Museum

Vol XXXIII, n° 4, 1981

Cultural connections

museum

Vol. XXXIII, No. 4, 1981

Museum, successor to *Mouseion,* is published by the United Nations Educational, Scientific and Cultural Organization in Paris. An international forum (quarterly) of information and reflection on museums of all kinds.

Each issue: 25 F. Subscription rates (4 issues or corresponding double issues per year): 90 F (1 year); 145 F (2 years).

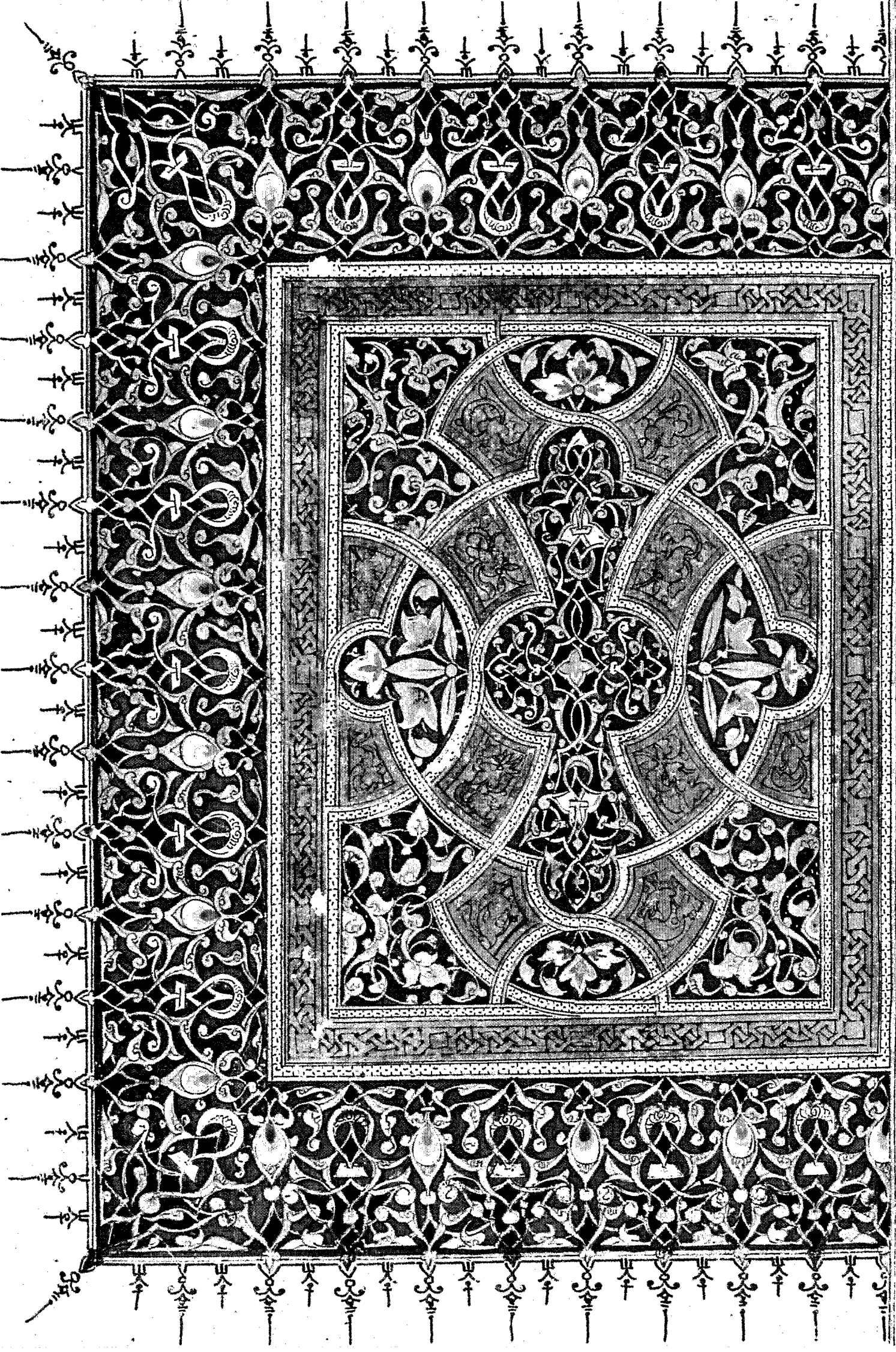
Printed in Switzerland
Imprimeries Populaires de Genève

Correspondence concerning *editorial matters* should be addressed to the Editor (Division of Cultural Heritage, Unesco, 7 place de Fontenoy, 75700 Paris, France) who is always pleased to consider manuscripts for publication but cannot accept liability for their custody or return. Authors are advised to write to the Editor first.

Correspondence concerning *subscriptions* should be addressed to the Commercial Services Division, Office of the Unesco Press, Unesco, 7 place de Fontenoy, 75700 Paris, France.

Cultural connections

ISSN 0027-3966 *Museum* (Unesco, Paris), Vol. XXXIII, No. 4, 1981



'This superb exhibition brings us a moving vision of the genius of the Islamic peoples as seen through one of their most favoured means of expression, of the multiple styles created out of a common spiritual and ethical source of inspiration. Calligraphy in the copying of the Qur'ān reveals that spiritual communion which, down the centuries, has brought together under the same faith so many peoples of such diverse sensibilities and traditions.

'For Muslims everywhere the Qur'ān—the eternal Word of God—is the basis of all knowledge and wisdom. It is with the Qur'ān that, traditionally, children learned to read and write. This is why the art of calligraphy—the art of copying the Qur'ān—has been such a prestigious one throughout the Islamic world, why so many great artists have devoted their lives to fashioning an aesthetic form for the holy scripture that reflects the highest aspirations of their art.' (From the speech of Amadou-Mahtar M'Bow, Director-General of Unesco, at the opening of the exhibition *Qur'ān and Bindings from the Chester Beatty Library* at Unesco Headquarters, Paris, 16 June 1981.)

In this issue...

A mixed issue of *Museum* such as this one brings together contributions that are by definition disparate. Yet the lines of questioning among museum workers today, their preoccupations and the achievements dearest to their hearts so converge that unity of intent often appears without undue strain on editorial effort.

Still, we have applied an implicit criterion of choice in choosing to print unpublished articles sent to us earlier or texts linked to various new museum projects or events. James Porter argues in this issue (p. 234) that 'one of the most crucial and difficult tasks of the museum is to communicate the cultural heritage in a way that illuminates the contemporary situation'. Extend the notion of culture to its widest anthropological sense, link our present-day life to the eternal creative search of man on the one hand and the material world, both natural and man-made, on the other, and you discover a purpose that is common to all the authors who share with us here the fruit of their research, their educational efforts or their curatorial experience.

The issue opens on a scientific note—but one that is germane to human culture as a whole—as a distinguished prehistorian explores some basic questions about the primeval sources of art. The description of a prehistoric site museum that follows provides museological counterpoise, focusing on the interpretation and display of a still little-known area of our common heritage, and we hope to bring our readers more of the same in future issues.

Italy's 'fatal gift' is not just that of beauty but also one of the continuing inventiveness of those responsible for its rich and varied heritage, whether it be Umbrian art of the fourteenth to fifteenth centuries or the industrial and technological culture that, in the recent past, has altered the face of a city and its world of work.

Subtitled *Cultural Heritage and Contemporary Life*, the *Festival of Sri Lanka* at the Commonwealth Institute, London (16 July–13 September 1981) was built around a museum presentation that very skilfully made 'the right cultural connections', linking the country's artistic past with its institutional and political present. Painstakingly prepared by a team of Sri Lankan specialists and British designers and curators, the exhibition featured art works from several periods and styles of ancient Sri Lanka. Their historical and aesthetic background is explored by the distinguished Dutch orientalist who wrote the catalogue.

Diverse fields are represented in the 'Museum Notes' section: the Islamic heritage, particularly its great tradition of calligraphy; ethnography and the preservation of traditional crafts, life-styles and performing arts traditions; educational presentation of science and technology; and the interpretation of contemporary art—a variety that testifies to the vigour of museums everywhere. Forthcoming issues in 1982, on the other hand, will focus on specific themes, i.e. conservation; evaluation and prospects concerning the role of museums in Latin America and the Caribbean; museums in the Ukrainian Soviet Socialist Republic; and preservation of the underwater heritage.

Frontispiece: The Holy Qur'ān, Egypt, mid-fourteenth century. Chester Beatty Library MS. 1464.
[*Photo:* David Davison].

THE HERITAGE OF

The article below is based on an opening address delivered by Emmanuel Anati at a seminar, 'The Origins of Art', organized by him at the Centro Camuno di Studi Preistorici at Valcamonica, Italy, from 30 October to 2 November 1980. The seminar brought together prehistorians from many different countries, who discussed the most ancient forms of artistic creativity, raising questions about the nature of art itself, its psychology and biology and the relationships between art, ideology and religion. By the time this article is published another international meeting will have been organized by the author, from 31 August to 13 September 1981, in co-operation with Unesco, ICOM and ICOMOS (whose International Committee on Rock Art is in fact headed by him). At this international training seminar on rock art, participants will have studied the exploration, detection, dating, recording, analysis, evaluation, interpretation, conservation and cultural valorization of rock art. A higher degree of professional attainment on a world scale is imperative for the comprehension and protection of art forms that are among the oldest and most significant expressions of human creativity. The seminar aims, therefore, to provide training in the field, to promote standards of procedure and to lay the foundation for an international co-operation strategy to safeguard rock art. During the seminar participants will also have had the opportunity to attend an International Consultation of Specialists on the Study, Documentation and Conservation of Rock Art. Organized by Dr Anati on behalf of Unesco, with the participation of ICOM and ICOMOS, this meeting aims to define priority measures of international co-operation.

The role of museums, a question on which Museum *hopes to reflect current thinking in a future issue, will also have been discussed. In the meantime, we publish below an article about a French prehistoric site—Pincevent—open to scientists but, for want of resources, not yet sufficiently to less specialized visitors.*

The origins of art

Emmanuel Anati

When we talk of prehistoric or ethnological art, we often mean graphic art: figurative, decorative or symbolic. But even those peoples who, technologically speaking, are among the most primitive on earth express themselves not only through figurative art but also through music, dancing and poetry, and oratory—forms that, in the case of the prehistoric era, cannot be detected using present-day techniques. For so far, archaeology can reconstruct only that which has left physical traces.

Even where the graphic or plastic arts are concerned, the vestiges that have come down to us are only a minute part of what was originally produced. Apart from objects made of stone, bone or ivory—materials that have endured—how many objects made of wood, plant fibres, bark, animal skins or other perishable materials have been destroyed by the passage of time? We know also that palaeolithic man used to leave his imprint and make his marks in mud and sand, as many peoples still do today. In the open air these works are immediately destroyed by rain, snow or wind.

PREHISTORY

The context factor

In the case of the oldest evidence of artistic creativity, the context is also an unknown quantity. Hence there is much speculation, not always verifiable, about the psychological and social context in which the works that have reached us were created.

Ethnological comparisons with present-day hunting societies can reveal a range of possibilities, but since their behaviour is not identical with regard to artistic creativity, we cannot draw precise analogies.

Many Australian tribes, for example, produce their rock painting on special occasions and in sacred places. Art is created at moments of ecstasy, but ecstasy in a very different sense from the one we understand: social encounters between different clans of the same tribe, who live apart for the rest of the year. On such occasions marriages are arranged, initiation rites take place, there are exchanges of gifts, discussions about problems of common concern and redistribution of hunting grounds. During these encounters, the participants vie with one another in the exuberance of their self-expression. Their common bond is above all a need to release a great flow of energy from their bodies and minds. They paint one another's bodies and deck them with ornaments made from plants; they draw patterns in the sand, light fires, eat meals together, sing, dance and play their wooden instruments. They use all their senses and are united in the common rhythm and cadences, the crescendo of movement and voices, memories and traditions strengthened through the renewal and confirmation of their social identity. One aspect of these 'corroborees' is that of tending the sacred cave: new rock paintings are produced or old ones repainted.

Twenty thousand years later, the only remains of all this creative exuberance and self-expression would probably be the paintings executed inside the cave or shelter, provided that their colours are durable. And even these will have faded. If the archaeologist were wholly ignorant of all that was going on around them, he would be in a very poor position to conjecture about their context and would have to confine himself to a summary description and a few hypotheses.

If, however, we turn to other ethnological examples, we see that artistic creativity may occur in a wide variety of contexts. The Eskimos of the northern wastes of Canada are also a hunting people, and they, too, until they came into contact with Europeans, remained at a technological level that could be called palaeolithic. During the long months of the arctic night, the hunters rest and, in the warmth of the igloo, by the yellow light of an oil-lamp, surrounded by their families, spend endless hours carving wood, ivory and stone, making statuettes, plates and decorated objects, some of which show remarkable similarities to certain decorated objects of the upper palaeolithic in Europe or in Siberia. The rest of the family watches the work taking shape and listens to the tales and legends that inspire it, while the women mend or stitch skins, the children play in a corner, and the food is cooking over the fire. The context is very different from the previous example, but here again the archaeologist, coming across such statuettes after 20,000 years, perhaps even with a few tools made of stone or bone lying near by, would be able to say very little about them if he were not familiar with the human setting and the patterns of myth and anecdote underlying the objects produced.[1]

One could cite other examples of artistic creativity among hunting peoples, from the Bushmen of South Africa to the tribes of the Amazon basin in Brazil or

Emmanuel Anati was born in Florence. Studied at the Sorbonne in Paris, at the University of Jerusalem and at Harvard University. His scientific interests focus on the art and religion of prehistoric and tribal societies. He has undertaken research in Europe, the Middle East, India, Australia and the United Republic of Tanzania. Founded and continues to direct the Centro Camuno di Studi Preistorici at Valcamonica. Professor of Palaeoethnology at the University of Lecce; General Secretary of the International Association for the Study of Prehistoric and Ethnologic Religions and President of the ICOMOS International Committee on Rock Art. He has to his credit more than forty books and many monographs published by leading publishing houses in Europe and America, e.g. *La civilisation du Valcamonica*, Paris, Arthaud, 1960; *Camonica Valley*, New York, A. A. Knopf, 1961; *Palestine before the Hebrews*, New York, A. A. Knopf, 1963; *Rock Art in Central Arabia*, Louvain, Institute Orientaliste, 1972–75, 4 vols.; *Hazorea*, Capo di Ponte, Edizioni del Centro, 1973; *Evolution and Style*, Capo di Ponte, Edizioni del Centro, 1976; *L'art rupestre du Negev et Sinai*, Paris, L'Equerre, 1979; *I Camuni alle radici della civiltà europea*, Milan, Jaca Book, 1980.

1. Cf. J. Veisse, 'The Eskimo Museum at Churchill, Canada', *Museum*, Vol. XXXIII, No. 1, 1981.

Are these figures specific human beings? Or are they anthropomorphic figures, representing spirits, divinities or imaginary beings? What message do they convey? Numerous superb paintings in the rock shelters of the Tassili, Algeria, still guard the secret of their meaning and motivation. This example is from the Tin-Abotéra site. [*Photo:* Office du Parc National du Tassili.]

the Highlanders of New Guinea, but I think the two examples already given will suffice to show us that generalization about contexts is not possible.

And it is perhaps appropriate to inquire whether generalization, or the search for one single contextual matrix, is warranted, even with regard to the vast quantity of evidence available for the art of the Euro-Asian palaeolithic period. Indeed, when we speak of palaeolithic art, we include both immovable and movable objects, a rather heterogeneous range of figurines, plates, decorated tools, rock paintings and carvings, sculpture and high reliefs, covering successive periods that lasted for more than 20,000 years all told, in an area that stretches from the European shores of the Atlantic to the heart of Siberia. There is art that is fully attributable to the palaeolithic even outside the European and Asian region. Today, we are in a position to state that such art is to be found on all five continents.

And perhaps one of the crucial problems arising in connection with contextual pattern is that of the origins of such art; did artistic creativity spring from one source only, or were there many sources? Did it have one primary motivation, or many? Does it reflect a single conceptual context or several?

The problem of origins

To tackle the question of origins, we should first have to define what art *is*, in order to know that art *is not*, a vast problem that can only be touched on here.

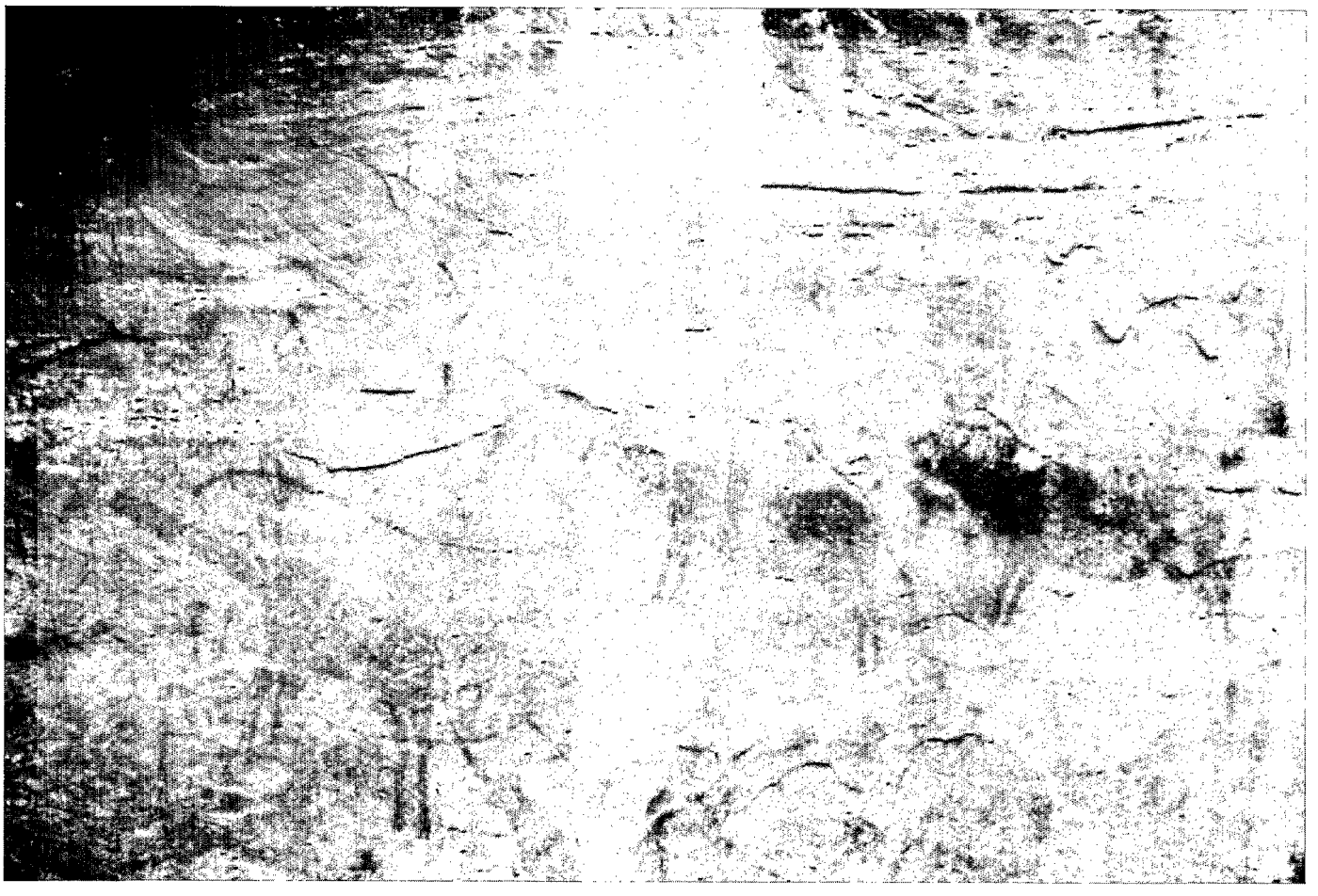
In the European palaeolithic, it seems possible to distinguish three major phases of iconographic evolution. The last of the three and by far the most lively, articulate and varied is the Magdalenian period, which has left us large-scale works in many colours, caves full of wonderful decorated galleries, such as Lascaux and Altamira, and a remarkable quantity of fine objects.

The second phase, which is much poorer and rougher, with a much more limited representational range, is the Aurignacian, lasting until the Solutrean period, which has very little to show by way of artistic creativity.

The first phase, which, apart from a few dubious cases, has not yet yielded up authentic works of art as such, but chiefly signs, strokes, scratches, cup-marks—and which we might call protographic—occurs before the Aurignacian, and so precedes *homo sapiens*. It reappears in the Mousterian period. Nowadays, almost all scholars agree that the products of this phase could not count as art. However, it would be worth while to establish why similar traces of the Aurignacian group are, on the contrary, often considered to be art: perhaps because, along traces that our twentieth-century logic cannot associate with images, there are others that we find less obscure.

In the Aurignacian period in Europe, there are two major geographical areas of artistic creativity: the one Franco-Cantabrian, with sites such as L'Abri Blanchard, Laussel, Pair-non-Pair, La Ferrassie, Isturitz, Lespuge, etc.; the other central European, with sites such as Willendorf, Vogelherd, Dolni Vestonice, etc. Concerning these two areas, we can first of all inquire whether they have a common matrix. Many scholars think so, but others have doubts.

But then we find sites of prehistoric art, dating from more or less the same time, on the other side of the world. The assemblage of palaeolithic art in the heart of Siberia, around Lake Baikal, is well known. In the highlands of the



Twelve successive phases of paintings have been recorded in the rock shelter of Cheke, near Kondoa in the central highlands of the United Republic of Tanzania. A detail of this exceptional sequence is shown here. All the recorded phases are the work of hunting and gathering artists of the Stone Age. Each phase exhibits different stylistic features. [*Photo:* Unesco/E. Anati.]

United Republic of Tanzania there are superb paintings of palaeolithic character, which may well be as old as the most ancient European cave art. In the Pampas of southern Argentina rock paintings of palaeolithic character have also been found. In the far south of Australia, Koonalda Cave has preserved iconography not unlike that of certain Aurignacian European series, which are 22,000 years old by carbon dating.

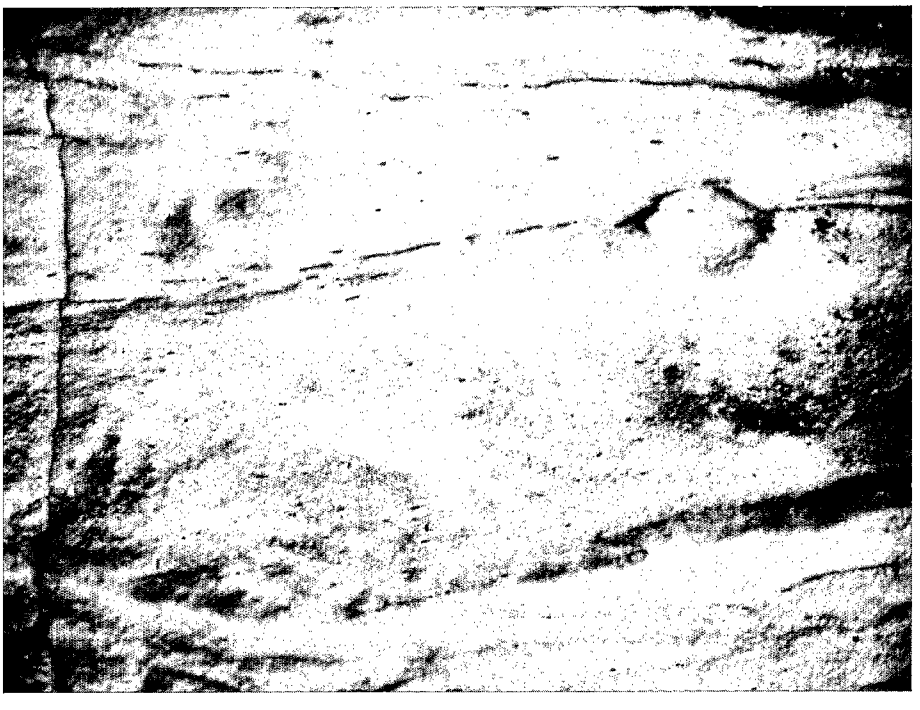
Can we postulate a common matrix? The question is whether the art that evolved on every continent in the world along palaeolithic lines can be traced back to a single matrix, or whether graphic art developed similarly, but independently, in a number of different places.

The same question applies to the conceptual matrix, the initial motivation, the function and role underlying artistic creativity. These are open questions that we can compare and discuss, pooling our efforts to find a solution. Is it possible to attribute a single function to all palaeolithic art, or are there, in what we often consider together as forming a single whole, different parts that serve a variety of purposes?

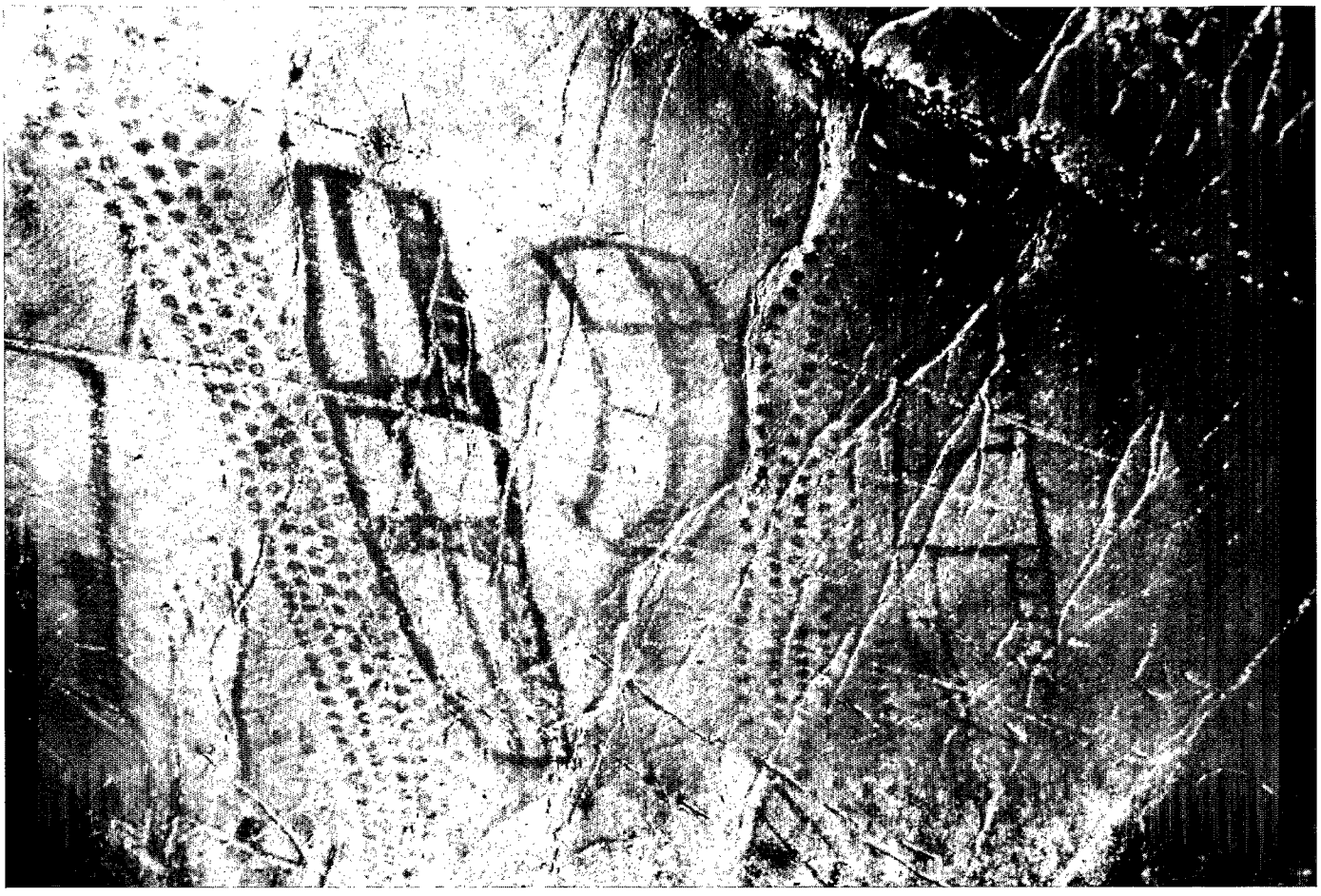
Regarding the motivations and functions of art in its infancy, there are many theories, listed in many textbooks. Should we believe that only one of these is correct, or that several have a grain of truth in them, or that they are all mistaken or, at any rate, incomplete?

Our premise

What were man's first contacts with signs? The footprints of an animal or a man in the sand, the scratch marks left by a bear's claws on the walls of a cave, the heaps of fresh earth left by the rabbit in front of its burrow, the black marks of cinders that indicate the site of a cooking-fire, the scattered debris that marks the spot of an abandoned camp and a hundred other signs had and have, for man the hunter, man who lives in his environment, very precise meanings. We would say today that they are symbols that man could read, and that they gave him information. But for palaeolithic man, or for hunting communities today, this term 'symbol' has no meaning. A footprint is a footprint: it is real, and it is the trace of someone who passed that way. By its shape, and how fresh it is, man immediately knows who passed by and how long ago. The sign is an instrument for discovering a particular fact, but is is also an instrument for communicating that fact. Therefore, one's own footprints, like those of others, could be used to convey information, and so could the imprints of one's own hands, and similarly with other signs.



A group of hand stencils from the Possum rock shelter near Laura in the York Peninsula, Australia. They are the expressions of a hunting and gathering group. [*Photo:* E. Anati.]



El Castillo cave, Santander, Spain. Quadrangular feminine signs accompanied by rows of masculine dots. The signs are between 30 and 60 cm high. The equivalent of this photograph was published in André Leroi-Gourhan's monumental work *Préhistoire de l'art occidental* (Paris, Mazenod, 1971). *Museum* is grateful to Editions Mazenod for having facilitated access to the photographer, Jean Vertut, who has kindly authorized reproduction of two of his photographs to illustrate this article. [*Photo:* © Jean Vertut.]

There are at least two stages to be clarified: the first is the transition from the state of awareness of the meaning of a sign, a footprint or the evidence of some action in the past, to the conscious act of making a sign in order to pass on a message. The second stage is the development from making signs whose shapes are imposed by nature to making man-made signs, whether these be imitations of nature or inventions.

Understanding the progress through these stages and the motives behind them would perhaps open up the way to an understanding of the origins of art. We should then realize how arbitrary the distinction is that is often drawn between representational and abstract art. Probably the abstract did not exist for prehistoric man. On the other hand, graphic and figurative art is always an abstraction, even at its most naturalistic, because it is the representation and hence the transformation of reality through the selection of a part, namely, what is visible, symbolic or conceptual. What we call 'abstraction' is often determined by the degree of synthesis, or else by our ability or inability to single out the right associative mechanism.

True, the syntheses are not always universally comprehensible, especially when one lacks precise knowledge of the content. Accordingly, if an artist from a culture different from our own has found in a shape or in a sign, such as the disc or the cup, the cross, the line or the dot, the quintessence of forms or concepts, the end-product alone, i.e. the sign, will not easily yield up its origins to the uninitiated. In more favourable cases, we can come close to understanding the content through analysis of the contexts, precedents and associations, thus gaining an overall view of the intellectual world in which the sign occurs.

Where signs are found in association with one another, we may attempt to understand the pattern of links in that association; and when we achieve understanding, at a stroke, that which was abstract is no longer so. Thus we can say that Stone Age man did not know the meaning of the 'abstract', although he practised abstraction. The same artist, in a single piece of work, might use and combine a variety of modes of expression.

Components of prehistoric art

Before passing on to the graphic, intellectual and ideological content of the sign, we should consider a number of essential components that have a bearing on the relation between the sign and its context:

Space: the natural shapes and the chosen position on the wall or rock constitute the most immediate and obvious association—so obvious that it is too often left out of account. And yet between the sign and its position there is a real, physical relation that corresponds to a specific choice, whether conscious or subconscious.

