Museum

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Museums and Children

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Page 67: Photo credit 2 should read, 'Institut d'Archéologie de l'Université des Sciences Humaines de Strasbourg', and not 'Collection Gallimard'.

Museums and children

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Editorial

Georges Henri Rivière

During 1979, proclaimed the International Year of the Child by the United Nations, Unesco has intensified its action in favour of the world's children.

This international year has provided the opportunity to clarify the demands made on children by the modern world and the contribution that they make to the adult universe, to reflect on the condition of childhood today. It has been marked by an international campaign and many national projects in favour of the most deprived and, in general, in defence of the rights of the child—to well-being, to health, to education and to culture.

Museum too has been called upon to contribute by taking up the relationship of the child to the museum. What are the responsibilities of the museum towards the citizens of tomorrow and what are its hopes?

While children's museums certainly exist in many countries, the museum for the general public can also address itself specifically to the young in many different ways. As the President of ICOM's International Committee for Education and Cultural Action points out in his introductory article, the museum must innovate in its approach to display and educational activities so as to give the appropriate orientation to the presentation of its collections and the preparation of specific programmes for the school-age visitors.

The pedagogical approach must be an open and original one able to meet the varied requirements of children today, to help them to understand the world around them, to find their place in contemporary society and inspire a world for tomorrow. Participation and play, freedom of choice and a multiplicity of possibilities are among the means the museum has at its diposal to forge a new type of interaction with the young visitor.

These are some of the directions described in the theoretical studies of this issue, which draw upon the concrete experience of museums in Latin America, Australia, the United States and India. The four case studies that follow reflect different thematic approaches to a common form of dialogue with the child and the school in Botswana, Chile, France and Thailand.

The album which closes the issue describes the contributions of different types of museum in the Federal Republic of Germany, Denmark, Greece, Italy, Romania and the United Kingdom. Each case illustrates a different aspect of the special relationship with the young visitor: stimulating his innate creativity, teaching him to communicate in one of the new languages of our time, exploring archaeology in that magical climate that is the privilege of childhood, awakening his awareness to the natural environment or, going beyond the museum's walls, helping him to understand, appreciate and protect the cultural and natural heritage as a whole.

The issue leaves unanswered some fundamental questions, both biological and cultural, that are the object of scientific controversy today. What are the respective shares of innate characteristics and acquired traits in the growing child's learning processes? What are the stages of his intellectual growth? What role is played in his cultural universe by the social 'rites of passage'? What are the commonalities among civilizations in this respect and what are the differences?

These are the kinds of question that are as vital for the programming of museums of man as for museums of natural sciences in an overall spirit of interdisciplinarity.

1
Child watching baby chicks in the courtyard of a house in the People's Republic of Benin. (Extract from the brochure *Unesco Co-operative Action Programme and the International Year of the Child,* Paris, Unesco.)

Introduction

Ger van Wengen

1979 has been proclaimed the International Year of the Child, with the manifest intention of focusing attention on a variety of matters concerning children, and particularly their place in the society they grow up in. A child, as he grows up, undergoes a process of adaptation to his own society. This process takes place in stages.

In the first stage, the family will have a preponderant influence. In the following stages, not only will the child's friends of his own age make their influence felt, but also institutions such as schools, religious, philosophical or political communities, libraries, radio and television, will have an increasing influence.

The purpose of this article is to examine the role that museums, according to circumstances, can play in children's lives.

Children and museums, children's museums

Two categories of museum should be distinguished: those intended exclusively for children and those intended for people of all ages.

The first category represents only a very small part of the total number of museums throughout the world. Such museums are to be found only in the United States of America and a few European countries. Undoubtedly, they have an admirable aim, do useful spadework and can introduce innovations.

Museums in the second category have a wide potential field of action from which children can greatly benefit. Whatever their subject field—art, human sciences, natural sciences, advanced technology—their collections lend themselves to an almost infinite number of applications for young visitors; they encourage children's ambition to enter adult life. The role of these museums is on the whole marginal, mostly for two reasons: first, the absence or inadequacy of programmes for children in the form of exhibitions, animation activities and specialized publications, and second, the fact that they hesitate still between a purely scientific presentation of their collections and one deliberately aimed at appealing to the average visitor.

Exhibition planning and display

Whereas museums used to be strongly object-oriented, today they are gradually becoming more public-oriented.

As far as exhibition planning is concerned, this entails purposefully choosing a theme and developing it in exhibitions aimed at catching the public's interest in the broadest sense. In many cases, that will mean exhibitions with obvious social relevance. Thus history museums can make the inhabitants of a town or region aware of the effect of local or regional history on their present housing conditions, ethnological museums can contribute to a better understanding of developments in the world, and natural history museums can draw visitors' attention to the problem of their own environment.

The manner in which an exhibition is presented also plays a very important part in attracting the public's interest and stimulating visitors' empathy. It appears from the hitherto rather rare polls of museum-goers that for many of them the traditional treasure-house type of presentation, consisting in arranging in long rows of showcases objects chosen chiefly for their aesthetic qualities, elicits virtually no response. Children, in particular, want to be able to identify with what is exhibited: they want to be able to imagine themselves in a different situation and a different sphere during their visit to the museum. Their desire can be met by a room furnished entirely in the style of a period in history, by a diorama of woodland scenery with plants and animals, or by a Berber tent from the North African desert.

Empathy can also be stimulated by giving visitors the opportunity to participate actively in the museum. Mechanical devices with which they can play question-and-answer games by pushing buttons, short slide or video shows which can be turned on by the visitors themselves and museum assignments which will keep children busy are but a few examples of what can be done.

In every arrangement—regardless of the approach chosen—museums must try to achieve well-balanced didactic units. They will have to try to draw and hold their visitors' attention by means not only of combinations of objects, texts and photographs, but also of visual aids and a variety of supporting methods developed mainly by their educational services. It is therefore of the utmost importance that those responsible for presentation or display agree upon a definite strategy determined mainly by their visitors' interests.

However, such endeavours to arouse visitors' empathy by means of attractive displays come up against an obstacle that should not be underestimated: the fact that curators are often more inclined to attend to their scientific work, for which they have mostly been trained, than to the display aspects intended for a wider public.

They often find it hard to get away from the scientific context in which they feel at home. The manner of display and accompanying texts are often striking testimony to this already-mentioned ambivalence, and it will not always be easy to find solutions to this problem.

Nevertheless, it seems essential that the display strategy and aims be clearly laid down in the general exhibitions plan. It would also be most expedient for museums, wherever possible, to recruit people who have made the organization of exhibitions their career. Educational staff in museums are well aware just how important presentation is in attracting the public and stimulating their interest.

Education and recreation

A study of the manner in which children usually come into contact with museums shows that, in practice, two situations prevail: either the school brings them along with their classmates or they come with their parents or members of their age group, usually at weekends or during the holidays. In the first case, the visits are considered educative, while in the second they are regarded more as recreational. However, it is difficult, and not always desirable, to draw a dividing line between the two.

It could perhaps be maintained that the recreational side of museum-going is

of a more voluntary nature. In fact, though, education can be regarded as the gateway to recreation and vice versa: a recreational situation can lead into an educative situation and participation in an educative programme can induce new recreational needs.

The two approaches can complement each other, especially if the exhibits are presented in a way which invites visitors not only to look but also to participate and, finally, arouses their empathy. For that reason alone, presentation must be given the highest priority.

All kinds of activities can be organized in this connection which will increase the attraction of the museum from both an educative and a recreational point of view. In addition to the slide and film shows more and more frequently offered to visitors, there are many other ways of making a visit to a museum a more stimulating and significant experience: musical performances and costume parades; demonstrations of ancient crafts (for example, in an open-air museum); a tea ceremony as in Japan (in an ethnological mueum); a potter working at his wheel; or microscopes that visitors may use in a natural history museum. One can conceive of numerous variations on this theme. In many cases, such activities will naturally require additional financial outlay, but so does the purchase of objects and scientific research; in planning a museum's activities it is necessary to weigh these things one against another and lay down priorities. In other cases, as for instance when history museums organize walks through the town, or natural history museums organize tours through nature reserves, little expense is involved but the activities are equally attractive from both a recreational and an educative point of view. Such tours offer excellent opportunities for recreation, during which parents and children fire each other's enthusiasm. Visits to restored monuments (castles, country houses) are also recreational activities. The mere atmosphere of such buildings makes it easy for visitors to identify with the period from which they date.

Some of these buildings are eminently suited to visits by, for instance, groups of schoolchildren studying a particular period in history; the children are taken to spend the day imbibing the atmosphere of bygone times in an old restored country house. In some cases, a programme is organized in consultation with the school, so that the children can wander through the house in costumes of the period, prepare a meal of the period and observe the rules of behaviour of the period as they eat it.

Particularly over the past twenty or thirty years, schools and museums in many countries have started to work very closely together, and the nature of school groups' visits to museums has changed. Formerly, such visits were planned as an excursion just before the holidays, once the curriculum proper was already completed. Nowadays, more and more school groups are taken to the museum to complete a particular part of their curriculum on the spot and with the help of the visual aids to be found in the museum.

Thanks, in particular, to museums' educational services, a large number of teaching methods have been developed which, in addition to an intellectual approach, seek to promote identification with the subject concerned. Museum assignments, role-playing games, discussions of a theme worked out in an exhibition and creative work in museum workshops are a few examples in point, which are dealt with in detail in the following articles of this special issue of *Museum*. These educative methods benefit not only school groups but also different kinds of youth groups and, to a certain extent, children who do not visit a museum in an organized group.

Educational work in museums

Many staff members of educational services in museums have had to learn their job by trial and error; at most, they were helped by their colleagues who had

2
Charles es à Nourrice, detail of an educational engraving, Metz, France (mid-nineteenth century) intended to make children aware of different moments in their lives. (Musée des Arts et Traditions Populaires, Paris.)

3
Mariage de Marie, another detail of an engraving from the same source and period. (Musée des Arts et Traditions Populaires, Paris.)

already gained the necessary experience. Training in educational work in museums hardly exists and where it does it is almost always part of more general training in museum work. The staff of museum educational services does include people who have come from the teaching profession and had pedagogical training, but they, too, have had to make a place for themselves and develop their own working methods. This calls for a sizeable dose of enthusiasm and, above all, enjoyment of working with people.

Especially in recent years, various people have brought more specific expertise to the museum educational services: university training in pedagogy and special proficiency in techniques of manual dexterity, training in group psychology, etc. Their contribution has put educational work in museums on a sounder basis, so that it can now be increasingly underpinned with theories developed in scientific circles. Thus, it makes use, *inter alia,* of the theory developed by the American education expert, Bloom, which makes a distinction between cognitive learning and affective learning. Cognitive learning is related not only to transfer of knowledge but also to formation of concepts and to analysis and synthesis of subject-matter. Moreover, learning is not a purely rational activity but largely determined by feelings and other reactions pertaining to the affective sphere. In fact, well-constructed educational programmes are based on both cognitive and affective elements. With Bloom's theory as a starting-point, such programmes can now be far more wittingly and systematically developed and followed through.

The same can be said with regard to the application of the ideas of the Swiss psychologist, Jean Piaget. Piaget distinguishes a number of stages in a child's development: in the first stage—up to the age of 7—a child is very self-centred in his behaviour; in the second stage—between the ages of 7 and 11—although his thinking is still very object-oriented, he learns to associate things with each other; in the third stage—from the age of 11—his ability to think in abstract terms steadily increases. Such theories, of which the above provides but a very incomplete summary, are of great importance in drawing up museum programmes for children. That people are increasingly coming to recognize the need for scientific underpinning of museum educational programmes was recently demonstrated yet again when the children's workshop of the Georges Pompidou Centre in Paris

enlisted the help of professional psychiatrists to prepare its exhibition programme for the blind, *Les Mains Regardent.*

Another important task that requires the aid of specially trained experts is evaluation of educational programmes. The better we are able to assess the results of our programmes, the better we shall know how and where such programmes possibly need to be supplemented or modified. Evaluation is no simple matter, particularly as far as the affective consequences of educational programmes are concerned.

Recruitment of educational service staff who, by virtue of their training, can make a specific contribution to educational work in museums is at least as important as the scientific underpinning of educational activities. Moreover, their training will determine the status of such staff in the museum. Generally speaking, educational work would benefit if educational staff were given the same status as professional curators: to mention just one advantage, this would further the development of a balanced plan of activities. At present, there are unfortunately only a few such cases.

Museums in the educational network

As we have already seen in the introductory part of this article, museums can play an important part in helping children to adapt themselves to the world around them. However, they are not obliged to fulfil this function in social isolation: they have any number of possibilities of co-operating with other institutions. The relationship between museums and schools has already been discussed. If libraries are brought into the picture on a regular basis one has a triangular relationship by virtue of which schoolchildren will make regular use of both museum and library as important sources of information.

Other obvious institutions with which museums can co-operate are youth clubs whose members study nature, local history or archaeology in their free time, while the neighbourhood associations to be found in the districts of large towns and the many centres for amateur artistic activities offer further possibilities.

For many of these groups, the museum can be a source of information and inspiration. Consequently, museums can maintain many and varied contacts at local level. However, their educational services must be substantially staffed for the purpose, for maintenance of such contacts, particularly preparation of special programmes for the various groups, demands much time and thought.

Contact with the mass media, such as newspapers, radio and television, is a relationship of an entirely different nature. Regular newspaper announcements of the activities that the educational service of a museum organizes for children will certainly result in more children visiting the museum.

Radio and television can play a particularly useful role in this connection. There are innumerable examples of museum staff giving regular broadcasts for children either from their museum or from a television studio—in the latter case, with objects they have brought along from the museum. In a great many cases, such broadcasts have stimulated curiosity not only in the objects discussed but also in the museum itself. Wherever local radio or television programmes are broadcast, a radio or television programme presented jointly by the museum and one or more of the above-mentioned institutions is an extremely attractive possibility. For children, and of course for adults too, such programmes can be very stimulating.

[*Translated from Dutch*]

Theoretical aspects

4
Museum of Natural History, New Delhi. Child allowed to touch an Ammonite fossil.

Museums and children in Latin America[1]

Sylvio Mutal

Some years ago, while visiting the exhibition of the *Treasures of Chinese Art* in Paris, I was attracted by the sight of a group of schoolchildren with their teacher who were trying to make their way through a multitude of adult visitors like ants in an elephants' world. In another instance, in New York, on a Sunday afternoon, I followed a child of 5 being dragged through the corridors of a vast museum and occasionally lifted up by her parents to see the contents of a showcase, which presumably might interest her. On another occasion, in Lima, Peru, I watched hundreds of children queueing at the entrance of a large museum. They were waiting to commence a procession between the show-cases, mingling with occasional groups of tourists accompanied by a guide/loudspeaker in a foreign language who was suffocating the few words their teacher was trying to get across to them; in addition there were numerous repressive admonitions of 'don't touch', 'keep on walking', etc., meaning practically 'don't look' or 'don't feel'.

What is the issue? I thought. Undoubtedly a visit to a museum by children is regarded by educators, parents and society at large as a means to further and develop the extra-curricular activities and out-of-school education of children. However, in many instances, this aim is not achieved, or even worse, harm is done to children's dearest virtues and characteristics of inquisitiveness, spontaneity, openness, and their desire to touch, to feel, to see, to smell, to live.

The two-way communication expected by the child in any of his behavioural manifestations is for some reason interrupted, broken or frustrated. In today's world, children around the globe, in both so-called developed and developing countries, are in danger of losing their childhood with all its manifestations.

In developing countries, the majority of children, in both rural and urban areas, are compelled to adopt an adult way of life as early as possible in view of the socio-economic conditions prevailing as a result of the ever-growing subsistence/survival economies.

