzerland and the Netherlands, have made serious efforts to meet their obligations under this aspect of the treaty. The same is true of the obligations to introduce suitable legal obligations and sanctions within domestic military and criminal law in order to enforce the country's obligations under the Convention. It has been established, at least since the Nuremberg trials following the Second World War, that grave offences against cultural and religious symbols and cultural property in general can be tried and punished as war crimes, and that the primary obligation to investigate and prosecute such war crimes rests with the individual states with a relevant interest. Normally this obligation applies in relation to war crimes occurring on a state's own territory or carried out by its own military personnel or other nationals in any part of the world.

However, for the first time since the 1940s, an International War Crimes Tribunal has been established in relation
Protecting cultural property

to recent atrocities in former Yugoslavia, and cases of 'cultural' war crimes are being vigorously pursued for the tribunal at the present time. Indeed, the report stresses the importance of the successful prosecution of some test cases in the United Nations Tribunal in order to send a clear message to the world in relation to other conflicts.

In view of the growing alarm about what has been and is still happening in the civil wars and other internal conflicts of the past few decades, particular attention was paid to the apparently growing phenomenon of deliberately targeting important cultural and religious symbols of the perceived enemy. This has been perhaps most visible in former Yugoslavia due to the presence of the international media. It is evident that this alarm and concern is entirely justified on the basis of the facts, and is not some sort of media hype or propaganda by one or another of the warring factions, though there have probably been examples of both. In far too many cases, eliminating all visible evidence of the presence of 'the other' has not been an accident of war but an important war aim in itself.

The United Nations was in fact most anxious to see 'cultural genocide' specifically defined and outlawed in the 1948 Genocide Convention. Tragically — in the light of subsequent events — this provision was deleted from the final text at the insistence of some democratic powers, concerned about the implications of such a concept in relation to their policies on the active promotion of their 'national' languages and cultures both in their home territories and their colonies.

The report concluded that there is little that is basically wrong with present international law, particularly the 1954 Convention: the continuing problems are due to failures in implementation. One of the highest priorities must be to get all countries formally to ratify and implement it. At present, several major international powers have not ratified the Convention; they include the United States, Canada and the United Kingdom. In addition, there are entire regions of the world, notably Latin America and sub-Saharan Africa, where only a minority of states have adopted it. The report therefore concludes with a series of recommendations addressed to UNESCO, the United Nations, to states — whether parties to the Convention or not — and non-governmental organizations, and a number of proposals for possible amendments and additions to the Convention itself if it is revised.


Editor's Note: Patrick J. Boylan, author of this article and of the UNESCO report, is vice-president of the International Council of Museums (ICOM) and Head of the Department of Arts Policy and Management, City University, London.

Some readers may recognize the title and subject: a book by the same author entitled New Museums - A Start Up Guide was published in 1987. It enjoyed much success and, as it should, inspired this new version which is not so much concerned with starting up new museums as with managing existing ones successfully. (It may also be recalled that another recent book by the same author, together with C. Faine, appeared under the title Museum Basics; it was a broader and more detailed work done for ICOM.)

As for the book in question, the title itself is intriguing: 'management' is the saviour term against an uncertain future; 'new' is always a good way to begin, as we can rarely resist the charm of novelty; and, finally, 'guide' is quite comforting since we all tend to feel lost and there is nothing more soothing than the promised destination of 'good practice'.

What does the book offer? Six chapters, in some 140 pages, covering such complex themes as first steps (where basic information about the museum as an institution, whom to contact and how to plan the changes, is explained); managing the collections (where the phases from acquisition to research and care are briefly considered); the museum and its users (where everything that falls into this broad category, from defining the user to exhibitions and catering, is concisely exposed); managing the museum (a broad and technical theme treated in its basic sense). The two brief remaining chapters are concerned with further reading (British bibliography exclusively) and other sources of information (again, aimed at British users). There is also an index.

The book rests upon the assumption that everyone (finally!) agrees upon what it means to run a museum successfully; because it discusses practice, it represents a transfer of professional knowledge. But for whom? It makes easy reading for an experienced curator as it demonstrates no ambiguities and admits of no speculations; indeed, it suggests by implication that no such things exist in a clear vision of what constitutes good practice. If only this were true! The need or possibility to go further remains, however, an open - though not obvious - question. Most curators will surely like it this way as it suggests that the profession can be learned by reading the book.