The individual who made that choice had an identity. The hypotheses are various. He could be young or old, man or woman, priest or layman. Art was probably not practised by all indiscriminately. Another type of association is, therefore, that which holds between the relic that has come down to us and the type of individual who produced it.

The time when the sign was made, i.e. at a particular moment in the course of the day or night, in summer or in winter, and in the lifetime of the creator. It was, in a specific context of action, *before*, *after* or *during* other activities that man was engaged in: before or after hunting; before or after eating or sleeping; before or after the accomplishment of other actions. And it also took place during a particular period: a time of solitude or socializing, during a ceremony or meditation, accompanied by noise or by silence. The act, any act, even that of painting, is unquestionably set in a temporal and sequential context. There is therefore another type of association, between the work and time.

The type of sign is variable, and there are associations either between signs that are similar or between signs that differ from one another. There is a syntax and a grammar, where by syntax we mean the system of associations and by grammar the specific form of the sign.

For the groups of the Aurignacian period, syntax and grammar appear straightforward, although not enough to give us complete understanding. In the Magdalenian, the syntax is much more complex, and three types of signs are to be found, grammatically different from one another. Those three types recur in a great many complexes of later prehistoric and ethnological art, and we also find them in the rock paintings of the Valcamonica region of Italy. We have called these three categories of signs:

Pictograms (and mythograms): figures in which we are able to recognize identifiable forms of real or imaginary objects, animals or people.

Ideograms: repetitive and synthetic signs that are sometimes interpreted as arrows, sticks, tree shapes, phallic or vulvar signs, discs, etc. Their repetitiveness and associations seem to indicate the presence of learnt, conventional concepts.

Psychograms: signs which are not recognizable as, and do not seem to represent, either objects or symbols. They are strokes, violent outpourings of energy, that may perhaps express sensations such as heat or cold, life or death, love or hate, or even more subtle perceptions. They seem the most difficult to understand, and yet perhaps it is precisely through these that we can gain better understanding of palaeolithic art.

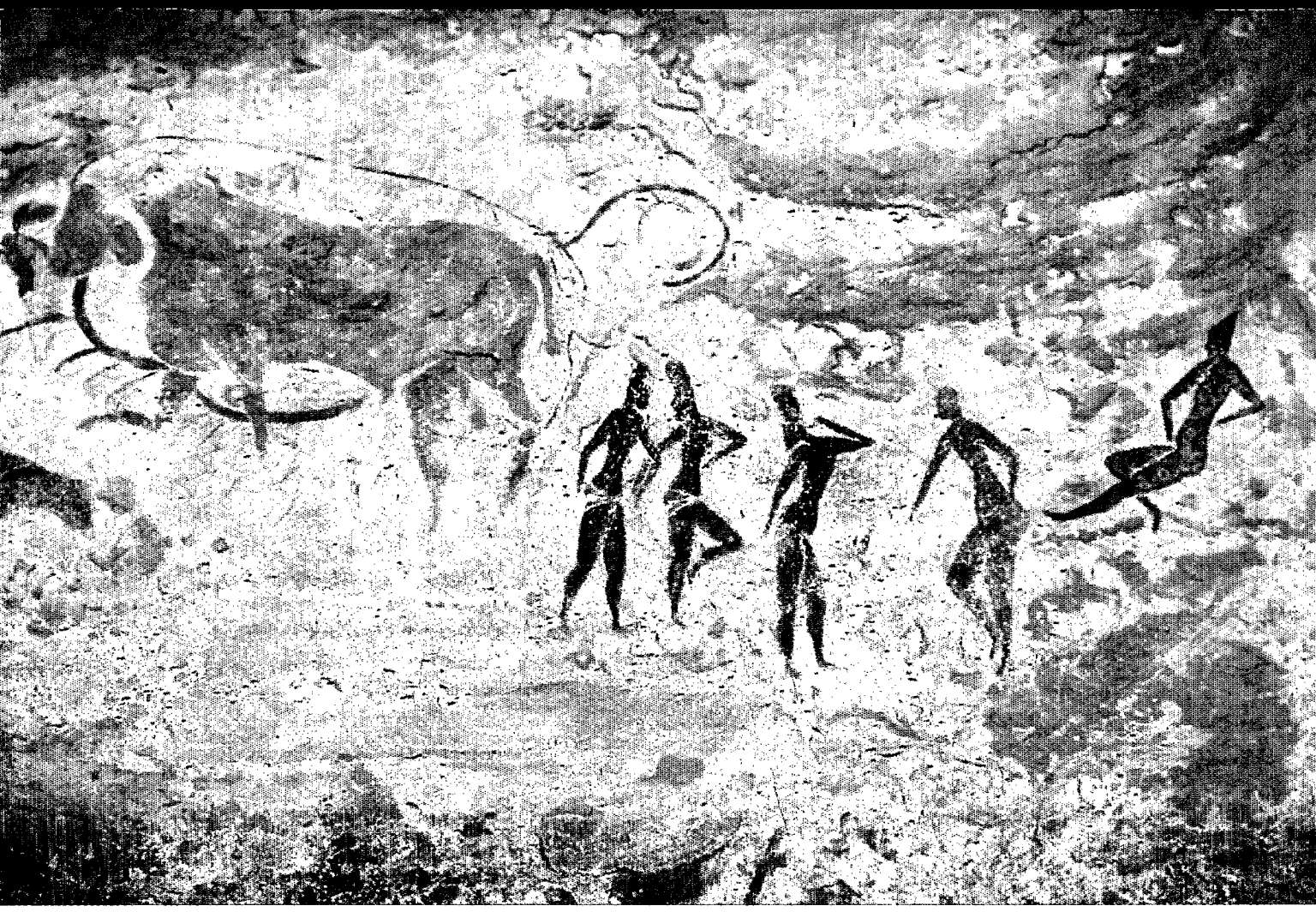
Pictograms are images whose shapes we identify with animal and anthropomorphic figures. We recognize mammoths, bison, horses, reindeer, bears and so on. Next to these there are often ideograms that are sometimes undoubtedly associated with the figures. The meaning of the figures themselves and of these associations has been studied and discussed by many experts in the field and various theories have been put forward concerning them.

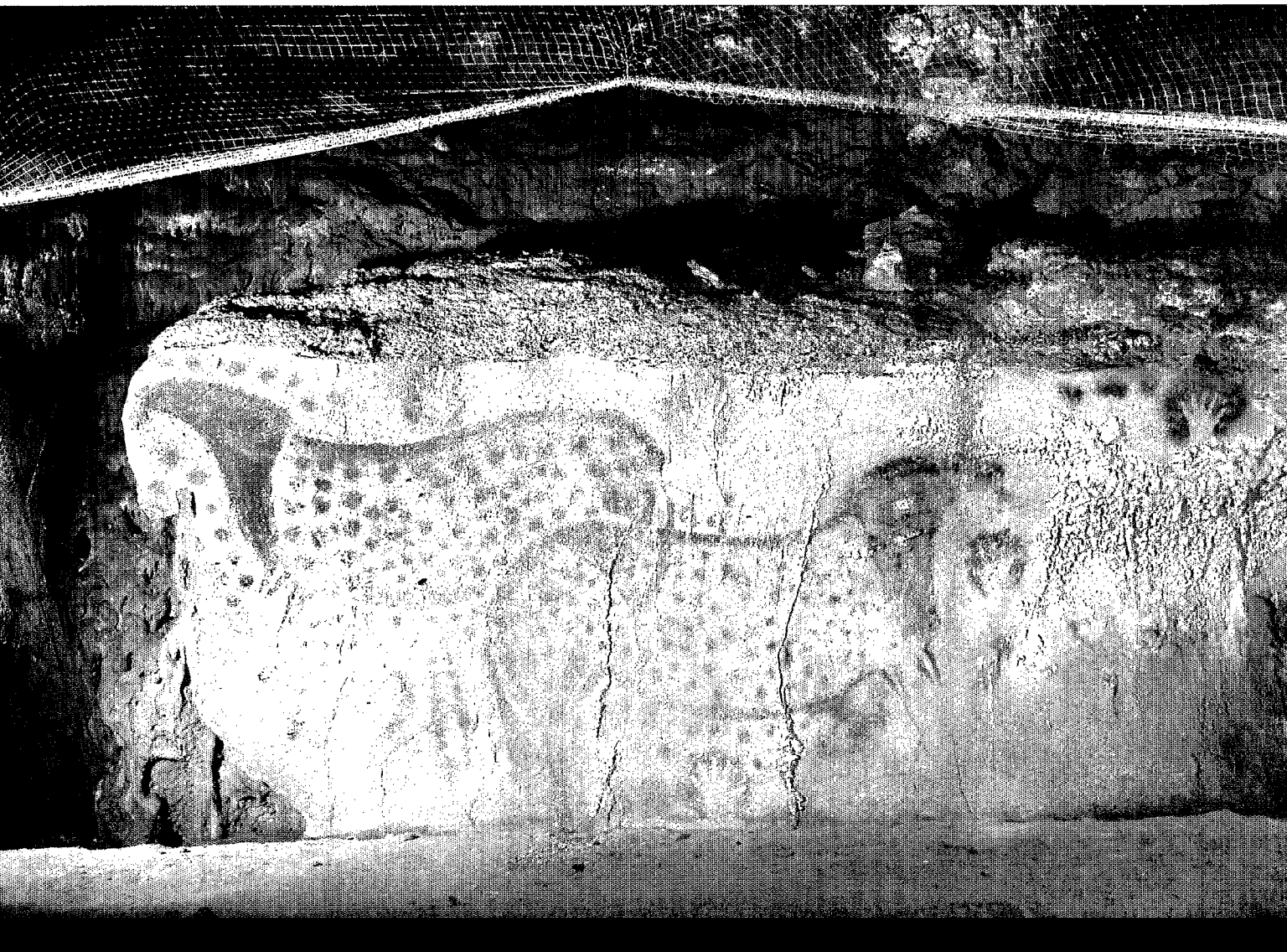
Nowadays, no one is satisfied with the mere identification of the animal species represented or other technical details, since such an elementary definition is only a prelude to further study. There are dimensions that cannot be measured in concrete terms.

For Renaissance painters, the dove was indeed a dove, but when Fra Angelico paints it in the Annunciation scene, in order to understand its meaning it is certainly not enough to say that in a particular part of the painting there is a dove.

Moments of daily life several millennia ago are shown on this painted rock from Jabbaren, Tassili.
[*Photo:* Office du Parc National du Tassili.]

Pech-Merle cave, Lot, France. Group of horses with dotted bodies. Professor Leroi-Gourhan draws attention to the negative hand stencils, particularly the one underneath the horse's belly, accompanied by a double row of dots.
[*Photo:* © Jean Vertut.]





When we know the theme that inspired the artist, and when we are familiar with his methodological and conceptual equipment, the dove takes on a symbolic meaning and a content. Similarly, Picasso's dove is not merely a dove. In this instance, the pictogram is combined with the ideogram, the olive branch, that we recognize as such only because we are initiated. Twenty thousand years hence, perhaps, someone may wonder whatever could be meant by the sign near the beak of that strange animal vaguely resembling a bird.

A host of examples could be cited: the eagle in Roman times. Yes, the bird represented does seem to be an eagle. Tests will prove this from the shape of the beak or from the wing-span. But what does this eagle mean? Sometimes, when the pictogram is accompanied by four ideograms that nowadays we are able to read as SPQR, some inkling of the conceptual content of the figure will perhaps emerge.[2]

Thus the splendid pictograms of the palaeolithic, often accompanied by their ideograms, must have been clearly legible to anyone who knew their conceptual content. Today, there has been a break in the direct tradition, and the work of the archaeologist is to assemble the components and observations that may enable us to approach an understanding of the content. A correct analytical approach is indispensable to any progress towards understanding.

When we observe some of the palaeolithic compositions, such as the scene at the well in Altamira, with the masked figure, the bison, the dart and the bird standard, we realize that a tremendous amount of conceptual background still eludes our understanding. But even when we take images that are apparently less complex, such as the high relief of the woman in Laussel holding a horn in her hand, it appears obvious that, once again, the pictogram accompanied by its ideogram calls for a broad and thorough explanation.

Ideograms are signs that convey ideas in ancient writings and in many groups of rock paintings, from the writer to the reader, from the painter to the real or imaginary beings intended to receive the message.

Psychograms are signs that convey sensations from the one who represents to the one who observes them. This is a level still more abstract than the symbol, which, as such, has its own well-defined meaning. The psychogram works at a subconscious level, as do certain archetypal signs that our conscious memory is no longer able to define but which, deep within the self, release associative and sensory processes on wavelengths that escape the bands of ordinary transmissions and are remarkable for their immediacy. Psychograms are not intellectualizations, but signs that have power to stir the blood and the mind without conjuring up any specific association. They are the quintessence of something that cannot be consciously defined but which resonates deep within us.

The first time that I stood facing such signs, I felt that the man who painted them 15,000 years ago could have been myself. I do not believe that I can explain the phenomenon. But I believe that to reduce them to the status of symbols would be to cheapen them. Psychograms are not symbols: they have a different dimension.

We are entitled to say that ideograms, in order to be such, must be artificial, and that they are repetitive. Psychograms have neither of these characteristics. There can, however, be psychograms that we find similar in European palaeolithic art and in the art of the Australian aborigines, and which may even have been taken up by a modern artist such as Joán Miró.

A legitimate question that arises is whether the psychograms were definable for prehistoric man in cognitive and conscious terms. In other words, whether what today seem to us to be psychograms may not have been ideograms for prehistoric man, or whether they were also psychograms for him.

Our level of perception has been seriously impaired by rational thought: since the swing towards rationalism in classical times, our perceptions have been deadened as never before.

2. Roman Senate and People (from the Latin *senatus populusque romanus*).

Order and logic

It is a habit of the modern Western mentality to regard as disorderly anything that does not fit our patterns of order. The fact that we are not always able to recognize an order in palaeolithic art does not mean that no order exists. It can also mean that different canons of order were used, whose measure we have not yet altogether grasped.

Referring back to examples whose context we know, we can recall that the bark paintings of the Australian aborigines often have neither top nor bottom. The artist paints them on the ground and moves around them, adding to them from various sides. When we want to exhibit them, the problem inevitably arises that we do not know which way up to show them. The same difficulty applies to the decorated objects of the Eskimos, and the works of art of other peoples who have hunting economy and whose technology is typical of the Stone Age.

So we find that there are fundamental differences between, on the one hand, the concept of space that emerges from the order of shapes and signs in the art of hunting peoples and, on the other, our own concept of space. The relative proportions of various figures, in the classical mould, reduce the whole iconographical complex to the same unit of metrical measurement. The relative proportions of signs or figures from the point of view of hunting peoples is governed by a different logic: differences in size may have other meanings, such as the importance of one image in relation to another, or the fact that one sign is more sacred than another, or so as to make the subject stand out from its surroundings. Our type of 'objectivity' is not the only one; the relative proportions of the figures, in graphic art as in every aspect of human thought and its outward expression, show not only aspects of actual size, but also other parameters of dialectical or existential relations, through the various parts of the whole.

Why art?

We can claim that art, any art, over and above its many and varied characteristics, is a means of communication, a means of contact between the artist and the outside world. Communication with whom? With spirits, the souls of the dead, the gods, nature, animals, rocks? The artist is often reluctant to say that he is addressing other human beings. But even in these cases, art is, by definition, the message that one individual conveys to others.

This fundamental function is not necessarily conscious. But art that does not communicate is not art and, even if it were, for man and for his culture it is as if it did not exist.

An international responsibility, safeguarding the heritage. The International Convention for the Protection of the World Cultural and Natural Heritage, adopted by the General Conference of Unesco at its seventeenth session in 1972, provides for the first time a permanent legal, administrative and financial framework for the safeguard of sites which are of outstanding value for all mankind. Whether they be rare or representative examples of our planet's geological and biological history or the unique achievements which different cultures have bequeathed us throughout the ages, these sites, by virtue of their inscription on the World Heritage List, benefit from all the measures of protection provided for by the Convention.

Praying figure ('Orante') before a reticulated form, possibly the representation of an idol, from the Foppe di Nadro site, Valcamonica, fifth millennium B.C. Systematic investigation by the Centro Camuno di Studi Preistorici during the last two decades has brought to light over 170,000 rock engravings in Valcamonica, a narrow Alpine valley in Lombardy, one of the world's major concentrations of rock art now included in the World Heritage List. The most recent engravings date from the beginning of the Christian era; the oldest go back as far as 7000 B.C. From the earliest bands of hunters, who depicted the quarry they wished to kill, to the bellicose farmers of later times, who adorned their battle scenes with inscriptions in Etruscan lettering, the creators of the rock carvings set out for decipherment the history of people during 8,000 years of economic, social, cultural and religious evolution. In the Neolithic age, the first Camunian farmers depicted worship of the sun and of the dead, propitiatory dances, and initiation ceremonies. Later their place was taken by stock breeders, and then traders, who had a more complex economic life and whose carvings feature idols and spirits with prominent eyes. Then came the cult of weapons, the powers of the subconscious, priests and polytheism. The stone engravers of Valcamonica may have been illiterate, but their work is more informative than the written evidence left by many an ancient civilization.
[*Photo:* © Centro Camuno di Studi Preistorici.]

Colour slides on the World Heritage List are under preparation. The first series will include forty-eight slides showing the sites on the list. It will be accompanied by a text on the convention and contain descriptions of the sites. The series will cost 50 French francs and will be available by December 1981. For further information please contact the Division of Cultural Heritage, Unesco, 7 place de Fontenoy, 75700 Paris.

But why has man felt the need to use this means of communication? For more than 30,000 years, artistic creativity has been man's heritage, and without it man and mankind would not be what they are. So, why art? Asking such a question may be like asking ourselves: 'Why man?'

Understanding how and why this archetypal characteristic of man emerged is certainly of paramount importance to the history of mankind and to a better understanding of ourselves.

Figurative art is the first step towards writing. The capacity for artistic creation and, still more, the ability to form the concept of artistic creativity implies a psychological structure that, as far as we know, is found in no other species on earth except man.

We may wonder, with good reason, what man's life was like before he was capable of producing and appreciating works of art, before he had the capacity for rationality and irrationality inherent in the inner drive and the talent for outward expression of artistic creativity. Without the faculties implicit in that type of awareness of reality and that need for abstraction, the human being, as we picture him, was incomplete, and undoubtedly less conscious, less sensitive, less curious and less extroverted. Such abilities and needs are bound up with many other aspects of the process that has produced modern man. Without those same characteristics, there could not be a fully developed and articulate language; man's intellectual and communicative abilities would necessarily have been infinitely more limited.

The existence of art therefore marks a major turning-point, a giant step forward in the history of mankind.

[*Translated from Italian*]

The discoveries made by prehistorians are rarely spectacular. The most famous sites, particularly those that have given their names to major subdivisions of cultures, such as Le Moustier and Aurignac, are today no more than featureless empty caves. At best, only a commemorative plaque recalls the importance of the research once carried out there. Even sites that are being excavated are not necessarily more impressive. The remains brought to light disappoint the layman, who sees nothing but a jumble of stones and bones, alongside dull stratigraphic sections. All he can do is to observe excavation methods and wonder at their meticulousness. But Pincevent, on the territory of the commune of Grande-Paroisse, in Seine-et-Marne, France, is among those to which this rule does not apply.

Pincevent, a prehistoric site museum

Gilles Gaucher

The author was born in 1930 at Mainsat (Creuse). He became a secondary-school teacher of history and geography and later studied prehistory and protohistory. Docteur d'État, thesis on the Bronze Age in the Paris Basin, 1976. Research assistant at the Centre National de la Recherche Scientifique. Lecturer at the University of Paris I, Panthéon-Sorbonne. Helps to direct the excavations at Pincevent, with special responsibility for studying post-glacial levels and presenting the site to the public.

The Pincevent site was discovered by chance in 1964, when a sandpit was being worked on the bank of the Seine. The news reached Professor A. Leroi-Gourhan, who immediately began rescue excavations. Given the results obtained after a few weeks, a commission of specialists succeeded in having work on the extraction of sand and gravel stopped and the site acquired by the state.

Most of the remains brought to light go back some 12,000 years. They belong to the Magdalenian culture, the most recent of the Palaeolithic cultures known in France, and were deemed to be of exceptional interest, particularly because they bear witness to an open-air settlement. It was considered as more than likely that in prehistoric times not all human beings always lived in caves. It was even known that palaeolithic settlements had been found, particularly in the Ukraine, which were not in natural shelters. However, nothing of the kind was known in western Europe. At Pincevent the traces are also surprisingly well conserved. Around hearths in which the fire seems to have been only recently extinguished, chipped flint implements and bones are to be found lying very much in the state in which the reindeer hunters left them. In addition, the layers covering these remains contain here and there archaeological documents attesting occupation during the neolithic, protohistoric and Gallo-Roman periods.

From conservation to presentation

As with all excavation sites, conservation problems arose from the outset. The remains can be viewed in two ways. Regarded as 'movable property', commonly termed 'objects',[1] most of them, whether flints or other stones, do not call for special precautions. The bones, which require greater protection, are impregnated with artifical resins, sometimes on the spot, which helps to consolidate them. Like all objects these risk being stolen or losing their identity. As a very simple solution, enclosed sites, locked storerooms and display cases make it possible to avert the first of these dangers. In order to deal with the second, a complete system of records has been gradually worked out, consisting of plans, vertical photographs, inventories and the marking of items.

In actual fact, the problem is more complicated. The remains should not be considered primarily as objects, but rather as larger structures which can be compared to 'built immovable property'. Naturally, the stone implements and bones have to be collected together. However, it is much more important to try to preserve the hearths, the heaps of chipped flint implements, the layers of food refuse, and so on, which constitute the site's exceptional interest.

It was mainly this requirement that made it necessary at Pincevent to proceed from conservation to presentation, thus gradually installing the components of a

1. The terminology adopted in the French original of this article is that used by G.H. Rivière, *Essai sur le musée de site*, Paris, ICOM, 30 May 1978, 17 pp. (mimeo.).

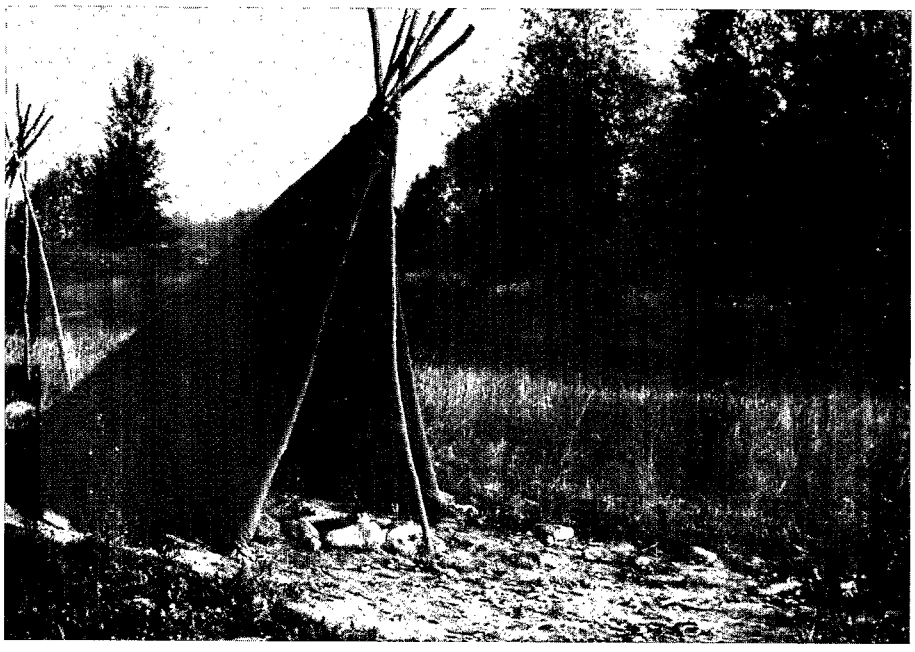
genuine site museum. Components can be traditionally classified into two groups, depending on whether they are placed under cover or in the open; in this particular case, it is simpler to draw a distinction between the inside and the outside of a building constructed near the site in 1965.

The building consists of two exhibition rooms. The larger was planned to house a moulding of the main ensemble discovered during the first excavations. Fairly early on it became obvious that this complex, consisting of three hearths and an extensive layer of flints and bones, could not be conserved *in situ*, the chief reason being that it was situated only a foot or so above the level of the Seine. At the first spate, the water would have swept away everything, and in this valley hardly a winter passes without floods. In addition, conservation *in situ* came up against other difficulties. Even if protected from flooding, the soil levels strewn with remains could not continue to exist intact, with frost attacking the surfaces in winter and the burrowings of animals, in particular rodents, threatening to destroy several sectors. Above all, the documents thus conserved could not have been studied. Examining an object from all points of view, if necessary under a microscope, measuring it, reckoning numbers and making analyses, trying to piece together flint modules or stones split by fire—none of this is possible if the objects are left on the ground.

Traditional techniques make it possible to 'conserve' structures to a greater or lesser degree. Those most currently used are plans and photographs. They are used extensively at Pincevent, particularly on the basis of surveys carried out to the square metre. Overall scale drawings are made to a twentieth, or even a tenth, and areas 'covered' photographically. The removal of whole units is also a traditional conservation method, but this is used only in exceptional cases on the site, first because even this technique hampers the study of the remains, and second because the interesting surfaces are frequently too large to be easily removed and transported.

Another solution is occasionally adopted: that of reconstitution. However, putting back hundreds of items in their exact places, in three dimensions, and giving the whole the effect of a soil which has just been excavated, is not easy. Assemblages of this kind are rarely successful, and in most cases the fact that they are not genuine is immediately obvious, even to the most untutored eye. In addition, the work can only be carried out once the study of the objects has been completed, since it is subsequently almost impossible to make them available for consultation.

The large exhibition room. In the foreground, part of the moulding of the 'ensemble' with three hearths.
[*Photo:* Gilles Gaucher.]



'Real-life model' of a Pincevent habitation: a tent covered with reindeer skins, and a hearth surrounded by a layer of remains, lying mostly outside the tent, in line with the entrance.
[*Photo:* Gilles Gaucher.]

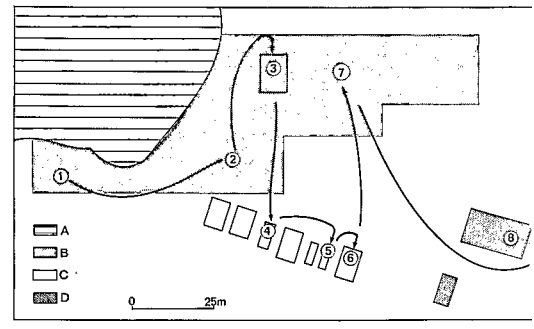
Latex moulding: an effective preservation technique

At Pincevent, an original process for conserving prehistoric structures was developed as far back as 1964, at the instigation of Michel Brézillon, who was then Professor Leroi-Gourhan's assistant. This is a technique of moulding in latex, which is simple and can be learned after a few exercises. It is also relatively inexpensive.

When excavation has been completed, and the objects thoroughly cleared, several layers of liquid latex are poured over the surface to be moulded. The latex solidifies as it dries. This produces a flexible 'negative' which can be removed without too much difficulty, since it involves only a reasonable amount of undercutting. It is then used to produce the desired number of positive mouldings in plaster. In practice, the technique is somewhat more complex.[2] For example, it is necessary to construct a rigid forming block to keep the mould in shape, and to produce mouldings quickly, since the latex shrinks after two or three days.

The results are excellent. The bulbs and the fracture waves on the flints, the alveoli in bone matter, even the very faint traces of scrapers on the soil are all recorded with the most amazing accuracy. The undeniable advantages of this technique account for its having been rapidly put to use on several other prehistoric excavation sites.

The moulding shown in the large exhibition room at Pincevent consists of 102 plaster casts, fitted together with great accuracy and painted. They have been placed in a concrete basin built for the purpose, and attached to pieces of wood some 50 cm high. Thus a life-size view, in colour and relief, of 65 square metres of palaeolithic soil has been visible for an unbroken period of more than fifteen years; this is an achievement unique in the world.



Plan of a tour of the site: (a) former sandpit, now under water; (b) excavated area; (c) shed; (d) another building. (1) ensemble with three hearths, on the spot where the site was discovered; (2) excavations taking place; (3) surfaces previously excavated, left *in situ* under cover; (4) the washing and marking of remains; (5) mouldings store; (6) storehouse in which objects are housed; (7) 'concrete model' of a Pincevent habitation; (8) exhibition rooms.
[*Photo:* Gilles Gaucher.]

Exhibition areas at the site

The second exhibition room is periodically rearranged as new discoveries are made. It contains a few moulded structures and also items that have been removed as a single unit, in particular a chalcolithic burial place, and also, of course, objects. Some of the exhibits illustrate study methods. For example, a series of reindeer jaws shows how they reveal the year in which the Magdalenians came hunting at Pincevent; examples of reassembled flint modules show how they reveal information about the technique used at that time to turn this raw material to account. A sample section moulded in latex shows details of the stratigraphy of the site, and at the same time illustrates a study and surveying process also developed at Pincevent.[3]

2. M. Brézillon, 'Applications archéologiques du moulage au latex', *Bulletin de la Société Préhistorique Française* (Paris), Vol. LXII, 1965, pp. cix-cxi (CRSM No. 3). T. H. Dinh, P. Soulier et al., 'Techniques de moulages appliquées à l'archéologie', *Cahiers du Centre de Recherches Préhistoriques, Université de Paris I* (Paris), Vol. 5, 1976, pp. 75–102.

3. M. Orliac, 'Empreintes au latex des coupes du gisement magdalénien de Pincevent, techniques et premiers résultats', *Bulletin de la Société Préhistorique Française* (Paris), Vol. LXXII, 1975, pp. 275–5, 1 fig. (CRSM No. 9).

A sample section. This technique, developed at Pincevent by Mr Orliac, is useful for conserving stratigraphies of geological or archaeological interest. Several layers of latex, backed by muslin, are applied to a carefully prepared section. The surface of the section sticks to the backing and can be detached, provided that it is not too coarsely grained. The sample thus obtained can stand up to hard treatment, and there is no difficulty in exhibiting it upright. At Pincevent this method is mainly used for scientific purposes: examination of samples in transparency, as in this photograph, makes it possible to study the detailed stratigraphy of the silt.
[*Photo:* Gilles Gaucher.]

Once the dig is completed, the ground is seen to be strewn with the often charred remains of bones, flint and other stones. Not only must these pieces be preserved but it is equally important to leave them in place, as they constitute hearthstones, cutting areas, rubbish grounds...
[*Photo:* Gilles Gaucher.]