In the so-called developed countries, modern society seems to demand a new kind of member whose sole responsibility is to become more and more passive in the whole decision-making process, losing his individuality and creative spirit in collective thinking. Education, these days, is in most cases aimed at new needs created by modern society and not necessarily at developing the individual's capacity and productive potentialities.

Children are losing their unique chance to be what they are. Science-fiction films show the end of this century as a robot-operated mechanical society. To what extent is this true? How far will man go before revolting against his own scientific creation and trying to balance it with his human and cultural values.

1. Experiences and a study carried out within the Framework of the UNDP/Unesco Regional Project for the Preservation and Presentation of the Andean Cultural Heritage.

The quality of life is being questioned. Attention is now being paid to man's historical consciousness and his participation in the historical and evolution process, particularly when studying past civilizations. Historical consciousness is not, however, exclusively a matter of the past. It is a contemporary issue very much related to today's scientific and technological development and the socio-environmental conditions in which it is taking place.

Museums, as institutions of lifelong education, will have to play a new role in this historical process; to meet this requirement, museums have even been specially designed for children.

Indeed, museums are depositories of historical evidence, of the products of man's creative activity in every sense of the term. Being the guardians of knowledge, the museum cannot be isolated from the child who is to acquire this knowledge throughout his years of growth.

Working in Latin America in programmes of conservation, preservation and revaluation of the cultural heritage, I could not detach myself from the social and psychological reality of children on the one hand and museums as establishments of knowledge on the other.

Undoubtedly, in this part of the world, museums provide very little for the child. They are mostly reflections or repetitions of museums in Europe and the United States in earlier years. The establishment of 'children's wings' or 'youth wings' in museums, let alone children's museums, is a twentieth-century phenomenon found mostly in industrialized countries.

Only a few museums in Latin America have out-of-school activities for children. The most common ones concern artistic creation: drawing, painting, sculpture, ceramics, puppets, etc. When financial and material means are available, special sections are built for this purpose. Otherwise classrooms, auditoriums or even corridors are used. In some museums, games, such as treasure hunts, demanding direct attention to a particular object and visual observation, are used to awaken interest, to provide a distraction and to convey the message that a visit to a museum is in itself rewarding and full of pleasure. Children learn, after all, by playing.

But let us go back to the reality of most Latin American countries. Most museums are not equipped to meet the needs of children nor have they as yet special programmes for children. They are usually situated in large cities far away from where the majority of the young people live. As for the children, most of them never reach secondary-education level. None the less, whether in school or working with their families in rural areas or urban centres, they are full of life and eager to have a recreative day outside their usual routine.

Responding to all these realities, I thought that some activities of an experimental and research nature could be undertaken on the subject of 'the child and the museum' in some Andean countries.

5
Galeria del Banco Continental, Lima. Poster of the exhibition *5,000 Years of Peruvian Textiles.*

Experience within the framework of an exhibition

During the special exhibition *5,000 Years of Peruvian Textiles,* an experimental programme[2] for primary schoolchildren was carried out at the Galeria del Banco Continental in Lima. Class groups of twenty-five pupils (aged 8 to 11) visited the exhibition on appointment in the mornings when it was closed to other visitors.

The purpose of the visits was to get the children acquainted with ancient textiles as a manifestation of the cultural heritage of Peru, relating it to contemporary life patterns in the present Andean population. With the purpose of providing a pleasant, recreative, educational, stimulating and creative visit, the programme, lasting about 90-120 minutes, was carried out in the following phases:

A visit to the exhibit by children on their own (15 minutes).

Two treasure hunts with ten questions each (15 minutes) (Fig. 6).

A discussion between children and animator on some of the objects presented and most liked by the children (15 minutes).

2. This programme was carried out with the collaboration of teachers, educators, museum personnel and psychologists, both national and international. Donations were received from private and public institutions, including Unesco and Unicef. Much of the credit for what has been done and will be done in the future should go to them.

6
GALERIA DEL BANCO CONTINENTAL, Lima. Children participating in a treasure hunt during the exhibition *5,000 Years of Peruvian Textiles.*

This discussion was followed by a slide show and another general discussion on the origin of textiles, history, pre-Columbian cultures, present weaving techniques and rural handicrafts. The children were given materials like cotton, wool, etc., so that they could express themselves in manual work (15 minutes).

Lastly, the children were given the opportunity to draw or paint their impressions on the exhibit (30 minutes) (Fig. *7*).

About 2,000 children from different types of school participated in the programme.

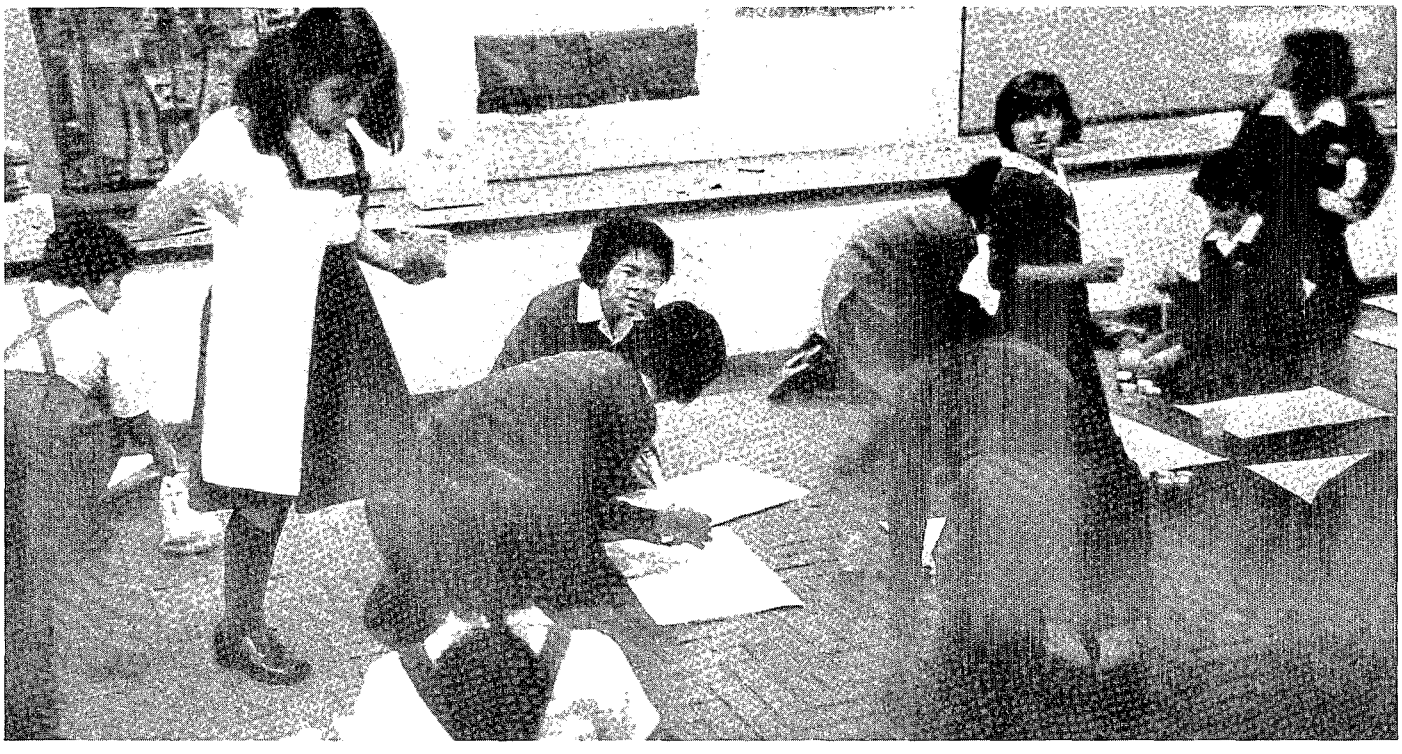
Out of all the paintings presented, some 150 were selected and shown in the same gallery after the textile exhibition closed.

The children's exhibition was entitled *Pre-Columbian Images as Seen by Children of Today.* A special poster and a catalogue were prepared by the children themselves (Figs. *5, 8*). Children then brought their parents and friends to their exhibit. It was interesting to note that when the children visited *their own* exhibition, they recognized through the paintings of other children and their own, the cultures, techniques and conservation problems related to pre-Columbian textiles ans the products of contemporary handicrafts.

Programme of activities for children in the National Museum of Anthropology and Archaeology in Lima

As a result of this experimental programme, the National Museum of Anthropology and Archaeology in Lima started a special programme for children, who visited this museum in their hundreds every day. In this particular case, it was impossible to close the museum to other visitors, but children were taken in groups of twenty-five or thirty to one particular hall where a programme similar to that organized during the textiles exhibition was arranged for them. Teachers who accompanied the children were surprised at times by the excellent and original contributions made by pupils who were not considered brilliant in class, but who responded vividly and with enthusiasm when faced with real objects. Surely a lesson to many educators.

There was no doubt that the knowledge acquired by children in this special programme was far beyond that acquired by large groups who had to visit in forty-five minutes eight huge halls representing 4,000 years of history. Children



7
GALERIA DEL BANCO CONTINENTAL, Lima. Children painting in the museum.

who participated in the special programme expressed, verbally and in writing, their wish to return to the museum and spoke of it with enthusiasm.

The children's comments on the conservation and preservation of objects were of special interest, particularly when they realized that these problems arise as a result of poor conditions of storage, humidity, etc., which occur after excavation. An interesting lesson, again, to make children aware of their responsibility in modern society to preserve the cultural evidence of the past.

As for the exhibition *5,000 Years of Peruvian Textiles,* the schools whose pupils had followed the museum programmes were invited to organize their own exhibition with works executed in the museum by the children.

Again the children produced their own catalogue and poster. The catalogue included a historical background, children's comments and even the text of some compositions written after the visit.[3]

To give the children some idea of the delicate and precise work involved in the conservation of textiles, they did some laboratory work (Fig. 9). Student trainees with fellowships from the Unesco project taught the children how to wash textiles, block them and arrange them so that they would be well preserved and exhibited.[4]

After the opening of the school exhibition, for which the children made invitation cards inspired by textile motifs, all the children participated in games about textiles such as crossword puzzles and questionnaires, even during their lunch hour.

In this way, children took the museum to school, using their own paintings as objects with a total sense of freedom of expression. Here again, one can think of ways and means of stimulating and educating schoolteachers to prepare such programmes. A temporary detachment of schoolteachers to museums so as to ensure interaction between the two institutions should not remain just a dream.

A research project in museums and schools in Bogotá

As a follow-up of this first experiment in Peru, the UNDP/Unesco Regional Project is at present sponsoring a major research project on the 'Museum and the Child.'

This project has started in Colombia where an international colloquium on museology and cultural heritage was held recently. At that meeting the impor-

3. Here is a composition by a 10-year-old child: 'This basket was found in Chancay. It is 25 cm long and contains rolls of light and dark brown thread. It is very old, almost 900 years old. This basket was made from a material called "mimbre". I think that when a woman went to the meadows, she took along some rolls of thread and a piece of wool on which to weave her textile. When she was thirsty, she left the threads and went to drink some water from a nearby stream, but when she came back, she saw that her rolls of thread had slid away. She picked up some bamboo and made a basket to keep her rolls in so that they would not be lost again.'

4. Some samples of old textiles were actually shown in the children's exhibition.

tance of lifelong education and the role of museums in the community as a centre of communication and dissemination of information were stressed.

The research project is being carried out in five major museums in Bogotá (Museum of Gold, Museum of Modern Art, Museum of National History, Museum of Archaeology and the National Museum). It will evaluate the present state of these museums in so far as their resources and programmes for children are concerned and subsequently propose to them programmes responding to the needs of the child.

The research project comprises two phases: phase one is a survey at the museums mentioned above of the types of visitor, their opinions on architecture, space, organization, personnel, information media, services and the way the public would like to see the museum function.

During this phase, museum personnel are interviewed about the objectives, organization of the museum and programmes of research, cultural extension, human and technical resources, training, etc. Their views on various services are also sought, for instance, coffee shops, libraries, reading rooms, lecture halls, etc., and the way these services are integrated with others. Data will also have to be obtained about the teaching methods which are being used: notice boards, bulletins, catalogues, guide services, etc.

Another questionnaire distributed in schools will provide information on how the child perceives a museum and how he would like it to be. The questionnaire, comprising seven sets of questions, will be written so as to provoke reactions to the phrase 'visit to the museum', with counterposed adjectives such as 'pleasant/unpleasant', 'beautiful/ugly', 'clean/dirty', 'fun/boring'. This method will also be used with children who visit different museums between and after each visit so as to establish their preference for different kinds of museum as well as to evaluate the effectiveness of a museum in changing attitudes and perceptions.

Based on the results obtained in phase one, a general plan and specific programmes will be presented to museum directors with the aim of developing activities leading to better and fruitful integration of museums with the world of children.

Phase two is similar to the experimental programme carried out in Peru. It is based on the hypothesis that a group of children between 8 and 10 years of age, attending public or private schools, and following an educational programme of a dialectic nature with a recreative, imaginative, participatory and creative spirit, will have completely different reactions in their reponses to an evaluation questionnaire from those of a group of children who do not follow such a programme.

A group of educators and psychologists have already tabulated the early returns of the investigations, which have proved so far that the hypothesis is valid. Groups exposed to the programme have an 84 per cent accomplishment rate, as against 53.78 per cent for the non-exposed group.

Although there is no doubt that special programmes and exhibitions for children should be organized in museums, many questions remain unanswered and unresolved. Is the financing of such programmes a luxury in developing countries? Personally, I believe that if programmes for and with children are to have a meaning for the child and society at large, they should be a collective responsibility. Student volunteers, communal action groups, teachers, museum personnel and children alike should work together in a spirit of self-help, imagination and participation.

While thinking of programmes for children, museums should not forget the necessity of arranging programmes and exhibits on the child. The International Year of the Child (1979) offers a good opportunity for such activities.

Another question that comes to mind concerns children who do not have access to museums. Should there not be special travelling exhibitions for children and educators alike on themes ranging from cultural heritage to contemporary development issues, such as housing, agriculture, nutrition, health, etc., related particularly to the conditions in which a child and his family live in rural areas or shanty towns?

8
GALERIA DEL BANCO CONTINENTAL, Lima. The exhibition's catalogue is prepared by the children themselves.

9
MUSEO NACIONAL DE ANTROPOLOGIA Y ARQUEOLOGÍA, Lima. Children doing practical work on textile conservation in their school laboratory.

The types of programme described above should not be limited only to museums. A visit to a historical site, a historical town, the outskirts of the city, a factory, should also be organized in a dynamic way. Is not cultural tourism, as it is often called, a way for children to discover the realities of their country and the world they live in?

I should like to add that there is something of the child in us all which needs constant nourishment if we are to remain young. It is to the child in all of us that the museum should address itself in the future.

Museums and children in Australia

John C. Hodge

I am indebted to Dr V. Havyatt[1] for pointing out in her essay 'The Museum and the Child' that children and museums have always gone hand in hand, though not always willingly. According to Floud,[2] few museums made special provision for children before the 1920s. However, by the middle of the nineteenth century museum visits by schoolchildren were well established provided they were accompanied by an adult. The situation in the United States of America was far more tolerant and there are comments by visitors on the obvious wonderment of young children (some of them from working-class families) who were permitted to visit museums unaccompanied.

In Australia, a similar pattern of development to that which occurred in the United Kingdom took place. The regulations of the Australian Museum in 1892 show that this was so: 'Children under 12 years of age shall not be admitted to the Museum unless accompanied by a responsible adult.' By contrast, in 1977, adults questioned on the purpose of museums, in a survey in one Australian city, stated quite strongly that museums were for children!