The author provides lavish yet pointed information at the methodological and taxonomic levels, at least with regard to the basics which many museum professionals may not know or all too often forget. Thus, many readers will profit from the good advice and the reminders in the form of checklists. If many curators and museum directors knew the checklist and the few words of counsel concerning, for example, the architect's brief, much money and frustration would be saved. To accuse the book of not containing inspiring examples or new ideas would be incorrect, as its purpose is to teach the basics in a brief and succinct way. It thus records the state-of-the-art position, appropriating some novelties but respecting the rules, one of which is expressed emphatically on several occasions: 'A museum without collections is no museum at all.' Whilst this might be acceptable to a certain extent, it is followed by a more debatable position: 'Collections after all are the main reason for a museum being in existence.' Personally, I would rather be told that collections are a means to an end and not an end in themselves. When further on we find a chapter page bearing a quotation from the text that states, 'museums are for people, and the most successful museums are those which put their users first', I begin to suspect (based on my own experience) that museum
curators are not that different from politicians. The latter, it must be said, unlike us, never admit that they are only after power and money.

Some issues are still not clear to me. For example, the distinction between 'marketing' (which, according to the author, is 'matching resources to the wants and needs of people'), 'promotion' (which should be 'securing interest in your museum'), publicity (which is associated with 'promotion'), and 'public relations' (which should be 'managing relationships of museum-patrons and museum-users so that they correspond'): although it is nice to find this all briefly explained in one place, the first category tells me much the same as the last (albeit the last one seems clearer).

If you are looking for some words on, say, 'ethics', in this book, do not be too disappointed: firstly, it is a brief manual and, secondly, it does not open the question further than the notion of 'codes of conduct'. An advanced reader might appreciate a single sentence that would say that the entire mission of museums stems from the constant redefinition of our vocational commitment, i.e. ethical concern.

This being said, I must point out that the book is beautifully designed and well organized. One practical feature which many readers should appreciate is that some excerpts and quotations are set in the margins, thus providing instant reminders of the prevailing theme or conclusions. The book also includes useful cross-references so that the themes can always be related. I very much appreciated those pithy remarks scattered unpretentiously throughout the text as if they had been accepted truths for some time but that nevertheless should provide serious food for thought for any decent museologist, such as, for example, the mention of the 'public involvement and participation in the research and collecting process' or the statement that 'all museums in the UK work within a multicultural society, and must provide for multiculturalism in their public services'.

On the other hand, I am less convinced by the claim that 'success in managing a museum will depend upon how effectively you can defeat ... the competition' by providing a better product. Whilst true in general terms, it leaves too much room for misunderstanding; taken literally, it might destroy some of the values that Ambrose himself advocates.

In sum, the book, by being at the same time brief and all-embracing, remains dangerously simplified: 'Forward planning is a relatively simple and straightforward task.' It is not and the author knows this better than most since he offers the elements for what is, in the final analysis, the complex task of understanding the museum, knowing its clients, being aware of its unique circumstances, grasping its working processes and providing a vision.

The book is intended primarily for British professionals and will have the greatest impact on them; others will certainly profit from the material but will remain aware of that fact. Clearly written and simple in approach, it will undoubtedly enjoy much recognition, but this strength also implies a certain weakness: the term 'museology' is never mentioned, illustrating perhaps the profound truth that museum work may still be merely an 'occupation' rather than a 'profession' in its own right. This very reticence may be slowing down the ripening of our business, leaving us unprepared for the public arena. Methods and norms are essential but they do not necessarily represent the truth; if this is not clearly stated, one might proclaim that poetry is anything that rhymes! A successful museum is always more than the sum of its (managerial) parts. I am convinced that the author of this useful book would agree.

Book review by Tomislav Sola. A member of Museum International's Editorial Advisory Board, the author is a well-known museum specialist and teaches at the University of Zagreb.
Professional news

Getty Grant Program

Individuals and institutions in 51 countries received 189 grants totalling approximately $7.5 million from the Getty Grant Program during 1992/93. Representing the largest number of grants made in a single year since the programme's inception, the awards ranged from $10,000 to $250,000 and covered a broad range of projects involving art history scholarship, advancement of the understanding of art, and the conservation of art and architecture. Some $200,700 were granted to France, including approximately $80,000 for the conservation treatment of the altarpiece The Martyrdom of St Stephen by Peter Paul Rubens in the Musée des Beaux Arts in Valenciennes as well as other works in the collection, and some $35,000 for the conservation of paintings by Russian artists Natalia Goncharova and Mikhail Larionov in the Musée National d'Art Moderne in Paris.