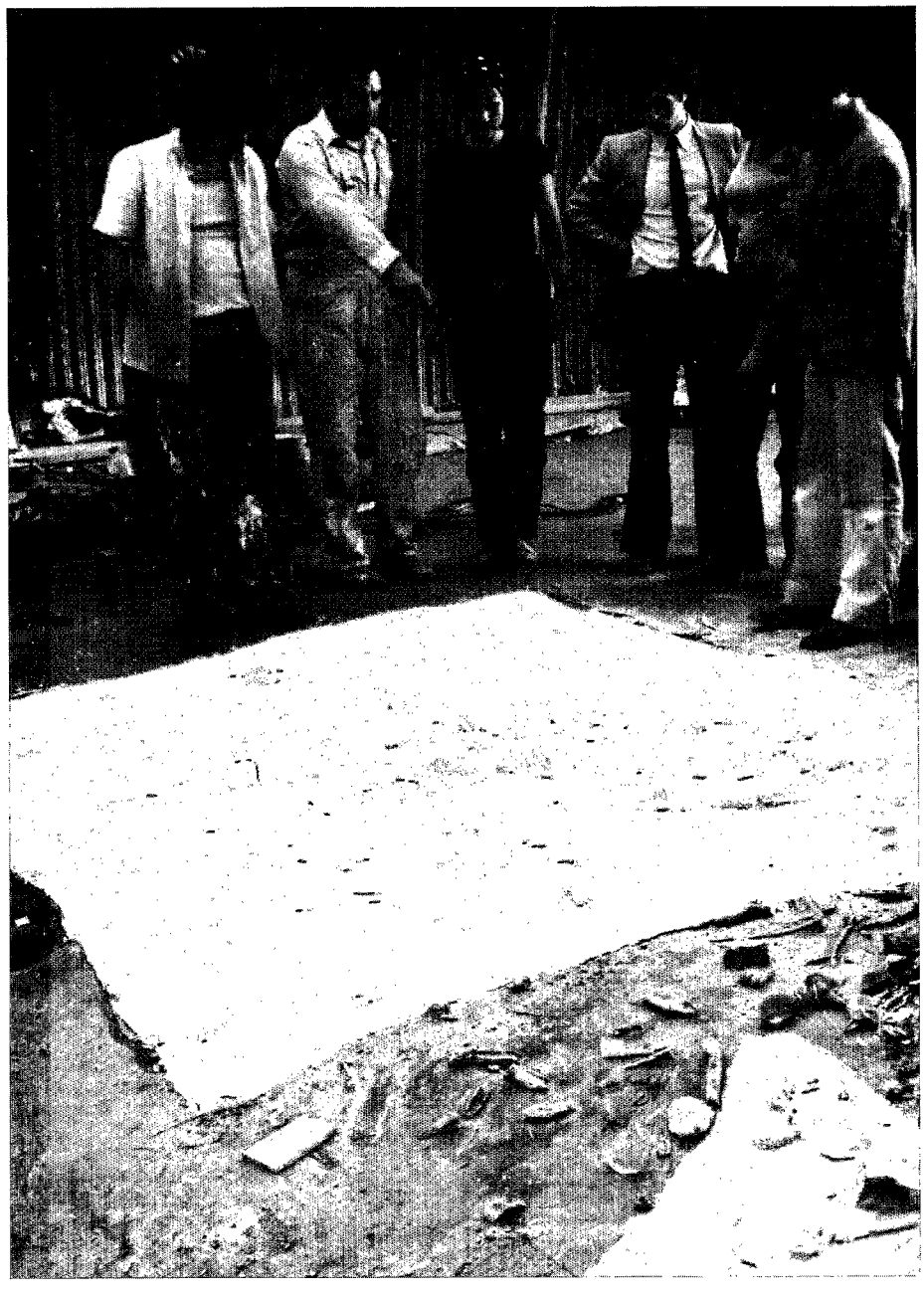
The meticulous methods employed by prehistorians are a constant source of amazement to the uninitiated visitor, who is astonished by the use of dental instruments and paintbrushes.
[*Photo:* Gilles Gaucher.]

Mouldings and genuine objects are accompanied by photographs, plans and explanatory texts. The latter are fairly long, since they have been planned in part for specialists or trainee excavators, who can come and consult them frequently. Each of the showcases exhibiting post-glacial remains has two texts, one placed on each side; the first is a general presentation which refers to the objects; the second, which is shorter and more specific, is an inventory drawn up on the basis of the individual objects.

Today a visit to Pincevent is not confined to these exhibition rooms, but includes an exhibition of items conserved outside the museum, either in the open or in temporary shelters such as tents or sheds. In fact, by the very nature of the site, it has always been possible for visitors to see the dig itself and observe the methods for clearing the archaeological soil and recording the remains.

The desire to obtain the greatest possible number of significant 'ensembles' has its influence on the work. The sectors that are richest in finds are 'taken to pieces' only at the end of the excavation campaign. This is in line with the excavation principles of Professor Leroi-Gourhan;[4] unlike many prehistorians,

4. A. Leroi-Gourhan, *Leçon inaugurale, Chaire de Préhistoire, Collège de France*, Paris, 5 December 1969, 32 pp.



Latex mouldings of prehistoric ground are usually made in small sections, such as the one seen in the foreground. The large mould on the background was made not of latex but soft synthetic plastic.
[*Photo:* Gilles Gaucher.]

whose primary aim is to observe stratigraphies, he considers that it is essential to be able to examine the most extensive surfaces possible at each level of occupation.

The use of sufficiently strong and large sheds makes it possible to keep some prehistoric soils for several years in areas that are not threatened by flooding, provided that they are protected in winter from rodents by nets, and from frost by sheets of plastic and a layer of sand. Surfaces that have been conserved in this way are exhibited nearly every year.

Work on arranging the outside exhibits has been completed from 1974 onwards. Since vegetation had obliterated the traces of excavations carried out in previous years, it was considered desirable to indicate clearly the main discoveries on the site. To begin with, all the hearths were reconstituted. The area thus roughly laid out is fairly large. So that it can all be taken in at a glance, pyramids of poles have been set up to give an idea of the tents that must have corresponded to the hearths. This has reproduced the vertical outlines of the Magdalenian camp, the shape of which has been gradually defined in detail by the investigations carried out at Pincevent.

A new stage was reached in 1976, with the making of a film produced by the Swiss Television Corporation and the French Centre National de la Recherche Scientifique (CNRS). A more detailed reconstitution was carried out, showing a

hearth, and alongside it heaps of flints, stones that had been heated, bones, layers of ochre, and the way in which the layout of these traces had been interpreted. Thus a kind of 'real-life model' of a Pincevent habitation was set up on the site. It is brought out again and set up every year, and is a key exhibit in the tour of the site.

At the same time, the working premises have been opened to visitors. In the shed where items are marked there is an exhibition of the various recording operations; in the shed that serves as a storehouse for the mouldings, the principles of the moulding technique are set out; and some aspects of the different stages of work between excavation and publication are explained in the shed storing newly discovered objects.

A mainly didactic site museum

This form of presentation has been possible because the land, which is state property administered by the Ministry of Culture, is enclosed, and there is a keeper. Professor Leroi-Gourhan, of the Collège de France, with assistance from a team whose members include two researchers and four technicians from the CNRS, conducts a dig there every year in June and July. With very rare exceptions, the site can only be visited during this period.

Two kinds of visits then take place: individual visits by trainees and a few specialists, and tours conducted by the members of the excavation team. Some of these conducted tours take place regularly every Saturday afternoon, and others are organized on request, mainly for school groups. In 1980 the site was visited by 250 primary-school pupils, 450 secondary-school pupils and 200 adults.

These conducted tours last roughly an hour and a half. They include a brief synopsis of the history of the site, on the spot, illustrated by the reconstituted hearths; an introduction to excavation methods in connection with the presentation of surfaces that are being cleared; and brief information on other stages of research, in the sheds used for these activities. The results achieved are summed up in the open air, in a commentary on the 'concrete model', and then indoors, in the two exhibition rooms described above.

The presentation of the excavations at Pincevent is obviously not confined to these visits. As well as printed publications, two of which are of major importance,[5] it includes participation in a great number of temporary exhibitions. For example, in recent years different-sized mouldings of soils, iconographic documents and objects have been lent to the exhibitions *Prehistory in France, Twenty Years of Prehistoric Research in France* (held at Nice, in connection with the Congress of the International Union of Prehistoric and Protohistoric Sciences), *The Origins of Man* (Paris, Musée de l'Homme) and *Three Million Years of Man's Odyssey, the CNRS and Prehistory* (Paris, Museum d'Histoire Naturelle). In addition, mouldings have been given to the Moravske Museum at Brno, the museum of French national antiquities at Saint-Germain-en-Laye, and above all the regional museum of prehistory at Nemours, which has a reproduction of one of the most important 'ensembles' excavated at Pincevent.

Basically an excavation site, Pincevent can be regarded as a site museum. However, from this point of view the situation cannot be considered satisfactory, mainly because the site is open to the public for only two months a year. It should also be borne in mind that exhibitions have all been mounted without special staff or funds, and that tours have to be conducted by archaeologists, though this is not really their job. It is obvious that only structural reforms would make it possible to provide a museographical presentation of the site that would be fully in keeping with the importance of the discoveries made there.

[*Translated from French*]

5. A. Leroi-Gourhan and M. Brézillon, 'L'habitation magdalénienne No. 1 de Pincevent près Montereau', *Gallia préhistoire* (Paris), Vol. IX, Fasc. 2, 1965, pp. 263–385. A. Leroi-Gourhan and M. Brézillon, *Fouilles de Pincevent, essai d'analyse ethnographique d'un habitat magdalénien (la section 36)*, Paris, CNRS, 1972, 2 vols. (7th supplement to *Gallia préhistoire*).

ASPECTS OF A

Such is the variety of Italy's cultural heritage and the imagination—historical, sociological, museological—of its present-day inheritors, that Museum *is never lacking in Italian contributions of real significance. In this issue Professor E. Anati has already discussed prehistoric art, in the article below a Moroccan art historian praises the excellent historical presentation of works of the Umbrian School of Painting by a museum in Perugia; yet he also points out the gallery's museographical shortcomings. In the next article a continuing experiment, which explores the evolution of Bologna and its working community in the industrial age, provides subject-matter of a diametrically opposed sort: technological culture and its expression through work and social relations.*

Perugia: an ideal regional art gallery

Ralph Toledano

The author, an art historian from Morocco, was born in 1953. He is currently preparing a doctoral dissertation in Paris, under the direction of Professor André Chastel, on the work of the Sienese painter Francesco di Giorgio Martini (1439-1502).

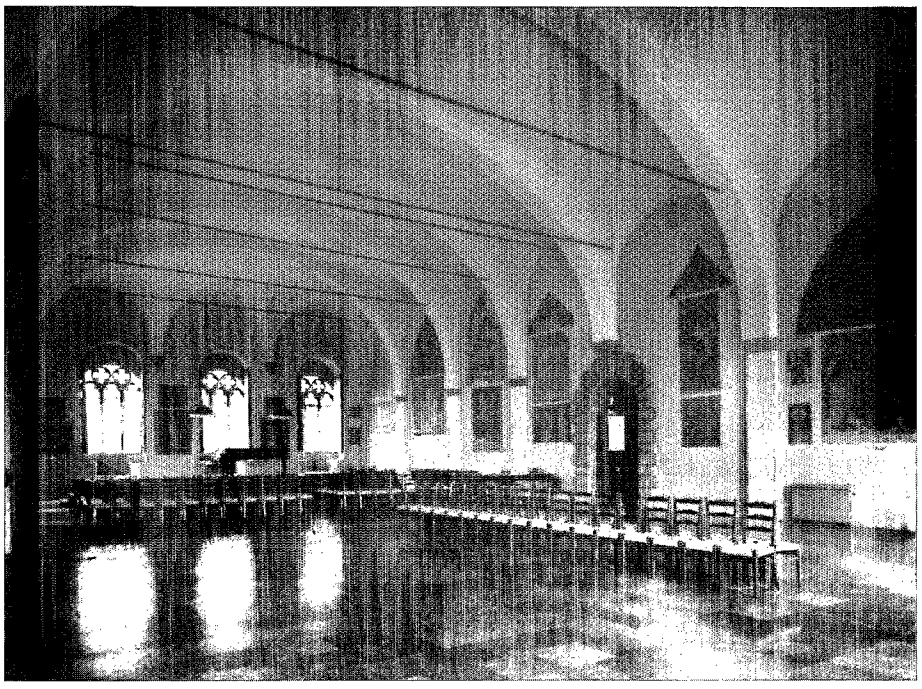
The example of the National Gallery of Umbria allows us to approach the whole subject of the museology of Italian Art. For although every museum has its own problems, the museums of any given country are similar because of a common historical background. There are two characteristic features of the Italian artistic heritage—the large number of works which owe their survival to the persistence of a favourable climate of opinion and to the age-old regard for historiography, and the fact that these works are to be found in a series of provincial museums which reflect the life of the economic and political centres of a nation long divided.

So far as actual picture galleries are concerned, or at least museums whose major purpose is to exhibit paintings (as in the case of Perugia), they are significant in that they enable us to grasp the concept of a regional school of art and, concurrently, that of outside influences. For if the centuries-old Italian traditions (for example, Etruscan monumentalism, Hellenistic linearity or Byzantine luminism) and the ways in which they were interpreted by the artists of the fourteenth and fifteenth centuries were compared to rivers with waters of different hues, the Italien 'centres' could be seen as tributaries, each with its own particular local colour.

My argument will focus mainly on the collections of fourteenth- and fifteenth-century art, for that was when the individual character of the regional schools seems to have been most marked. By then they had reached maturity, their intensity heightened by the discoveries in the art of representation and enhanced by contributions from various sources, and had not yet come under the levelling influence of Mannerism and the centralizing influence of Rome which were to follow. Moreover, it was only from those centuries onwards that the heritage began to be kept virtually intact. These various reasons help to give a comprehensive idea of that great period in creative art.

Two factors make the National Gallery of Umbria an ideal regional art gallery: the way in which its collections were and still are being built up, through a clearly defined policy of acquisition, and the actual arrangement of the works.

PERENNIAL FERTILITY



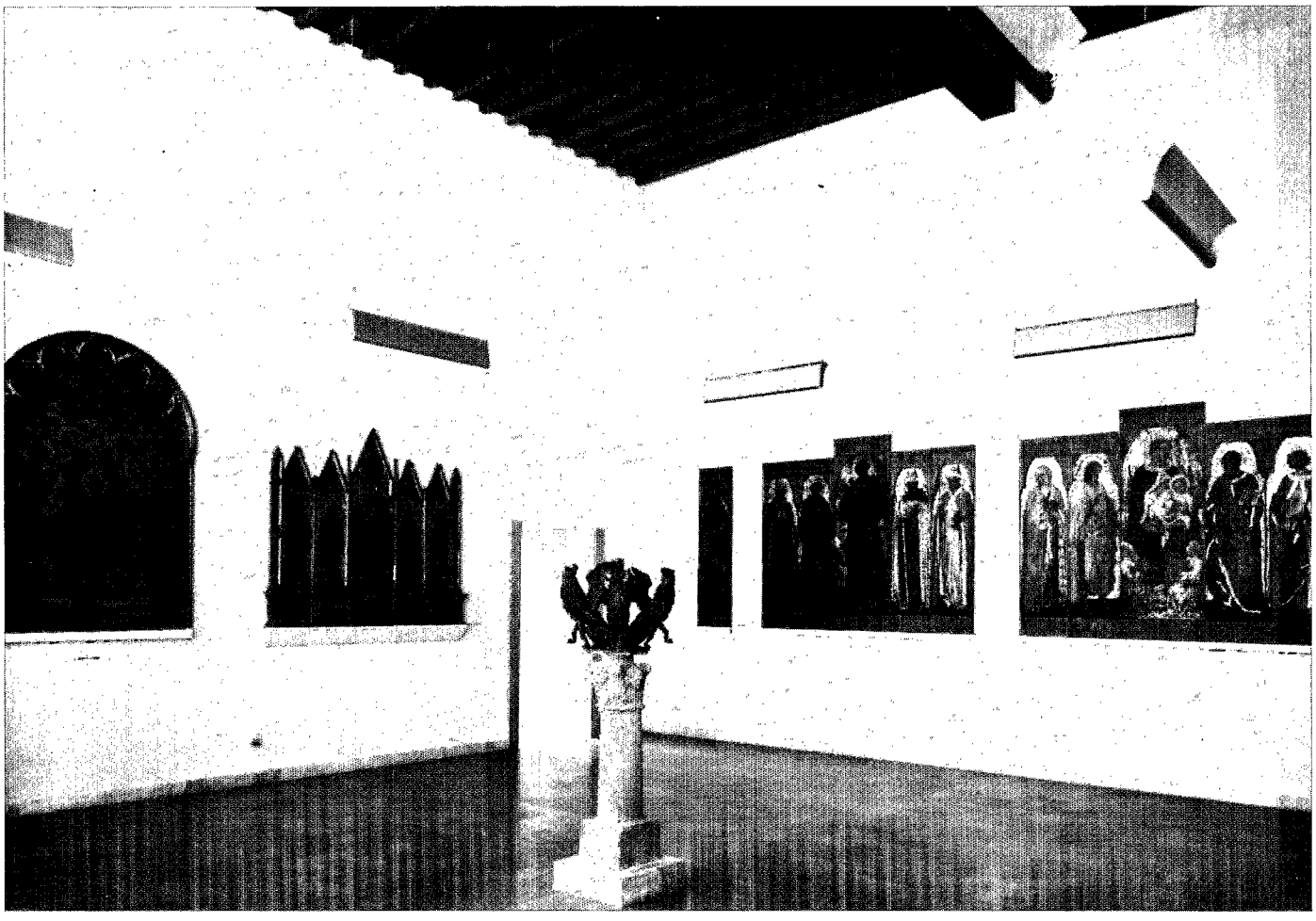
GALLERIA NAZIONALE DELL' UMBRIA, Perugia. Hall of the Consiglio Generale. It is unfortunate that there is no audio-visual or photographic material to help the visitor to see the connection between this admirable collection of fragments of thirteenth- and fourteenth-century frescoes and the Assisi works by which they were largely inspired. [*Photo:* Soprintendenza alle Gallerie dell'Umbria.]

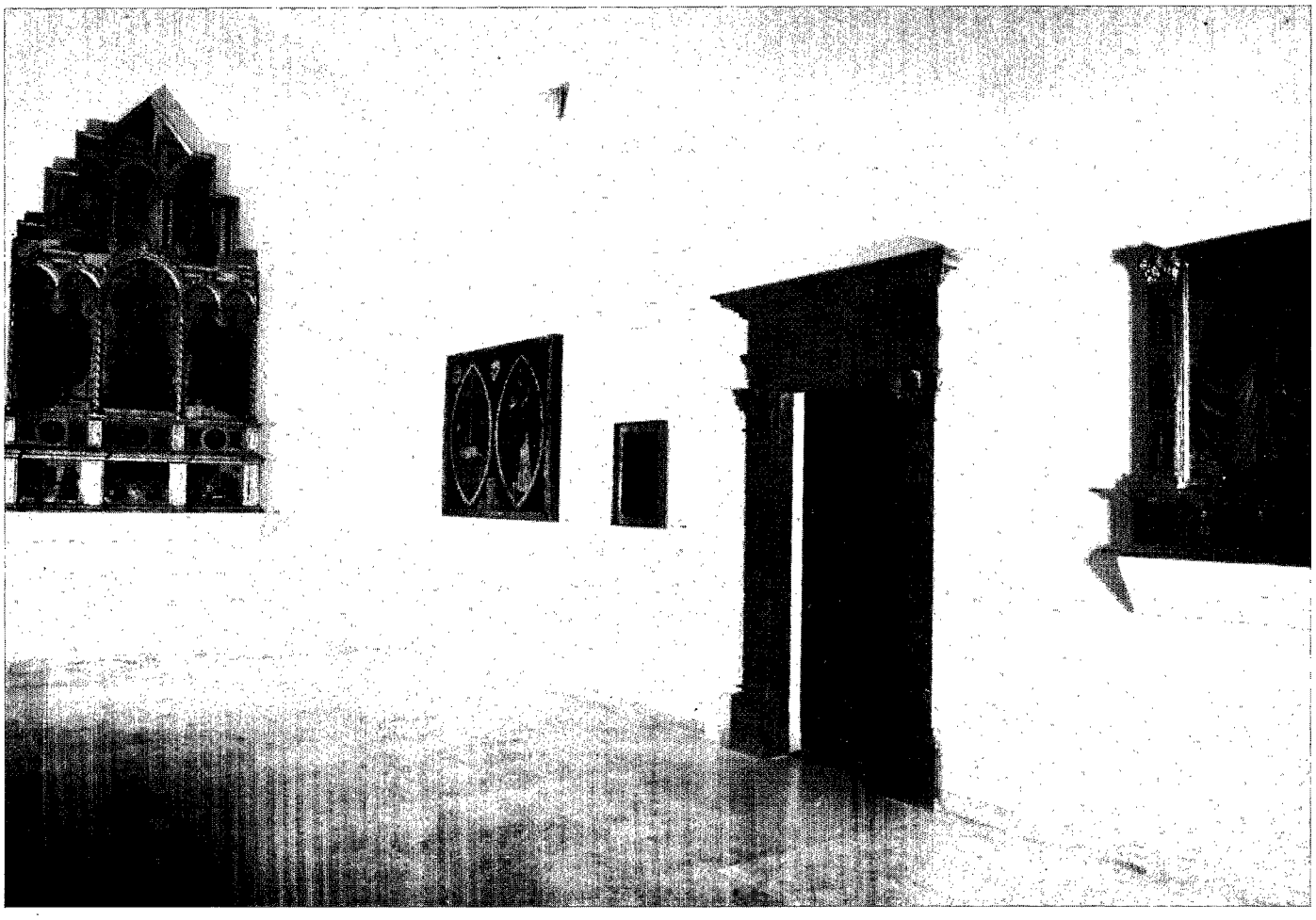
Genesis of the gallery

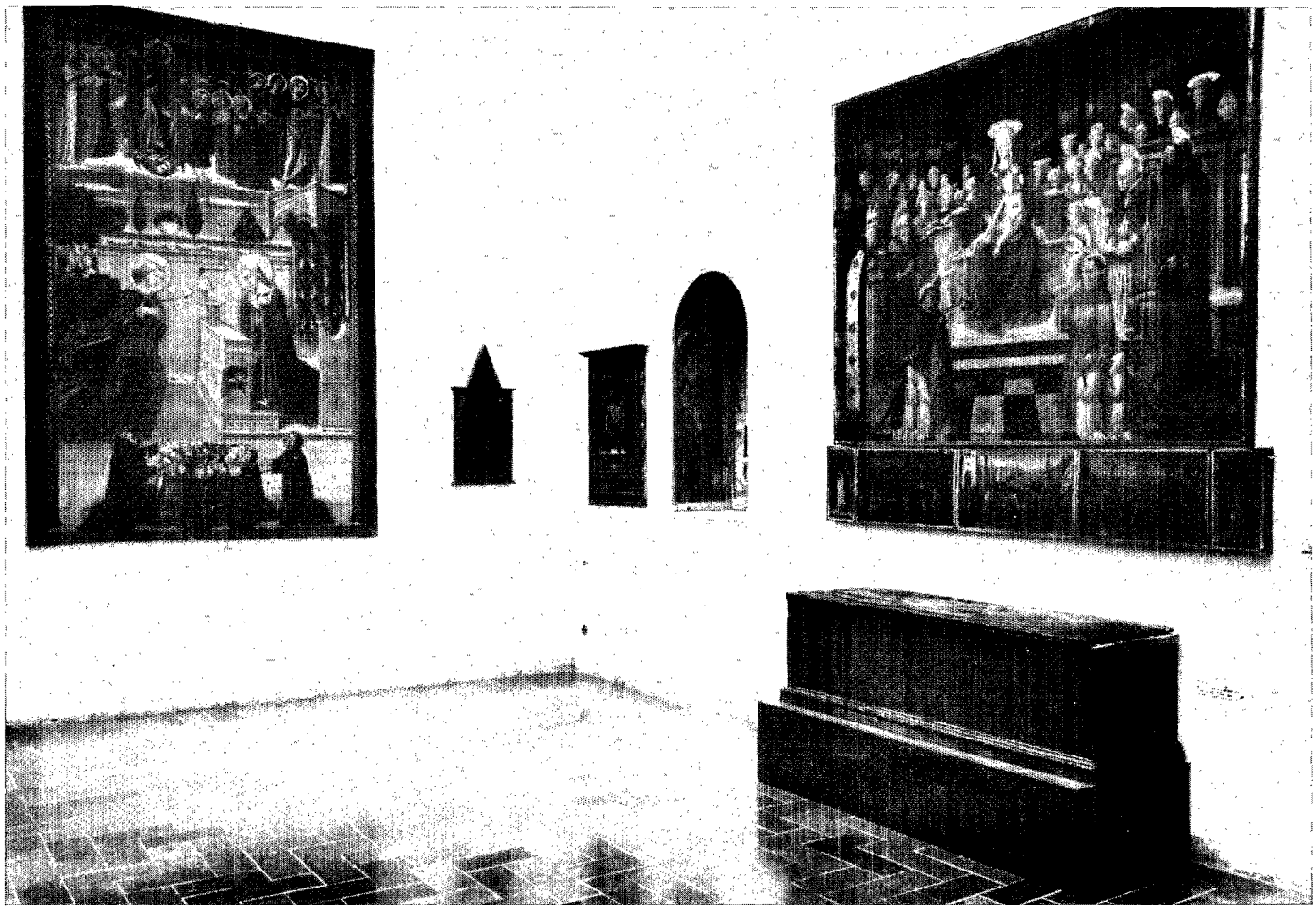
The Italian museums owe their existence to two decrees, one issued on 28 May 1810, which did away with the religious corporations and conferred ownership of their treasures on the secular authorities, and another, issued by the first government of unified Italy in 1860, confirming that decree. It was then that two local painters, Filippo Cecchini and Luigi Carattoli, were entrusted with the task of organizing the first Perugian art gallery in the university church at Montemorcino Nuovo. It was given the name of the city's most famous painter, Pietro Vannucci, known as Perugino (1448–1523).

The core of the collection is made up of all the panels, altar-pieces and devotional objects whose fragility or great value warranted their removal from the custody of the religious communities in the region. They represent the art of Umbria exclusively, all being works from within a short radius of Perugia and from the places where they undoubtedly originated. In 1878, Carattoli drew up the first inventory, which provides precious information about their history, describing where they were from, and the collection was transferred to the Palazzo dei Priori. The palace is on the Corso, and certain parts of it date from the end of the thirteenth century. Some of the large windows offer wide views of the surrounding plain, where here and there a tree emerges, dust-coated in the summer's heat. For a school of art which, as we shall see, was so directly inspired by nature, this is significant.

No sooner had the gallery taken up its new lodgings in the palace than the practice of making deposits and donations was instituted. The works came almost entirely from local religious communities or private collections. The policy adopted at Perugia for the purchase of works of art was consistent with the particular way in which the collection had originally been started. The gallery authorities might well have sought to broaden its scope by acquiring works of art from foreign countries or from parts of Italy with which Umbria had never had any connection. But it has so happened that ever since the last quarter of the







Room V (top left): between the end of the fourteenth century and the beginning of the fifteenth, two lines of influence converged on Umbria: that of the Siena school, examples of which are found in this room, and that of the Marches (Room VI).
[*Photo:* Nuovo Editoriale Venezia.]

Room VII (bottom left) shows the entry of the great fifteenth-century Florentine masters into the aesthetic universe of Umbria (at the far end, the altar-piece by Piero della Francesca and, to the right of the door, the altar-piece by Gozzoli).
[*Photo:* Soprintendenza alle Gallerie dell'Umbria.]

Room VIII (above), which is given over to Umbrian-born painters, shows the twilight of the influence of the Marches over Umbrian art and the triumph of the Florentine influence, with on the left the *Annunciation* by Niccolo de Liberatore and on the right, above the chest, Boccati's large *Madonna del Pergolato*.
[*Photo:* Soprintendenza alle Gallerie dell'Umbria.]

nineteenth century, at which time the gallery belonged to the municipality (it is now state property), a rule has been laid down and applied without exception: the only works in which the museum is interested are those done for the palaces, churches and convents of the region by local and foreign artists who left their imprint on the region.

This, then, was the approach adopted, and a first glance round the rooms reveals a large number of frescoes; the need to protect them by bringing them here has long been a matter of concern. Today, attention is being directed towards filling the gaps in the rooms devoted to works from the thirteenth to the beginning of the fourteenth century.

Chronology...

The arrangement of the works is the second reason why the gallery is a success. It was only in the 1950s that it was modernized, for which credit must go to the architect Gisberto Martelli, the *soprintendente*,[1] and Dottore Francesco Santi,[2] who in 1952 were given the responsibility of restoring the buildings and rearranging the works of art displayed.

1. Author of an article entitled 'The Remodelled National Gallery of Umbria in Perugia', which was published in *Museum*, Vol. IX, No. 3, 1956, pp. 156–60 and sets out the problems of the architectural restoration and the museographical arrangements adopted.

2. Dottore Francesco Santi, the honorary curator, had for a long time been *soprintendente*. He has written most of the recent publications on the gallery. I should like to pay special tribute to Dr Santi, who, for forty-five years, has been the only art historian in the *soprintendenza* and who, like his Italian colleagues, has served both as curator of the museum and as custodian.

Various rules are followed with regard to the hanging of the works. One of them is chronological order, which has been respected throughout, with the exception of the Hall of the Consiglio Generale, which contains the fragments of thirteenth-to-fifteenth-century frescoes, and the Capella dei Priori (Room XXXIII, frescoes by Benedetto Bonfigli), which could not be included in the circuit until after the sixteenth-century rooms.

An attempt to introduce variety into the rooms was made by giving some of them over to sculptures (Room II, fragments by Nicola and Giovanni Pisano) and art objects (Room XXII, corridor of the Treasury) and by the inclusion of a few rare *cassoni* (long, low chests which give a human touch to the rooms without distracting attention from the pictures).

...and influences

The rule of chronological order in visiting the rooms is not, however, the only scientific point of reference. I spoke of influences and said that it is the interplay of those influences which defines the character of a school of painting. In Perugia, many works are to be found by non-Umbrian artists. And yet they were originally from Umbria, as revealed by the beginnings of the collection.

For a long time, Umbria could boast of no great painters and called upon a great number of artists from neighbouring regions (the Marches, Siena, Florence and Tuscany in general) to embellish its palaces and places of worship. These painters and their work, which served as an example and an incentive to local painters, whose art was still in its infancy, represented cross-currents of foreign influence against the chronological mainstream of Umbrian art. These influences were more than mere interferences and were responsible for certain fundamental advances in the art of representation, which would never otherwise have occurred in Umbria. Where the gallery has been ingenious is in having alternate rooms devoted to Umbrian and 'foreign' painters, or in placing local works side by side with their foreign models. Wherever an Umbrian work could be displayed alongside the work that inspired it, this has been done. There are but few exceptions to this rule for the second half of the fourteenth century and the fifteenth century, whereas for the two preceding centuries it was more difficult to achieve because the original models were mostly frescoes, the finest examples of which are at Assisi. The Basilica of St Francis of Assisi, where the greatest Italian painters have left testimonies of their art, is one of the great religious phenomena of medieval Italy, which Umbria owes to the influx of creative ideas from outside. The circuit round this ostensibly conventional gallery cannot be described without some prior, very specific remarks concerning the history of art, since my object is to show that it is a live lesson on how the Umbrian school came into being.

In the Hall of the Consiglio Generale are displayed fragments of frescoes by 'followers' of the great Masters of Assisi: Simone Martini and Pietro Lorenzetti, the Sienese painters, and Giotto, the Florentine. The convenient term of 'follower' is used to mean artists who actually worked with the masters but also some who not only saw their works but found in them models to copy.

From the Sienese to the Florentines

The chronological tour begins in Room I. It contains the works of the master of the St Francis legend,[3] who was strongly influenced by the Giunta di Pisa crucifixes (not shown here), which broke with Byzantine conventions in their highly personal dramatic effect. The Farneto master, another Umbrian whose work is displayed in this room, is associated with the master of the St Francis legend, the early works of Giotto and those of the Florentine, Cimabue. The other works are anonymous and their style is described as 'Umbro-Tuscan' or 'Cimabuesque'. All the paintings here are reminiscent of the Assisi school. The last picture in this room is a Madonna by Duccio di Buoninsegna. Together with the works from

3. The unidentified painter of the famous cycle of frescoes on the nave walls of the Upper Church of San Francesco in Assisi, depicting the life of St Francis.