The idea of sending organized parties of schoolchildren to a museum began about the end of the nineteenth and the beginning of the twentieth century with the Louvre being among the first to welcome school groups. In regard to these groups the more progressive museums began to re-examine their role and gradually set about providing education departments in their institutions.

It is most regrettable that even today when education is mentioned in relation to museums the narrow concept of education (formal learning situations, schools and children) comes most readily to the mind of the adult visitor as well as of the curators and other museum staff. This view of museum education appears to be widespread throughout the museum community not only in Australia but overseas as well. It is the result of several factors, but principally a consequence of museums realizing that children are not miniature underdeveloped adults. The museum administrators set about catering specifically for children. The successes which these museums enjoyed, including special children's galleries within the museum or, as in the case of the United States, the setting up of children's museums, encouraged other museums to make special provision for children in organized school groups.

Doubtless the proportion of schoolchildren in the overall attendance of most museums today is quite high, but should they be segregated to children's museums or children's galleries? I am not going to debate the pros and cons of children's museums which are published elsewhere,[3] but I would like to emphasize the fact that adults get such a good deal of pleasure out of museums for children and,

1. V. Havyatt, 'The Museum and the Child: An Historic Review of Social Attitudes', unpublished essay written as part of the prescribed work for the Diploma in Museum Studies, University of Sydney, Australia, 1978.

2. Peter Floud, *Museums and Young People*, Paris, ICOM, 1952.

3. ibid., p. 3-11.

10
AUSTRALIAN MUSEUM, Sydney.
Entrance to the Arid Zone Gallery. 'It makes you feel like you're going into the desert,' said a 9-year-old boy.

on the other hand, children get equal pleasure out of museums presumably designed for adults (Fig. *10*), that I wonder why we need separate institutions. Perhaps there is a lesson to be learnt here by museum designers, curators and education staff. I recall my own particular pleasure in the children's gallery in the Metropolitan Museum of Art in New York some eight years ago and could not understand why the exhibition (concerning art techniques) was not in one of the main galleries.

This does not mean that all displays should be directed at a very young audience. However, many displays appear to be constructed without giving due emphasis to the objects themselves which become secondary to labels, graphics, audio-visuals or overall design. Today, more than ever before, our children are subjected to a great variety of two-dimensional media, particularly television. While this means that they are able to be informed or entertained, this is a second-hand experience. Only the museums with their real objects are able to supply the tangible material missing from their everyday experiences.

During the last decade museum educational research has been concerned with evaluation studies of exhibits and programme effectiveness. Experimental research has been applied to factors affecting visitor-learning and behaviour. Recently we have made an attempt to determine how children and their teachers perceive the museum environment.

The data collected so far still remain to be examined critically but some patterns are emerging. One important factor is that a single school class can show wide variation in interests and needs and that the teacher of a class often sees the visit as being successful whereas the children do not. Rather than being concerned with children and museums, we need to look carefully at the child and the museum.[4] Most children appreciate the opportunity of getting out of the classroom, but if the museum visit is boring or frustrating, then they are unlikely to want to return in the future. Ideally, children should be separated into small

4. Graham C. Morris, 'Museum Education Training', a conference of the Museum Education Association of Australia, Sydney, Australia, 1977.

11
AUSTRALIAN MUSEUM, Sydney. Space for schoolbags needs to be provided.

manageable groups of similar ability and interests, yet this is often impractical for reasons of staffing and available facilities.

Many children request more films in the education programme, and this should be disturbing to museum educators because the most important thing should be the real objects that give the museum its *raison d'être.* Why should children come to museums for experiences that can be provided in the school classroom? Sometimes the museum, with its greater access to resource material and its ability to spend a longer time than the class teacher, can lead the way to teaching innovations such as simulation gaming[5] or team-teaching or drama,[6] especially when the museum display galleries are relevant to the topics being studied.

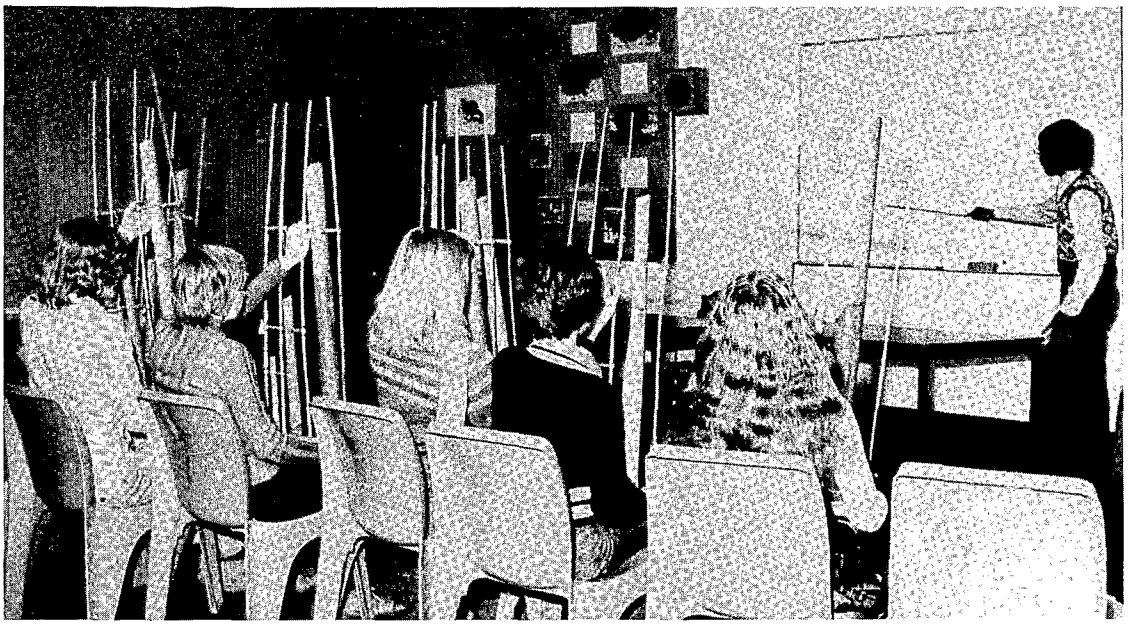
Audio-visuals as used in a museum programme need to be exciting, well-produced and should not attempt to convey more than three or four major concepts in less than half an hour. The use of real objects in an audio-visual presentation creates additional interest and is more relevant to the museum environment.[7] By such changes of pace and variety, children rarely become bored.

Most teacher-training courses fail to teach prospective teachers how to use real objects for creating interest and communicating knowledge. They also fail to include training on how a school excursion, such as a museum visit, should be conducted. Consequently, the museum education staff, most of whom are recruited from the school system, lack proper training in these areas and also lack the basic museological knowledge to enable them to see the education service as part of the whole museum philosophy. As a result, many children do not perceive the museum visit as a satisfying, enjoyable experience and think of it as 'like school'. Museum education requires different kinds of approaches and techniques from the more formal education of the school classroom. In addition, children learn how to use a library when quite young but they get no such instruction on how to use the museum and unfortunately neither do their parents or other adults.

The museum environment—its appearance, collections, facilities and staff—can work to provide a comfortable atmosphere for children (Fig. *11*). However, any one of these can be disturbing for some children. An attendant who shouts, cramped working areas or lack of cloakroom space can destroy the objectives of a visit.

Children like doing things in a museum, particularly when they can take home evidence of their work, such as making a plaster cast from a real fossil impression, or perhaps learning a new skill associated with some aspect of the museum's collection (Fig. *12*), such as performing on an unfamiliar musical instrument. The Art Gallery of New South Wales, as a consequence of the Columbian Gold exhi-

5. John C. Hodge, 'Simulation Games', *Kalori* (Journal of the Museums Association of Australia), No. 53, December 1977, p. 20-5.
6. John C. Hodge, 'Drama in a Museum Education Programme', *Kalori,* No. 49, November 1974, p. 15-20.
7. John C. Hodge, 'Audiovisual and Participatory Exhibits', *Kalori,* No. 54, June 1978, p. 59-60.



12
AUSTRALIAN MUSEUM, Sydney. A lecturer in Indonesian studies at the University of Sydney instructs members of the museum's Discoverers' Club in the playing of *anklungs*.

13
QUEENSLAND MUSEUM, Brisbane. A painting by a 6-year-old boy of his impressions of a visit to the museum was reproduced as a Christmas card by the museum.

bition, provided information on the making of objects like those of the exhibition using metal foil. Many children recall the major exhibition in a museum's entrance area. In the Queensland Museum at Brisbane it is a lion, and a drawing of this in a follow-up activity by a 6-year-old boy (his impression of the museum) was used for that museum's Christmas card (Fig. *13*). Children like to see their work exhibited in the museum and so do their parents. Children are fascinated by craftsmen demonstrating work unfamiliar to them—blacksmithing, wood-turning, pottery, etc. Many examples of museum experiences and special programmes for children could be given. A recent example in an Australian historic park consists in teaching children in a historic school-house using costumes, materials and school equipment of the 1850s at the Sovereign Hill goldmining township in Victoria. Young children not only enjoy it, they learn to appreciate the similarities and differences in relation to their own schooling as well as gaining valuable insights into the history of their own country.

The course for museum educators is clear—to motivate for learning to occur in enjoyable, exciting, innovating, interesting and dramatic ways. The task is not easy but the rewards are great and many adult visitors will enjoy similar experiences either with their own children or with others of their own peer group.

The museum and the childin the United States and India

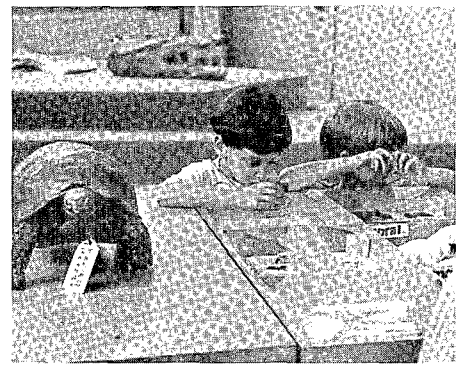
S. M. Naïr

14
CARNEGIE MUSEUM OF ART,
Pittsburgh. Creativity activity for children at the 'Imaginarium'.

An old Chinese proverb, 'I hear and I forget; I see and I remember; I do and I understand', underlies the very concept of a new approach to educational programmes and activities for children in museums. Exhibits in a museum, no doubt, provide a fund of information useful to children. But they often tend to become mere exhibits devoid of the kind of experience necessary to enhance the quality and efficiency of communication at a level that a child can perceive. A child's ability to perceive is dependent upon how he correlates an object or a situation with his personal experience and responds to it. An understanding of the child's learning process is therefore fundamental in evolving effective programmes for children in the museum.

An awareness of the above basic concept in educational programming for children can be seen vividly in some of the contemporary museums such as the Exploratorium in San Francisco, the Laurence Hall of Science, Berkeley, California, and the Children's Museum, Boston, to quote only a few examples from the United States of America. These dynamic institutions display a total departure from traditional museums. Their experience has also made an impressionable dent in some of the traditional museums in evolving certain programmes and activities which can be described as experience-oriented. The Discovery Rooms at the Smithsonian Institution's Natural History Museum in Washington, D.C., the American Museum of Natural History, New York, the 'Please Touch Museum' at the Academy of Natural Sciences, Philadelphia and the 'Imaginarium' at the Carnegie Museum, Pittsburgh (Fig. *14*) are examples in this direction. These museums and museum programmes with provocative exhibits and activities demonstrate the tremendous advantage of direct participation of children.

Museums all over the world have in the last two decades evolved a large number of educational programmes for children. These include structured tours for school groups, museum classes for schoolchildren, creative activity in arts, crafts and the sciences, hobby clubs, demonstrations, competitions, etc. Many museums have also developed educational kits for loan to schools to enrich classroom teaching in different subjects. These have now become the common types of activity of museums that are committed to the cause of educational work for children. Discovery-oriented programmes for children have now added a new dimension to the educational function of the museum. The Children's Museum in Boston is an excellent example of an entire museum committed to this kind of educational communication.



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Museum of Natural History, Smithsonian Institution, Washington, D.C. Children examining objects in the Discovery Room.

The Exploratorium in San Francisco is a museum for touching, hearing, seeing and exploring exhibits in the field of science, technology and human perception, a centre which encourages playfulness, where interaction is the route to discovery. The Discovery Room, a concept which was given shape for the first time at the National Museum of Natural History in the Smithsonian Institution, Washington, D.C. (Fig. *15*), followed by the Academy of Natural Sciences, Philadelphia, the American Museum of Natural History, New York (Fig. *16*) and others provide children with a unique and informal facility for learning by doing. In these, young children find a bounty of objects to handle, to learn about and to enjoy leading to an appreciation of their aesthetic or scientific value. The 'Imaginarium', a programme of the education section of the Museum of Art, Carnegie Institute, Pittsburgh (Fig. *17*), is yet another novel idea in the field of creative museum education. It is designed to help children and teachers explore their own creative capacities and to use the resources of the Carnegie Institute. The programmes range from performances to classes for children. These experiences are planned around themes such as *A Search for Shapes, Masks, Myths and Monsters, Colour-Go-Round,* etc.

Among the exhibits in a museum, those that have an element of actual participation and involvement hold out the highest potential and greatest promise in communicating with children. Many such examples could be found in various museums: the walk-through heart at the Franklin Institute, Philadelphia, and the Museum of Science and Industry in Chicago; the live animal exhibits such as

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16
American Museum of Natural History, New York. Natural Science Center for Young People. Introducing the wildlife and geology of New York City to children.

17
National Museum of Natural History, New Delhi. Children participating in a painting contest on wildlife.

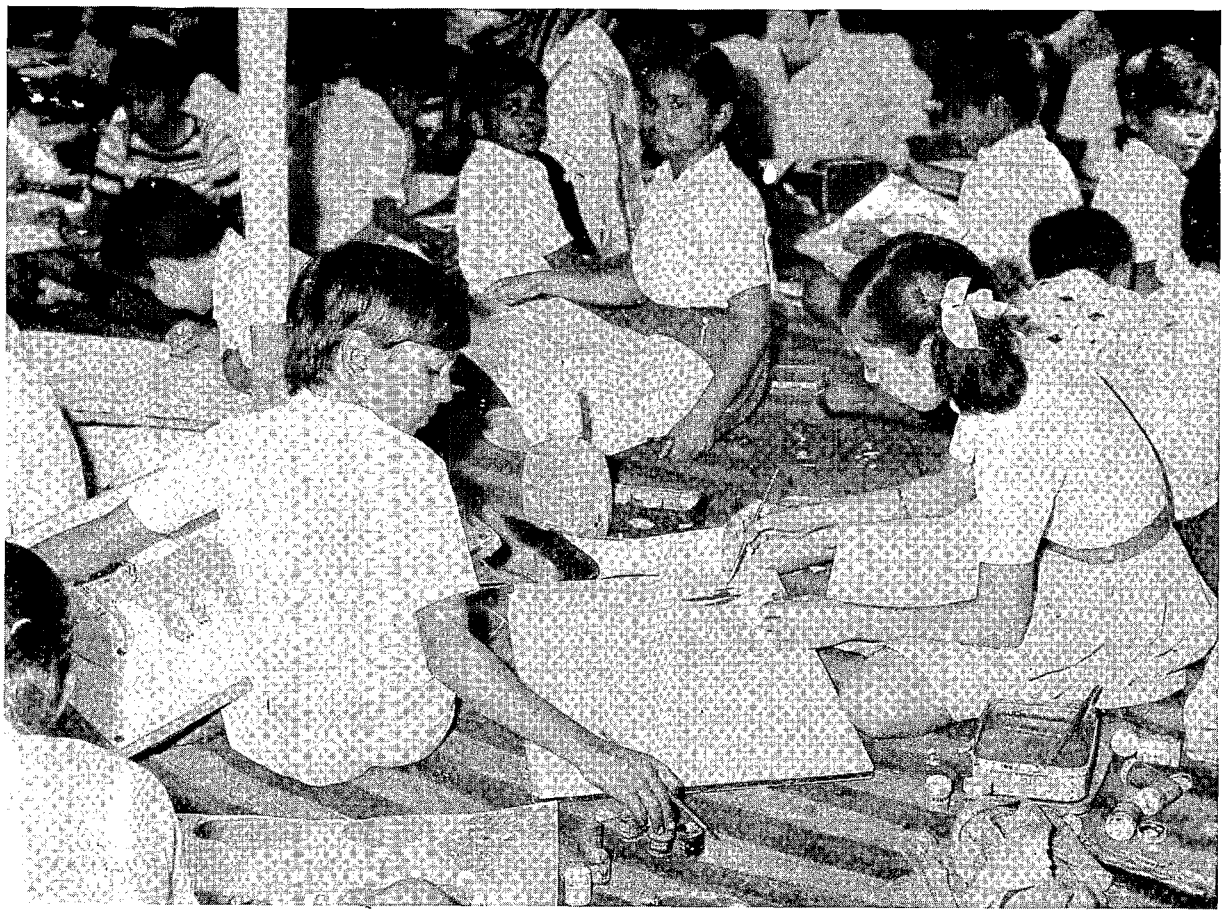
18
National Museum of Natural History, New Delhi. A child examines a 'discovery box' of spiny-skinned animals.