For further information (including brochures, applications and guidelines):
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401 Wilshire Boulevard, Suite 1000, Santa Monica, CA 90401 (USA)Tel: (1.310) 393-4244Fax: (1.310) 395-8642

Australia acquires contemporary Asian art collection

The Queensland Art Gallery in South Brisbane (Australia) has purchased eighteen works which will form the basis of the only major collection of contemporary Asian art in Australia, and one of very few in the world. The Kenneth and Yasuko Myer Collection of Contemporary Asian Art was made possible by one of the largest private donations in the gallery's history and, in the words of gallery director Doug Hall, "will form the focal point of a developing collection of contemporary art from throughout the Asia-Pacific region, an area which has been sadly neglected by art museums throughout Europe, America and Australia".

For further information:
Queensland Art Gallery,
P.O. Box 3686,
South Brisbane,
Queensland 4101 (Australia)Fax: (61) 07-844-8865

New publications


This completely revised and updated edition of the successful 1990 Keyguide provides an integrated guide to the documentation, reference aids and main organizational sources of information on museums and museum studies worldwide. Part I is a critical overview of museum studies, its literature and other information sources; Part II is an annotated bibliography; Part III is an international directory of organizations.

Published by the Museum Development Company Ltd, Studio Five, Mill Lane, Woolstone, Milton Keynes MK15 0AJ (United Kingdom), 1994, 400 pp. (ISBN 1-873114-14-1).

A comprehensive guide to sources of information, advice, best practice and heritage organizations in the United Kingdom, the Museum Directory lists some 4,000 specialist suppliers of products and services as well as
hundreds of support organizations. Practical case-studies cover a broad range of museum and heritage concerns including market research, retailing, security, environmental control, charitable trusts, lighting techniques, storage systems, mail-order catalogues, sponsorship, developing Friends organizations and sources of European funding.

Training in Conservation. Published by the Conservation Unit of the Museums and Galleries Commission and the UK Institute for Conservation with support from Historic Scotland: Scottish Conservation Bureau, 1993, 48 pp. (ISBN 0-948630-08-6). Distributed by the Conservation Unit, 16 Queen Anne's Gate, London SW1H 9AA.

This new guide illustrates the growth in courses in response to demand in the United Kingdom and overseas. The broad range of specialities covered includes upholstery, plastics, stained glass, art on paper, photographic, library and archive materials, antique clock and furniture restoration, and archaeological conservation. A companion booklet, Working in Conservation, illustrates the day-to-day work of seven conservators ranging from the ongoing conservation of suits of armour at Durham Castle to restoring the mirrors at Hampton Court Palace after a fire.

Les Sources de l'histoire de l'art en France: répertoire des bibliothèques, centres de documentation et ressources documentaires en art, architecture et archéologie [Sources of Art History in France: Directory of Libraries, Documentation Centres and Resources in Art, Architecture and Archaeology]. By Marie-Claude Thompson, assisted by Catherine Schmitt and Nicole Picot. Published by the Association des Bibliothècaires Français, 1994, 300 pp (ISBN 2-900177-08-1). Distributed by La Documentation Française, 29, quai Voltaire, 75344 Paris Cedex 07 (France).

The first national survey of its kind in France, this publication lists some 600 sources of specialized information available in a broad variety of institutions. Five indexes facilitate research by city, département, institution, type of library, and key-words.


This new international journal is devoted to the publication of original research and review papers on any aspect of the preservation and presentation of archaeological sites worldwide. Topics covered include historical documentation and condition reporting, analysis of deterioration and environmental monitoring, protective sheltering and roofing of ruins, analysis and treatment of building materials, structures and decorative surfaces, site and visitor management, national and international legislation, as well as the cultural, social, ethical and theoretical issues associated with the conservation and interpretation of archaeological sites.


The conservation of documents, and their preservation for posterity, is 'an interesting amalgamation of both science and art', requiring a total understanding of the problem and use of scientific techniques as well as an appreciation of aesthetics, historicity, authenticity and value. The author explores the physico-chemical qualities of paper, factors of deterioration and methods of conservation so as to narrow the gap between curators and scientists and to call attention to the interdisciplinary approach needed to develop better conservation practices.
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Some of our references:
Royal Museums of Art and History [Brussels], Beit Al Qur’an Museum [Bahrain], Musée du Louvre [Paris], L’Historial de la Grande Guerre [Péronne], Victoria and Albert Museum [London], Imperial War Museum [London], National Museum [Singapore], Museum of Art [Taiwan], Kremlin Museum [Moscow], Tretjakov Gallery [Moscow], etc
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