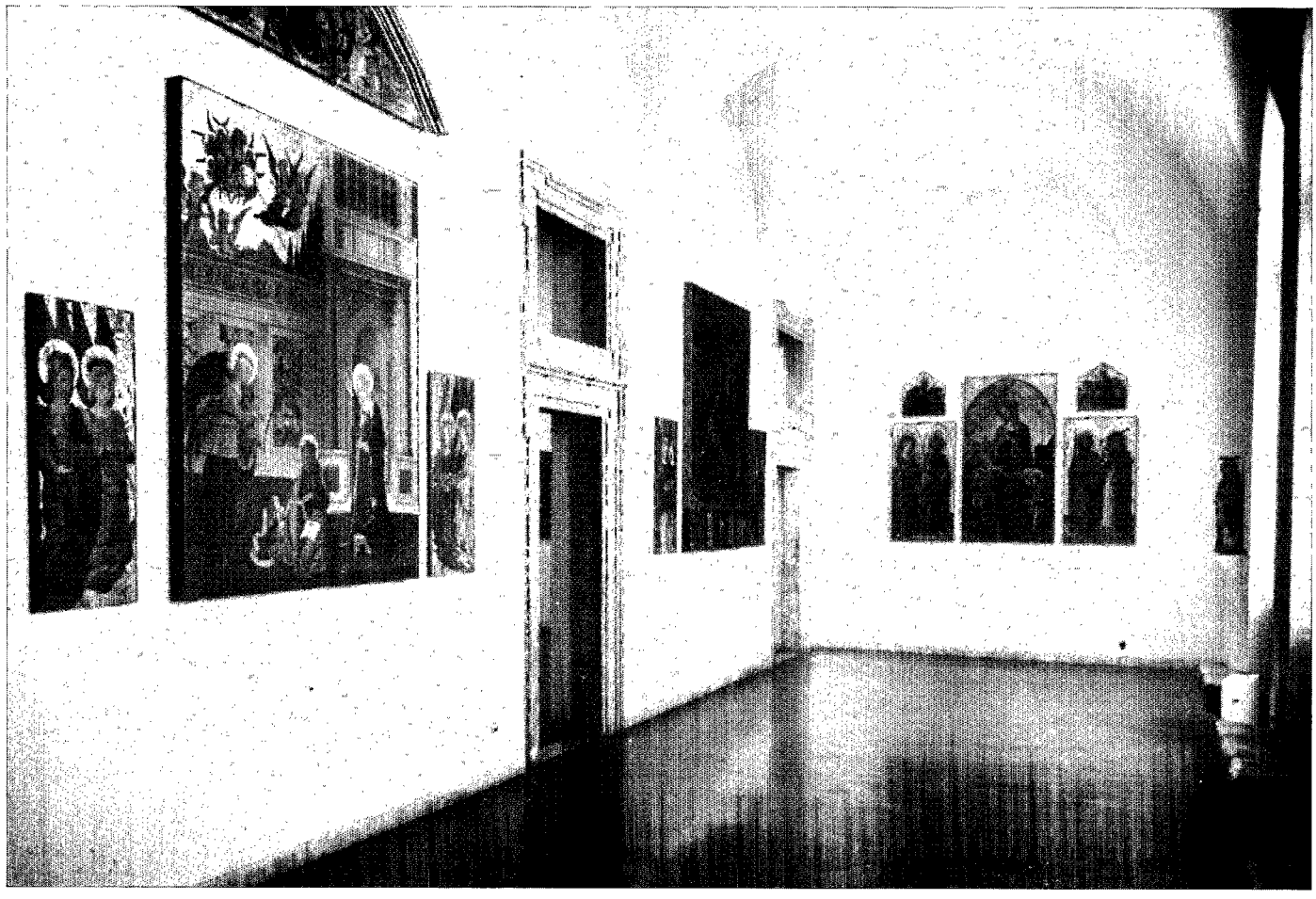
the atelier of Meo da Siena that can be seen in Room III, it heralded a period of fervent admiration for the Sienese models, which inspired artists like Marino da Perugia and Meo di Guido, whose works, which are displayed in the same room, are more Sienese than the original models. In Room VI, we have the works of a Perugian follower of Lorenzetti and two local disciples of Meo da Siena and Francesco da Rimini; indeed, to sum up the characteristics of Umbrian painting around 1350, we might say that it was a blend of two measures of Siena to one of the Marches (the latter tinted to some extent with shades of the Venetian influence which had come down along the Adriatic coast). The following generation (end of the fourteenth and beginning of the fifteenth century) continued to be influenced by these two distant but compatible sources. A distinction should be drawn between the two sources, as has been done in Room V and Room VI. The first contains Sienese painters such as Lippo Vanni, Bartolo di Fredi and Taddeo di Bartolo. The popularity of the Sienese painters can be explained by the fact that their superlative art, with its elegant lines, superb technique and deep poetic feeling, needed no revolution in thinking, as Giotto's work did, to be understood by the Umbrians who were still some way behind. Artists from the Marches and a few Florentine painters such as Bicci di Lorenzo, Mariotto di Nardo and the Franchis, who were highly appreciated in Umbria for the decorative quality of their work and sumptuous profusion of floral design, inculcated by Lorenzo Monaco, are grouped in the second of these two rooms on account of their Gothic characteristics. The painters from the Marches are Gentile da Fabriano, whose work bears the stamp of the ornamental profusion of the Murano school, the Salimbenis of Sanseverino, whose grey-toned fresco representing the Crucifixion is reminiscent of the French or Nordic miniatures that were part of a worldwide trend, and Ottaviano Nelli da Gubbio, whose delicate use of colour and ideal of serene beauty put Umbria on the way towards the style that was to be its own. Objects in marble, statuettes and a particularly fine north Italian *cassone* (chest) complete the decoration of the room.

It was not until well into the fifteenth century that the influence of the modern Florentine artists took over from that of Siena, for it needed a more mature mentality to respond to them. Here, in Room VII, are the testimonies of this revolutionary turning-point: the San Domenico altar-piece by Fra Angelico (1437), the *Madonna and Saints* by Benozzo Gozzoli (1456) and the great San Antonio altar-piece by Piero della Francesca (1480). Benozzo appears as the popularizer of the work of Fra Angelico in terms of discoveries in space and relief. There is something in the genial look of his figures that appealed more to the Umbrians than Piero, whose work is rather too imposing and austere. Room VIII illustrates the growing thrust of the Florentine influence; several works still bear the message of the art of the Marches (Francesco di Gentile da Fabriano, Giovan Francesco da Rimini), whose influence is felt rather less strongly in the work of Matteo di Pietro da Gualdo (who on the other hand owed a debt to the Sienese school), to vanish altogether in the works of Boccati da Camerino (a citizen of Perugia in 1445) and Niccolo di Liberatore, who, before going to live in the Marches, was the most faithful follower of Benozzo Gozzoli.

Conspicuous absences

One master is conspicuous by his absence—Filippo Lippi, whose most faithful disciple was Boccati. That none of his work is to be found here is one of the regrettable shortcomings of the gallery, for it was from Lippi that Benedetto Bonfigli drew his inspiration, timidly applying his lessons on volume and space. Bonfigli, Bartolommeo Caporali and Fiorenzo di Lorenze (whose works are displayed respectively in Rooms IX–X, XI–XII and XIII) were the first true representatives of the school. It is not that their art was genuinely critical and personal, but it was evidence that from then on, in that region of Italy, the art of realistically depicting inanimate objects and human beings, perspective and space had been mastered as consummately as in a modern centre like Florence.

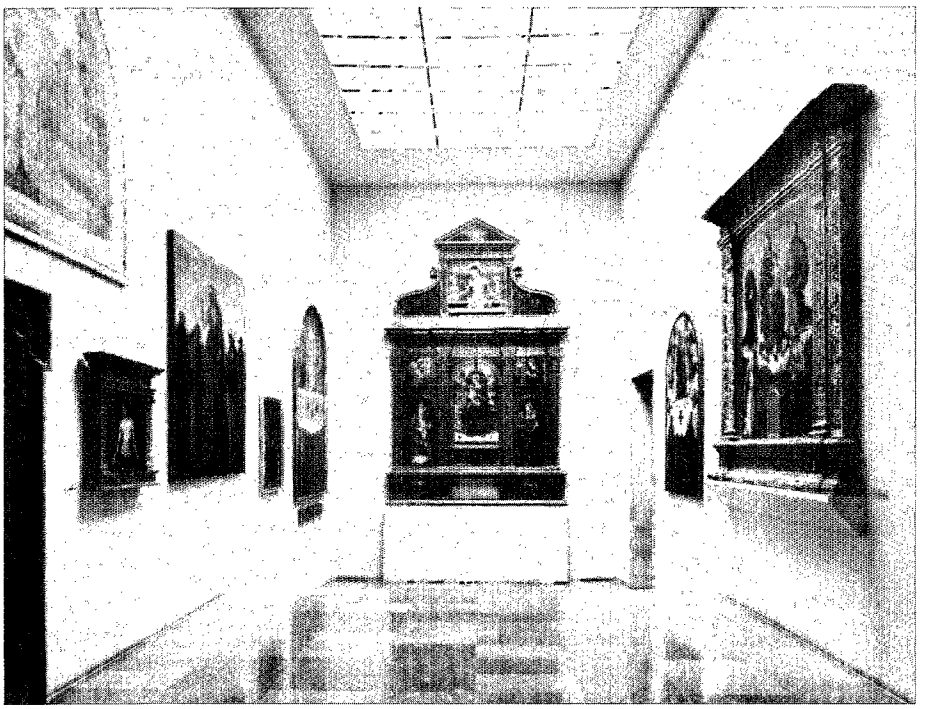
A great gulf separates these three artists from Perugino, and therein lies the



Room IX: in this and the next four rooms, we see the progressive assimilation by Bonfigli, Caporali and Fiorenzo di Lorenzo of the most modern Florentine figurative techniques.
[*Photo:* Soprintendenza alle Gallerie dell'Umbria.]

character of their respective works. Bonfigli, Caporali and Fiorenzo were still attached to the Florentine school, and great was their dependence on it; once it was thrown off, the painters of the region earned themselvres the reputation they still have for their representation of space. True, the teaching of the Florentines on space was essential, but it was a science and no more, for to them it was an enclosed, measured, prehensible space. Perugino revealed the infinite, poetic, almost mystical quality of space, which, after him, was to become the whole poetic substance of Umbrian art. There are, without a doubt, individuals whom chance elects to express in pictorial form what is subconsciously felt by a whole community, or what is confusedly expressed by nature around us. At the gallery in Perugia, careful museography has subtly revealed that pathway leading suddenly out into the light. In Room XIV the chapel of San Bernardino has been reconstituted in its stark abstract simplicity. The standard is indisputably the work of Bonfigli. But the eight small wooden panels illustrating the miracles of the saint, and about whose authorship opinion is divided (although it is almost certain that Perugino had a hand in them) are elements in a highly individualistic concept of space which comes forcefully into its own in Room XV. From that moment on, the Umbrian school can be said to exist. Those who were the collaborators or followers of Perugino and Pintorrichio, Bernardino di Mariotto, Gianicola di Paolo, Lo Spagna, Berto di Giovanni, Eusebio di San Giorgio and the Alfanis were the artisans, in the regional tradition, of those limitless hazy landscapes bathed in glowing lights. While the fact that there are no works by Filippo Lippi is to be regretted, since it means that an aspect of the Florentine influence on the Umbrian school is represented but not its souce of inspiration, the absence of Raphael in the gallery is doubly so, for in the work of Raphael, who was Perugino's pupil, are blended with unrivalled force all the virtues of the school at its most mature: the tranquil narrative quality with no dramatic effects, the varied but harmonious use of colour, the diffuse light of distant horizons. That there should be none of his work here is the gallery authorities' deepest regret.

Room XXVI: the new arrangement of the galleries of Baroque painting is the result of restoration work carried out between 1969 and 1973. The remarkable overall effect of this part of the gallery was achieved by a blend of refinement and modernism in the decoration and lighting.
[*Photo:* Soprintendenza alle Gallerie dell'Umbria.]



Room XV: Umbrian art comes of age with the work of Perugino; the paintings in this room are, in a sense, the culmination of that process, while the progressive stages leading up to it are shown in the following rooms.
[*Photo:* Soprintendenza alle Gallerie dell'Umbria.]

The rooms devoted to Baroque and later painting, which contain some fine work, do not warrant any museological considerations of this kind and I will simply commend the striking and sumptuous effect produced by the display.

For a better 'reading' of the gallery

I should like to make a few comments before concluding. At the end of the last century, photographs of important regional works scattered around the world were displayed on the fabric-covered walls of some of the rooms. The impression this gave of a ghost museum has been treated with scorn. I do not, of course, think it is a good idea to hang authentic works and reproductions side by side, as the former are thereby brought down to the level of documents and are shorn of their artistic and poetic value. But whereas the art historian and the particularly experienced art lover may well understand, appreciate and derive a keen sense of pleasure out of the present judicious arrangement of the works, there is also the ordinary visitor whose needs have to be borne in mind. There would be two ways of helping him to 'read' the museum. One would be a good audiovisual presentation of the works, which could be supplemented by a room containing maps of Italy showing the pattern of influences by means of a system of colours and arrows. Documentary material showing the main features of the Assisi art scene of the time would establish their connection with the Umbrian works of the thirteenth century and beginning of the fourteenth century, to make up for the fact that there is not a single example in the gallery of the models from which the latter were drawn.

The *soprintendenza*, which is understaffed, has hitherto directed efforts towards holding exhibitions on the restoration of the gallery (and all the work that this has entailed). It will need a larger staff, more specialized in the history of painting, to equip the gallery with basic educational material and to devise an educational policy to arouse the interest of schoolchildren. For the time being, the Hall of the Consiglio Generale is sometimes used for concerts and this is the only way in which the gallery is drawn into the life of the city.

[*Translated from French*]

Bologna in the show-case

Roberto Curti, Paola Pacetti and Vincenzo Pallotti

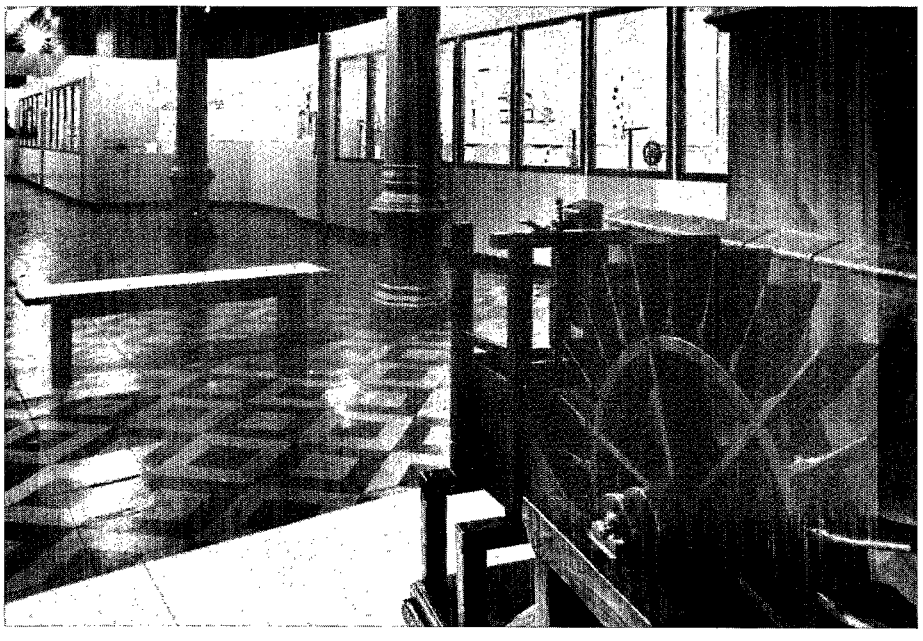
Roberto Curti was born in Bologna in 1945. Graduated in political science at the University of Bologna. Has published studies on the agrarian question and the peasant struggles of the period following the Second World War. Teaches at the Aldini-Valeriani Technical and Industrial Institute. Conducted the research on the institution for the exhibition *Machines—School—Industry*.

Paola Pacetti was born in Bologna in 1951. Graduated in modern literature at the University of Bologna. Has published a study on manufacturing activity in Bologna and Ferrara in the first half of the nineteenth century. Responsible for research on the economic history of Bologna in the nineteenth century for the exhibition *Machines—School—Industry*.

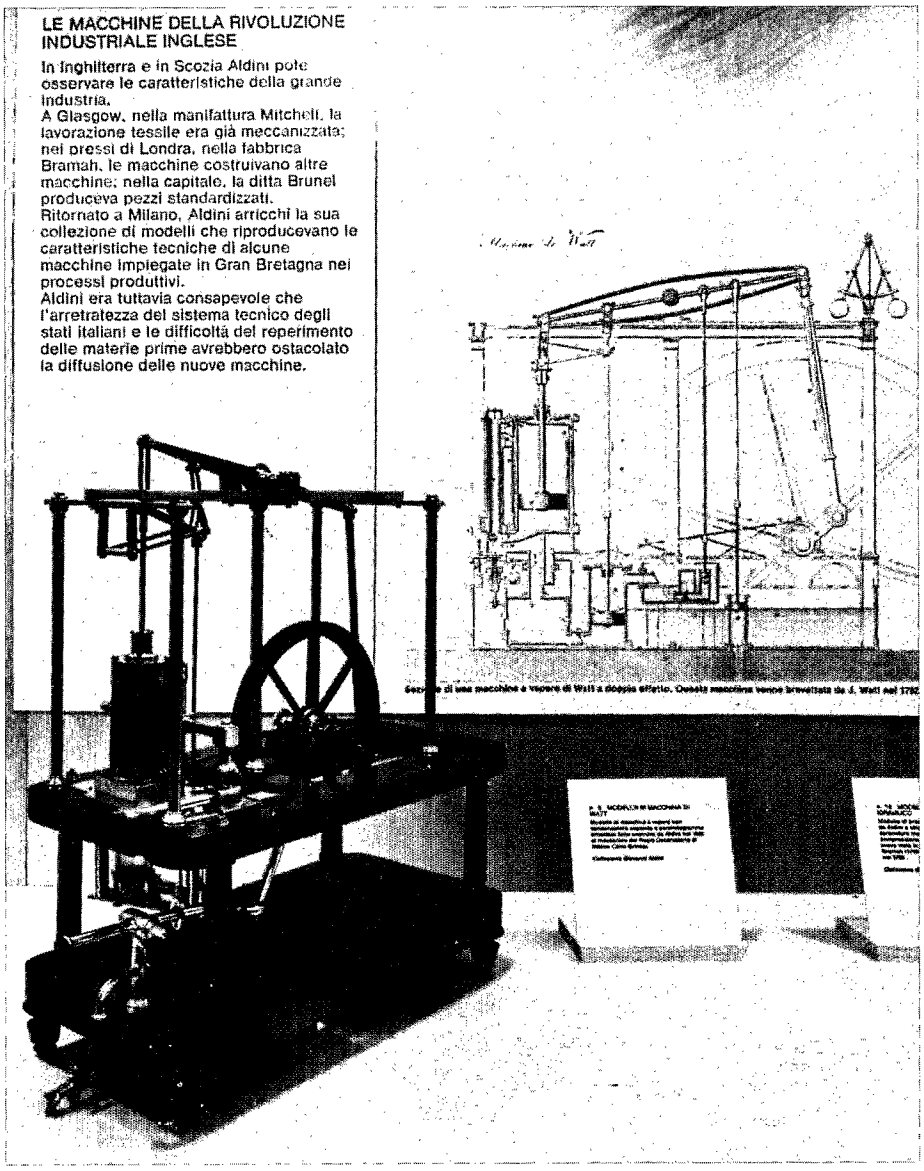
Vincenzo Pallotti was born in Bologna in 1951. Graduated in philosophy from the University of Bologna. Has published studies on positivism, experimental physics and the Bologna Institute of Sciences. External adviser to the university. Conducted research on the history of technology for the exhibition *Machines— School— Industry*.

Materials for a museum

In 1975 a group of teachers from the Istituto Tecnico Industriale Aldini-Valeriani, an important technical training institution in Bologna, began to restore teaching materials—books, archives, technical and scientific instruments—which had once been used at the institute but had fallen into an advanced state of disrepair. In 1977, the Municipality of Bologna, which is responsible for the institute, realizing the value of this spontaneous initiative, devised a support scheme for it called 'Materials for a Museum'. The University of Bologna was asked to act as consultant to the project and provide the services of researchers. This was done, and the research team was co-ordinated by Professor Carlo Poni, former curator of the Museo della Civiltà Contadina (Museum of Rural Life) of San Marino di Bentivoglio. A start was also made on a survey consisting of interviews with a sample of people who graduated from the institute between 1900 and 1930. Meanwhile the director of the Bologna State Archives reorganized the records for the years 1860 to 1913, and experts in librarianship supervised the reorganization and indexing of the institute's store of out-of-date books (about 2,000 volumes, collections of periodicals and pamphlets). A team of the institute's technicians, co-ordinated by a specialist, completed the restoration of



The exhibition *Machines—School—Industry* in the old Sala Borsa in the centre of Bologna. In the foreground, the paddle-wheel of the model of a corn-mill built in 1844. [*Photo:* Corrado Fanti.]



Perception of the object, about the object and beyond the object. Model of a machine constructed by Watt in 1823. The explanatory panel and photomontage situate it in a wider frame of reference.
[*Photo:* Corrado Fanti.]

Pupils of the Aldini-Valeriani Technical Institute working in the institute's model department in the years 1898–1913.
[*Photo:* Corrado Fanti.]

Students and researchers during a guided visit of the exhibition.
[*Photo:* Corrado Fanti.]

science teaching apparatus that had been in use from the end of the eighteenth century to the beginning of the twentieth century.

All these activities had one end in view: the preparation of a permanent exhibition on the internal history of the institute and above all the network of contacts and relationships that grew up around it in the city during the nineteenth century and the early twentieth century.

The exhibition opened on 1 February 1980, after three years' work, and marked the centenary of the institute. By this time the project's main research tools were ready: the catalogue, the inventory of the institute's archives and an information pamphlet on some particularly interesting machines.[1]

'Macchine—scuola—industria'

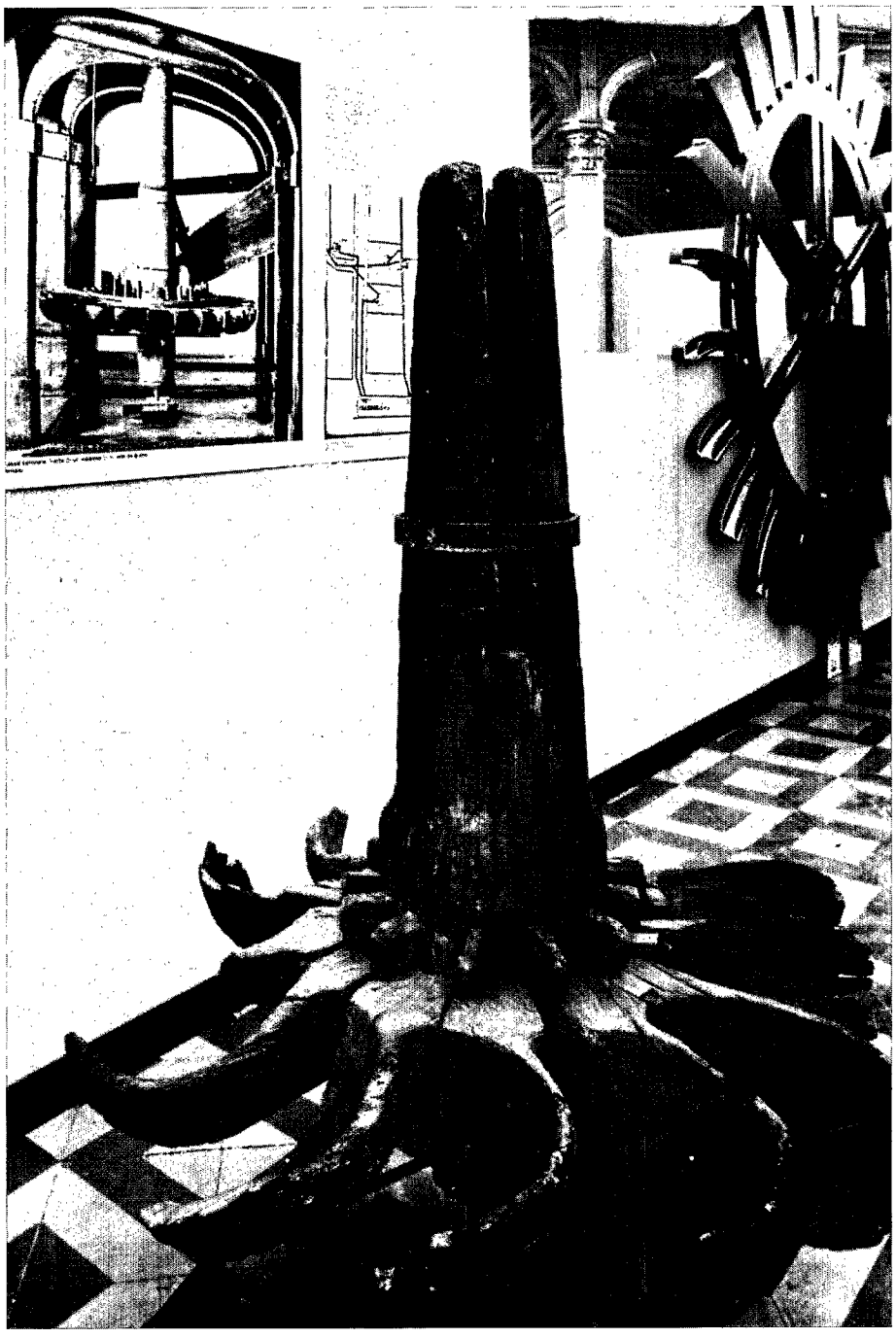
The exhibition, entitled *Machines—School—Industry: From Craftsman to Industrial Worker*, throws light both on the objects themselves and on their wider implications, drawing on studies of the history of technology and of the educational institutions and economic structure of Bologna.

The specific focus of the exhibition is the history of the Aldini-Valeriani Institute—a microcosm of the city, created, shaped and reorganized by it in the course of urban transformation. The *raison d'être* of the institute was Bologna's vital need to work out a different mode of production and new ways of conveying technical and scientific knowledge. For more than a hundred years, from the end of the eighteenth century to the beginning of the twentieth, efforts to popularize and pass on scientific and technological knowledge have both reflected and inspired changes in the local economic structure, with which they were closely linked. The old 'silk city' gradually became a centre of small and medium-sized industrial firms, with a modern machine-building sector based on the technical know-how and dynamism of the city's entrepreneurial organization.

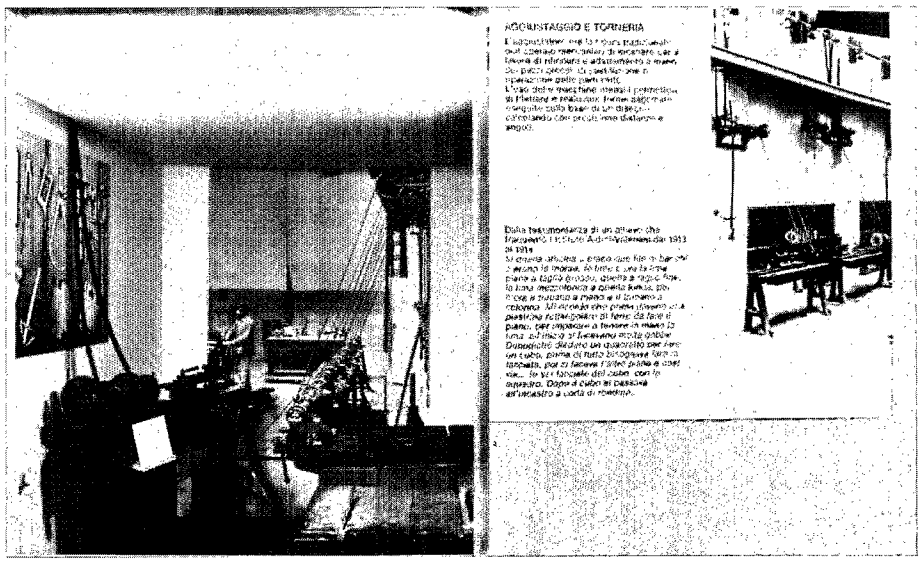
Presentation of the historical development of the institute provides the first level of understanding of the material. But separate display areas or spaces have also been set aside, showing how objects form networks of relationships. In fact the juxtaposition of different forms of communication (diagrams, photographs, audio-visual aids) enables the visitor to link different planes of perception—of the object, about the object, through and beyond the object presented.

In the case of the models demonstrating physical and chemical laws, e.g. hydraulic engines, steam-engines, mills or presses, machine tools, etc., initial information is given by the label. The illustrative photomontage which forms a background to the object situates it in the context of the formal education system, of the technology of the city, of the economy which produced it. For

1. *Macchine—scuola—industria, dal mestiere alla professionalità operaia* [Machines—School—Industry: From Craftsmen to Industrial Workers], Bologna, Il Mulino, 1980; *L'archivio della Scuola Professionale di Arti et Mestiere Aldini-Valeriani*, Bologna, Comune di Bologna, 1980; G. Dragoni and V. Palloti, *Modelli e macchine termiche*, Bologna, Comune di Bologna, 1980.



Paddle-wheel with vertical shaft, used mainly in corn-mills in the Bolognese Apennines and the explanatory photographical display, which shows the model used for teaching purposes in the institute.
[*Photo:* Corrado Fanti.]



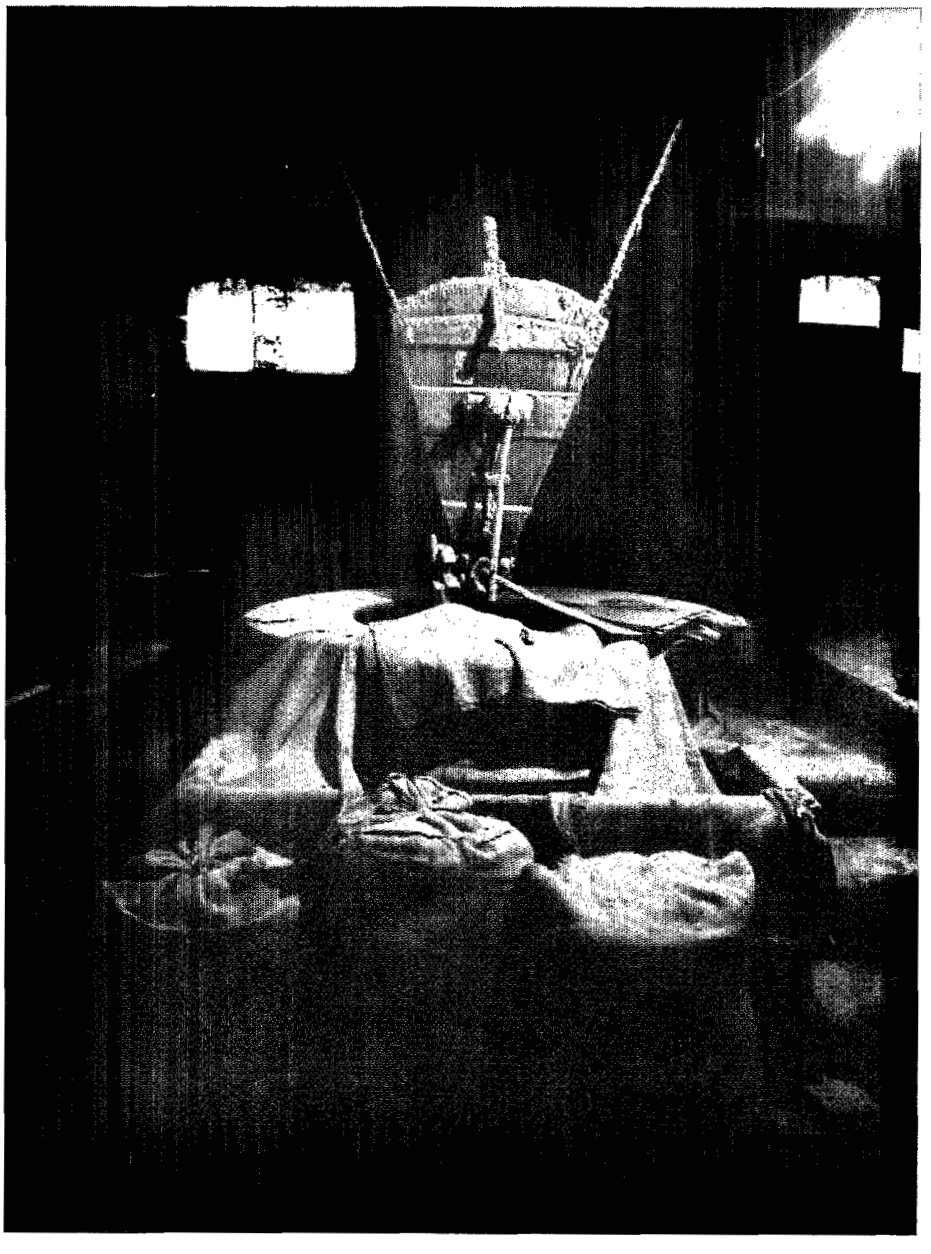
A reconstitution of the turning and fitting departments of the Aldini-Valeriani Technical Institute (1878–1913). The institute, during this phase in particular, was meeting the needs of the city's machine sector for highly skilled labour. At the same time is appears as a powerful instrument for the inculcation of the employer's work ethic.
[*Photo:* Corrado Fanti.]

example, the model of a beater for threshing rice, constructed by Luigi Poluzzi, a craftsman of the city, in 1856, is a masterpiece epitomizing both the processes of cereal production and the craftsmanship of the carpenter.