19
National Museum of Natural History, New Delhi. Children participating in a quiz exhibit in the Discovery Room.

the insect zoo at the Natural History Museum of the Smithsonian Institution, Washington, D.C.; exhibits depicting the structure of the Geological Museum, London; the submarine exhibit at the Deutsches Museum, Munich; the cave exhibit at the Cincinnati Museum of Natural History; the large number of participatory exhibits and demonstrations provided by the Palais de la Découverte in Paris, and other science museums all over the world are examples of exhibits and programmes involving the actual participation of visitors.

Programmes and activities in natural history museums often cannot be confined to the four walls of the museum. In fact, the most realistic natural studies can be provided only in the field. The museum of natural history should therefore be considered only as a starting-point to initiate children in understanding nature and in inculcating the required kind of interest in observing and learning more in the actual environment itself. For successful nature study programmes, the museum can organize suitable outdoor activities for children. An excellent example of this kind can be seen in the *Outdoor Biology Instructional Strategies,* a programme of the Lawrence Hall of Science, Berkeley, California. OBIS is an outdoor biology programme giving young people between the ages of 10 and 15 years the experience of observing organisms and events in the out-of-doors. This programme encourages children to investigate the interrelationships and interactions of plants, animals and the physical environment, including the role man plays in the natural scheme, forming a basis for understanding basic biological relationships. This understanding promotes the development of a general consciousness required to support appropriate management of man's environment.

The contemporary museum scene in India also holds out promising possibilities. Several new museums in the field of the arts and sciences are in the making, and many of the traditional ones are undergoing radical changes in their approach to educational communication. Museums of science and technology during the last two decades of their growth have woven into their structure a large number of educational programmes such as extension services for schools, mobile science exhibitions for the rural public, competitions and science fairs, teacher-training



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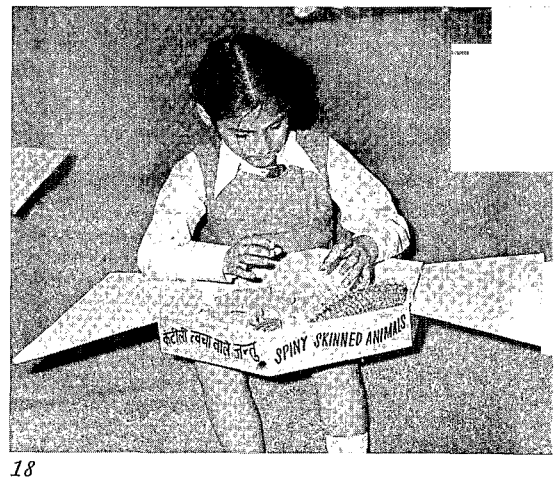
programmes, etc. Even art museums have slowly come out of their conventional shell confining them to collection, display and research, and have introduced educationally viable 'out-reach' programmes. In New Delhi, the National Museum's 'propagation of culture' scheme for schools is an example of this new approach. It provides a package deal comprising a workshop for teachers on the use of visual material for teaching art and culture and an educational kit (consisting of a set of selected replicas representing Indian art and archaeology, a selection of colour transparencies, a slide projector and a tape recorder with taped lectures to be used by teachers) for the participating schools.

The National Museum of Natural History in New Delhi, a newcomer on the museum scene in India (opened on 5 June 1978) has a large number of programmes for the benefit of children. These include a 'Discovery Room' (Figs. *4*, *17*) providing opportunities for children to handle and examine specimens, to interact with live animals, to participate in creative activities, such as modelling, painting and conducting simple science experiments as well as discovering information contained in a large number of 'discovery boxes' (Fig. *18*). This unique area also provides a mini-library corner for children. Other educational programmes include an 'Exhibit Bank' of school loan kits on curriculum-based topics to be lent out to schools, occasional programmes for children, such as painting and essay competitions on environmental themes, outdoor biology picnic programmes and a large number of curriculum-oriented museum displays, participatory exhibits, quiz programmes (Fig. *19*), etc. The museum itself is designed as an invitation to adventure, inquiry and exploration.

Children today need carefully planned learning situations capable of holding their attention and interest and creating a sense of inquiry and learning through actual participation. For this they need experience and not mere exhibits alone. With imaginative planning every museum will be able to devise at least some such programmes for children in their respective fields. Let us remember the old Chinese proverb again, 'I hear and I forget; I see and I remember, I do and I understand.'



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Case studies

Children and museums of Botswana

Doreen N'Teta

Recently, I attended a meeting of a women's organization where there was a discussion on what women should do to commemorate the International Year of the Child. The meeting lasted until very late, and some of us began to worry about our children whom we were neglecting. I should have thought that women above all know all about the needs of children, and that this year was meant to remind governments and men that they have a responsibility towards children.

Nowadays museums organize a variety of things for children, including running crèches while parents are looking at museum exhibits. Many museums have activities for the underprivileged children in their communities. Some have clubs to which only a few children can belong because of limited space, time and teachers. These are all commendable but they are the responsibility of museums. In so far as museums are open to all, these clubs should be run for children.

During this International Year of the Child, museums are fortunately not alone in the struggle to make children happy. Children will have many opportunities in which to express themselves—writing, drawing, sculpture, drama, etc. The National Museum of Botswana is no exception. During the last three years, we have concentrated a great deal on children, especially primary schoolchildren. We have produced material for primary schoolteachers and schoolchildren. Our teachers' guidebook has some examples of things that children could do when visiting the museum.

In a paper written for a Unesco study[1] I mentioned the size of the country—Botswana measures 570,000 sq. km and has a predominately rural population of over 750,000. The country is semi-arid and 85 per cent of it is covered with Kalahari sand. There are problems of poor communications, poverty and illiteracy. Many of the schools are poorly staffed and badly equipped.

This short and sketchy background will serve to show the problems extension workers have to grapple with. If 80 per cent of the population is rural, is a national museum in one town justified? The Botswana National Museum is trying to remedy the situation in three different ways: first, by encouraging and bringing children to the National Museum; second, by encouraging the establishment of local museums; and third, by providing a mobile museum service for rural primary schools.

We believe we have made museum visiting more interesting for the children. We thought 1977 was a good year because school parties had started coming as early as April, compared with previous years when teachers brought their school-leavers at the end of the year to fill in time. The first groups started coming in January 1979, and by 31 March there had been seventeen group visits with

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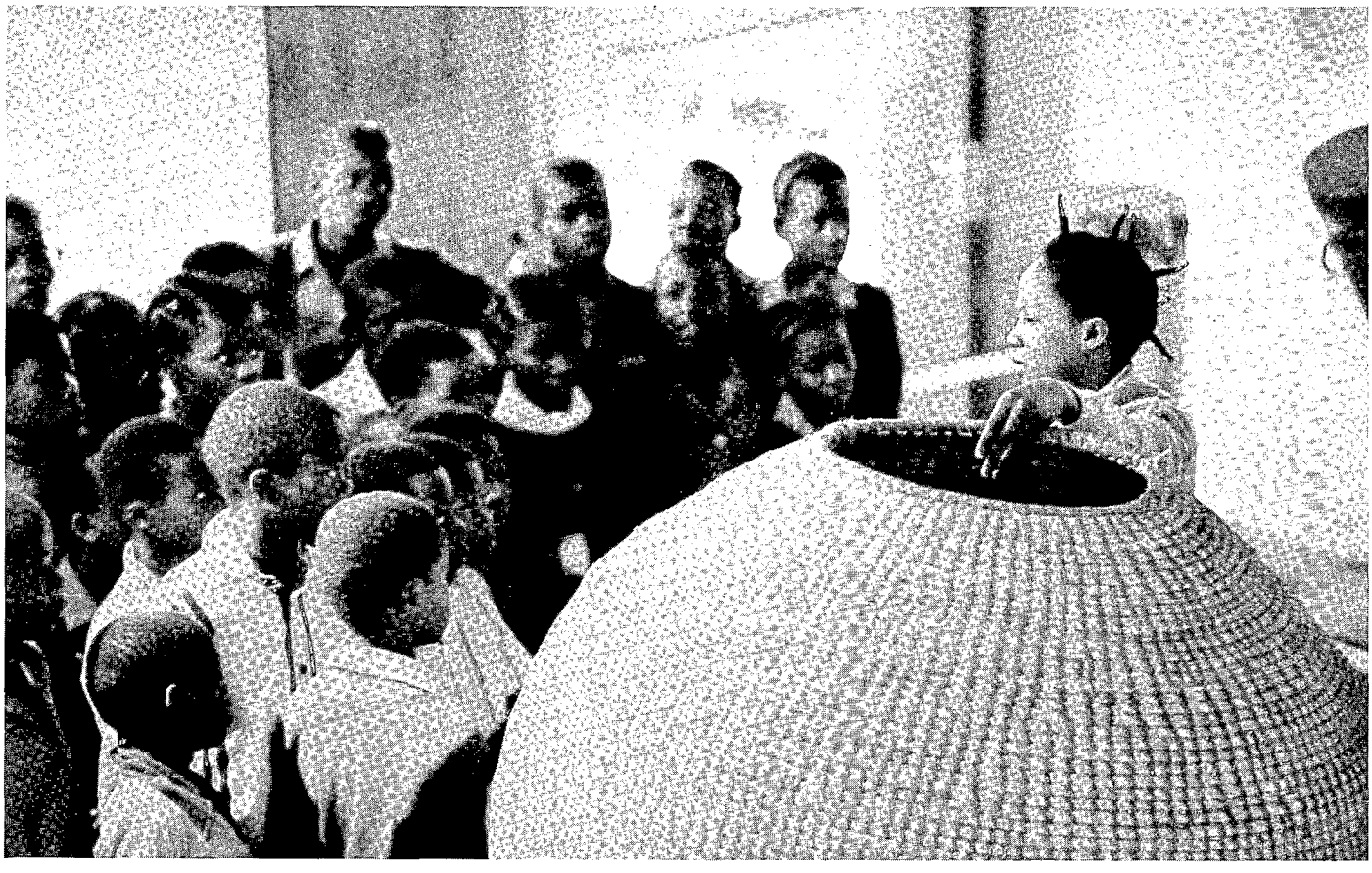
National Museum of Botswana, Gaberone. A dangerous situation! A little girl lifts up her friend for her to look at crocodiles in a pit.

1. 'Museums as Educational Instruments, a Study for Unesco on Out-of-School Activity', Paris, Unesco, January 1978.



21
During a guided visit, the children stop to look at a wickerwork receptacle.

a total of 786 students. Generally, a group is first given an orientation talk and then it is divided into sub-groups which are shown round the museum (Fig. *21*) and art gallery. When they come back they are given reference books and they then go off again in groups. Lastly they are shown a film or slides. Smaller groups are given objects to handle and discuss their uses. For instance, a trunk full of Basarwa (Bushman) material, consisting of cloaks, loin cloths, digging sticks, bows, arrows, quivers, leg rattles for dancers, powder puffs, beadwork, water containers, etc., is put before them and the students are asked to pick out the three most important items necessary for survival in the bush. A great deal of discussion usually follows such activity.

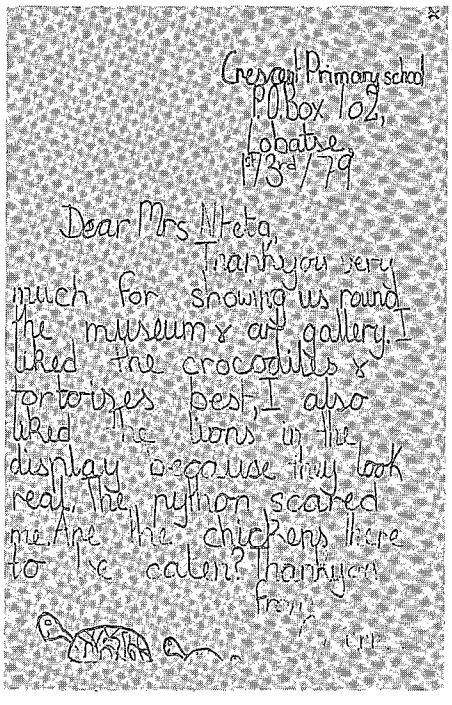
In previous years we have organized an Easter-egg hunt in the museum grounds. We ask for donations of hen's eggs and have these boiled and then decorated by the art club children. It is great fun.

This year we are putting more in the package for children. For the older child (7 to 15) we hope to have a self-portrait drawing session. Each child will bring a self-portrait and a mirror. The drawings will be displayed in the hall, then a lesson on how to draw will be given, after which the children will draw another portrait of themselves following the hints and methods given by the teacher. The first portrait and the second will hang side by side.

Although we visit schools on request, we always encourage the teachers to bring the children to the museum. We can, of course, take some exhibits to the schools, but this is difficult. If asked to do so, we will make a small display for a school, using museum materials.

There are other places in Botswana which either have local museums or are trying to establish them, for instance, the Phuthadikobo Museum in Mochudi, forty kilometres from Gaborone to the north. The National Museum has loaned some material to this museum, which is proving to be a very good centre for local history. Successful temporary exhibitions have also been held there.

As mentioned earlier, due to difficulties in communication and the long distances between the National Museum, district museums and the rural population, the National Museum, with the help of the Ministry of Education and equipment from Unicef, is going to run a mobile service for remote areas. It is hoped that the van will be on the road in 1979. This service, which is mainly for primary schools, will be offered to the whole community in the evenings. The exhibit


Gresham Primary school
P.O.Box 102,
Lobatse
13rd/79

Dear Mrs Mfeta,
Thankyou very much for showing us round the museum & art gallery. I liked the crocodiles & tortoises best, I also liked the lions in the display because they look real. The python scared me. Are the chickens here to be eaten? Thankyou
from

23 (a), (b)
Children's letters following a visit to the museum.