The different stages of development are shown by means of audio-visual material based on the interrelationship between machines, education and industry. The title of the exhibition thus contains, inevitably in schematic form, the key to an understanding of the materials and the planes of meaning on which they operate. A more comprehensive interpretation is suggested in the subtitle—*From Craftsman to Industrial Worker*—which refers to the range of skills required for different means of production.

The exhibition follows a set course which tells the visitor a 'story' if he keeps to the chronological itinerary. It is flexible, however, inasmuch as various planes of perception intersect where attention is concentrated on a single object. In this sense it is being used experimentally to test the use of exhibition techniques as a laboratory for popularization and instruction, in co-operation with the education system, trade unions and other organizations of the world of work in general. The exhibition was therefore scheduled to remain open over a long period.

The research team formed a working group to manage the exhibition, while continuing their research work, with the idea of publicizing its content and enlisting the help of teachers prepared to use it in their educational activities.



Interior of a corn-mill still functioning in the Lagaro region in the Bolognese Apennines. [*Photo:* Corrado Fanti.]

The exhibition as a laboratory

The first problem they encountered in running the exhibition was that of its educational function. A committee of researchers and teachers was set up to work out ways of using the exhibition and other material existing in the area during the period of compulsory schooling and the two years of secondary school that follow it. Concentrating on this educational level meant linking up with teaching of the basic skills and the first stage of the learning process. It also allowed a link with experimental teaching methods based both on the use of laboratory work to complement the study of technical and scientific subjects and, more generally, on observation of the natural, economic and social environment—the city and its surrounding area.

The exhibition affords pupils an opportunity of satisfying their curiosity and applying their critical judgement to aspects of culture not fully accepted in our largely humanistic tradition. As might be expected, varying degrees of interest are aroused by themes such as changes in techniques, in occupational roles and qualifications, in the working process and in forms of production, and by the methods used to put them over. The opinions exchanged about the exhibition are instructive. Institutions with an academic bent do not consider the knowledge it offers worthy of the term culture, while technical and vocational institutions underestimate the educational value of a critical appraisal of historical beginnings and lay stress solely on the applications of the techniques from a developmental standpoint. The schools dispensing compulsory education (primary and secondary level, ages 6 to 14), while recognizing the exhibition's potential as an experimental laboratory, are often unprepared to devise ways of using it in the classroom after the visit. We feel, therefore, that the first task of the school is to enable the pupil to 'read' the exhibition, for this involves bringing teaching methods into line with the exhibition's content. In order to assist in this process the working group has singled out features—sources of power and engines; representation of construction plans by means of technical drawings; the machine as operator and as tool; the mill or press; the transference of motion—in which the interelations brought out in the exhibition link up with specific school subjects. Pedagogical units, which are increasingly broken up and related to the various levels of education, make possible two different approaches to the exhibition: historical development or consideration of particular topics. The use of the exhibition as a laboratory involves constant attention to the display—adjusting and supplementing it, introducing new sections and seeing that the standard is maintained.

The exhibition as a form of museum

The originality of the exhibition lies in the fact that the exhibits are regarded as a starting-point, as sources or documents for research. There is no question of imposing a cut and dried commentary on the public. The objects displayed are not used to illustrate a fixed discourse.

The work put into the materials realizes their potential as instruments for the popularization of the applied sciences. They express knowledge to be passed on, the way of passing it on, skills already acquired by their makers and new abilities to be acquired by the learner. As educational apparatus, the objects are material evidence of an attempt to transform theoretical knowledge into practical knowledge. The school is a place where the empirical knowledge accumulated in professional life comes into contact with the technical and scientific culture built up in specific disciplines, expressions of new methods of work and production on the shop floor. It is a place where a learning process that produces the conditions required both for the transformation of the city and for its management is set in motion.

The set of problems raised by the objects calls for research and studies, to be defined later with other materials, with objects from other places, communicating elements and networks in the government of the city. Places of work, for

example—survivals of old methods of production still existing in the area, industrial plant, the material and physical basis of proto-industrialization, machines, working tools. Other institutions would include yet other schools, the university and other institutes of higher learning.

The place in which the 'ideas' are to be found is, of course, the city, and the materials themselves and organization of research will make up its 'museum'.

The city already has museums. Those of the university reflect the prestige and influence of the Institute of Sciences, that eighteenth-century temple of scientific culture. The Civic Museum collects objects that were the pride and joy of the city's bourgeoisie. For a long time these museums were a show-case for the image of the city that the ruling classes wished to project. Today other means of communication—the mass media—prevail over the museum and the image of the city is no longer its responsibility. The images from the past remain, but the contemporary face of the city is not seen.

It was after studying the equipment used in a particular school, objects that formed a fixed series by virtue of their use, but whose value has changed with the trade to which the course of training was geared—objects thus seen as caught up in a network of relationships—that we were led to prepare an exhibition that did not show 'finished products'. A story is never finished; there is always more to come. A state of affairs has not been defined, once and for all: the manner and causes of the transformation are simply presented.

On the basis of this experiment we have put forward a proposal to the Municipality of Bologna that a new institution should be established that would use the traditional means of display—the exhibition—to show how different branches of knowledge are built up.

The methodological tools, approaches and subjects emphasized in the 'new history' are used for the production of the conceptual material. For instance, the opposition between the history of the rise of the ruling classes and that of the lower classes will be overcome by singling out an area of material culture in which they meet, each making its own contribution. Alongside the stately image of the stratified urban community preserved in eighteenth- and nineteenth-century museums and the subordinate image of the proletariat, heroic as it is in its struggle and toil, there can and must be added another, showing what is common to all through the knowledge/work relationship.

Just as the studies and their visual representation will not constitute a static reconstruction of aspects of the past, so the new institution will not simply 'conserve'. The intention is also to reflect the present, to be a centre in which current problems are brought together and solutions to them suggested. It is intended to record social changes as they occur and make the community conscious of them.

The method followed in historical research can also be used in research concerning the present: awareness is brought about through contact with everyday things: the bus, the city garden, the life of a school, the new machines installed in a factory, the itinerary of a certificate through municipal offices.

All this is material for a museum, as it reflects a society on the move.

[*Translated from Italian*]

SAFFRON AND STONE:

It can be argued that one of the most crucial and difficult tasks of the museum is to communicate the cultural heritage in a way that illuminates the contemporary situation. Many institutions understandably remove themselves from the problem by simply attempting an interpretation of the past without any reference to the present.

Currently, with developed countries reducing their public expenditure and developing countries caught in recurrent funding problems, there is a strong temptation to emphasize conservation rather than development and to persist in scholarly detachment rather than attempt the more dangerous task of making cultural connections.

Certainly there are risks involved in attempting to show the links, and it is most important to present both the cultural heritage and the contemporary situation with integrity. However, as the Director-General of Unesco pointed out at the Intergovernmental Conference on Cultural Policies in Latin America and the Caribbean (Bogotá, 1978), the cultural heritage is not just the sum total of historical monuments but rather the entire dynamic and living creation of man. To follow through such a sentiment requies a strong emphasis upon the arts of communication and of interpretation.

Relating cultural heritage to contemporary life

James Porter

The author was Leverhulme Scholar at the University of London, 1950–55. Graduated in sociology from the London School of Economics, 1953. M.A. in Sociology of Education, 1955. Taught in primary and secondary schools and lectured in Sociology and Education till 1962. Deputy principal, Coventry College, 1962–67. Principal, Bulmershe College of Higher Education, 1967–68. Member of: National Committee of Inquiry into Teacher Education and Training (James Committee), 1971; Education Committee of University Grants Committee, 1978; Educational Advisory Council of the Independent Broadcasting Authority; ICOM United Kingdom Executive Committee. Fellow of the Royal Society of Arts, 1978; Honorary Fellow of the College of Perceptors, 1978; Chairman of the World Education Fellowship, 1979. Consultant to the Division of Higher Education and Training of Unesco since 1976. Now Director of the Commonwealth Institute, London, the main education and cultural exhibition centre for the forty-five countries of the Commonwealth. Co-author (with N. Goble) of *The Changing World of the Teacher*, Unesco, Paris, 1977.

Origins

The *Festival of Sri Lanka* at the Commonwealth Institute illustrates both the problems and the promise of such an approach. Opened on 16 July 1981 by Her Majesty Queen Elizabeth II, the final manifestation was a festival which included three related exhibitions and the use of the total space of both the inside and the outside of the institute. Most important was the involvement of artists from Sri Lanka, films, conferences and seminars on political and religious life, and the continuous animation throughout the two months of the festival by Sri Lankans who related the events and explained the artefacts to many different audiences.

Professor van Lohuizen played a central part in bringing the various objects together for the central exhibition on the cultural heritage and her article below describes the objects and their relationship to the history of Sri Lanka. However, a consideration of the origins and the concept of the project as a whole serves to demonstrate one strategy for forging the crucial link between the past and present.

The original idea for the festival developed out of a number of informal discussions in Colombo, Sri Lanka, in late 1978. Out of the discussions grew a conviction that there should be an international projection of the sites to be found in the Cultural Triangle of Sri Lanka,[1] and from the beginning it was understood that there should be reference to the contemporary cultural life of the island. The fact that the date of the exhibition coincided with the country's celebration of fifty years of Sri Lanka led to the design of a complementary contemporary exhibition concerned with constitutional development.

1. The Cultural Triangle is the triangular area, defined by the three ancient capitals of Anuradhapura, Polonnaruva and Kandy, rich in monuments, both religious and secular, and archaeological sites.

SRI LANKA

Development

The festival emphasized the need for a 'programme brief' as well as a 'design brief', as it became increasingly obvious that contemporary messages can only be communicated satisfactorily by the most active involvement of the people who represent the 'dynamic culture'. This involvement was demonstrated by young men and women from Sri Lanka who acted as guides and animators, by a display of books currently published and printed in Sri Lanka and by the presence of craftsmen and women working throughout the festival to demonstrate both traditional and contemporary skills.

Sri Lankans living in London also made a major contribution, taking over part of the catering facilities to offer Sri Lankan food to visitors, and assisting with many events.

However, during the two years over which the festival was developed there arose a number of important issues that constantly required adjustment and response. Very early on it became obvious that linking cultural heritage and contemporary life required a very flexible and dynamic approach to the design of the exhibition and the process of programme-building around the main themes. This process of adjustment and response continued throughout the exhibition, as was also the case with the institute's *Masks* exhibition in 1980.[2]

Conservation, security and display

The central part of the festival was provided by the exhibition on Sri Lankan art described by Professor van Lohuizen. The exhibition itself involved objects of great intrinsic and historic value, many of which had never travelled outside their country of origin and were furthermore held in high esteem and veneration because of their religious associations. Originally it was anticipated that over 130 objects would be exhibited but in the end the number was reduced for several reasons, the most important being the problem of transporting precious objects such a long distance and the concern about the possible damage that might occur during transit.

It was therefore vital that the condition of all objects be carefully checked and recorded on initial packing in Sri Lanka and on their arrival in London. Senior

Modern Sri Lanka portrayed in the exhibition.
[*Photo:* Commonwealth Institute.]

2. F. Lightfoot and A. Cobbold, 'London Commonwealth Institute: *Masks*', *Museum*, Vol. XXXIII, No. 1, 1981, pp. 9–20.

staff had to supervise the procedures and the same process had to be repeated when the exhibition was repacked and returned to Sri Lanka. Everyone handling the objects had to give them the utmost care and consideration.

A second area of concern was that of security in the exhibition area. All the objects were in fact placed in a zone of maximum security, which was given additional twenty-four-hour personal security coverage and a new alarm system. The whole system was then inspected and approved by an independent agency.

Thirdly, there was a need for a great deal of discussion of the way the objects would be displayed. The solution of the problems of display, the need to be sensitive to the problem of providing an appropriate setting in a place distant from the country of origin, was only possible through the closest liaison between the institute and the representatives of Sri Lanka. However, for the options to be properly provided at the appropriate level, the Chief Exhibitions Officer of the institute had to spend a substantial period of time in Sri Lanka working on the sites with the colleagues concerned. The greatest possible care was taken to provide a setting of beauty and repose through the use of foliage and flowers and the appropriate atmosphere was provided by lighting, fabrics and the provision of the maximum space for the objects to 'speak for themselves'.

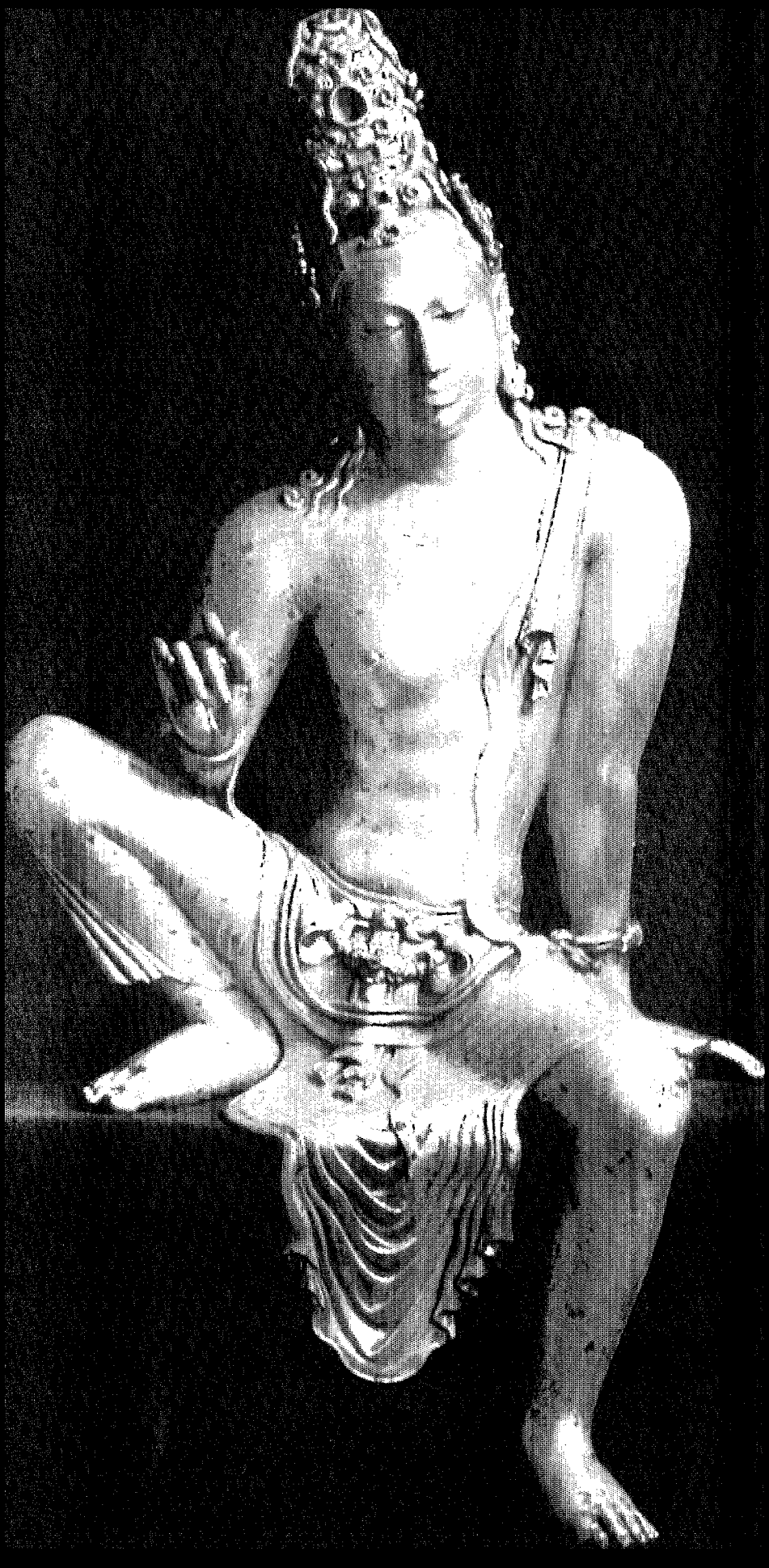
Another question that called for a flexible response throughout the build-up to the exhibition and during the exhibition itself was the public debate that was stimulated both in Sri Lanka and in London. The debate raised questions about the issue of allowing valuable objects to leave Sri Lanka for such an international display and the problem of presenting a true reflection of cultural heritage and contemporary life. Such discussion illustrated the great importance of a long period of preparation for the festival and the need to involve all those who feel they have a direct concern for the cultural heritage. The list of such people is actually a great deal longer than is often acknowledged by some exhibition designers. They include government representatives, religious leaders, archaeologists, museum curators, scholars, writers and influential leaders of public opinion and those representing major strands of cultural identity which are often concerned with minority ethnic religous groups.

Management

The strategy for handling the complex and shifting issues involved was to have a carefully constructed pattern of co-ordination established at the very beginning of the project. The diagram on page 241 indicates the nature of the co-ordination, which centred very much upon the role of the key co-ordinator, the Secretary of the Prime Minister of Sri Lanka, who was in a position to communicate at all levels and to draw together the varied interest groups concerned. The Deputy Commissioner of Archaeology in Sri Lanka was the designer of the exhibition in association with the institute's Chief Exhibitions Officer. With the High Commissioner for Sri Lanka acting in a co-ordinating capacity with his colleagues in London and in direct link with the Government of Sri Lanka and with the director of the institute in charge of contributions from the institute, it was possible to achieve a practical and effective working relationship.

All important communications, telexes and records of discussions and meetings were mutually shared; responsibilities were carefully defined and redefined throughout the period of planning and development. The outcome was a genuinely co-operative project and one in which all those with professional skills to offer were able to deploy them in a secure framework, conscious of the highest level of interest and engagement in the country presenting the festival. Thus the positional authority of those responsible in Sri Lanka was most important, particularly as it was also combined with the highest level of administrative effectiveness and executive style. The final stage of the project will be a comprehensive evaluation, to be carried out by all the participants.

Sri Lanka, *Ancient Arts*, Commonwealth Institute, London, 17 July–13 September 1981. Image of the Bodhisattva Samantabhadra seated in *lalitasana* or attitude of ease and raising his right hand in the teaching attitude of *vitarkamudra*. Fire-gilded bronze; eyes inlaid with crystal. Eighth to tenth century, Veheragala. Archaeological Department, Colombo, No. V.03. Height 49 cm. ▷ [*Photo:* Commonwealth Institute.]



Located beyond the southernmost tip of the Indian subcontinent, ancient Sri Lanka was far from being an isolated outpost of human settlement, at the very edge of the great expanse of water between India and Antarctica. Rather, Sri Lanka and its Cultural Triangle formed the 'main centre from which the influence of Theravada Buddhism and the Sinhalese genius together spread outwards. At various periods, it attracted thinkers, creative artists and scholars from all over the world, and especially from the rest of Asia, who came to give added depth to their faith or broaden their knowledge, meditate in its monasteries, learn from its philosophes or work with its artists. All the buildings, structures and objects still to be found there—whether they be the majestic dagobas of Thuparama, Ruvanvelisaya, Abhayagiri and Jetavana or the splendid frescoes of Sigiriya, the Alahana University at Polonnaruva or the Temple Square in Kandy—bear witness to the exceptional spiritual, cultural and technical developments which the Triangle has lived through down the ages.'[1]

The distinguished Dutch orientalist Dr J. E. van Lohuizen-de Leeuw explored the historical and cultural background to this art in her introduction to the catalogue of the exhibition, on which the following article is largely based.

The ancient art of Sri Lanka

J. E. van Lohuizen-de Leeuw

The author earned her Ph.D. in 1949 with a thesis entitled *The Scythian Period*. From 1942 to 1951 she was Docent for Sanskrit at the University of Groningen; lecturer in Ancient History and Culture of Indonesia at the University of Utrecht, 1946–51. In 1951 she was appointed lecturer in Indian Art and Archaeology at the University of Cambridge, where she remained till her election in 1959 as Professor of South and South-East Asian Art and Archaeology at the University of Amsterdam. She has been awarded three research fellowships, by the American and Canadian Associations of University Women and by St Edmund's House, Cambridge University.

Culture contact and the island's destiny

While trade between the various parts of Asia had been haphazard in earlier days, it assumed a more regular pattern towards the beginning of the Christian era. The main line of communication linking the Near and Middle East in the west with South-East Asia and the Far East was the maritime route that skirted Sri Lanka. Thus the island's harbours became important ports of call. Expanding international contacts made it possible for political and religious developments on the Indian mainland to play an ever-increasing role in the history of the island. In this respect the decision of the Indian Emperor Asoka (269–242 B.C.) to send Buddhist missionaries to various parts of Asia, including Sri Lanka, was the most decisive factor in shaping the country's destiny. Mahinda, the monk selected to lead the delegation to the island, may well have been the emperor's own son. On his arrival he first met the Sinhalese ruler Devanampiya Tissa (250–210 B.C.) at Mihintale, not far from the capital, Anuradhapura, which remained the seat of government till the end of the tenth century. As a result of Mahinda's mission the king and his people became followers of Buddhism.

Chronicles of two millennia

Although it is likely that Indian immigrants had already settled in the island several centuries earlier, it was only now that Sinhalese culture blossomed under the fertilizing influence of the new religion. As in medieval Europe, the newly founded monasteries became centres of scholarship. Most of these monastic establishments were located in or near Anuradhapura and in the course of time some of them became great centres of learning. Apart from passing on knowledge in such fields as astronomy, medicine, philology, grammar and literature, their most important duty was of course to preserve the purity of the teachings of the Buddha. This they did most faithfully, with the result that Sri Lanka is still one of the few countries in which the Theravada or older form of Buddhism has

1. From the Appeal for the Safeguarding of the Cultural Triangle of Sri Lanka, launched at Kandy by Amadou-Mahtar M'Bow, Director-General of Unesco, on 25 June 1980.

been preserved down to the present day. In addition, the island owes a unique aspect of its culture to these monastic centres, for the various chronicles kept up to date by the monks represent a complete and unbroken record of historical events from the moment of Mahinda's arrival. A large number of inscriptions have also come down to us, constituting additional and valuable sources of history. Apart from China, no other country in Asia can pride itself on such a complete and detailed history recorded meticulously over a period of more than 2,000 years.

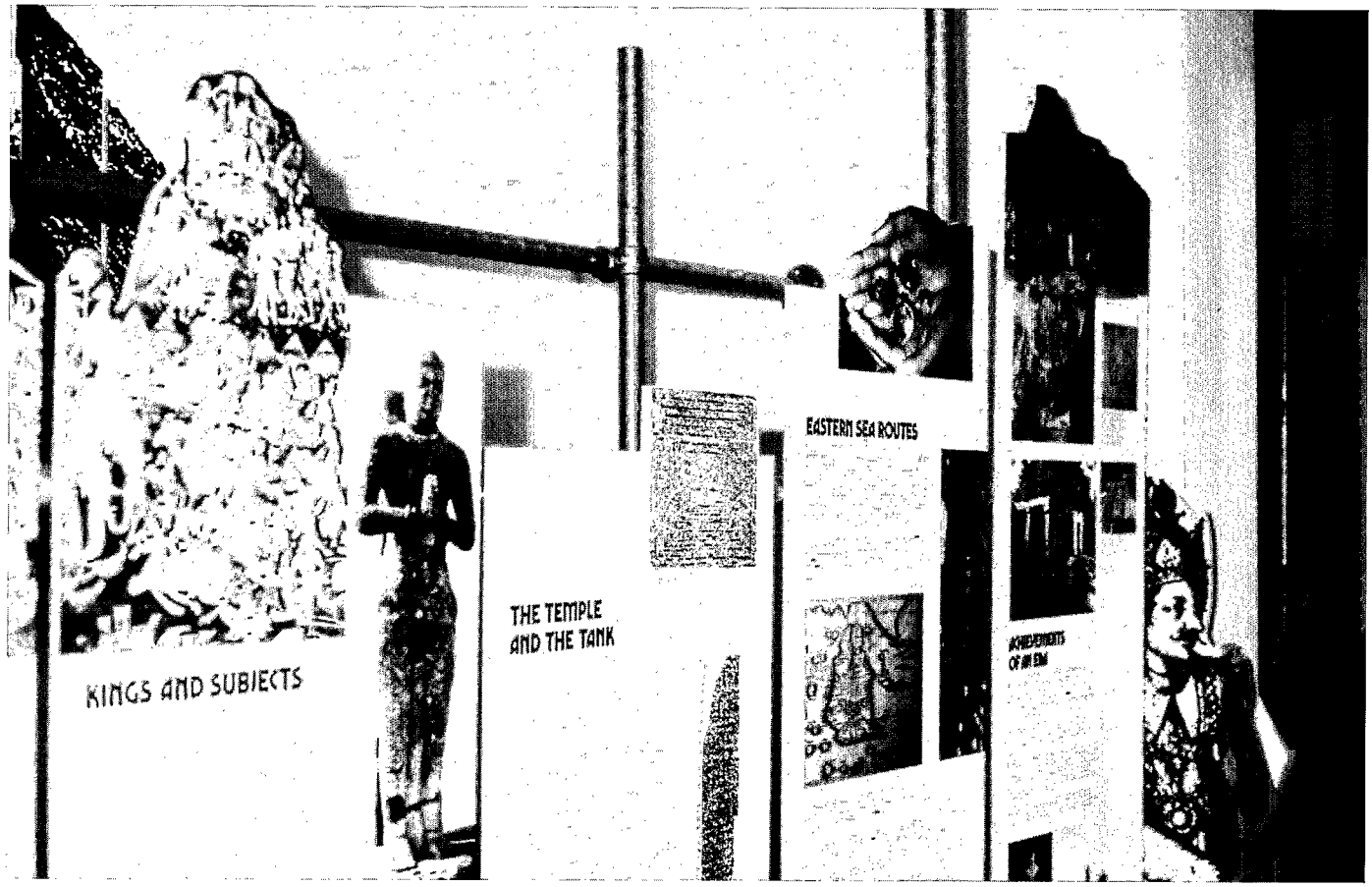
As these chronicles were written by monks, they contain a great deal of information regarding religious matters. We are, therefore, usually well informed about the locations and architectural arrangements of the various monastic establishments. Moreover, archaeological research over the past hundred years has brought to light many remains which can often be checked with information provided by the chronicles. Whereas our knowledge of the ancient architecture—especially of religious buildings—is therefore fairly adequate, reliable information with regard to other branches of fine art, such as sculpture and painting, is very scant indeed. In these respects the chronicles are of little use, for it is difficult, if not impossible, to identify certain Buddha images with those occasionally mentioned in the chronicles. The main reason for our deficient knowledge about sculpture and painting is, however, the fact that much of it was executed in perishable materials, while finds discovered in a chronological context that enables us to date them precisely are very rare.

Sculpture and painting

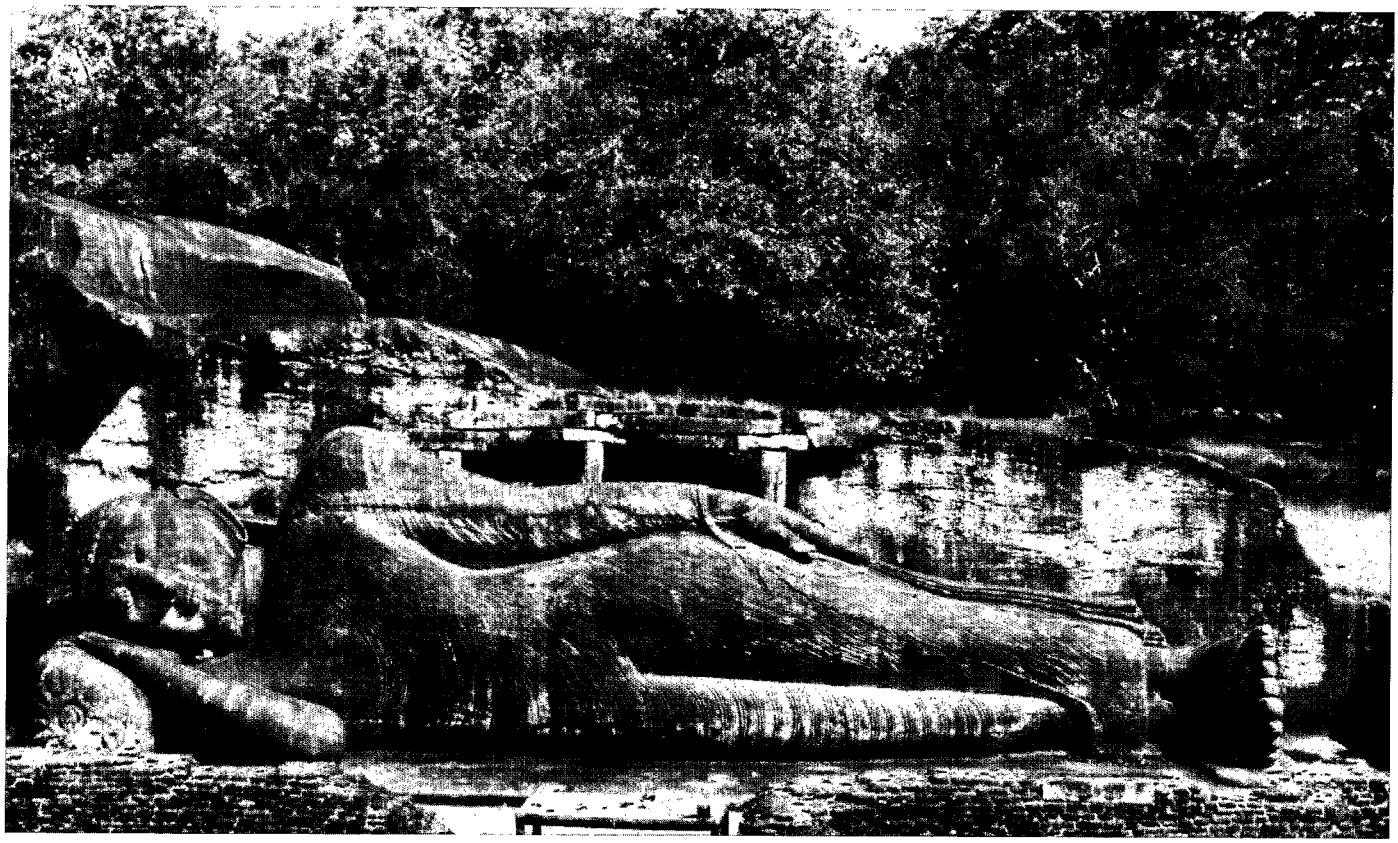
As for painting, the perishable material on which these were normally executed has, of course, unfortunately reduced the number of preserved remains in a drastic manner. The few examples of early pictorial art that have survived are limited to a number of wall-paintings. Among these are, however, the world-famous rock-paintings at Sigiriya, dating from the late fifth century, which can without hesitation be qualified as the finest examples of early pictorial art in the whole of South Asia.

With regard to sculpture the situation is somewhat better, but here too the amount of material is comparatively limited, although this time for another reason. For, while on the one hand Sri Lanka became a bulwark of Theravada Buddhism in Asia, on the other this more orthodox form of Buddhism confines its artistic expressions in sculpture almost entirely to Buddha images. Representations of the exalted beings called Bodhisattvas, which in countries professing Mahayana Buddhism by far surpass the number of Buddha figures, are comparatively rare in Sri Lanka. The few examples that have come to light seem to belong to the last three centuries of the Anuradhapura period when some Mahayana influences made themselves felt in the island. However small the number of Sinhalese Bodhisattva images may be, one of them is the most superb representation of such a noble saviour of mankind ever created anywhere in the world. In general, therefore, sculpture was confined to the production of Buddha figures, but in these images too the puritan character of Theravada Buddhism left, as we shall see, its mark.