22
Children looking into the crocodile pit.

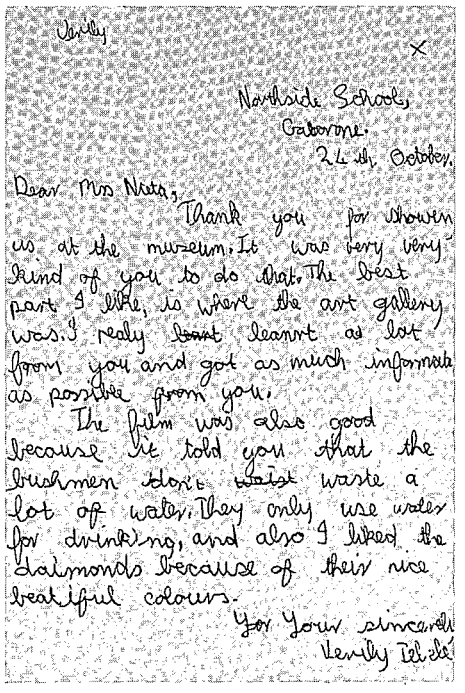
material consists mainly of films, pictures and photographs with a few traditional museum items.

The idea is to make schoolchildren aware of the diversity of the culture of their country and of their environment, and to try and widen their horizons by providing them with information which is not included in their school syllabus (Figs *20, 22*). It is hoped that the lectures will stimulate the children to find out more about the world they live in. We have found that people's experience in a rural setting is so limited that any kind of extra information is always welcome.

The National Art Gallery has been running national art competitions for four years. These competitions are open to all residents and citizens of Botswana. Children's entries have always been more numerous than those of adults, and our children have also participated in international exhibitions in different parts of the world. This year we are devoting a whole room to children's work and are displaying adults' work separately in a smaller room. Children are always enthusiastic about entering the competition and we hope that some of their good work will go to international exhibitions and displays commemorating the International Year of the Child. The National Museum is planning to have an arts centre and a children's room with displays aimed at children. A survey in the city of Leeds, in the United Kingdom, conducted by students of the Museums Association one morning in 1970, showed that the majority of museum visitors were children. Adults who were interviewed in the street said that they had last visited their local museum as children and had not been back since, nor had they taken their children there. This certainly is the case in our museum. One wonders, therefore, if museums should be built for children rather than adults and scholars.

As we continue to build more displays in our museum we ask ourselves constantly if we are reaching our audience—the children. One should continually ask oneself this question so as not to lose sight of the goal. Even though we seem to be reaching the children, we should always have them in mind when we mount displays. I believe the most successful exhibit we shall ever have will be the mobile exhibit for primary schools. We all seem to overestimate the understanding of adults, especially those in the rural areas where many are illiterate.

Figures *23(a)* and *23(b)* reproduce comments made by children after a visit to the National Museum and Art Gallery. A new approach to an introduction to the Art Gallery produced very good results.



Dear Mrs Nketa,

Thank you for showing us at the museum. It was very very kind of you to do that. The best part I like, is where the art gallery was. I really learnt a lot from you and got as much information as possible from you.

The film was also good because it told you that the bushmen don't waste a lot of water. They only use water for drinking, and also I liked the diamonds because of their nice beautiful colours.

Yor Your sincerely
Kenny Tebele

23 (b)

Children and the Natural History Museum, Santiago, Chile

Grete Mostny

Children and museums[1]

Remembering

When I was a little girl visiting museums for the first time, my feelings were the same as those Alice must have experienced in Wonderland. One goes through a door (or a mirror—the result is the same) and enters another world—a mysterious and exciting reality far removed from everyday life, arousing in the depths of one's being the sensation described in Greek as *thaumázo*: a feeling of wonder, amazement and curiosity which is at the root of all science and creation.

The unreality of reality

This same feeling of wonder and mystery was expressed by a little boy, only just 5 years old, who said, when entering the museum with three small friends and their schoolteachers, 'We've come to a mysterious land', and, again, by a 12-year-old girl when she exclaimed, 'It is like a fantasy to see prehistory in real life'. Another small visitor requested 'something full of suspense and terror' which he believed would complete this wonderful world of the museum, where everything seems possible. Another less courageous visitor commented that it was fortunate that the animals were dead, because if they had been alive, they would have been terribly dangerous, while one little girl, more romantic than the boys, said she liked the museum because the animals 'seemed about to come back to life'.

The real thing

In general, the children like the museum because the objects—animals and archaeological and ethnographic artefacts—are 'real', and they ask for the displays to be even more realistic. They want the clothes and accessories to be displayed on people (mannequins); they want the Indians' huts to be shown; and they want to see a replica of the jungle with the animals that inhabit it, showing how they live and what they eat. The children would like the prehistory rooms to exhibit not only the objects, but also the people who made and used them: as one child said, 'It should be made more realistic.'

1. This article is based on experience and observation in the National Museum of Natural History in Santiago, Chile; most of the survey material covering children between 5 and 14 years old was compiled by the museum's teacher-guides.

The image of the museum

Most children who visit the museum for the first time admit that they had imagined it differently: smaller and much less attractive. They are surprised by the size of the rooms[2] and the great number of species and objects exhibited; they find things 'never seen before' and that are 'out of the ordinary'.

But they are also critical: they ask for more colour, the museum should be more cheerful, not so gloomy and dark. (I must admit that I agree with them completely, but there would be no point in explaining to them the reasons for these shortcomings.) Some of the children criticized the absence of seats: apparently the phenomenon known as 'museum feet' manifests itself at an early age.

Surprisingly, the children do not object to the glass display cases housing most of the objects. Despite the fact that they would like to touch the animals and handle the artefacts, their almost unanimous opinion is that the cases are necessary, because children (not they themselves, of course, but others) would destroy the objects if they were within reach.

In general, the children consider the visit to the museum, especially the first occasion, to be an outstanding event in their young lives.

The favourites

The favourites are the very large objects: the blue whale and megathere skeletons, which also have the attraction of showing them bone structure which is usually hidden by skin. The bison, the giant Japanese crab and the tiger (Fig. *24*) follow in order of preference. Several children commented on the beauty of the tiger as well as on that of certain birds. One of the young visitors suggested that the large animals be placed near the museum entrance, to create an even greater impression.

Closely competing with the animals are the prehistoric objects, one of which, the 'frozen child'[3] holds first place. It is the great antiquity of these objects that impresses the children. One girl, for instance, wanted to see 'the oldest of all the peoples of the world', adding with resignation that she knew this was not possible. Others ask to see more mummies.[4]

Pleasing the customers

Although the directors of the museum think that the number of exhibits is more than sufficient, the children do not agree. They want to see more fish, more insects, elephants and mastodons; human fossils, minerals, examples of cultures from other continents (especially Greek and Roman); 'pieces' of the human body, prehistoric animals, machines,[5] rockets and flying saucers.

On the one hand, the children prefer enormous objects and the display of a large quantity of specimens and artefacts and, on the other, they want 'more reality', which in their language means a better display in more natural surroundings of the objects exhibited. These factors should be considered by museum specialists when they think about creating museums for children and perhaps not only when they are for children.[6]

Reasons for visiting the museum

The children from 5 to 14 years of age who were interviewed by teacher-guides over a period of several years visit the museum for different reasons.

The largest group of visitors is made up of school classes who come at least once a year. After these visits the children are assigned work on certain subjects selected by the teacher or chosen by the students themselves. This obligation usually creates the need for another visit, not as a class, but in small groups or individually.

24
MUSEO NACIONAL DE HISTORIA NATURAL, Santiago, Chile. A little girl cannot resist the temptation to stroke a stuffed tiger cub.

2. The museum is housed in a former palace with a surface area of approximately 4,800 square metres of exhibition space on two floors.

3. The frozen body of a child approximately 10 years old, dressed according to Inca custom, was discovered in 1954 at 5,400 metres above sea level near the summit of Cerro El Plomo, and dates from approximately A.D. 1500.

4. Bodies from prehistoric graves in the north of Chile which, due to the desert climate, desiccated instead of decomposed.

5. In Santiago there is no museum of technology; there are plans for the creation of one, and a project has been drawn up by Dr Daniel M. Macmaster, President Emeritus of the Chicago Museum of Science and Industry.

6. The division into cultural and scientific galleries of the Musée National des Arts et Traditions Populaires in Paris, created by the museologist, Georges Henri Rivière, comes close to these ideas.

25
A group of pre-primary children with their 'aunt' (teacher) study a relief map of Easter Island.

26
A discussion around an Antarctic cormorant.

Another group, a smaller one, is made up of children who come by themselves or accompanied by a relative. These visits are often the result of previous ones. The main motive is curiosity and interest, as the students have no study obligations.

A third and also fairly large group consists of members of the Juventudes Científicas de Chile (Young Scientists of Chile), whose headquarters are in the museum. They no longer regard themselves as visitors, but as belonging to the museum. The exhibition rooms hold little interest for them as their concern is study and research in specialized fields, for which the museum offers facilities and contacts with researchers and laboratories.

Museums and children

The museum services offered to the children are mainly of two types: one provided by the museum's education department and the other by the Young Scientists of Chile.

The education department

This consists of a group of teacher-guides with specialized knowledge of the museum's basic themes. As a result of the close co-operation with schools, includ-

27
A member of the Young Scientists of Chile explains his project to a visitor in front of his stand at the Young Scientists Fair which has been held every year since 1970.

ing private secondary schools, the most important museums in the country are able to provide such services.

The teacher-guides receive visiting classes and take them through the exhibition rooms, providing appropriate explanations and trying, at the same time, to awaken in the children a love of nature and the desire to protect it. During subsequent visits, when the children arrive in smaller groups, the teacher-guides give talks illustrated with slides and specimens, as well as objects that the children can handle. They are available for consultation and advise the children on their work, using catalogued materiel from different sections in the museum (Figs. *24-26, 28*). According to the availability of films, they arrange cinema shows for the children.

Of a total of 25,954 primary schoolchildren (6-14 years old) who visited the museum during 1978, 19,531 were received by the teacher-guides. The largest section consisted of 5,891 children in the 9-10 age group (third and fourth years of primary school). The teacher-guides also worked with 5,367 secondary-school students and 1,178 university students. In addition to this, they replied to 1,980 individual and group requests for advisory services.[7]

Juventudes Científicas de Chile (Young Scientists of Chile)

This scientific youth organization was established in 1967 by the museum with fifteen children and is constantly expanding. Today there are more than 400

7. In 1978, 56, 203 children and 18,682 adults visited the museum on working days. On Sundays and holidays, the number of visitors was approximately 200,000; we estimated that 40 to 50 per cent of this total were children.

members in Santiago, who spend most of their free time in the museum. At the outset, membership age was fixed at between 14 and 21 years of age, but it was soon decided to lower the minimum age to 10, a decision we have never regretted considering the children's originality of ideas and projects, which at this stage are only slightly influenced by the rigidity of formal education. We would like to include children from the age of 6, if it were not for the problems inherent in their care.

The children and young people form work groups according to their field of interest, and in this way establish centres (or clubs), each supervised by an instructor, for biology, archaeology, entomology, mineralogy, astronomy, anatomy, ecology, etc. Thirteen different clubs are now operating. It is rare for members over 18 years old to continue membership of the Young Scientists; upon entering university they usually leave for a period, but later return, spontaneously, offering their services as instructors for the younger members.

The Young Scientists are supervised by secondary schoolteachers, who are responsible for the operation of this movement. The museum provides meeting rooms, a scientific library for young people, laboratory facilities, and contact with its scientific personnel and research members of universities and other institutions.

Since 1970, the Young Scientists have held an annual Youth Science Fair in which all the primary schools and public and private secondary schools in Santiago are invited to participate (Fig. 27). During the last few years, these fairs have also been held in other cities and those submitting prize-winning projects participate in the Youth Science Fair organized by the National Museum of Natural History.

The Young Scientists movement is sponsored by CONICYT (National Commission for Scientific and Technological Research).

In 1978 the First Young Scientists Camp was organized for Young Scientist members, under the auspices of the State television channel, the Young Christians' Association, CONICYT and the National Museum of Natural History.

Although the Young Scientists form a group distinct from the other children who visit the museum, the facilities provided by the Education Department enable many children to join them.

28
A teacher-guide explains the motifs on a prehistoric ceramic pot while the children try to copy it.

Other activities

For 1979, the International Year of the Child, the museum has planned, as a new experiment, an exhibition organized by the children and focused on subjects that the children suggest themselves. The National Chilean Museum Committee, affiliated with ICOM/ALAM, will invite children from all over the country to take part in a museum project contest. The Third Conference of Chilean Museologists, to be held in October 1979, will also take museums and children as its subject.

This is our way of preparing for the future.

[*Translated from Spanish*]

The Children's Workshop at the Georges Pompidou National Centre for Art and Culture, Paris

Danièle Giraudy

In 1976, concurrently with the Georges Pompidou Centre, the Children's Workshop was opened in Paris. An area specially designed and equipped for schoolchildren and young visitors was freely available, with a team of forty people (thirty part-time activity leaders and ten persons full-time) and a programme of activities in artistic expression to prepare them to derive greater benefit from the various departments in the centre.

Along with this, a distribution service intended for regional cultural institutions was set up, with travelling exhibitions, kits, teaching courses and meetings, the content of which will be discussed below.

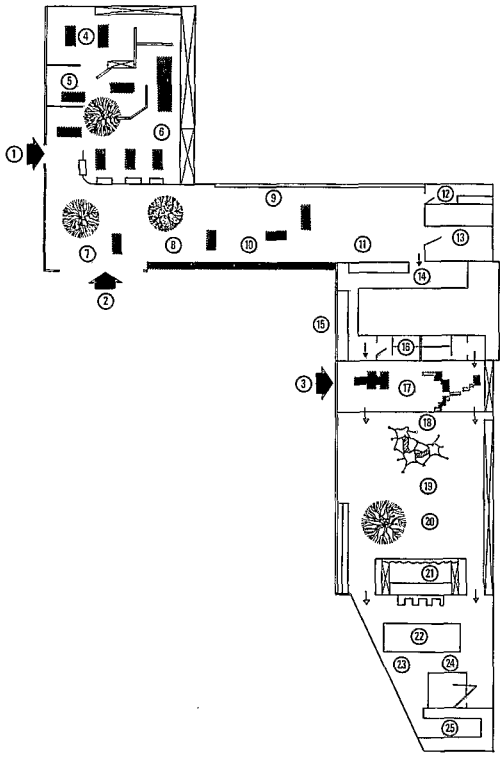
Since it was opened, the Children's Workshop has had more than 80,000 visitors for series of six sessions and has been working regularly with a network of fifty provincial museums.

Since the creation of the centre, particular attention has been given to visiting children, primary schoolteachers and activity leaders. This public has been steadily growing in France thanks to the new school timetable law, which encourages cultural outings in school time, and to the new Ministry of Education directives.

The Children's Workshop takes school parties from Paris or the provinces. Opening on the Place Beaubourg, this area of games and workshops, designed for and with children, can take in each day three hundred children from 4 to 12 years old. The workshop's aim is to teach children how to look, listen, and feel, to educate their senses—rather than focusing on development of their reason and memory, which is the role of the school—to put them in contact with young artists, painters, sculptors and musicians, to set up a dialogue that will enable young people to open their eyes to contemporary creative work and to familiarize them with the artist and his research. By concentrating on creation, the young visitors are prepared for encountering the written, plastic or musical works presented in the Museum Library, the Centre for Industrial Creation (CCI), or the Institute of Acoustical and Musical Research and Co-ordination (IRCAM).