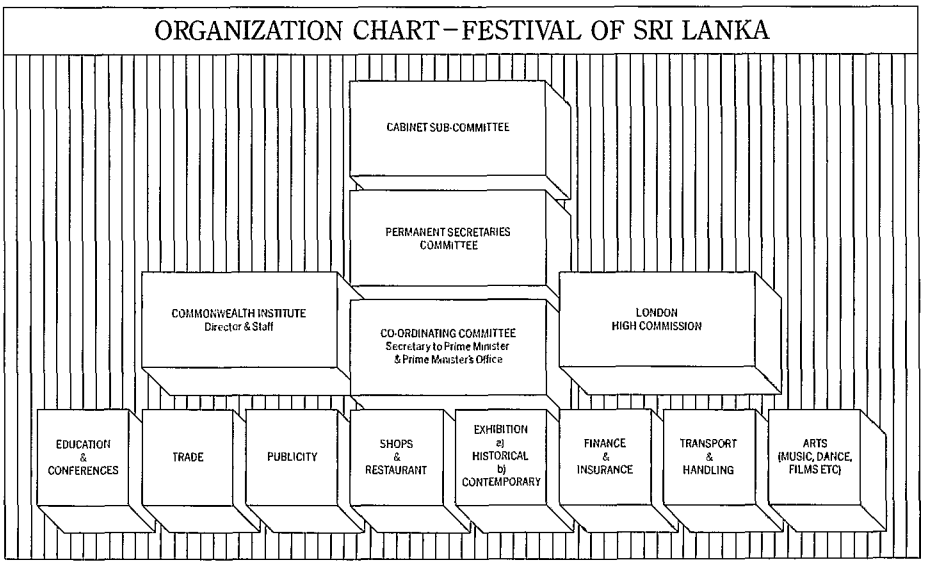
In early Indian art the Master had not been represented in human form but was worshipped by way of substituting symbols such as his footprints or the Bodhi tree under which he reached spiritual enlightenment. When human figures of the Buddha started to appear in India around the beginning of the Christian era, Sri Lanka soon followed suit, although the worship of symbols continued for a much longer period in the island than on the mainland. During the subsequent centuries the traditional tendencies of Theravada Buddhism prevented—or at least considerably slowed down—stylistic and iconographical developments in the appearance of the Buddha image. As a result, it is often quite difficult to attribute a particular sculpture to a specific date or even period, merely on the basis of its style. This uncertainty with regard to dates is made worse by the fact that only a very limited number of sculptures and objects have



The historical context of the Cultural Triangle.
[*Photo:* Commonwealth Institute.]



The priceless Bodhisattva is carefully unpacked and examined.
[*Photo:* Commonwealth Institute.]



Organization chart of the *Festival of Sri Lanka.*
[*Source:* Commonwealth Institute.]

◁ Visitors to the *Festival of Sri Lanka: Culture Heritage and Contemporary Life* at the Commonwealth Institute were greeted by a fibreglass replica of this colossal (13 m) statue of the Lord Buddha in nirvana at the Gal Vihara, Polonnaruva.
[*Photo:* Unesco/Cart.]

been discovered in a datable context. The uncertainty of our knowledge with regard to the stylistic, and consequently the chronological, development of Sri Lankan Sinhalese sculpture is best illustrated by the fact that my dear friend and colleague, the late Professor Paranavitana, who was undoubtedly the greatest authority on Sri Lankan art, changed his attributions repeatedly, often by as much as several centuries.

Apart from imagery, the plastic arts were also applied in the decoration of religious buildings. However, here too the austere and unostentatious character of Sri Lanka's religious background is evident, for the architectural sculpture of the island stands in sharp contrast to the exuberance displayed on Indian temples with their bewildering number of gods and semi-divine beings. The sculptural decoration of Sinhalese buildings is limited to a few structural elements such as steles of the early *vahalkadas*, pillars and their capitals and entrances. Apart from this, some buildings were enhanced with stucco, and terracotta decorations or occasional friezes in stone. Among other architectural ornaments drip-tiles and door-handles should also be mentioned. Of course, the only wooden elements that have survived are not more than a few hunderd years old.

As against religious architecture, most secular buildings were constructed of perishable materials and have therefore completely disappeared except for a few more recent remains. However, the ruins of a few palaces have survived. Judging by the recovered material their architectural decoration was probably rather similar to that of the religious buildings.

The stupas

Having dealt with the sculptural ornamentation of religious and secular structures it is time to mention the most important type of Buddhist monument: the stupa or *dagaba*. In early Buddhist art this was a mound containing a relic of the Buddha or one of his disciples. Later on, stupas were erected over the ashes of less important persons. When Buddhism embarked on its gradual conquest of large parts of Asia, stupas appeared throughout the length and breadth of that continent. In fact, in the course of time, this type of building became, so to say, a symbol of Buddhism to the same extent as, and comparable to, the cross of Christianity. Consequently, stupas or *dagabas*, as they are usually called in Sri Lanka, are the most characteristic type of Buddhist monument in the island. Their sizes vary from merely a few centimetres to huge mounds such as the Jetavana Dagaba, which is 120 metres high with a diameter of 112 metres at its base.

The reliquaries deposited in these stupas were made of different materials such as crystal, precious metal, bronze or ivory. They are often shaped like a *dagaba*, for in actual fact both are reliquaries. In some cases the relic was put in a small crystal container, which was deposited in a gold reliquary, which in turn was again placed in a bronze casket, all three shaped like stupas. The small gold reliquary discovered some time ago in the *dagaba* on the summit of Mihintale hill is of course the oldest and one of the holiest of all, for it contained the ashes of Mahinda, who brought Buddhism to the island and after whom the hill was named.

Acculturated Hinduism

Buddhism was, and still is, Sri Lanka's main religion. Owing to its geographical location, cultural elements from abroad continually entered the island, most of them of course from the Indian mainland. During the first millennium of the Christian era, when Buddhism flourished on the south-east coast of India, the contacts between both countries were of a religious as well as a political nature. With regard to the latter, it should be remembered that already in prehistoric times Tamil settlers regularly entered the northern parts of the island, an influx that has continued down to the present day. Although many of these immigrants settled down peacefully, the chronicles also inform us about countless wars of conquest waged by Tamil rulers from the mainland. In fact, as early as the second century B.C. Tamil kings were ruling at Anuradhapura for a short while and the last Sinhalese King of Kandy, who was deposed by the British in A.D. 1815, was also of Tamil extraction. As a result of this continual flow of Indian immigrants into the country, Hinduism became the dominant religion in the northern parts of the island. However, many of these Hindu Tamils became Buddhists and adapted themselves to Sinhalese culture. Because of this protracted process of acculturation, Buddhism in Sri Lanka gradually incorporated a number of religious elements that go back to Hinduism.

The country underwent its longest and most intense period of Tamil influence when the mighty Chola ruler Rajaraja I invaded the island around 993 A.D. sacking Anuradhapura which had been the capital for at least thirteen centuries. While the south-east corner of the country somehow remained independent, the major part of the island was virtually a province of the great Chola Empire till 1070 A.D. During this Chola occupation Polonnaruva was the seat of government and after the country regained its independence it remained the Sinhalese capital till 1236 A.D.

The finest examples of Hindu architecture and sculpture in Sri Lanka date from this period of Chola domination. The temples were almost certainly constructed under the supervision of Tamil architects brought over from India—a tradition that was carried on right down to the present century. There is, however, good reason to believe that quite a number of the marvellous bronzes belonging to this period were made locally, though some may also have been imported from South India. As a result of the Chola occupation the Hindu

Standing Buddha figure raising his right hand in the teaching attitude of *vitarkamudra*. Ivory with black and red paint or lac. Eighteenth century. Kandyan region. Archaeological Museum, University of Peradeniya, No. G.50. Height 38.5 cm.
[*Photo:* Commonwealth Institute.]

elements in the mixed culture of Sri Lanka obviously increased. However, a number of sculptured architectural details indicate that the ensuing incorporation of these element was a process that has already started many centuries earlier.

Intertwined strands

Before the introduction of Buddhism the original inhabitants of the island were animists, worshipping all sorts of evil and benevolent spirits as well as powers of nature, which greatly influenced their lives. Among these, the *Nagas* or snake-deities who were believed to grant rain and fertility to the land should be specially mentioned. As in the case of Hinduism, some elements of these aboriginal beliefs were gradually incorporated in Sinhalese culture and eventually formed an inseparable part of it down to the present day.

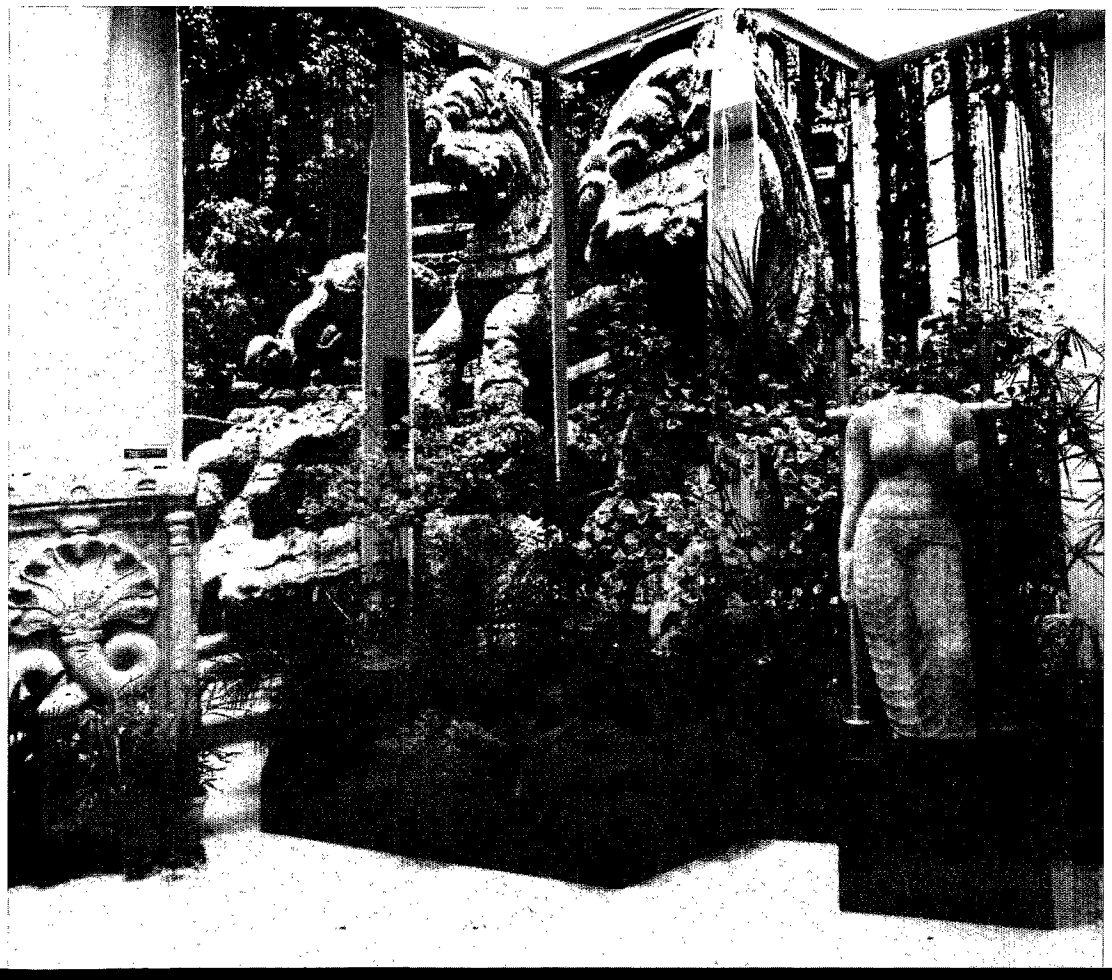
Although essentially Buddhist, the culture of Sri Lanka was, therefore, stimulated and enriched by two other worlds of religious thought. How well all these different elements were blended is proved by such interesting examples as the so-called *virakals* or hero-stones. These Hindu sculptures were erected all over South India in order to commemorate the death of a valiant warrior. A number of them have also been discovered in Sri Lanka with in some cases a figure of the Buddha seated above the battle scene.

General view of the exhibition, showing the skilful blending of light, foliage and structural framework that provided such a harmonious setting for the objects.
[*Photo:* Commonwealth Institute.]

Shiva Nataraja in bronze. Eleventh to twelfth century, Polonnaruva, Archaeological Museum, Anuradhapura, No. 379. Height (including base) 1.395 m. This bronze is believed to be one of the largest images of Shiva Nataraja, Lord of the Cosmic Dance. With his right foot he tramples on the dwarf, Apasmarapurusha, personification of ignorance. Shiva is lord and master of the *ganas*, who are shown making music on the base. ▷
[*Photo:* Commonwealth Institute.]

A section of the exhibition. In the foreground, female deity in dolomite, sixth to seventh century, provenance unknown. Archaeological Museum, Anuradhapura, No. B.78. Height 1.15 m. ▷
[*Photo:* Commonwealth Institute.]

Viewed in context: standing image of Parvati, Shiva's consort. Bronze. Eleventh to twelfth century. Shiva Devale No. 5, Polonnaruva. Archaeological Museum, Anuradhapura, No. 380. Height 81.5 cm.
◁ [*Photo:* Commonwealth Institute.]



In a culture so deeply rooted in religion as that of Sri Lanka, objects connected with ritual worship play an important part. Of the earlier periods only those made of imperishable material have survived. Among these are such objects as conch trumpets, the sound of which accompanied certain ceremonies, or tripods on which these instruments were placed. The largest group of ritual objects consists of lamps, for apart from offering flowers or burning incense, the devotee could also worship a deity by lighting an oil-lamp. Some of these lamps are masterpieces of bronze casting, and many of them have exquisite or highly original shapes.

Ivory chess-man in the shape of a chariot drawn by four horses, second to third century A.D., Mantota. Archaeological Museum, Anuradhapura, No. 67. Height 1.7 cm, length 3 cm.
[*Photo:* J. E. van Lohuizen-de Leeuw.]

The role of international trade

Although religion was throughout the centuries the backbone of Sri Lanka's culture, international trade resulting from the island's geographical location also played a relatively important role and often determined its history. In the early centuries of the Christian era a lively exchange was carried on with the Roman Empire, as is testified by the discovery of countless Roman coins. In fact, a Sinhalese embassy paid a visit to the court of Emperor Augustus in Rome and the island and its mercantile riches were fairly well known in the West. A country carrying on brisk trade with such far off lands as Arabia, the Roman Empire, South-East Asia and the Far East had, of course, also a currency of its own. Apart from spices, the country was famous for such commodities as pearls, precious stones and ivory. It was the same merchandise that later on lured the traders of Western Europe, such as the Portuguese, Dutch and English, to the distant coasts of 'Ceylon'.

Few early ivories have survived, but the charming little chess-piece carved in the shape of a tiny chariot drawn by four horses deserves special attention, as it is the oldest chess-man anywhere in the world. The numerous fine examples of ivory work dating from the more recent period when Kandy was the capital prove that the tradition of carving ivory remained unbroken for over 2,000 years. The same applies to the craft of the jewellers and goldsmiths, as could be expected of a country that was always famous for its gems. Very early pieces as well as quite recent examples testify in equal measure to the great skill of the Sinhalese artisans.

Scholarship in both Sri Lanka and in the West has busied itself for almost two centuries with the study of the island's rich culture. However, when surveying the wealth of its ancient art, we have to face the sad conclusion that many problems remain unsolved and we will have to continue in ignorance of numerous aspects of Sinhalese art. For example, there are two marvellous images of probably the same lovely goddess, who has so far managed to guard the secret of her mysterious identity.

MUSEUM NOTES

Splendours of the Qur'ān

Derk Kinnane

For some 700 million Muslims throughout the world, this year is a special one. It marks the beginning of the fifteenth century since the Hegira, the departure of the Prophet Muhammad from Mecca for Medina. Among Unesco's activities in observation of this anniversary is an exhibition of outstanding examples of the copying and decoration of the Qur'ān, held at Unesco Headquarters in Paris from 16 June to 3 July 1981. The Qur'an *exhibition shown at the British Library in 1976 as part of the* World of Islam Festival *was probably the most varied and universal display of original Islamic manuscripts ever shown together in one place.*[1] *It is unlikely that so many original works of such quality could be brought together again: the cost of insuring and protecting the exhibits would be prohibitevely high. But its organizers, the World of Islam Festival Trust, realized that a travelling exhibition could reach millions of people in every part of the globe, something that even the most generously financed show of the originals would never be able to do. So they were particularly glad to be able to undertake the production of a self-contained travelling exhibition of colour photographic facsimiles from the Chester Beatty Library in Dublin.*[2] *There has been great progress in recent decades in making exact and 'lifelike' reproductions of manuscripts. Hence the outstanding quality of the facsimiles in the travelling exhibition. They are accurate in size to within 1 millimetre of the original, and the photographer, David Davison, has caught the texture of the parchment and vellum, leather and gold leaf, and the glow of inks and paints that emanates from these great works (see box, pp. 248–9).* Museum *is happy to publish an article by Derk Kinnane, Editor of* Unesco Features, *about the evolution of Qur'ānic calligraphy as exemplified in this exhibition, followed by a brief note on the World of Islam Festival Trust by its director, Alistair Duncan.*

Calligraphy and the Qur'ān

The word *Qur'ān* may be translated as 'reading' or 'recitation'. For the Muslim what is being read or recited is the faithful copy of an original scripture kept in Heaven. The Qur'ān was given, through the Angel Gabriel, by God to Muhammad, the final Messenger of God. It was given in Arabic for the Arab people and for all mankind.

Knowledge of the Qur'ān, the eternal word of God, is the bedrock of traditional Islamic schooling. For Muslims, there is great merit in committing all of its 114 *surat* (chapters) to memory and it is traditionally from the Qur'ān that children learn to read and write. Throughout the Islamic community, including its many different non-Arab people, the Qur'ān is read and studied in Arabic. Given this context, it is hardly surprising that calligraphy became an especially esteemed art in the Islamic world, and particularly as used to copy the Qur'ān.

Arabic probably evolved in the sixth century A.D. from an Aramaic dialect, Nabataean, current in northern Arabia, and was well established as a written language by the seventh century when Muhammad lived. Read from right to left, it consists of seventeen characters which, by the addition of dots placed above or below the character, produce twenty-eight letters. Short vowels are indicated by signs placed above or below the consonant or long vowel. Letters vary in shape according to whether they are at the beginning, middle or end of a word.

The script used in the earliest surviving writing of the Islamic era is Kufic, named after, nobody is sure why, the town of Kufah in Iraq. It is a more or less squared-off, angular script, with a monumental quality. In the eleventh century A.D., Kufic was replaced for general use by Naskh, probably the most popular form of Arabic script. The first development of Naskh is attributed to one of the greatest calligraphers, Ibn Muqla. A mathematician, Ibn Muqla fixed the single vertical stroke that forms the letter *alif*—*a*—as the diameter of a circle. This in turn formed the module for determining the proportions of all the other letters.

Another very great calligrapher working in Baghdad, Ibn al-Bawwab, refined this concept by treating the *alif* as if it were the profile of a standing, well-proportioned person. As in the ideal proportions of the human body, the head was to be one-eighth of the full height of the person. In his calligraphy, the 'head' was the dot made by the *qalam*, the reed pen used for writing. Eight dots gave the proper length of the *alif*. In this way a script was developed in which an elegant balance between the vertical and the horizontal assisted a feeling of fluid progress.

The third great Abbasid calligrapher, Yagut al-Musta'simi, summed up the art this way: 'An architecture of the spirit which shows itself through a material instrument.'

Other scripts developed. One was Thulth, a large, majestic and rather slow-moving form of cursive writing adopted in the thirteenth century for many of the large copies of the Qur'ān used in mosques. The name means a third, and refers to a *qalam* whose heaviest line was the width of eight mule-hairs, one-third of the twenty-four mule-hair width *qalam* used for the documents of the Abbasid caliphs of Baghdad.

Several other types of writing arose in which the Qur'ān might be copied, while still others, although widely used, were not favoured for copying the scripture. One of these, devised by Persian penmen, is Ta'liq, meaning suspension, as each succeeding word seems suspended from the preceding one, making a line of writing that descends from right to left. Another form is Nasta'liq, which, as its name indicates, is a combination of Naskh and Ta'liq. It was developed at the end of the thirteenth century by Mir Ali of Tabriz. Both might be used for commentaries penned in the margins of the Qur'ān.

It may be said of Arabic calligraphy in general, as a present-day Iraqi master, A. Ghani Alani, has pointed out, that as in other Islamic arts—music, architecture and the illumination of manuscripts—calligraphy reflects a love of symmetry and rhythmical repetition and a hatred of the void.

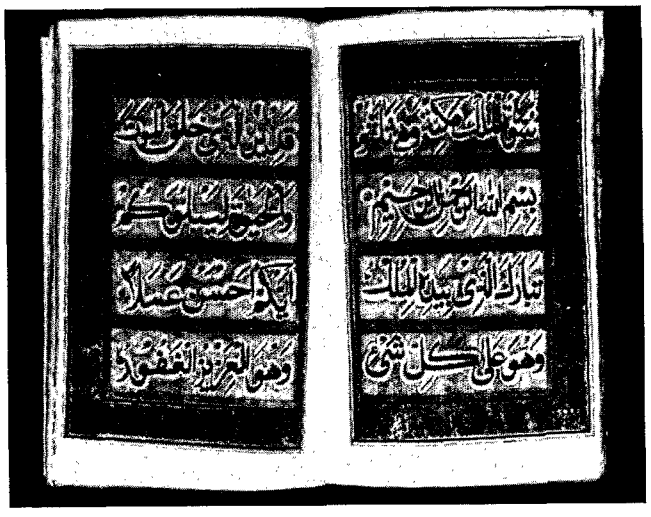
Illumination, too, plays an important part in the sevice of copying the Qur'ān. Most often the calligrapher would pass on the copy to an illuminator, but sometimes, as in the case of Ibn al-Bawwab, the two arts were practised by the same man. In early times illumination was used only to separate chapters of the Holy Book. Reference points indicating verses of chapters were added and medallions in the margin would indicate every fifth and tenth verse. Other marks showed the quarter and half-way point through a section of the Qur'ān or indicated where prostration is required.

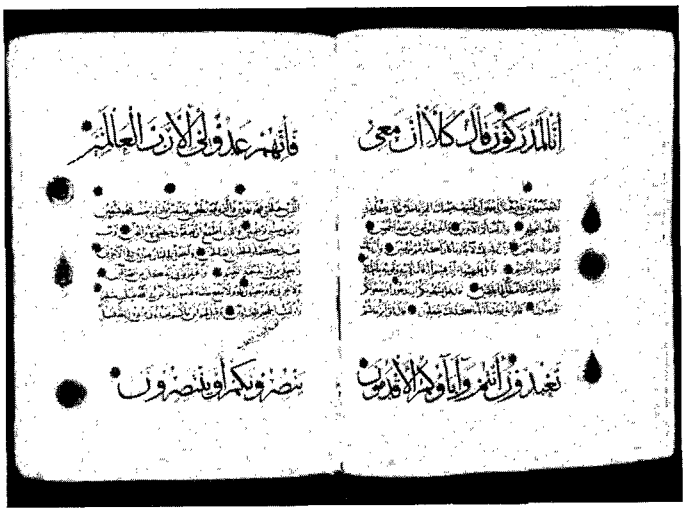
More elaborate ornamentation was given to pages opening sections of the text, but the greatest ornamentation came to be lavished on the opening double-frontispiece or carpet page. Here, the illuminator could make a virtuoso display of abstract geometric decoration infused with a sense of metaphysical order. Such illumination attained great heights of religious expression.

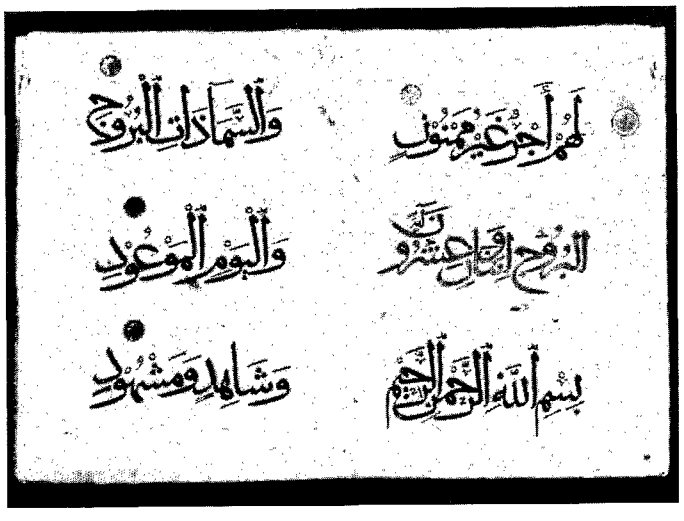
This decorative art drew on many sources, including many outside the Islamic world in time and place. Palmette patterns appear, which

1. Yasin Hamid Safadi, 'The British Library *Qur'an* Exhibition', *Museum*, Vol. XXX, No. 1, 1978.

2. The Chester Beatty Library's reputation has been established largely on the basis of its Islamic material but its collections are by no means confined to Islamic manuscripts and works of art. When the great American-born collector Sir Alfred Chester Beatty died in 1968, his final and perhaps most impressive act of generosity was to leave his collection, the labour of many decades, as a gift to the people of Ireland. The Chester Beatty library 'has no wish to remain an isolated cultural unit, jealously guarding its collections, but rather to co-operate with similar bodies and institutions that have the common aim of wanting to make known the contents of their collections. ... The Trustees ... regard themselves as custodians of the collections, not just for the Irish nation, but for the whole civilized world.' Librarian Patrick Henchy made these comments in his Foreword to the catalogue of the recent exhibition *Islamic Masterpieces of the Chester Beatty Library* that was held at the Leighton Gallery, London, in June 1981. *Museum* has asked Mr Henchy to elaborate on those comments for an article in a future issue.







Top, left. A rare example of the use of Nasta'liq script for copying the Qur'ān is this work of Malika-Jahan, an eighteenth-century princess of Oudh in India. Chester Beatty Library, MS. 1563.
[*Photo:* David Davison.]

Top, right. Made by Ahmad bin al-Suhrawardi in Baghdad in 1301–2, this copy of the *sura* 'Al-Shu'ara' (The Poets) has the main body of the text in Naskh with a line of fine Thulth above and below. Chester Beatty Library, MS. 1467.
[*Photo:* David Davison.]

Bottom, left. This rare example of Tumar, executed in Egypt in about 1300, may be the work of the well-known calligrapher Ibn al-Wahid. Chester Beatty Library, MS. 143(c).
[*Photo:* David Davison.]

Bottom, right. This example of Maghribi script was executed in Morocco in the late sixteenth century. Chester Beatty Library, MS. 1560.
[*Photo:* David Davison.]

can be traced back to Coptic Egypt and Sasanid Iran. From China came the lotus, peony and cloud-scroll. The Ottoman Turks, originally from Central Asia, brought the carnation.

Great collections

Such glorious works were of course highly valued by the pious and the cultivated, and great collections grew up in major religious and political centres of the Islamic world. Cairo and Meshed in Iran built up extraordinarily rich collections; perhaps the finest of all, for quality and comprehensiveness, is that at the Topkapi Palace in Istanbul.

Important copies of the Qur'ān were also acquired for collections outside the Islamic world, such as those in the British Library in London and the Bibliothèque Nationale in Paris. Surprisingly, the most extraordinary collection not in an Islamic country is in Dublin, Ireland. A most unlikely place, one would think, situated as Ireland is at the edge of northern Europe, far from the worlds of the Mediterranean and Islam. Moreover, the Irish have been too occupied in recent centuries with their own problems as a colony to take much interest in what was for them a remote culture.

However, the Irish way of life often attracted affluent people who settled down amidst the country's verdant beauty. One such was Sir Alfred Chester Beatty. Born in New York in 1875, Beatty trained as an engineer and, by his mid-thirties, had become a multi-millionaire from mining in countries around the world. He used his money to support cancer research and to build up one of the world's greatest collections of oriental manuscripts. His passion for the latter is believed to have sprung from the beautifully written and illuminated copies of the Qur'ān that he first encountered in Cairo in the 1920s, when living in Egypt because of its healthy climate. Beatty was naturalized as an Englishman in 1933 but moved to Ireland at the end of the Second World War. He died there in 1968, bequeathing his collection to the Irish people.

Beatty's money and enthusiasm were combined with great connoisseurship, with the result that his collection of the Muslin Holy Book is, in the view of some scholars, second in quality only to that at the Topkapi. There are over 250 copies of the Qur'ān in the Chester Beatty Library, ranging in date from the eighth to the nineteenth century. Among them is a copy made in Baghdad in A.D. 1001, the only extant work of Ibn al-Bawwab.

Some technical details

The facsimile reproduction technique

The fundamental aspect of the work for this exhibition was the demand that each print be truly facsimile in size and colour. To achieve this it was essential that each stage of the

process be carried out under carefully controlled conditions. All the manuscripts were photographed in a horizontal position on a professional copying bench, both to avoid stress on the precious manuscripts and to show each double-page opening as part of a book as normally seen. Each subject was photographed on the same batch of 102 × 127 mm Varicolor 25 negative film using electronic flashlamps to provide even light of constant colour temperature and brightness.

Prior to exposure each manuscript was carefully levelled and centred on a suitable background, at the edge of which was positioned, in the same plane as the manuscript, a millimetre scale, a grey scale and colour patches. These controls acted as indicators of correct exposure, of colour bias and of size. However, as the nature of the subjects varied between richly gilded pages and dark leather bindings, modification of exposure was necessary in order to achieve the optimum negative quality from each original.

Following exposure the negatives were processed under strictly controlled conditions. Each negative was then individually test-printed several times until the desired accuracy of colour was achieved, whereupon the final print was made. All processing and printing work was carried out at Pieterse Davison International, as it is the writer's belief that for this kind of work it is essential that the photographer be closely involved throughout the entire operation.

Certain problems had to be faced. In direct colour-print work some colours cannot be reproduced. Happily, the pigments used in Arabic manuscripts are not the most difficult in this respect, and although occasionally compromise in colour balance was necessary it is not apparent.

Perhaps a more serious problem was the nature of the manuscripts themselves. They vary greatly in size, and many, particularly the smaller ones, do not open flat. The simple solution is to use a sheet of glass to press down the pagecs, but this procedure places stress on the book and may damage the illumination. In some cases a light sheet of Perspex had to be used, but in general a system of support for spine and cover was used in order to maintain a common plane between the two sides of the book. Throughout, the safe handling of the manuscripts was of paramount importance. This project occupied several months, but, we hope, has enabled many people to appreciate these magnificent Qur'āns and will perhaps encourage a visit to Dublin to see further treasures at the Chester Beatty Library. (David Davison, Pietersee Davison International Ltd., 101 Lower Rathmines Road, Dublin 6, Ireland.)

The exhibition itself

This exhibition is specially designed for travelling and is adaptable for presentation under virtually any circumstances. It consists of 115 exact colour photographic facsimiles of the original manuscripts and bindings from the Chester Beatty Library mounted on thirty-eight display panels measuring 6 ft × 4 ft and 3 ft × 4 ft (1.8 m × 1.22 m and 0.915 m × 1.220 m). These facsimiles represent the span and development of the Qur'ānic art of calligraphy and illumination from all the principle periods and styles from North Africa to Persia. Each illustration is captioned in English with provision for a second language and an introduction to each section in English. The boards are numbered so as to ensure their correct viewing sequence. Any language may be requested. In addition to the display panels, an illustrated and comprehensive catalogue is available for sale; this is of academic standard and will be of use to scholars and students quite independently of the exhibition. There is an exhibition poster, with a blank panel for local overprinting, and, if required, a selection of slides and postcards, also for sale. The entire exhibition is packed in reusable crates, and further supplies of catalogues, posters and replacement panels can be supplied by the Trust. The cost of the exhibition is £ 6,000, with English and Arabic captions. The English-language catalogue costs £4.50 (trade price £3.20) and the poster £1. These prices cover the real costs of producing the exhibition with only a small margin to enable the Trust to invest in some other worthwhile undertaking. The prices are for delivery to a United Kingdom port or address. Inquiries and orders should be sent to the Director of the Trust at the following address: 33 Thurloe Place, London SW7 2HQ. Cable: ISLAMTRUST London SW7. Each set includes fifty catalogues and twenty-five posters ready for local overprinting.