Within the Children's Workshop, six activity workshops are run simultaneously in two galleries which give directly on to the square through glass panels (Fig. *29*). Each of these workshops is devoted to a mode of expression: drawing, colour, volume, audio-visual, bodily action and music. Leaving their shoes at the door of their domain, the children walk on artificial grass matting to the giant games invented by artists on the basis of their requests: a small castle, puppets, musical hopscotch squares, nests and balloon baskets, all sorts of fancy dress and a walk-on cinema (the picture is projected on the floor).

Outside our walls, this new form of teaching is applied in schools where the



29
GEORGES POMPIDOU NATIONAL CENTRE FOR ART AND CULTURE, Paris. Plan of the Children's Workshop.

organizers from the centre arrange activities in plastic expression and teachers can borrow teaching kits containing works which they can make up into their own classroom exhibition for eight or ten days. This loan service supplements activities carried out on a larger scale in the provinces with travelling exhibitions. In three years, the exhibitions *Vive la Couleur, Du Point à la Ligne* and *Les Mains Regardent* have visited fifty towns, thus creating a network of points for the workshop (Fig. *30(a), (b)*). For the International Year of the Child, the Children's Workshop has started up a programme of international exchanges (exhibitions, staff) with children's museums in Europe, America, Israel and Japan.

Thirty activity leaders—plastic arts specialists, puppeteers, dancers and actors—are in attendance daily in the different areas given over to schoolchildren during the week, divided up into small groups for the beginners' course of six sessions.

This art school, where the teachers are creators, develops young pupils' curiosity, imagination and sensitivity. The eye and the hand, taste, hearing and smell are all linked together to open out the child's development process by teaching him to love and to invent. There are also sessions along similar lines for handicapped children, who learn how to look, to move, to dance, to mime, and to listen together with other children, with puppets, fancy dress, masks, make-up, sounds and smells.

Outside activities are also proposed to teachers as a preparation or follow-up for these visits to the workshop; these are provided, under the new teaching timetable arrangements or the 10 per cent time allotted to non-formal education, in the school environment or in the local district workshops by our teams of organizers.

All the teachers enrolled in the same course get together at the beginning and the end with each team at the workshop to prepare the programme of activities offered to them.

Equipment on the premises

The area of 800 square metres was designed in close co-ordination with children themselves. On their lips, at the tip of their pens or in their drawings, the most commonly expressed yearning is for greenness (grass, trees, plants or flowers) as well as walls on which to paint in absolute freedom, nests in which to hide, a floor on which to lie down or walk barefoot, a puppet theatre, flowing water, a circus and every imaginable idea for playing, climbing and hanging, or dancing.

Taking these wide and varied notions as a basis, expressed as they were with such force by the children, those in charge of the workshop tried various experiments with school parties which came to the workshop on its trial opening in 1975 and 1976, in the Rue des Francs-Bourgeois. Quite unlike the rest of the building, the floor-covering here is no longer grey but transformed into a green lawn on which children can sit or lie down, there are screens of transparent fireproof fibreglass to separate the various activities going on round low tables with rounded corners. The dual-position stools can also be used by the very young, and the whole area is surrounded by a profusion of natural or artificial plants and wicker baskets in which to tidy away the fancy-dress clothes, not forgetting the grey concrete walls covered with cork or artificial grass matting, and the puppet theatre with its simple use of standard-size cupboards. A musical hopscotch board which is 'played with the feet' gives a musical accompaniment on moving into the bodily action workshop, a 'painting-wall' of enamelled metal sheets will take ten metres of ephemeral frescoes and a stream of water runs along the ground for rinsing the young artists' paint-brushes. Finally, the lighting has been laid out according to the various activities and its brightness can be regulated. A meeting room, rest room and showers complete the premises which take in participants for the course.

A constant quest for natural, warm-coloured materials enables the children to feel at ease, after the endless kilometres of gangways, escalators and the 70,000

square metres of the centre which they can enter, at all levels, alone or accompanied.

The programme of art education

The introduction to art proposed by the workshop aims at developing the child's sensitivity and creativity by stimulating his individual imagination and expression with an approach that concentrates on the senses rather than on teaching procedures, using artists' materials and techniques in order that the child may learn to see, touch, smell, listen and taste through play.

Seven workshops are permanently open under the supervision of thirty activity leaders—young artists who are specialized in the organization of activities in the plastic arts. Each one looks after ten children. These workshops reveal the bases of an artistic education.

The drawing workshop is an introduction to drawing using various materials; it proposes a new way of seeing and saying, a wordless writing which recounts in black and white.

The volume workshop is an exploration of the daily environment (the town, nature, the sea, space, etc.) and is often given over to three-dimensional construction of imaginary dwellings with paper, cardboard, clay or string.

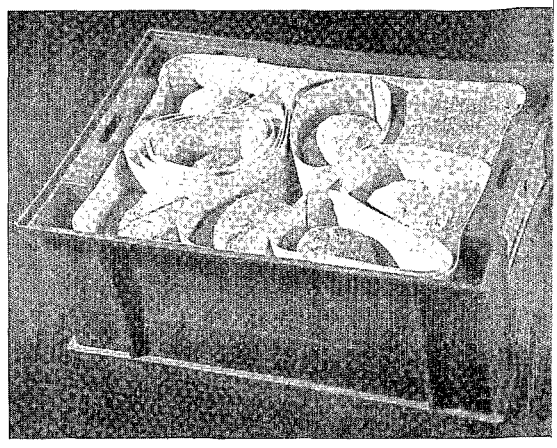
The colour workshop tries to teach how to live and dream in colour, to choose, enjoy and play with the colours of the painter's palette and the rainbow.

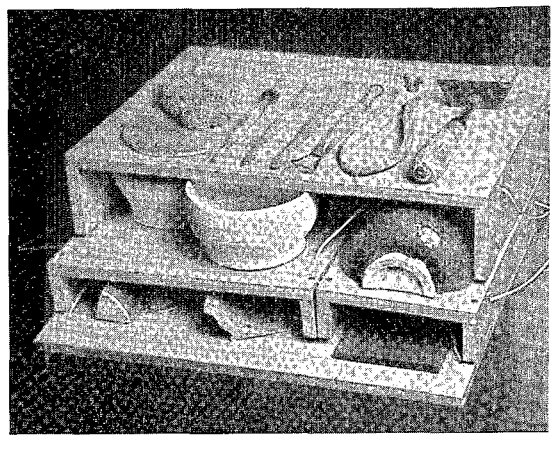
The bodily action workshop encourages expression and communication through play, by using the body and its movements, puppets, shadows, mime, language, voice, sound and rhythm.

The visual image workshop gives an opportunity to discover the cinema, photography, video, cartoons—all specific modern-day visual and sound media which by movement and rhythm can tell a story picture by picture.

The light workshop is the extension of the preceding workshops with three-dimensional theatre equipment designed and produced by artists: groups of children photograph their silhouettes together on fluorescent screens, walk on a film projected on the ground, play in a colour theatre where they are disguised by the light projections.

The music workshop, which was opened with the collaboration of IRCAM, is an approach to music through the way it is perceived in the daily environment.





30(a), (b)
The workshop loans teaching kits containing works of art to schools: *(a)* some, like this one, contain stone and wooden sculptures that can be handled freely; *(b)* others contain works mounted on blocks of wood. For example, here are some potter's tools used for shaping bowls: the different stages of production are also shown.

The Children's Workshop and continuing training

Concurrently with its mission of art education for children, the Children's Workshop is continuing and developing training activities intended both for teachers and for organizers of cultural activities and students of art concerned with this question.

Practical training periods (free of charge)—designed first and foremost for students, they last approximately five weeks. Trainees join the team of organizers, and choose, according to their particular study field (plastic arts, theatre, audio-visual), to gain experience in two or three of the five workshops, taking part in two weekly sessions with children for each workshop, as well as a working meeting with the activity leaders.

Training sessions for primary schoolteachers under the continuing training programme. Besides the explanations given during activities carried out with the children and the constant exchanges between organizers and teachers in the course of the five sessions, the Children's Workshop organizes training sessions designed as an introduction to workshop teaching and working methods. These sessions, which have been organized at the request of the primary teacher-training colleges, can take in between twenty and fifty teachers and involve four to six working sessions over two or three weeks.

Teaching-training courses (fee-paying)—designed for students, organizers of cultural

activities, curators and museology students. Four training courses will be held in 1979 on the following themes: The Child and Art Education; The Teaching and Organization of Artistic Activities; Art Education and School: Using the Senses; The Use of Audio-visual Media.

The colour workshop

This workshop (Fig. *31*) offers children and accompanying teachers the chance to discover colour through painting, light, make-up, dress and food. In terms of the experience proposed, daily life and surroundings become a field of research and investigations, an area for experiments in teaching and play. Whatever the theme, the first aim is to learn to observe and thus to give varied tools for observation which enable children to perceive the world of colour in all its different shades and varieties—by starting, for example, with a hunt for all the sorts of red with an Instamatic camera—or in games of description or memory, etc.

Another more general aim is to give children the tools for expressing themselves, to introduce them to the various techniques of colour, and to teach them how to handle them.

For each activity, there is documentation to introduce, supplement or comment on the chosen theme: slides, objects, books or paintings and sculptures presented in the centre.

The drawing workshop

The drawing workshop (Fig. *32*) is first and foremost a workshop of the plastic arts. As a workshop it is devoted to creation, but the objects the children necessarily produce are not ends in themselves, but rather pretexts: the workshop is neither a children's masterpiece factory, nor a centre for learning craft techniques.

The aim is to enrich the child through contributing to the building up of the intellectual and sensorial tools necessary for understanding and controlling his environment: the workshop takes in teachers and children alike, and its teaching methods take full account of these two types of public who are to share the experience in the institution. The activity leaders are creators of 'teaching situations' which, through real-life activities of an artistic nature, bring out the problem of nature and the place allotted to these activities in the school environment.

The drawing workshop attempts to reach these goals by: (a) an exploration of the environment through the senses (springboard for the imagination); and (b) shaping the information received for the purpose of creating a communication object (drawing, prints, traces, symbols, photographs, sculptures, paintings, etc.).

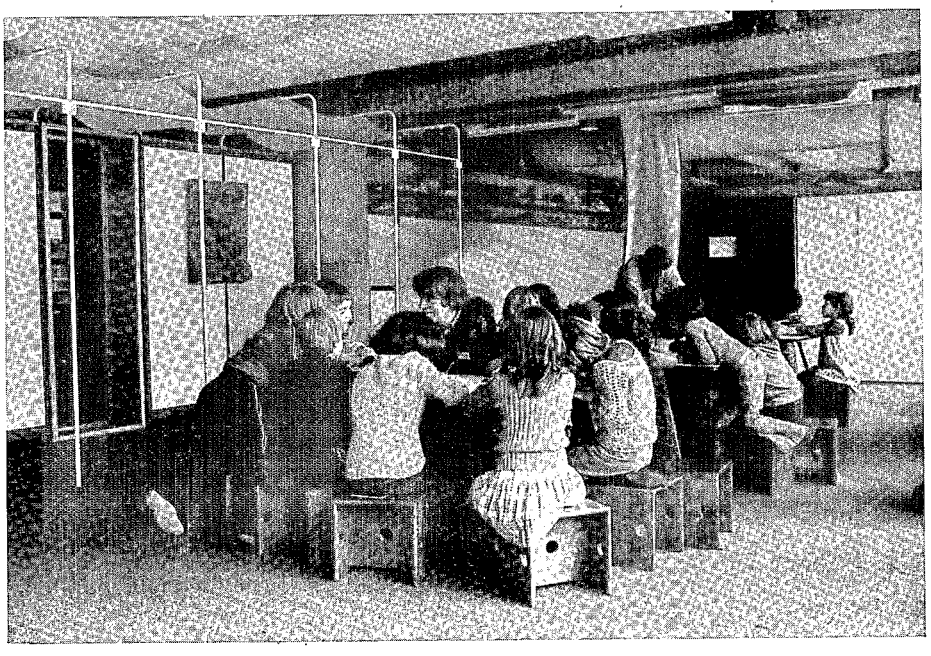
Through these created objects it is hoped to be able to approach, embryonically but essentially, what it is that a so-called work of art attempts to achieve: (a) looking at the world from different, unusual angles which may enable us to have a fresh view of it, one which gives it some meaning; (b) exploring it by communicating (through this object) what we learn from it; and (c) talking about the world as a way of talking about oneself (the work of art: a meeting-place between a person and the universe).

The volume workshop

The volume workshop (Fig. *33*) is not an introduction to coded forms which make up the structure of an abstract space (cube or sphere), as its title might suggest. Rather it proposes an approach to life in all its shapes and forms, and its space is what the hand can touch, feel, stroke, gauge, discover and transform.

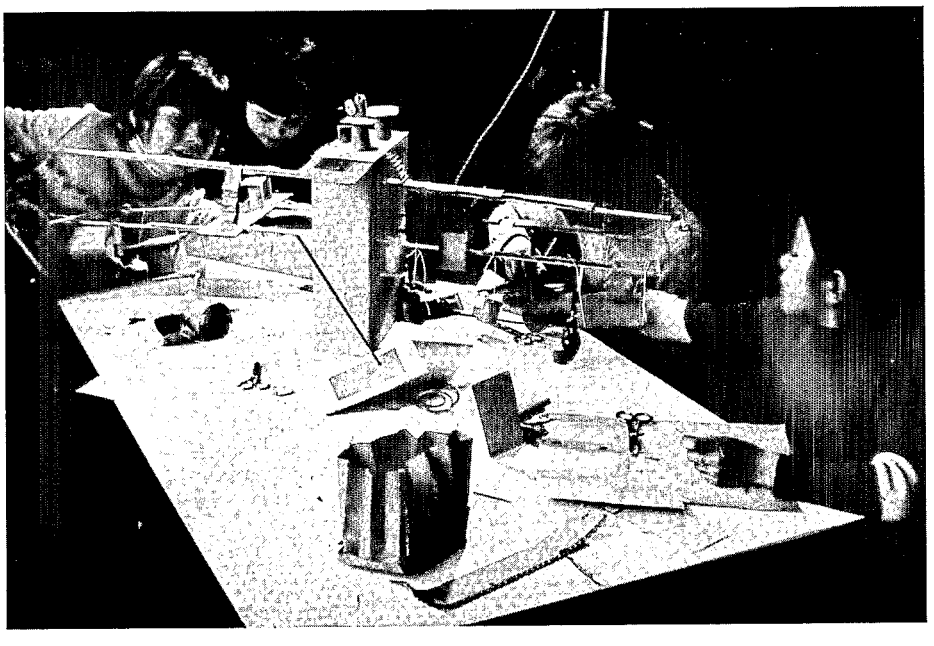
This space 'in the palm of the hand' is above all an everyday space: discovery

31
In the colour workshop the children are painting on the 'painting wall' of washable enamelled metal sheets with a channel of running water underneath (it is covered by a grating).



32
An activity leader teaching children graphics in the drawing workshop.

33
Children making imaginary three-dimensional houses of paper, cardboard, clay and string; this is part of the volume workshop's programme.



34
In the bodily action workshop children mime a story, using their bodies to develop expression and communication through play.

of it is through the sensations, the savouring and assimilating of it in the regular movements and contacts between the hand and the eye, nose, ear, tongue and skin.

But the hand, opened out, becomes an instrument for measuring the surrounding world: the first finger pointing towards its object is both the extension of the pleasure of knowing and a tool for exploring an alien space. Fingers wrap themselves round the unknown objects in a series of question marks.

On the basis of these bridgeheads into the unknown, all sorts of projections are possible: the hand can now create its own universe. Its control of reality—after feeling, sensing and guessing it—passes through a transformation of this reality into imaginary space which bears its own imprint, obeys special laws and which is both personal and communicable.

The approach of the volume/habitat/environment workshop goes through these various stages of a child's development in the space of the world: discovery through the senses, learning skills, the freedom to invent. The organizing team therefore strives to perfect 'lessons on observation of things' in respect of which more is remembered of the thing than of the lessons, as well as to suggest games that can be opportunities for the child both to express his 'individuality' and to meet others.

The bodily action workshop

Body language, body theatre, eurhythmics, dancing, mime, etc., such is today's wide range of activities that are no longer confined merely to stage professionals. This blossoming of classes and workshops is a measure of the urgent need to awaken the body, long constricted by a certain moral order, education and way of life that were gradually squeezing all life out of it. As for children, the need they have to know their bodies is well established, but channelled into sporting activities, apart from which this need, which is as much 'sensual' as it is physical or muscular, is more often than not disregarded, particularly in the school.

The bodily action workshop (Fig. *34*) offers activities where the child is asked to recognize his body, to get to know it, in order to communicate more easily with the world and with others, whether in school life or elsewhere.

Our purpose is not to give body 'training', by using various techniques. The children themselves warn us against such a temptation: any over-technical approach to the body is looked upon as a form of gymnastics, i.e. a formal activity.

35
In the audio-visual workshop children make puppets and then work them themselves on the stage of a neighbouring theatre.

By 'bodily action' is meant all sorts of play centred around a particular theme (from daily life or the imagination) with which the children are familiar and in which their bodies are sources of experience, modes of communication, means of expression. Our main goal is to arouse bodily sensitivity, so that the child feels a need and a pleasure in involving his body in his self-development and expression.

The audio-visual workshop

The role of this video and film-animation workshop (Fig. *35*) is to make the children practise certain techniques so that they can have a better understanding of what is involved in the production and design of audio-visual material, without accepting everything that is presented to them daily on radio and television or at the cinema.

They should understand that there is a mechanism at the conception level which can even involve a certain amount of manipulation. The main aim is that they should not be allowed to remain passive.

With video-recorders and Super-8 cine-cameras, reportages are made by interviewing passers-by on a theme chosen by the whole group. The presence of a camera and microphone enables a contact to be established on the same level as adults. During viewing of the recordings or the film, we try to understand everything that was said by giving our comments and adding our own personal opinions.

Film animation techniques have an important part to play in the workshop and, depending on the length of the courses, we use techniques such as direct drawing on 16-mm film, make short cartoons, or do modelling-clay imaging.

The film-animation techniques are also used to carry out trick-filming with '*pixillation*', where the participants themselves can create effects not to be found in real life, thus helping to take some of the mystery out of audio-visual products.

The child is a great consumer of audio-visual products (television, the press, books, strip cartoons, records, radio) and knows, without being aware of it, the audio-visual language, decoding its messages at a steadily younger age, whether they are intended for him or not.

But when he tries to produce something, he finds there is a great gap between what he would like to do and what he actually does; e.g. he takes a photograph of the square with a tiny dog in the background, and presents the picture as a photograph of a dog.

36
During the exhibition *Seeing Hands*, a blind child practises measuring the size of objects by touching them one after the other.

Our whole work is therefore to reduce this distortion between what he says and what he means, through different sorts of exercises. The work is developed along several lines: we give the group with which we are working the chance to carry out what they wanted to do when they came to the workshop (make a film); we discover and perfect the techniques to make this feasible; through this work we continue research into the child's audio-visual perceptions, in order to throw more light on our future research work.

Our approach takes into account one basic fact above all: the relationship of the child with audio-visual products. Children coming to the audio-visual workshop are there to work at an activity chosen by them in order to produce something: they want to make a Super-8 film.

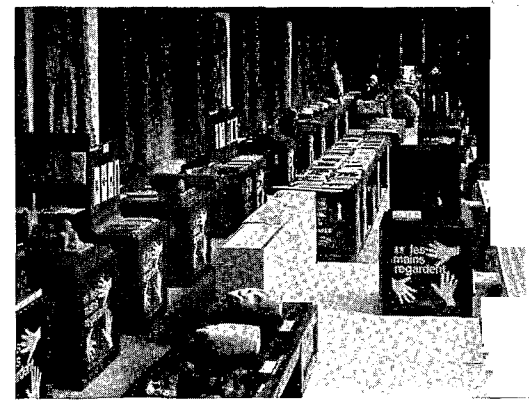
This is usually the first time they have encountered audio-visual production equipment, and in their activities in or out of school it will probably be the only time. Thus, within this confined framework, we must enable the children to make a certain number of discoveries about language and communication. It is rarely possible to go beyond the stage of discovery: that would involve our work being followed up by the schoolteacher or the parents, which is rarely the case.

The music workshop

First experience of collaboration between the Children's Workshop and the teaching department of IRCAM:

The child has music in him, and it is important for him to contribute to its development, but his natural desire to make music is too often curbed or stifled by the adult, teacher or parent, particularly when it is expressed in crude terms such as a rhythm banged out with the back of a spoon on the table or on a tin can. Furthermore, the child lives in a world that is a conglomeration of surrounding noises and sounds, invading him and often preventing him from listening to one or more sounds in isolation and playing with them, taking pleasure in transforming them as he would the shapes of modelling clay.

The purpose of the music workshop is to create conditions under which music can once again become an act of life, by approaching it not as an isolated, even élitist language, but as a real language firmly tied to everyday life. This is done through instrumental, vocal, corporal and graphic experiment and improvisation on the one hand, and through work with electrical acoustic equipment on the other.



37
Elsewhere, a sighted child is blindfolded and tries to distinguish objects without the use of his sight.

38
The exhibition *Seeing Hands* at the Musées Royaux d'Histoire, Brussels. View of a group of crate-stands arranged in two parallel circles.

Why this choice of improvisation? With this technique, music can be experienced as a personal expression and a means of communication, the individual act being the basic condition for collective work. It also encourages a true realization of the daily reality of the children, of their own world of sound.

In this workshop, the aim is to prompt children to listen actively, in order to attach value to even the most timid of contributions, thus giving everyone a chance to express themselves in a language not of words but of music.

The workshop is a place of experiment and creation of sound. Its purpose is: to broaden the idea of listening to music; to broaden the concept of the instrument and the playing of instruments; and introduce non-musical aspects: the body, space, graphism, and pictures.

The music workshop is open every Wednesday from 5.30 to 7.30 p.m. with a group of fifteen children aged 10-14 enrolled for a term.

'*Les Mains Regardent*' ('*Seeing Hands*'), *a travelling museum of the sense of touch* (Figs. *36-38*). *A teaching experiment for young handicapped people*

Les Mains Regardent is our third travelling teaching exhibition; following *Vive la Couleur* in 1975 and *Du Point à la Ligne* in 1976, it offered in 1977 an introduction to volume and touch with carefully designed content, dimensions and approach for children, particularly non-seeing children. It was made available to museums, cultural centres and specialized institutions in France in 1978, and abroad in 1979.

From 'be careful' to 'don't do that', in school and at home, the child has little chance to play freely or to get to know what would be most useful to him: to sharpen his sense of curiosity and his desire to learn, to enter into contact with others, to develop by discovering their differences, to expand his imagination and his ability to create, to dream, to love and to perceive with his five senses which should be trained just as carefully as his memory, his reasoning or his discipline,

39(a), (b)
Method used in the making of imaginary luggage for the *Suitcase Dreams* which is part of the exhibition *Le Temps des Gares*: (*a*) imagining the travellers who will carry them; (*b*) the cases are made and decorated at school.

for which the school is generally responsible. An education of the senses, and a teaching programme for the handicapped were the two goals of this exhibition, where it was possible to get to know the 'feel' of a sculpture more fully by learning touch. It is a fact that the child loves touching and first discovers the world with his hands. It was therefore logical to invent a museum of the sense of touch, and the twenty-one sculptors were willingly party to this, because artists and children like to meet one another.

This is why the exhibition designed for the under-twelves is perhaps not entirely meaningless for others to go on a voyage of discovery of the third dimension.

'Please, Miss, what colour is the wind?' This question, asked by a young blind girl, one day gave me the desire to take non-seeing children round the museum for which I was responsible, and with them to find out the answers to their difficult questions: Why is a painting beautiful?

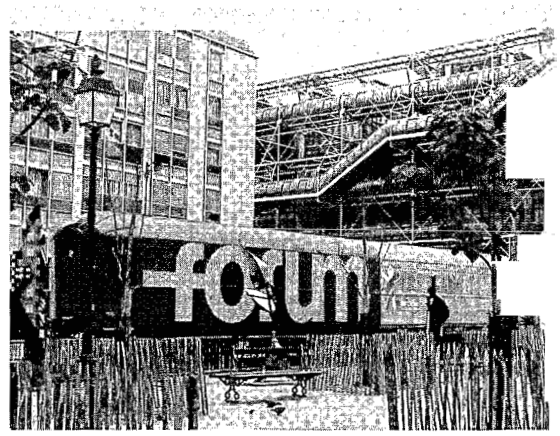
We then discover that our five senses are barely developed, whereas the blind person's four senses are real lessons in discovery: to find one's way along a smell, to read a smile through the fingertips, to hear tiredness or affection in a voice.

There are very few museums that cater for the blind. Thus very few people have the chance to learn, thanks to the blind, how to see with their eyes closed, to gauge the size of a room by the clinking of keys in a pocket, to discover that blind children are happy, that they do not want our pity, which just encloses them in their blindness, but that it is possible to help them to have a happy share in life as we experience it: full of risks that have to be shouldered and rich with experiences.

This is the story behind the exhibition, which is made up like a jigsaw puzzle, with sculptors, organizers, blind people, architects, researchers, parents, doctors, all contributing their own good idea, a game, a bibliographical source, a maze, a gearbox which can be taken to pieces, clay pellets, cotton textures, a sculpture, a tale, a joke or a page of Braille.

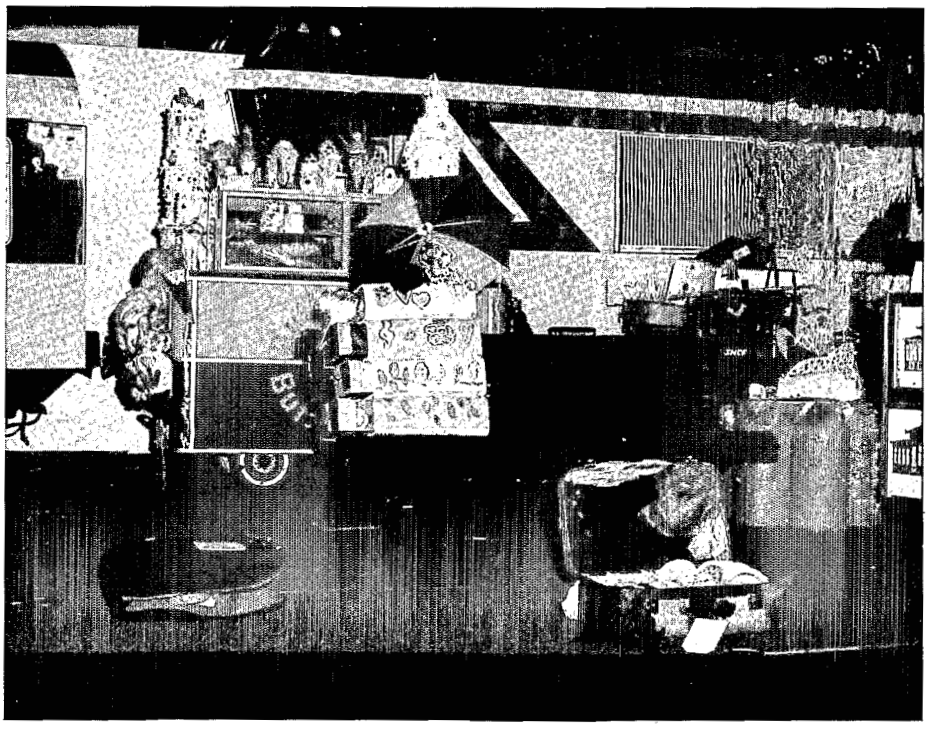
First for the hand, its imprint, its gestures, and then to surfaces for the fingers, followed by shapes for the palms and finally to contemporary sculptures 'to play with' using both hands, this tactile journey is not the goal, but the beginning of a quest and an encounter between a museum and non-seeing children.

We have thus been able to confirm that it is not impossible to overcome the traditional 'do not touch' and to put the hand in contact with original sculptures (some 80,000 visitors—and twice as many hands—during the tour in France). Equally, we have learnt that it is worth while mixing together works of art, games, specially designed or chosen teaching materials, to prepare the fingers for the tactile journey over the works on display.



40
In 1979, the centre organized, with the help of local museums and schools, a temporary mobile exhibition, *Le Temps des Gares,* part of which was devoted to the theme *Suitcase Dreams*: 'A platform abandoned for the night; abandoned pieces of luggage dream of travellers and journeys . . . .'

41
The children's museum-train standing in front of the centre: the mobile exhibition *Tin and Wire* was organized on board it in 1978. During 1979, the museum-train will travel across France and Europe and then, in 1980, without the railway carriages, the exhibition will be reassembled on fixed boards, put into cases and then go to the Children's Museum in Jerusalem. Inside: display of objects in tin made by craftsmen, artists or children and grouped under different themes: the home, tools, rituals and festivals, children and toys.



42
Suitcase Dreams. A station platform with benches and a few cases abandoned by travellers, as well as an imaginary buffet: plaster ice-cream, strange sandwiches, coloured drinks and other inventions of the children.

Plan of the exhibition

This tactile journey has seven component parts: the hand; stroking; burrowing; imprints; volumes; structures; the town.

On this occasion we carried out a careful study along four lines:

1. Art teaching for the handicapped child (we received and learnt a lot from not only blind children, but also mentally handicapped children).
2. A technical study on the wear and tear restoration of regularly handled works (with the development of different materials for various forms of presentation).
3. A museological experiment in packaging: for small museums with little storage space for the crates, unable to cater for the preparation of sixty stands (for four weeks), we perfected a display crate with swivelling lid for each work, which could be used for both transport and display, on a model size suitable for children, in order to set up the travelling exhibition in a very short time, as the premises are often available only a few days or even hours before opening, and ensure greatest possible security for the works—the risks of damage and theft are greatest on unpacking and repacking.
4. Obtaining subsidies from the Ministries of Education and Health to contribute towards animation activities, for redistribution to all the provincial towns putting on the exhibition.

A catalogue and labels in Braille were provided for blind people. Other visitors were given a catalogue on cassettes.

Tin and wire

In 1978, an exhibition of popular art was given, following an idea by H. de Varine, on board the children's museum-train (Fig. *41*).

On a journey, or stationary alongside a platform, here is a museum designed to move towards its public; its specially designed carriages are open to all ages, but particularly to the under-fifteens; welcomed in by the museum-train organizers, its visitors travel into the land of the imaginary.

Displayed in front of the Georges Pompidou Centre from 25 October to 5 December 1978, the children's museum-train received more than 30,000 visitors. It is now offered to all stations, large or small, in France and in some neighbouring countries, particularly Belgium, the Netherlands and Switzerland.

This use of railway networks, first seen in Russia in 1917, provides an easy answer to problems of packing, transport and setting-up of mobile exhibitions and, with its advantage of freeing the organizers from the cultural circuits, gives us the benefit of greater geographical mobility.

The halts at places with no specialized equipment are easier; stop-overs in stations of large towns attract a public probably quite different from the one that normally visits museums. The towns or their arts patrons are asked to pay the cost of hiring the carriages from the French railway authorities; the cost of organizing and running the visits, conceiving and putting together the exhibitions and equipping the train is borne by the Georges Pompidou Centre.