The World of Islamic Festival Trust[1]

Alistair Duncan

Alistair Duncan has been Director of the World of Islam Festival Trust since 1977. Previously, he was Administrator of the World of Islam Festival, 1974–76. He has written and photographed extensively in the Arab World since 1961 and his published works include *The Noble Sanctuary* and *The Noble Heritage*, illustrated books on Muslim and Christian Jerusalem respectively. He is Chairman of the Middle East Photograph Archive.

The World of Islam Festival Trust was founded in October 1973 under the chairmanship of Sir Harold Beeley, and with the late Raja of Mahmudabad, then Director of the Islamic Cultural Centre in London, as vice-chairman. Its structure was that of a registered charity and cultural foundation designed to promote knowledge, appreciation and understanding of the Muslim world by the West, and to further Islamic studies and projects by Muslims and non-Muslim scholars and academics.

Its initial project was the great *World of Islam Festival* in 1976. The festival's twelve major exhibitions and the events that sprang up spontaneously to form a dramatic and important 'fringe' together formed an unprecedented presentation of a living culture throughout the United Kingdon. Through films, books, catalogues and academic papers, the effect of the festivl was felt around the world. About thirty countries— Muslim and non-Muslim— participated in varying degrees, but it was not generally appreciated at the time how great was the contribution of the United Kingdom. Although it was a private venture and not government-sponsored, only a financial guarantee by the government amounting to millions of pounds enabled us to assemble such a large and magnificent collection of manuscripts, artefacts and treasures from all over the world. Furthermore, the 'space' of our exhibition centres was donated free of charge, as was much of the work and time of their curators and academic staffs. While many of the exhibits were gathered from the great historic centres of Cairo, Damascus, Baghdad and the shrines of Persia, the direct financial burden was carried by donations from seven countries, of which the United Arab Emirates contributed over 70 per cent.

In 1977 the Trust was reorganized in order to

1. This article first appeared in the *Arab-British Trade Magazine*, May 1981.

continue its work on a more modest scale, with its efforts directed towards two principal areas of activity. The first was the continuation of our academic support over as wide a spectrum as possible. The second principal area of concern is for the conservation of the Islamic architectural heritage in those parts of the world where the authorities responsible for them have not the financial means—or sometimes the inclination—to undertake such restoration or preservation work from their own resources. This is often an area of considerable sensitivity and requires careful preparation and the deployment of considerable funds if it is to be successful.

So the work of the Trust continues, for the most part away from the public eye, and with the scale of its activities conditional upon the degree of financial support that it receives. It maintains a lectureship at Oxford and other academic activities at London University and elsewhere.

In 1980 and 1981 the Trust emerged modestly into public view once more with the publication of a *Handbook of Arabic Inscriptions in Jerusalem* and two exhibition catalogues. The exhibitions that they document are concerned with the Chester Beatty Library in Dublin. The first has been described above. The second was the exhibition *Islamic Masterpieces of the Chester Beatty Library* at Leighton House, London, from 19 May to 27 June, 1981.

This year will also see the publication of a definitive work entitled *Sanā: A Southern Arabian City*. This limited edition of 2,000 numbered copies represents the work of the Middle East Centre of Cambridge University under Professor R. B. Serjeant over the last fifteen years in the capital of the Yemen Arab Republic, and will become a 'collector's item' on publication.

It is not easy to see into the future, but by following the guidelines laid down by the three Muslim and three non-Muslim trustees, and avoiding the political and theological aspects of Islam's heritage and current concern, it is felt that the Trust will continue to subscribe to and support efforts by Muslim and non-Muslim scholars and institutions to help improve appreciation and understanding of our two interrelated cultures.

The Village Museum of Tanzania: a handicraft centre

S. J. Ntiro

Introduction

The Village Museum at Dar es Salaam run by the National Museum of Tanzania was formally opened on 4 July 1966. The National Museum of Tanzania created the Village Museum with the aim of using it as a research centre on crafts throughout the country, and one that would also exhibit Tanzanian crafts on a permanent basis, for the benefit of the local people as well as for visitors from foreign countries. Its creators intended it to contribute to the overall development of the country by encouraging traditional handicrafts of good quality. These aims have been largely fulfilled.

The museum ethnographer, in addition to his normal duties, is in charge of the museum. He is responsible to the Board of Trustees for the maintenance and care of the museum as a whole and for the planning of continuous expansion work. It is proposed, however, that in future the ethnographer should work full-time so that he can both travel throughout the country to collect materials for display and carry out the research required to improve further the museum setting and its facilities.

From the very beginning it was envisaged that the Village Museum would be self-supporting as soon as possible. For this reason an entrance fee is charged (2 Tanzanian shillings per adult and 1 shilling per child) and a shop has been installed for the sale of crafts. School groups are admitted free of charge provided an application is made to the Museum Education Officer beforehand. Under this arrangement many people have visited the Village Museum. The first edition of the Village Museum Guide in Kiswahili and English was published in December 1966. This guide is of great help to visitors who want to understand both traditional buildings and the crafts as a whole.

The United Republic of Tanzania is a big country, covering an area of 365,000 square miles. Its population is made up of about 120 different tribes. The Village Museum has so far been able to present various crafts of these different groups: traditional housing, iron smelting, building of traditional canoes (*ngalawa*), Makonde and Zaramo carving, the making of the traditional musical instruments, mat-making and weaving.

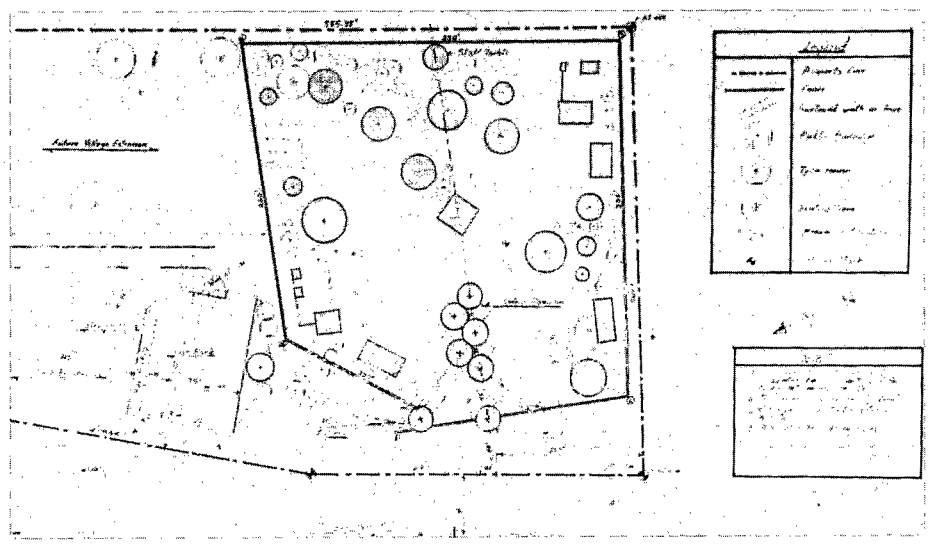
Traditional building styles

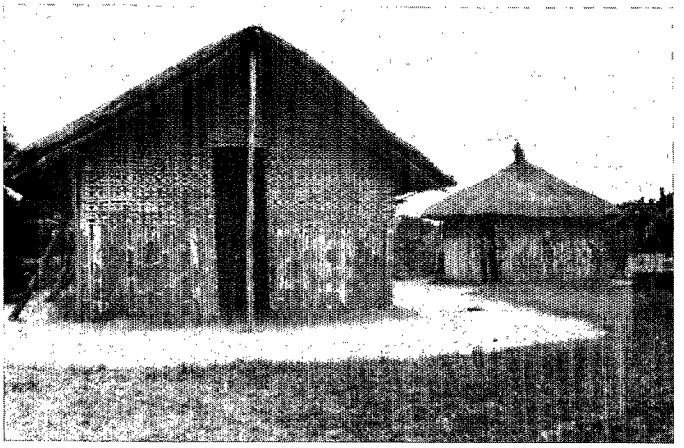
When the Village Museum was opened, five traditional houses had been built. Today there are seven more, bringing the total number to twelve: *wahehe, wagogo, wafipa, wangoni, warundi, wachagga, wanyamwesi, wahaya, wanyakyusa, wamasai, wamakua* and *wazaramo*. In these names of the traditional house forms the Kiswahili plural form *wa* is used before the name of the tribe which inhabits it. The singular form is *m*.

Traditional building styles are obviously the most important craft forms presented in the Vil-

Born in 1923 at Machame, United Republic of Tanzania. Diplomas in education, Makerere University and London University. F.R.S.A., London. Twelve years teaching experience at Makerere University, followed by three years in the Tanzanian Foreign Service as Councillor and Ambassador, six years as Commissioner of Culture, eight years as Resident Artist, Associate Professor and Head of the Art Department at the University of Dar es Salaam. His work has been shown at exhibitions in Algiers, Berlin, Dar es Salaam, Kampala, Moscow, London, Nairobi, New York and Stockholm, and has been acquired by museums and other institutions in London, New York, Uganda and the United Republic of Tanzania.

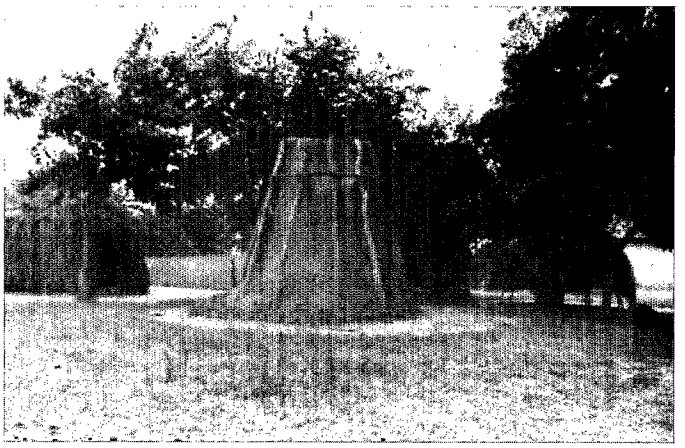
Plan of the Village Museum.
[*Source:* National Museum of Tanzania.]



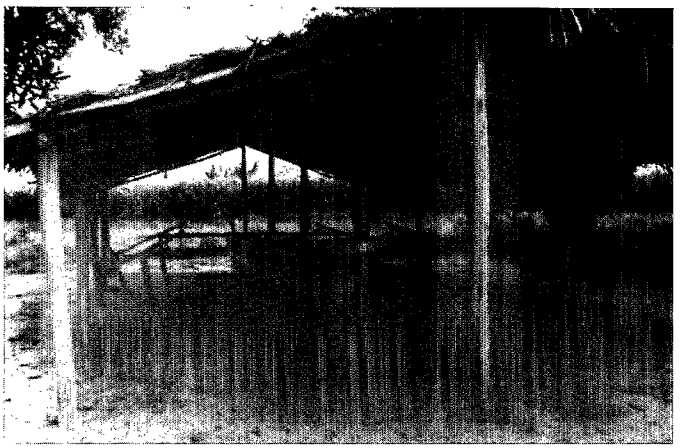


VILLAGE MUSEUM, United Republic of Tanzania. The *wanyakyusa* hut. The father uses it with his first wife and children. The hut on the right is used by his second wife and each additional wife has her own hut.
[*Photo:* National Museum of Tanzania.]

The conical *wachagga* hut of the eastern Kilimanjaro region. The Wachagga of Central and West Kilimanjaro use a flat domed hut thatched with dry banana stems. The conical type shown here is thatched with grass. An attempt is made here to create an atomosphere of banana trees, etc., which are the basis of the Wachagga ecology.
[*Photo:* National Museum of Tanzania.]



A Wafipa iron-smelting kiln, with a *wafipa* hut on the left. On the right are two workshops used for working on the crude iron after the smelting process.
[*Photo:* National Museum of Tanzania.]



The *ngalawa* canoe, a type of dug-out commonly found all over the East African coast.
[*Photo:* National Museum of Tanzania.]

Iron smelting.
[*Photo:* National Museum of Tanzania.]

Drumming and dancing.
[*Photo:* National Museum of Tanzania.]

Playing on two xylophones.
[*Photo:* National Museum of Tanzania.]

lage Museum. Not only are they extremely complicated, varying from tribe to tribe, but are directly connected with tribal life itself. The houses in the museum have been built with great care so that the result in each case is as faithful as possible to the original house in its local setting. Needless to say, each house is a work of art in its own right, built by the people who live in it, using materials transported by various means from the area of origin. Experienced traditional experts collect, prepare and utilize these materials—wood and creepers from the forests, thatch grass and anthill earth from the plains.

These experienced traditional builders ensure that the foundations are properly dug, so that the upright props, or those slightly leaning inwards, can have the skeleton strength that the house requires. Climbers are used for tying the horizontal beams together and also serve to form the strips that support the roof. After the foundation has been dug, the arrangement of rooms inside the house has to be considered in the overall preparation of the props, the beams and the tying climbers. According to traditional custom, when the house is completed the people who have built it attend a big party, to which neighbours, friends and relatives are all invited. So the completion of a house becomes a significant social occasion.

The inside of a traditional house has rooms or apartments for various purposes: living, cooking, storage of food and other domestic objects, domestic animals. No traditional house can be complete without cooking pots, water jars and liquor containers, grain jars, and gourds for storing milk, honey and snuff. In each of the twelve traditional houses these objects are expertly presented in such a way that the visitor feels that the house is actually lived in.

The twelve traditional houses at the Village Museum are of various sizes and shapes. The first two, the *wahehe* and the *wagogo*, are of what we call the *tembe* or flat-roofed type. After the flat roof has been prepared with horizontal beams and climbers, anthill earth or cow dung is used to smooth it off. The *wafipa, wangoni, warundi, wachagga, wanyamwesi, wahaya* and *wanyakyusa* are seven houses in what we call the *msonge*, or conical shape. These houses are thatched with great care and skill by putting layers of special dry grass on top of each other until the required finish is achieved. The *wamasai* or *manyatta* is a special flat-roofed type, while the *wamakua* or *mdula* type is also distinctive. The flat-roofed on the one hand and the conical shape on the other mark the two extremes; in between there are complicated shapes whose intricacies can be properly grasped only by those who have seen them.

Traditional iron-smelting furnace

At the Village Museum there is a reconstruction of the Ufipa iron-smelting furnace, demonstrated during the *Saba Saba* Celebrations on 7 July 1967. The phrase *saba saba* in Kiswahili means 'seven seven' (seventh day of the seventh month), to commemorate the birth of the former ruling party on the mainland—the Tanganyika African National Union (TANU). This date is a Tanzanian public holiday and is usually preceded by a whole week of cultural events. The demonstration was carried out by two expert iron smelters of the Fipa tribe from Sumbawanga, in the south-west of the country, Mr Stepano Malimbo and Mr Andrea Monela.

The Fipa, who number over 70,000, live between Lake Tanganyika and Lake Rukwa, in the zone that includes Lyamfipa Plateau, from which their tribal name originated. It is thought that they moved into this area about two centuries ago, on their way from Central Africa via northern Zambia and southern Zaire, bringing with them the knowledge of agriculture and the technique of iron smelting that they had inherited from their Bantu-speaking ancestors ten centuries before. It is suggested that the founders of the Fipa Milanzi chiefdom were iron smelters as well as blacksmiths. Today the Fipa cultivate various types of grain and keep domestic animals.

It is important to note that in traditional Fipa society the skill of iron smelting is usually handed down from father to son without being strictly hereditary. This is because during his apprenticeship the initiate has to demonstrate a high degree of craftsmanship before he can qualify as a *mwami* (professional iron smelter). In addition to the knowledge of iron smelting—a complicated occupation involving intricate knowledge and experience of the use of wood, clay, charcoal and iron ore in a scientifically built blast-furnace in the form of a huge kiln—he must also be a medicine-man.

It is sad to record here that the practice of iron smelting has decreased considerably in recent years and it was for this reason that the National Museum decided to build the Ufipa iron-smelting furnace and demonstrate it to the public, many of whom had never seen iron smelting in their lives! In Sumbawanga at the turn of the century there were iron smelters in almost every village. But when the Germans occupied the area they discouraged the practice, and when they in turn were replaced by the British after the Second World War the situation got worse, since ready-made farm implements such as hoes, knives, axes and so on began to be imported. Today we in the United Republic of Tanzania use mass-produced implements which break from time to time. So perhaps the revival of the Ufipa smelting techniques can help us make better iron and thus more durable farm implements.[1]

Canoe-carving

There is a big canoe, *ngalawa*, at the Village Museum, rigged on concrete supports and covered with a shed made of iron sheets with a thatch roof. The canoe is typical of the type to be seen on the East African coast all the way from north of Mombasa down to Mozambique. It is said that its use goes back 2,000 years.

This canoe is stabilized by outriggers attached to either side of the hull. It is generally carved from the trunk of a mango tree, which is available everywhere. The smallest canoes accomodate one person while the biggest can carry ten, and they can be paddled or sailed. Carving the canoe requires great skill and experience: after cutting the required length of wood, the carvers must cut it flat on one side, the top, and then they decide exactly how it should be carved on the basis of long experience. If placed on water it should float easily without leaning left or right—in other words, it should have its own sense of balance!

A variety of crafts

The Makonde and Zaramo carvers can be seen at work at the Village Museum. They carve a wide range of objects—from human forms and animals to artefacts such as combs, walking-sticks and book-ends. Black ebony is generally used. Visitors have shown great interest in watching the carvers at work.

Makers of traditional musical instruments can also be seen at the Village Museum. They fashion two types of musical instruments: *limba ndogo*, a wooden box which has protruding pieces of metal that a musician plucks with his thumbs, and *limba kubwa*, a xylophone made from wooden slats placed on two horizontal wooden beams. These musical instruments are on sale at the shop and are used during the weekly traditional dances. The musicians play on the musical instruments as they sing and dance and, depending on the song, the dancers may sing as well as dance after the musicians. The dance groups have been greatly appreciated, especially on weekends and on public holidays.

There are two women mat-makers at the Village Museum. Mat-making is practised all over the country, in some areas by men but mostly by women. The preparation of the material is an intricate process. Young palm leaves are cut before they are mature—in fact when they are still folded—opened up by hand and put out to dry. When dry they are prepared for dyeing in green, blue or red, depending on the colour combination required. Formerly the dye was procured from the forest in the form of seeds or tree barks, but today it is bought from a shop. The dye is boiled in a tin or pot; when the coloured water is boiling the material is inserted and held down until it is properly dyed, after which it is taken out, dried in the sun and stripped into thin layers, ready to be made into lengths of mat.

Finally, two blind weavers Mr Mgoha and Mr George, also work at the Village Museum. They produce beautifully woven materials which are sold at the shop.

It is through activities such as these, all too briefly described, that the aims of the Village Museum have been achieved. Traditional crafts have found a permanent exhibition site where they can be viewed by Tanzanians and foreign visitors. Furthermore, the National Museum has used the exhibitions to study the social and economic impact of the crafts on the lives of the Tanzanian people.

1. J. A. R. Wembah-Rashid, *Iron Working in Ufipa. A Record of Traditional Processes of Iron-smelting and Forging among the Fipa of Tanzania.* Dar es Salaam, National Museum of Tanzania, n.d.

Singapore Science Centre programmes

R. S. Bhathal

Formerly a member of the academic staff of the Faculty of Science, University of Singapore. He is currently the Director of the Singapore Science Centre. He has published several articles in international journals such as *Nature, New Scientist, Museum, Journal of Geophysical Research, Physics Education*, etc. He has co-edited the following books: *The Singapore Environment, Singapore in the Year 2000, Government and University Research, Non-formal Education in Singapore, Cultural Heritage vs. Technological Development: Challenges to Education* and *Singapore Science Fiction.*

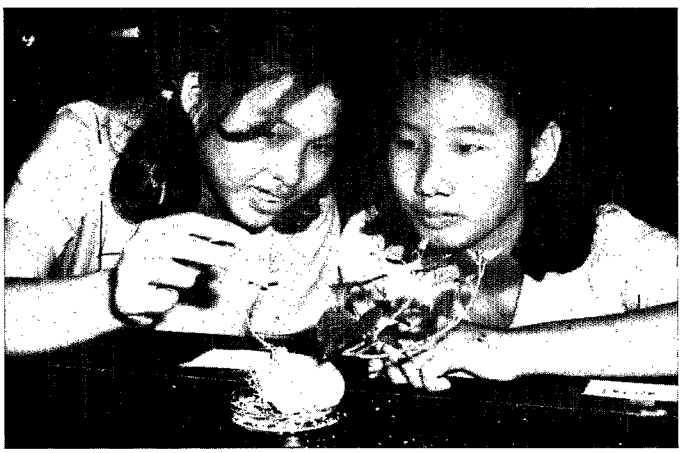
The Singapore Science Centre is one of the major institutions for the dissemination and popularization of science to the student population and the general public in Singapore. It was opened to the public in December 1977.[1] About 250,000 people visit the centre anually, of which 60 per cent are schoolchildren and students, and the remaining 40 per cent adult visitors. Its objectives are: (a) to exhibit objects illustrating the physical sciences, life sciences, applied sciences, technology and industry, and (b) to promote the dissemination of knowledge in science and technology.

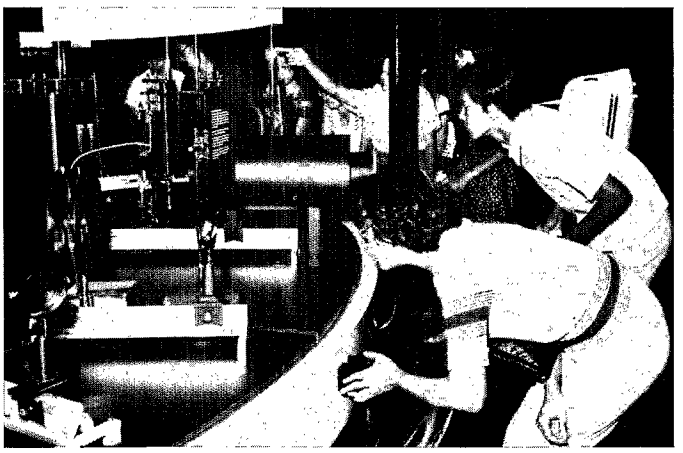
In order to carry out these objectives the centre provides several specialized facilites, which include exhibit programmes, school service education programmes and a science publications programme. Each of the programmes is described briefly below.

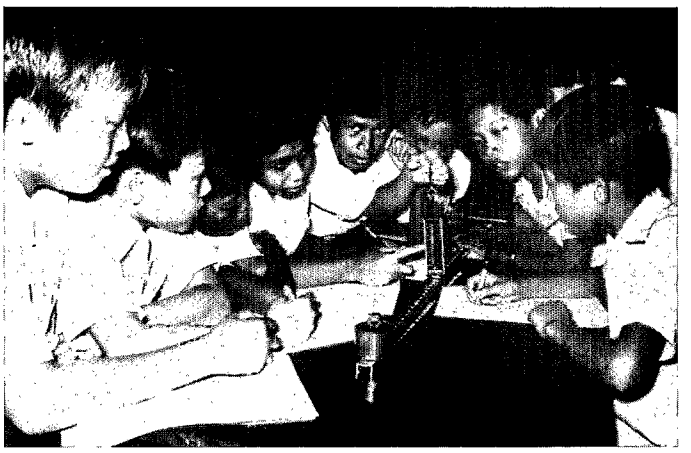
Exhibit programmes

The general philosophy followed in the setting up of the exhibits at the Singapore Science Centre is to explain the basic concepts of science

1. Kenneth V. Jackman and R. S. Bhathal, 'The Singapore Science Centre', *Museum*, Vol. XXVI, No. 2, 1974, pp. 110–16.







SINGAPORE SCIENCE CENTRE. School science programmes: students are encouraged to learn science with hands-on experience. [*Photo:* Singapore Science Centre.]

Exhibits on solar energy: visitors learning science through participation. [*Photo:* Singapore Science Centre.]

Science Camp: students investigating specimens collected from a freshwater pond. [*Photo:* Singapore Science Centre.]

and their applications in daily life and industry. Another aspect of exhibit design philosophy is to make many of the exhibits three-dimensional and participatory in nature, allowing visitors to touch the exhibits, push buttons, turn cranks and listen to taped messages on the telephone. This, we believe, is the best way to learn science for people living in a non-scientific cultural area. The chances of learning science by participating in an enjoyable learning environment are very great. An informal environment such as this is useful in countries where the general public may be apprehensive about scientific things.

The exhibits on display at the Singapore Science Centre are concerned with both the life sciences and the physical sciences. Energy and life are the central themes round which the exhibits have been developed: current problems of both Singapore and the world revolve around a constant supply of energy and the curbing of population growth, with its attendant social and economic implications. The fact that the Science Centre has exhibits dealing with both the life sciences and the physical sciences gives a coherence to the structure of science that can easily be understood by the lay visitor.

The following exhibit themes are explored in the galleries of the Singapore Science Centre:

Physical sciences: world of energy, nuclear power, automotive engineering, time, communication and information systems, universe and aviation.

Life sciences: the cell, human birth, population, genetics, evolution and ecology.

In order to attract and maintain a continuous flow of visitors to the centre, about 10 per cent of the exhibits are revised yearly. Another feature of this programme has been to hold at least two temporary exhibitions on contemporary topics every year. The exhibitions last for about three to six months each.

School programmes

The purpose of the school service programmes is to enrich, vitalize and complement the school science syllabus by means of first-hand observation and direct experience outside the classroom. It provides a setting for bringing about deeper insight, greater understanding and more meaning to those areas of knowledge that ordinarily are merely read about and discussed but seldom experienced.

The Science Centre conducts science talks, lecture demonstrations, laboratory courses and film shows for students in primary and secondary schools. It also conducts science talks and science forums for students in the pre-university schools.

It has been found that in many developing countries the primary schools are poorly equipped as regards laboratory equipment. As a consequence, science lessons are like history lessons, i.e. learning by rote. Students have no chance to play with simple equipment and study science with hands-on experience. It is in this area that science centres, with their centralized and well-equipped laboratories, can play a useful role in the teaching and transmission of scientific knowledge.

In order to acquaint teachers with the exhibits at the Science Centre, exhibit workshops are held every Saturday. About 60 to 100 teachers attend these and are taken on guided tours to familiarize them with the exhibits on display in the galleries and to show them how to use them to complement their science lessons. The centre also holds ecology and energy workshops for primary-school teachers. These workshops are held to upgrade the knowledge of teachers and to introduce them to simple laboratory equipment which they can use in their classrooms.

The Science Centre also organizes yearly a science camp for students, to enable them to study the natural environment and to instil in them a love of nature. The students camp in the grounds of the centre and during the week of the science camp they go out on field-trips to study various ecosystems. They collect specimens and analyse them in the laboratories of the centre. On the final day, they present reports on their studies of the different ecosystems to all the participants of the science camp. Some of the ecosystems that have been studied are a mangrove swamp, a coral reef, a freshwater pond and a freshwater stream.

Together with the Science Teachers' Association of Singapore, the Science Centre organizes a yearly Science Fortnight. Activities include a science fair, science forums, a science camp, science-fiction film shows, a science-fiction short-story-writing competition and a science olympiad.

Science publications programme

Another effective means of disseminating science to the student population and the general public is through publications. The Singapore Science Centre has an active programme of publications. It publishes a quarterly magazine (*Science Centre Bulletin*) which contains articles on various aspects of science. A special section is devoted to children under the age of 12. About 20,000 copies of this magazine are sold to the general public and the student population. The Science Centre also publishes wall-charts on topics such as the life cycle of a chick, the life cycle of a frog, Singapore fruit-trees, food chains, etc., for use by schools.

Other publications include a bi-monthly, *Science Centre News*, which gives information on the activities of the centre, leaflets on the exhibits and an exhibits guidebook for teachers and leaders of groups who intend to organize group visits to the centre.

The Bhartiya Lok Kala Mandal: research on folk art and its presentation

Devi Lal Samar

The author was born in 1911. A scholar and artist, widely travelled with his dancers and puppeteers, he won first prize in puppetry at the Third International Festival of Puppetry, Bucarest, 1965. Awarded the 'Padmashri' title by the Government of India, 1968. Headed Indian cultural delegation to USSR, 1978. Founder-director of the Bhartiya Lok Kala Mandal. Has published over thirty books on different aspects of folk art.

The Bhartiya Lok Kala Mandal (Indian Folk Art Centre) was established in 1952 at Udaipur, in the state of Rajasthan in Northern India, with the object of conducting research and field surveys in the domain of folk art and treating the results and the materials so obtained for prospective use in education. In this latter respect, the creation of the Bhartiya Lok Kala Museum has been a notable success.

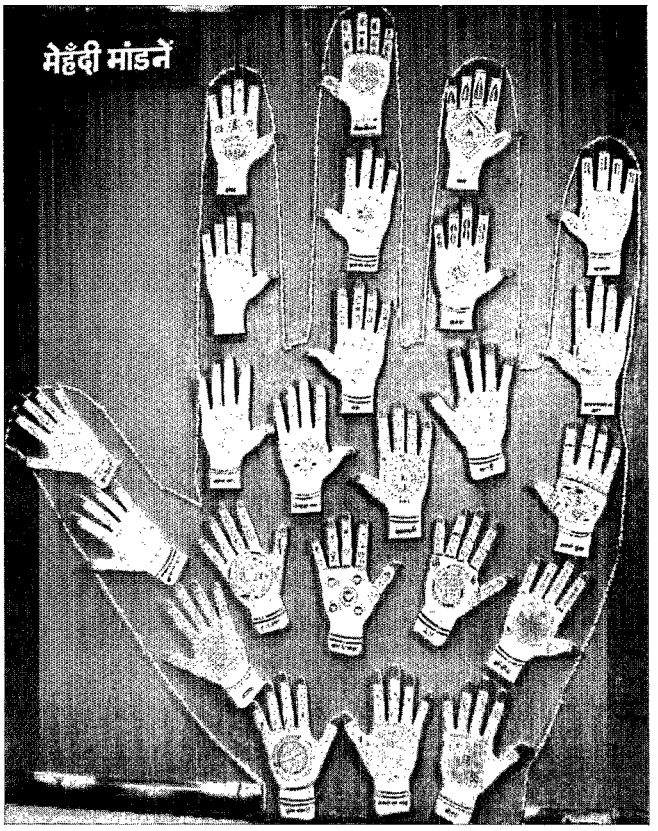
Surveys in the State of Rajasthan

Survey work, essential to the very concept of the institution, started at an early stage in difficult conditions. An immediate obstacle was presented by the inadequacy, if not absence, at that time, of means of communication with villages in the interior of Rajasthan State, which put the determination and devotion of Mandal workers, under the leadership of its founder, Devi Lal Samar, to the test. They were obliged to move from place to place on foot carrying their cameras and recording equipment on their shoulders. A second problem was that while people of the educated classes looked down on folk art as inferior because it was produced by villagers considered low and degraded in the social scale, in their turn the traditional village artists were, at first, timid and fearful of this sudden interest being shown in them by visitors from the towns. There were occasions when villagers were reluctant to help our teams to find food and shelter in

BHARTIYA LOK KALA MANDAL MUSEUM, Udaipur. The main entrance. [*Photo:* Bhartiya Lok Kala Mandal.]

Stone image of a folk deity. [*Photo:* Bhartiya Lok Kala Mandal.]

Mehndi mandana designs on ladies' palms. [*Photo:* Bhartiya Lok Kala Mandal.]



Shadow puppet from Andhra in peninsular India exhibited in the museum. [*Photo:* Bhartiya Lok Kala Mandal.]

their simple thatched huts or to assist in transporting our equipment from one place to another. Traditional singers, who perform on ritual occasions, were often suspicious, believing that the recording microphones would deform the quality of their singing. Our very motives were suspect and we had to work hard to convince folk artists that our investigations were in their own interest. Our quest for the Bhavais,[1] a mobile performing group, illustrates the difficulties: for more than a month, our team followed them as they moved always ahead of us from village to village, believing that we were officials pursuing them in order to exact entertainment tax on their performances! It was only when, through a friendly contact, they realized what we wanted that it became at last possible to study their wonderful dance-drama form.

Another episode concerned a traditional puppeteer found performing by the roadside in a town called Kuchaman. He had only a few puppets because most of his stock was mortgaged to a local money-lender for the paltry sum of 50 rupees (the equivalent of about $5). Our workers arranged for release of the puppets to enable the puppeteer to present a full performance and were delighted to have stumbled thus on a truly fascinating example of folk art. This led to a thorough survey of this puppeteer's community—the Bhats[2]—after a long period during which it had been very difficult to establish contact with them. Our efforts to get some of them to come to the Mandal's headquarters at Udaipur had met with very little success.

It took not less than four years to cover the

1. The Bhavais are a community of dancers, who also perform acrobatic feats and dance dramas for the entertainment of their patrons in different villages. They visit these patrons annually and get a fixed amount of remuneration in return.

2. The Bhats are mostly bards. They sing, dance and narrate the life history of a well-known person or a well-established family. They are also family chroniclers, and maintain records about families to whom they are traditionally attached. Some entertain their patrons with puppets, and are known as 'Puppet Bhats'; others narrate the histories of the deities painted on the doors of portable wooden temples (*kavads*).

Pabup ki pad, a painted scroll exhibited in the museum, with a bard couple narrating the histories of the gods.
[*Photo:* Bhartiya Lok Kala Mandal.]

greater part of Rajasthan in this way and to collect adequate material about songs, drama and crafts. Thus various groups of musicians and different forms of folk-song and ballad peculiar to each particular subregion were documented and recorded. Dance and drama groups were also surveyed and attention paid to the floral designs on walls and floors, such as the *thapa, sanjhi* and *bhoomi alankarans*[3] and the *mehndi mandanas*,[4] which play such a notable part in the cultural life of the people.

Surveys among tribes

Important research activity developed out of the cultural survey of the tribal population of Madhya Pradesh, Rajasthan, Tripura and Manipur, which was entrusted to the Mandal by the Home Ministry of the Government of India. This enabled us to study tribal communities such as the Bhils, Bhilalas, Madias, Murias, Dorlas, Kodakus, Kurvaas, Gonds, Saherias, Garasias, Santhals and Baigas at close quarters, to record their songs and film their cultural activities.

The same difficulties arose in establishing initial contact with these tribal people. On one occasion, as we approached a village in our jeeps and station-wagons, the whole population fled, this being the first time anybody from a town had come anywhere near them. It was said that even local revenue officials rarely visited many of these tribal villages, since it was governmental policy to intervene as little as possible in their daily lives. We were also advised to do without police or any other official escort and accordingly entered the villages as ordinary poeple, often after trudging for miles carrying all our kit.

Collection of folk-art objects

During the Mandal's intensive study of folk-art forms over a period of twenty years, objects directly or indirectly connected with these forms were also collected. It was often difficult to persuade the village people to part with familiar objects that were used in activities so bound up with their emotional, inspirational and ritual lives. Their confidence had first to be gained. Initial resentment at our mere presence in the village would gradually die away after we camped under trees, cooked our own food and, only after being invited, joined the people in eating with them and dancing. It was only then that we could start trying to collect objects like hairpins, combs, headgear, tribal masks, costumes, bows and arrows, etc. There were often special difficulties as, for example, over the hairpins and combs of the Madia and Muria women in Bastar: as these are presents from their lovers, parting with them is equivalent to abandoning the lover.

The beginning of a museum

It was several years before the idea of a museum could be given concrete shape. Initially, the Mandal possessed a mere collection of costumes, ornaments, dolls, puppets and musical instruments. It lacked not only exhibition space but even the necessary showcases in which to exhibit the items. Two distinguished visitors to the Mandal in those early years were Professor Humayun Kabir, then Minister of Education and Culture in the central government, and the well-known anthropologist Dr Verrier Elwin. They were impressed not only by our collection but also by the zeal of our workers. Professor Kabir helped us greatly in the construction of our present building and Dr Elwin gave us valuable guidance in our research work.

Though the Mandal shifted to its new premises in 1959, the building remained incomplete for four years because of lack of funds, and the proposal for a museum had to be postponed. It was still difficult to find donors, and for the same reason: lack of interest in the art forms of people considered to be backward, uncouth rustics. Eventually, the Rajasthan State Government came to the rescue and a number of benevolent donors were even found. This enabled the nucleus of a museum to be established. Since then its growth has been constant and it now bears witness to the intensive surveys undertaken by the institution since its origin. The museum now covers a surface area of 3,700 square metres.

Creative work

The Mandal has a good library and documentation section. The photo and recording section, which started with very meagre equipment, has produced four documentary films on the cultural activities of tribal and nomadic communities and now has a recording studio where folk-singers from several parts of Rajasthan regularly come to make recordings; these are systematically classified, along with the scripts of the songs, in a tape library. In the crafts section, rare art objects are photographically documented and training is given in the documentation of folk-art forms.

The publications section has produced so far some fifty works on the various aspects of folk art exhibited in the museum. Many of these publications are accepted as authoritative reference books by art scholars and some are also used as textbooks in a number of universities.

3. *Alankarans* are hand-made designs on floors or walls. The *thapa alankaran* is a hand-drawn design in indigenous colours made on the outer mud walls of a village home on different festive occasions; it can be wiped out once the festival is over. The *sanjhi* is a special design done in August every year by unmarried girls who wish to find a suitable husband; flower petals are stuck over a cow-dung base on the outer walls of the home. *Bhoomi alankarans* are decorative designs done on the floor with indigenous colours and motifs on different festive occasions. Each festival has a different design.

4. *Mehndi mandanas* are special designs done on the palms of all married and unmarried girls, excluding widows. The Mehndi paste is prepared with the powdered dry leaves of a plant that grows abundantly in the State of Rajasthan. These designs are made on different festive occasions, each of which has its own design. The paste is applied on the palms, with the help of a bamboo splinter, and is kept there for an hour or so, after which the yellow imprint remains for nearly a fortnight.

The puppetry wing of the museum gives a complete picture of Indian puppetry, and is now so well established that students, teachers and professional performers come from all parts of India, and even from abroad, to work in the research, training and experimental branches. Thanks to the museum, puppetry has become well accepted as an element in education in Rajasthan and several schools have included it in their curriculum. Simple shows are presented in a small puppet booth but there is also a puppet theatre in which both traditional and educational puppet shows of a high standard are presented.

Live presentation

For live performances, the museum is able to call upon a group of traditional folk-dancers and musicians, Bhavais and *tehratal*[5] performers. Folk-drama groups from all parts of the country are invited to perform free of charge in the open-air theatre.

A flourishing crafts section has been developed in which traditional puppet-carvers, *kavad*[6] makers, *gangore*[7] designers, *pad*[8] painters and turban-binders give training to young people in these elements of traditional folk theatre. Visitors can if they wish see in the workshops how the objects in the museum are actually made.

Small wonder, then, that the Mandal is officially recognized as a special educational and cultural organization. Besides the reputation it has earned for itself within the country, its units have represented India abroad in international exchanges and contests and have won several awards.

5. The *tehratal* dance form is a women's dance done in a sitting position. Thirteen cymbals are used, two held in the hands and the rest tied to the dancer's body and struck in a variety of ways. The word *tehra* means thirteen and the form also has thirteen different styles. It is danced in worship of the folk deity Ramdev.

6. A *kavad* is a portable miniature temple in wood, whose several painted doors bear folk deities. It is taken from village to village by the Kavadia Bhats, who perform for their patrons by opening one door after the other and singing and narrating stories about the deities.

7. *Gangore* is a replica of Parvati, wife of Lord Shiva, made of wood and dressed in gorgeous costumes and ornaments. The goddess is worshipped in the month of April by all married and unmarried women and is carried in procession to the bank of a holy river or lake. The worship takes the form of devotional dancing and singing.

8. A *pad* is a painted scroll illustrating the life of several well-known deities, and is a painting style in its own right. It is also the backdrop for ballad-singing: male and female performers known as Bhopa-Bhopin narrate the stories of the deities before the horizontally extended scroll. In another form the ballad is sung to the accompaniment of a folk instrument.

cummings and goings in a campus museum

mary z. maher and adria arch

Friend: *This* looks like a sardine.
e. e. cummings:[1] That's *not* a sardine . . . that's a steeple.
Friend: Who called it *that*?
e. e. cummings: Calder. Calder called it that.
Friend: Who is this steeple-caller called Calder?
e. e. cummings: Knock-knock.
Friend (giggling): Yes, only we did it backwards. . . .

Would you believe that this impious exchange took place a few years ago in an art museum before an audience of 150 people?

A bit of drama was part of a larger solution to a problem that plagues most university art museums across the country. The University of Arizona Museum of Art has a jewel-like collection including a Rothko, a Calder, an Arp, an Archipenko, several Picassos and various other contemporary gems as well as fine selections of medieval and Renaissance painting and sculpture. The problem? The museum was being ignored by the 30,000 students attending the university. Even more distressing, the collections were rarely visited by students in the College of Fine Arts, who passed daily within thirty feet of the museum's entrance!

In a gleam of inspiration, we planned a 'love affair of the arts' for the second-floor galleries of the museum in order to reawaken the sleeping campus to the riches at its feet. It took the combined efforts of the authors and Dr John Wilson of the Dance Program to create a unique programme specifically related to the works housed in the campus museum and especially designed to call on the many available support systems on a university campus. With wit, grace and philosophy, performances were tailor-made to entertain and educate. Students were recruited to perform and to aid in the creative process, thereby becoming part of it as well as part of the product of this artistic union.

Since both the professors involved were intrigued and even inspired by the freedom to create an art experience within the museum context, commitments to the projects were relatively easy to obtain. It was decided that the total evening's performance should not run for more than an hour and a half, that each director should independently plan his or her segment of the time period, and that an intermission should include refreshments, food and drink, to further underscore the key idea of the project—the communion or coming together of three different art forms.

Adaptations of earlier creations

Each programme manifested an individual and personalized method of creating. Both were characterized by a kind of indirect didacticism,

1. e. e. cummings (1894–1962) was an American poet whose innovations in form—irregular spacing and versification, abrupt juxtaposition of words and syllables and, in particular, unusual or non-existent punctuation—were intended to jolt the reader into a new sensibility. This technique was based mainly on typographic distortion and it served a combination of sentimental emotionalism and almost cynical realism. cummings has become a cult-figure in certain American intellectual circles—Ed.

Mary Z. Maher was born in 1941 in the United States of America. B.A. and M.A. from University of Iowa in Theatre Arts; Ph.D., University of Michigan, in Interpretation Studies. Has taught throughout the United States in departments of speech and theatre; at the University of Iowa and University of Michigan while degree in progress; was also assistant professor at Eastern Michigan University and Hofstra University; now assistant professor at the University of Arizona in Tucson. Presently teaching advanced level courses in interpretation and Shakespeare; directs Readers' Theatre performances; does independent performances at Chautauqua, Civic Theatre, benefits, recitals at the University of Arizona under professional title of 'Reading Allowed'.

Adria Arch was born in 1952 in the United States of America. Holds B.F.A. degree from Carnegie-Mellon University, M.A. from the University of Arizona. Was museum assistant at University of Arizona Art Museum and served as project director in special events, including the *Copper, Brass and Bronze* exhibit, an award-winning show done at the University of Arizona Museum of Art, the only one of its kind in the country. Also teaches course entitled Visual Arts for Elementary Educators in the Department of Art at the University of Arizona.

UNIVERSITY OF ARIZONA MUSEUM OF ART, Tucson. Narrator and drama student Kate Fleming with *The Steeple*, a mobile by Calder: 'Who is this steeple-caller called Calder?' [*Photo:* University of Arizona Museum of Art, Tucson.]

A lesson in comparative anatomy: Picasso's *Le Bras*, 1959, is very lifelike. [*Photo:* University of Arizona Museum of Art, Tucson.]

Trio: Kate Fleming and her student partner Mike Deal perform a poem called 'Who Shall Feed the Statues?' by William Gass. The statue here is Aristide Maillol's *Flore nue, 1910*. [*Photo:* University of Arizona Museum of Art, Tucson.]

revealing the professor/director's need to educate the audience in things aesthetic. A proposal was drafted to request funding for publicity and for video taping the dress rehearsals for later instructional use. Requests for funding were granted by the College of Fine Arts discretionary fund and the Graduate College. Money for posters, programmes, and video tapes added up to no more than $400. This sum would have been considerably more had each performer and director not been willing to adapt performances prepared earlier for presentation in the museum.

The dance segment of the programme directed by John Wilson was a project based on an earlier original work. A year earlier, Wilson had choreographed a larger selection, which he called *Luther*. It showed an orderly medieval society being thrown into chaos as Luther's *Ninety-five Theses* threw the problem of self-governance on to the shoulders of the peasant masses. Luther himself danced as a symbol of the need to question Church authority and of the new humanism that pervaded the Continent. This Reformation and its story constituted the original dance.

Wilson elected not to perform this longer work but instead extracted from it certain seeds of his creative process. He showed slides of the oil paintings and woodcuts of the period (Breughel, Bosch and others) and lectured on how these art objects inspired him to orchestrate the dance motifs that appear in *Luther*. His final product was a lecture-demonstration using his dance students, which was instructive and analytical and of tremendous interest ot the audience. His talk was an analogue of the creative process at it relates to art and dance in general and to his own methods of choreography.

The Readers' Theatre segment of the programme was synthetic and inventive in nature. The two authors worked together in the University of Arizona's Poetry Center. Their first objective was to locate poetry that had painting or sculpture as its subject. They found a great deal of material, much of it laboured and difficult to present orally. They then decided to take a creative left turn and focus instead on major paintings in the museum's Gallagher Collection of Contemporary Art. Adria Arch happened to hand Dr Maher a book of e. e. cummings's early essays as they left the Poetry Center one day. This serendipitous gesture suddenly cued the idea for the final script; cummings was both painter and poet and many of his dialogues and editorials relfect this dual insight.

In the final Readers' Theatre project, there was re-created an e. e. cummings figure and his Friend. These two narrators toured the contemporary painting and sculpture collection, making definitive statements about art and artists and using as examples of their major topics contemporary poetry that was chosen to relate to selected works in the gallery. Sometimes a poem would verbalize a mood or atmosphere that a painting seemed to express; sometimes it would be chosen to elaborate on a painting's content or structure. For example, three acrobatic and youthful cast members performed e. e. cummings's 'Chanson Innocente' in front of Appel's *Spring*. The end-product was a group of art-related poems woven together by a charming vaudeville team who also happened to know a lot about art. Again, audience response was eager and very open to this mixture of instruction and delight.

Preparations culminated in a run of three performances, the first of which was a preview night, planned as an informal evening for the students in our own classes and for the purpose of working out trouble areas. All were so well received that we had a request to do one extra command performance for the Chairman of the Art Department and his faculty.

Problems

The performance set a precedent at the Museum of Art. Previously, productions of the performing arts to which the public were invited had not been considered. The project precipitated new waves of thought among the staff concerning the development of policies to facilitate and control future endeavours. A museum's first responsibility is to the preservation and conservation of its collections; therefore, any activities that might endanger the safety of works of art must be closely and diplomatically supervised. Precautions taken for this project included the moving of extraneous pictures and certain sculptures in the galleries where the performances were mounted. No lighting was used other than that already installed, in order to prevent dangerous temperature changes. The problem of seating space was the most difficult to solve, for we were torn between wanting as many people as possible to see the programme and fears for the safety of the collections with so many people crowding the gallery. The gallery spaces comfortably seated about seventy, and each performance drew about 150 viewers. Not only was it uncomfortably warm, but many complained that they had difficulty seeing over heads.

Assessment

Our efforts—whether of labour or of money or of love—paid off handsomely. Modern dance and the Readers' Theatre received needed exposure as art forms: a summary calculation revealed that each department had tripled the size of their regular audiences for these events. The museum enhanced the appeal of its collection in an informative way, introducing abstract works to the public, increasing its daily traffic. Separate components of the Fine Arts complex proved that they could work together and shine in mutually reflected light. All this would be proof enough that projects like these should be continued, but these are merely institutional benefits, management plusses.

At a certain point, we realized that we had combined some classical functions: a museum is a place to view art; the Greek *theatron* was 'a place for viewing'. The museum staff is still assessing the problem areas and brainstorming for solutions in an effort to continue the shared museum concept.

The university was a major resource and a major beneficiary of the event. Afterwards, we assessed the campus facilities that we had used: two professors, the instructional television unit, the Poetry Center and its fine collection, props on loan from the Drama Department, the printing service on campus, the graphics design class in posters and programmes, the funds of the College of Fine Arts and the Graduate College. Many were the wheels put into motion, in addition to the museum staff, to bring the project to fruition.

What was most important in the project were what we began to call 'people plusses'. The co-directors were given that rare opportunity for the teaching artists: to give birth to a viable presentation in a new and totally aesthetic context. The students, for their part, were constant sources of *Zeitgeist* and joy; they were excited, on time, comic, fun to watch, visibly growing. They rehearsed badly outside the museum and energetically inside it; it was almost as if the muses were housed inside the artworks and animated the cast during the rehearsal hour. Both faculty and students were recompensed for their efforts in terms of recognition, experience, and professional accolades. Our ultimate hope is that both university and museum wish to follow up the success of this programme and to view interdisciplinary ventures with the same retrospective wisdom that cummings expressed inside the programme cover: 'ends are beginnings with their hats on'.

OPINION on the return and restitution of cultural property

Rape and restitution: the Cross River Region considered

Keith Nicklin

The author gained his B.Sc. and M. Phil. in anthropology from University College, London. Employed by Nigerian Federal Department of Antiquities, 1970–78, for a substantial part of which period served as Senior Ethnographer, Cross River State. Ethnographic field-work and rehabilitation of the National Museum, Oron (opened 1977) after the civil war of 1967–70. Author of numerous articles on worldwide ceramic theory, material culture and art of the Cross River region, and also *Guide to the National Museum, Oron*, Lagos, 1977. Honorary Fellow of Anthropology and of Eliot College, University of Kent at Canterbury. Appointed Curator of the Powell-Cotton Museum of African and Asian Zoology and Ethnography, 1980.

My initial reaction to Unesco's current preoccupation with the return and restitution of cultural property was a somewhat cynical one. In view of the lamentable lack, since the adoption of the 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, of real progress towards checking such illicit traffic, I was and remain deeply concerned that the return and restitution issue might deflect international attention from an even more serious problem: the continuing rape of the indigenous art of the developing world. This regrettable traffic is having a most damaging impact upon the original owners of the cultural property in question, and is causing serious harm to scholarship itself.[1]

My views are strongly influenced by a long period of employment (1970–78) with the Nigerian Federal Department of Antiquities (now National Commission for Museums and Monuments). For a substantial part of this time I was Senior Ethnographer in Cross River State, an extensive rapidly developing area of palm belt and tropical forest in south-east Nigeria. It is a region once extremely rich in a number of genres of traditional art, including wooden masks and figures covered with animal skin (among the Ejagham and neighbouring groups), the so-called 'monoliths' of the Middle Cross River, the hardwood ancestral sculptures of Oron, and bronzes cast by the *cire-perdue* method. The art of the region became well known to collectors in the West when much of it was removed during and immediately after the Nigerian Civil War of 1967–70. This part of the country is vulnerable in view of its proximity to the United Republic of Cameroon, whence many antiquities[2] are taken on the first leg of their journey overseas. Cameroonian legislation does not protect Nigerian antiquities.

Among such peoples as the Mbembe, Bahumuno, Yakö and Biase of Olubra mighty forest trees were hewn into free-standing pillars decorated with both abstract and figurative motifs, and carved into large slit-drums decorated with human and animal forms at either end, and houseposts in figurative and other forms. Sacrifices were made periodically at the shrines associated with these magnificent monoxylous

1. The present short article includes some material previously published in an article on 'The Rape of Nigeria's Antiquities' (*African Arts*, 1975, Vol. VII, No. 3, pp. 86–8) and in a review of Fr. François Neyt's *L'art Eket*, Paris, 1979 (*African Arts*, 1980, Vol. XIII, No. 2, pp. 24–7, 83).

2. In Nigerian law any object made before 1918 or used in an African ritual is an antiquity, 'even if it was made yesterday'. See Dr Ekpo Eyo's article 'Tourism and Control', *African Arts*, Vol. IX, No. 3, 1976, pp. 53–4.

Zoomorphic skin-covered mask representing the head of a leopard. National Museum, Oron.
[*Photo:* Keith Nicklin.]

Monoxylous wooden pillar, Obubra area. Village elders point to the place from which a carved figurative portion has been stolen.
[*Photo:* Keith Nicklin.] ▷

End of a large slit-drum carved in human form, Adadama area, Obubra. All other such works belonging to the community have been stolen, and this piece bears saw-cuts made by thieves disturbed in the process of attempting to remove it. Height approximately 1.5 cm.
[*Photo:* Keith Nicklin.]

Anthropomorphic bronze, Middle Cross River. One of the very few *cire-perdue* castings still existing in the field in south-east. Nigeria. Height 15 cm. ▷
[*Photo:* Keith Nicklin.]

Fragment of a male carved wooden figure, probably the end of a slit-drum. From a police case at Obubra. Height approximately 1 m. National Museum, Oron.
[*Photo:* Keith Nicklin.] ▷▷

sculptures, especially at the times of planting and of harvest. The carvings have been ravaged in recent years, and not by natural agencies. They are often too large for outright removal, so parts are sawn or chopped from them, often leaving a mutilated stump. In some cases, where significant portions of the sculpture remain, villagers have concreted them into the ground or built sheds around them. This obscures their aesthetic value, hinders ritual procedure, and places unwarranted financial strain upon small farming communities. In a few cases replicas or alternative works executed in mud or cement have been made as a last desperate resort. Many fine pieces, from the Mbembe area in particular, appeared in Paris some years ago.[3]

The Ekajuk, Abanyom, Nnam, Nselle and some other groups of Ikom and Ogoja used to commemorate their deceased sacred chiefs with basalt or limestone boulders carved with human features, measuring between 30 centimetres to 2 metres in height. Some 300 such monoliths were recorded by Philip Allison in a survey conducted for the Nigerian Department of Antiquities in 1961–62.[4] Since then many have been broken up for removal to neighbouring countries and damaged in land disputes. Monoliths are very heavy and usually have to be smashed to pieces for ease of handling, for example to get them into the boot of a taxi. This is done with sledge-hammers or by heating with fire. In 1973 the attempted theft of some fine Nnam monoliths (which, incidentally, comprise a National Monument) was thwarted by the clan head, Robert Ntool of Alok. The scale of this enterprise was reflected in the use of a tipper-lorry by the thieves.

The upper part of a Cross River monolith was offered for sale in June 1980 at a London auction house. In the sale catalogue[5] the official survey was cited in authentication of the piece, with apparent disregard for the fact that this evidence shows that the monolith was removed from Nigeria within the period that legislation protecting it was in force.[6]

Collectors often make the self-justificatory claim that Africans have no use for their 'idols' nowadays, and are inclined to discard or sell them. This was most definitely *not* true of the areas where I worked. Villagers were rarely prepared to part with cult objects, even for the direct benefit of Nigeria's national museums. Yet the ever-increasing foreign demand for traditional art caused illicit traffickers constantly to steal what was needed abroad. Throughout the decade following the adoption of the 1970 convention and despite the strenghtening of Nigerian legislation with the 1974 decree, theft and smuggling continued unabated in the south-east. Sometimes a few 'small boys' were caught and sent to prison, but the large-scale operators—the 'runners' and dealers usually based outside Nigeria—were rarely, if ever, implicated.

Ethnographic art research in West Africa has suffered tragically as a result. Villagers are now highly suspicious of the motives of the stranger (including the genuine scholar) who expresses an interest in 'old things'. Even if the *bona fide* field-worker manages to establish good relationships with the local people, his task is hindered when cult objects are believed to be worth a lot of money.

Problems of scholarship are not confined to field-work. There is a nascent trend away from studies based in Africa, and toward the investigation of African art in overseas collections, linked with skilful manipulation of the usually inadequate literature. This is sometimes the best that can be done in view of the sad fact that the object of study, the 'art', no longer exists in the field. Some catalogues seek to dramatize and add monetary value to the pieces, with little or no regard for other considerations. Others also mislead the reader. For example, a recent catalogue of Cross River masks is entitled *Les 'Duen Fubara'*,[7] a name describing the ancestral screens of the Niger Delta that has no connection whatsoever with the works illustrated.

The increasing tendency for collectors and dealers to sponsor academics to write about their collections is in one fundamental sense self-defeating, since the building of the collections is helping to destroy all possibility of explanation of the pieces. The meaning attached by a community to its arts is of equal value to human inspiration as the pieces themselves. The exploitation in the manner described above of communities that until recently were, or continue to be, relatively remote geographically is therefore a double tragedy.

3. Hélène Kamer, *Ancêtres M'Bembe*, Paris, 1974.
4. Philip Allison, *Cross River Monoliths*, Lagos, Department of Antiquities, 1968, and *African Stone Sculpture*, London, Lund Humphries, 1968.
5. Christie, Manson & Woods Ltd, *Important Tribal Art*, p. 67, Tuesday 17 June 1980.
6. The Antiquities Ordinance was passed in 1953, and superseded in 1974 by the Antiquities (Prohibited Transfers) Decree.
7. Hélène Kamer, *Les 'Duen Fubara'*, Paris, 1976.

Recent Unesco publications

Guide for the Collection of Traditional Musical Instruments, by Geneviève Dournon. Paris, Unesco, 1981. 107 pp., illus., bibliog., discog. (Protection of the Cultural Heritage—Technical Handbooks for Museums and Monuments, 5.) 36 French francs.

Musical instruments are among the most complex creations of the human mind. They embody a musical heritage that has always represented an essential element, physical as well as mental and spiritual, in the lives of groups and individuals. A Dan proved says: 'Man cannot stay in a village where there are no musicians.' And this existential truth applies to people of all continents and of all times in history.

The functions of music and the vehicle used to produce it—the instrument—cannot be reduced to the production of harmonious sounds. Music and instruments convey the deepest cultural and spiritual values of a civilization, transmitting knowledge in many spheres. Whether they are the creations of the most skilled craftsmen or rudimentary yet none the less expressive objects, instruments are among the most meaningful objects in the ethnological heritage. They bear witness to cultures, as revealed in the musical expression they preserve and renew.

Everywhere in danger of vanishing, traditional musical instruments are of interest of museums the world over, especially those institutions where the concepts of 'culture' and 'heritage' have found their broadest anthropological significance. The international specialized body on musical instruments, the International Committee for Museums and Collections of Musical Instruments (CIMCIM), of the International Council of Museums (ICOM) has worked closely on this subject. This guide is a complement, as it were, to two publications prepared under the direction of Jean Jenkins, *Ethnic Musical Instruments* and the *International Directory of Musical Instruments Collections,* which are the fruit of co-operation at the international level.

For its part, Unesco continues to devote attention to the problems of the protection of the ethnological heritage of peoples on whose behalf the capacity to preserve and restore musical instruments must be strengthened. It may also be pointed out that, in 1976, the General Conference of Unesco adopted a ten-year plan for the promotion of music and the visual arts in Africa and Asia. The plan provides for both field collection and recording, which are the very purpose of this guide, and for the creation of museums or archive departments where selected musical instruments and recordings will be preserved. These are the usual conservation tasks required for the protection of *all* aspects of the cultural heritage, but in the case of musical instruments they become multiform and complex, and require a specific method, 'so as to compile a store of information relating not only to the musical aspects, but to all the other areas that make up the socio-cultural context as well'.

Geneviève Dournon of the National Museum of Natural History in Paris, well known in scientific circles, is also curator in charge of musical-instrument collections at the Musée de l'Homme (Laboratory of Ethnology, Department of Ethnomusicology). In her introduction to the handbook, the author describes its purpose as follows:

'Collection in the field of the material evidence of a culture is the best way to assemble ethnographical collections. It is, in fact, the only method for the direct and systematic gathering of documentation relating to an object; such documentation is not facilitated by other conventional means of acquisition such as bequests, and to an even lesser extent by purchases from commercial intermediaries (antique dealers, private collectors, etc.).

'Collection in the field particularly concerns musical instruments, which are the privileged élite of cultural expression. Everywhere, there is increasing awareness of the importance of the musical heritage of traditional societies. Music, and the contrivance used to produce it, the instrument, play a considerable role because they are present at all levels in the life of a group. Their functions is not limited only to producing harmonious sounds. They also express the most profound cultural and spiritual values of a civilization and transmit knowledge in many spheres: religion, mythology, history and oral tradition.

'The benefit of the collection, study and preservation of musical traditions that are bound to change or vanish sooner or later escapes no one. For this reason, many institutions throughout the world are committed to this task.

'A musical instrument, which is not like other objects, is a tool that both produces sound and carries meaning. The acquisition of musical instruments should give rise to a specific, in-depth study for the purpose of gathering all relative information, not only with regard to the musical aspects, but with regard to all the other fields that make up the socio-cultural context as well.

'The collecting of musical instruments thus proves to be a complex, multiform task that must be approached using the appropriate methods suggested in this guide.

'The three sections of the guide correspond to work phases: before, during and after collection. Parts One and Two tie up with the following questions: Why? By whom? For whom? How are musical instruments collected? Part Three, which serves as a conclusion, summarizes the post-collection tasks that should be carried out on the musical instruments and the documentation gathered.

'In order to facilitate research, two field-work protocols, established in collaboration with Simha Arom, cover the main questions that should be asked in order to set up documentation relating to instruments and musical recordings. In the field, these protocols may be used as a guidebook.

'This handbook is intended for all those who, now or in the future, may be called upon to collect musical instruments *in situ,* that is, documented sets of representative objects intended for museums or specialized institutions.

'Although the collection of musical instruments is frequently ensured by specialists of music or the humanities—ethnomusicologists, organologists, musicians, anthropologists, archaeologists, and others—it is not, however, a field reserved only for these persons. This task falls to museum experts, curators and technicians as well, whose vocation is to assemble, study and preserve national or regional collections in which musical instruments should hold a privileged position. The recommendations and the field-work protocols are particularly intended for the latter category.

'A guide for some, a tool for others, this book is generally intended for field-workers and collectors of different backgrounds and areas of specialization working in different regions or different cultures who, in the framework of their institution (museum, conservatory, university, cultural centre or research institute) are responsible for assembling collections of musical instruments and related documents.'

Procedures and Conservation Standards for Museum Collections in Transit and on Exhibition, by Nathan Stolow. Paris, Unesco, 1981. 56 pp., illus., bibliog. (Protection of the Cultural Heritage—Technical Handbooks for Museums and Monuments, 3.) 15 French francs. The present work is a condensed version of the author's *Conservation Standards for Works of Art in Transit and on Exhibition,* which appeared in the series 'Museums and Monuments'.[1] This book summarizes the principal problems of storage, handling and transport of museum objects by road, rail, sea and air. It draws attention to the dangers (relative humidity, temperature, light, shocks and vibrations) that threaten these works according to their nature, form, volume, weight and, above all, their composition. A certain number of simple yet basic rules are laid down so as to ensure the best possible despatch, reception and care of art objects.

A series of clear illustrations, in particular drawings, illustrate the description of proven handling and packing techniques.

Like the previous works in this series, this is an essentially pactical guide and will be particularly useful to curators of museums whose resources are limited.

1. Nathan Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition,* Paris, Unesco, 1979, 129 pp., illus., index (Museums and Monuments, 17).