'Le Temps des Gares'

Rêves de Valise (*Suitcase Dreams*): display of the works of the Children's Workshop (Figs. *39(a), (b), 40, 42*).

A station platform with benches, abandoned pieces of luggage and an imaginary buffet (ice cream made of plaster, strange sandwiches, coloured drinks and other inventions of the children). All the objects were made by primary schoolchildren in the Paris region.

[*Translated from French*]

Children and the Science Museum, Bangkok

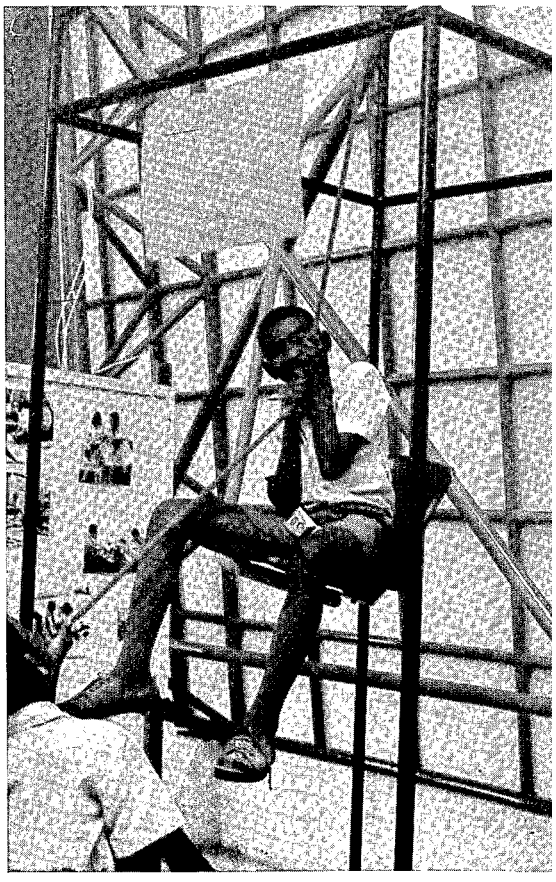
Niched Suntornpithug

A country's progress depends to a large extent on its human resources. A nation is said to be civilized and its inhabitants are classified as happy and enjoying a degree of prosperity only if they possess the following qualities: the basic knowledge to earn a good living, understanding of their responsibilities towards themselves and society, diligence, honour, discipline, open-mindedness, and a common national pride. It is true to say that no one can live alone in the present-day overcrowded world. The population explosion has become a common world-wide problem. The carelessness of one man may cause a chaotic disaster, therefore one cannot neglect others. Thus, a national goal for posterity must be to create men of high quality. If a definite direction is set, the ultimate aim will be accomplished by means of careful and thoughtful planning, and through education. The high quality of educational planning is the main key to the posterity of the nation.

Our history reveals that there were few changes in the Thai way of life prior to the reign of King Rama IV in the nineteenth century. Our neighbours lived under similar conditions. The way of life was as calm, easy and peaceful as the natural resources were abundant: there was plenty of fish in the water and plenty of rice in the fields. Education was not compulsory but was aimed at instilling a deep appreciation of the teaching of Lord Buddha. At the end of King Rama IV's reign and during that of King Rama V, Thailand escaped being colonized through clever leadership and its system of education. The aim of schooling was to train people to serve their country on behalf of the king, and in this way the governmental-service system was originated. To be efficient the system needed a large number of officers. Thus practically everybody who went to school joined the ruling hierarchy. This was very beneficial to the country. But as time went on, many changes occurred: for instance, a big rise in the population in the last decade, the high cost of living, low incomes, and rapid development in science and technology.

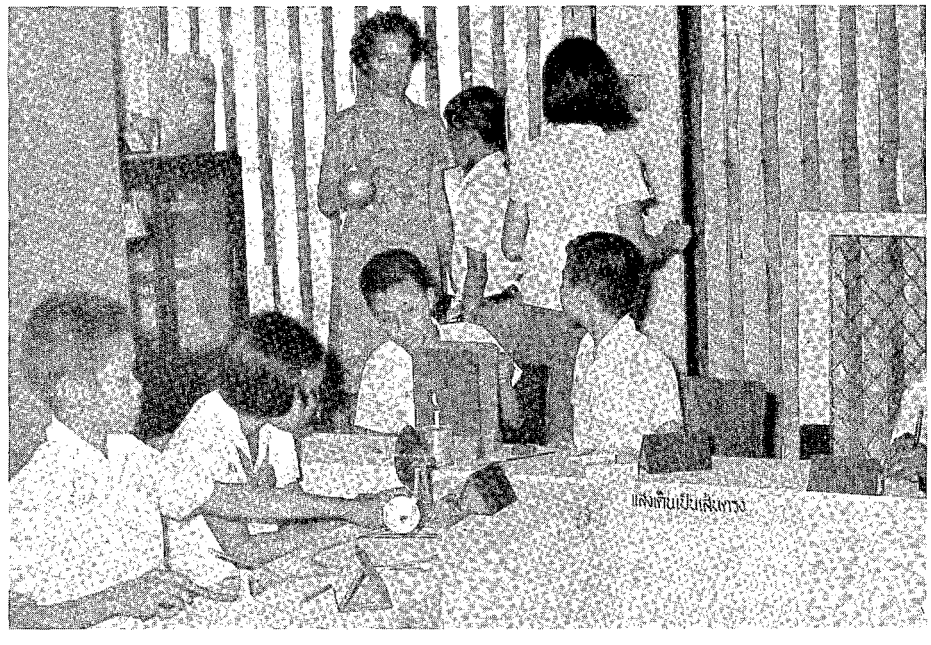
However, the idea of becoming educated so as to be able to join governmental service still persists. Therefore, the aims of education no longer fill the nation's current needs. We have come to a point where educational reform is necessary.

Failure in education lies in formal schooling where the learning process of reading, writing and arithmetic, the so-called three R's, has been heavily stressed. Lack of equipment has been another common problem. Our system of education thus creates a man who is good at learning by heart, instead of a man who can think scientifically. The school curriculum does not prepare for direct entry into working life. Nowadays many graduates from schools and colleges are not quali-



43
Science Museum, Bangkok. A simple machine which is really an educational game. Using a pulley system, a child hoists himself up and shows that a heavy object, in this case his own body, can be lifted with very little effort.

44
PLANETARIUM, Bangkok. The Planetarium was inaugurated on 19 August 1964 by their Majesties the King and Queen of Thailand. One of the largest in the world, it has already been visited by 3 million people. It is used for teacher-training courses.



45
SCIENCE MUSEUM, Bangkok. Children can play and learn in the Discovery Room picking out objects and then making them work, thus gaining knowledge through direct contact.

fied to take up positions. Very few can obtain employment in the field for which they have been trained. The learning process stops suddenly after the leaving age of about 12, since there is no incentive to continue one's education. The final outcome is therefore illiteracy. The total number of young people in the out-of-school category is comparable to those in schools. Our out-of-school education has been forgotten for so long; it is now time to realize its importance. Let us begin out-of-school activities or realistically continue some of those already existing, and take them seriously using firm ideas. We hope that man will continue to learn and seek to discover until he dies. But what can our society offer? How many educational departments can serve this need either in or out of school? How can everyone search for knowledge with freedom, equality and a non-competitive spirit? Who can help schools lacking science equipment and laboratories to teach the sciences in a truly scientific way? Taking into account the different levels of schools all over the country, who can minimize the difference in presenting a science topic? The answers focus on a common centre. The national museum is not the answer because its main aim is to conserve the national identity in the arts and crafts. A few government departments and some private persons own small museums, but they are insufficient in number and unsuitable for the purpose. The Bangkok planetarium, which has been under the Department of Educational Techniques in the Ministry of Education since it was opened in 1964, is now well known throughout the country (Fig. *44*).

46(a), (b)
SCIENCE MUSEUM, Bangkok. Children compare new and old in a temporary exhibition.

Following this success, the Department of Educational Techniques was authorized to establish a science museum in Bangkok which should answer the questions posed above. It will be a seat of learning in pure and applied sciences on an out-of-school basis. It is an absolutely open educational institution in Thailand. Once the success of this first Science Museum in Bangkok is assured, extension to other main provinces will be welcomed and fully supported. The more open educational institutions we have, the better the people's chance to gain knowledge on their own; the better the open educational institutions are, the better qualified our people will be.

Thailand is a developing country. The moral problem is as important as the economic problem. A man has to be trained to have scientific attitudes in order to solve the economic problem. A scientific mind is based on reasoning, on fact-finding through experiment and observation. High and efficient production can be achieved only by scientific systems, without which no production can be predicted with certainty.

Every developing country is in the same situation. There is only one sure way of training our population to work in a scientific system, and that is to follow the methods of developed countries, taking care to select wisely and only the best methods. We want the Science Museum to be a centre of learning in pure and applied sciences for every walk of life. Visitors will be able to learn some of the basic scientific principles; they will be kept up to date with knowledge

47(a), (b)
SCIENCE MUSEUM, Bangkok. Guided by a teacher, boys watch the movement of the sand pendulum.

which is profitable in life; they will learn about the country's science-related projects; scientific methods, discoveries and inventions by famous scientists will be illustrated. The aim is to create well-qualified men. It is therefore of the utmost importance that the Science Museum should be opened as soon as possible.

Inside this general plan, the following objectives are included:

To serve as a science centre for schools and the public by providing exhibitions, demonstrations, lectures, self-instruction activities, slides, closed-circuit television programmes and films.

To provide science education for people both in and out of school.

To minimize the gap in opportunities to learn science among schools. Lack of adequate science equipment and laboratories, and of qualified teachers, causes poor and unequal standards of science teaching. To overcome these problems, students should be able to acquire knowledge they lack from the science museum.

To foster an attitude and habit of lifelong education.

To provide a sufficient basic knowledge of science and technology to apply it effectively, safely and satisfactorily in daily life.

To help people understand interesting projects of applied science which can be wisely adopted and for which they can be responsible *vis-à-vis* themselves, the community, the nation and the world.

To serve as a research centre for science, to develop science teaching and to serve as a catalyst for new developments in science.

To serve as a place of public recreation.

To illustrate the ideas and history of famous scientists from home and overseas; these are good examples for young people who may be encouraged to become future scientists.

To show the inventions and discoveries of Thai and foreign scientists.

To present the most up-to-date and accurate local trends in economics, agriculture and industrial business.

To encourage students and the public to realize the important impact of science and technology which greatly influence daily life, and thus to understand the need consistently to improve themselves and society.

The idea of having a science museum in Thailand originated many years ago, but the present Science Museum was begun only recently. In 1974, the Thai Government allocated a budget of 20 million Baht (about 1 million US dollars) to build the Science Museum; construction started in August 1975 and took eighteen months to finish, in February 1977. The full-scale preparation of exhibits began from 1977 onwards. Figures *43, 45-47* show the rooms and activities that the Science Museum provides for visitors of all ages, but mainly children.

Album

48
Group of children making their own toys.

Federal Republic of Germany

'African Child Engineers,' a mobile exhibition arranged for children by the Übersee-Museum in Bremen, Federal Republic of Germany

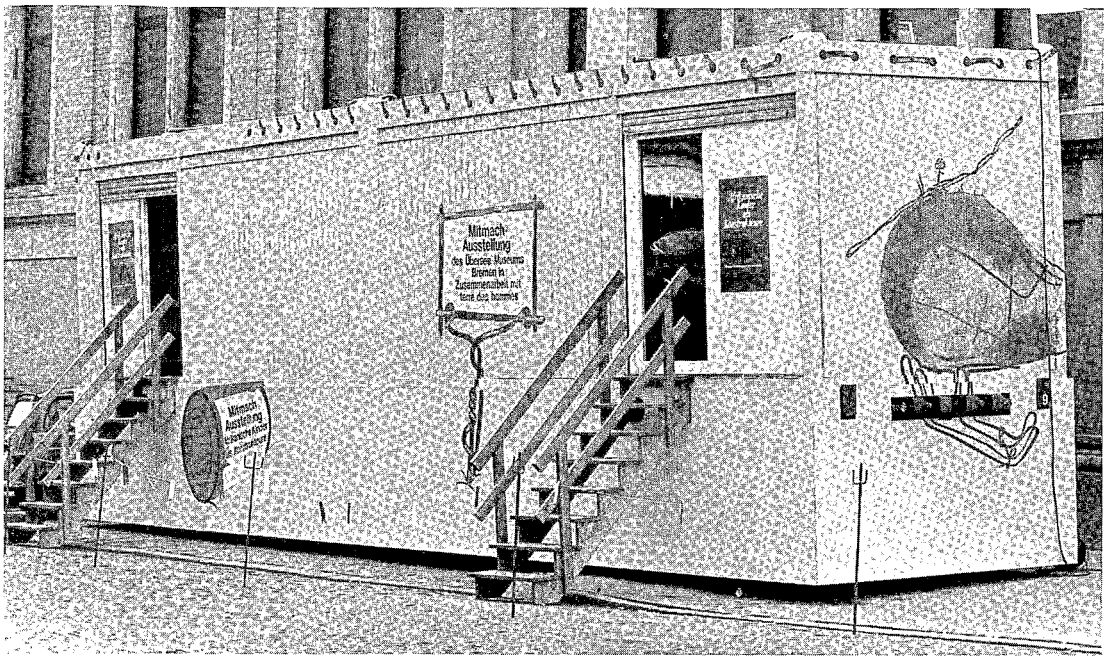
Volker Harms

'They are making their own toys'. This was the headline of a newspaper article summarizing the contents of an exhibition which started out from the Übersee-Museum in May 1979 to go on a round trip through the Federal Republic of Germany and West Berlin. The exhibition is installed in a mobile container. The objects shown have been designed and built by African children living in the slums of Nairobi, Kenya. There are motor-cars, aeroplanes, helicopters, lorries, buses, bicycles, and boats, ingeniously made by these children from waste material such as empty tins, wire, soles of worn shoes, plastic foil, corrugated cardboard, strips of old inner tubes, crown caps, and similar refuse.

This practice of making one's own toys—for children in African countries the quite normal and customary thing to do—causes much astonishment and the greatest admiration among children and also adults living in an industrialized country such as the Federal Republic of Germany. This is understandable if one takes into consideration that children in industrialized countries possess the same creative abilities as children of the same age in Africa, but that their environment prevents them from developing these abilities. An overwhelming quantity of ready-made toys (at the recent toy fair in Nuremberg 250,000 different kinds of toy were shown), which children and parents in the industrialized countries are constantly and everywhere urged to buy, leave little scope for the development of the children's own creative talents.

With regard to the chances for creative behaviour, this is actually a reversal of the relationship between abundance and poverty prevailing in the industrialized and the so-called developing countries. This situation may really be looked upon as an ideal basis for an exhibition attempting to familiarize children in an industrialized country with the situation of children in an African country: the admiration for the toys made by African children makes German children doubt the accuracy of the picture they have had so far of Africans. This is of greatest importance because most German children, and also most adults, under the influence of negative prejudice, have formed ideas about Africans that are in no way realistic.

Numerous studies have shown that this problem of prejudice really exists, and it also came up again in a small-scale test exhibit we arranged for elementary schoolchildren. We decided therefore in favour of a concept which would make the exhibition only one element—even if the central one—of a process whose main object would be to correct the false and negative impression most German children have of African people. This process would include preparing the children for a visit to the exhibition, their participation in activities connected with it, and follow-up instruction to deepen and reinforce the knowledge gained.



49
ÜBERSEE-MUSEUM, Bremen. Exterior view of the exhibition once it has been set up in the container.

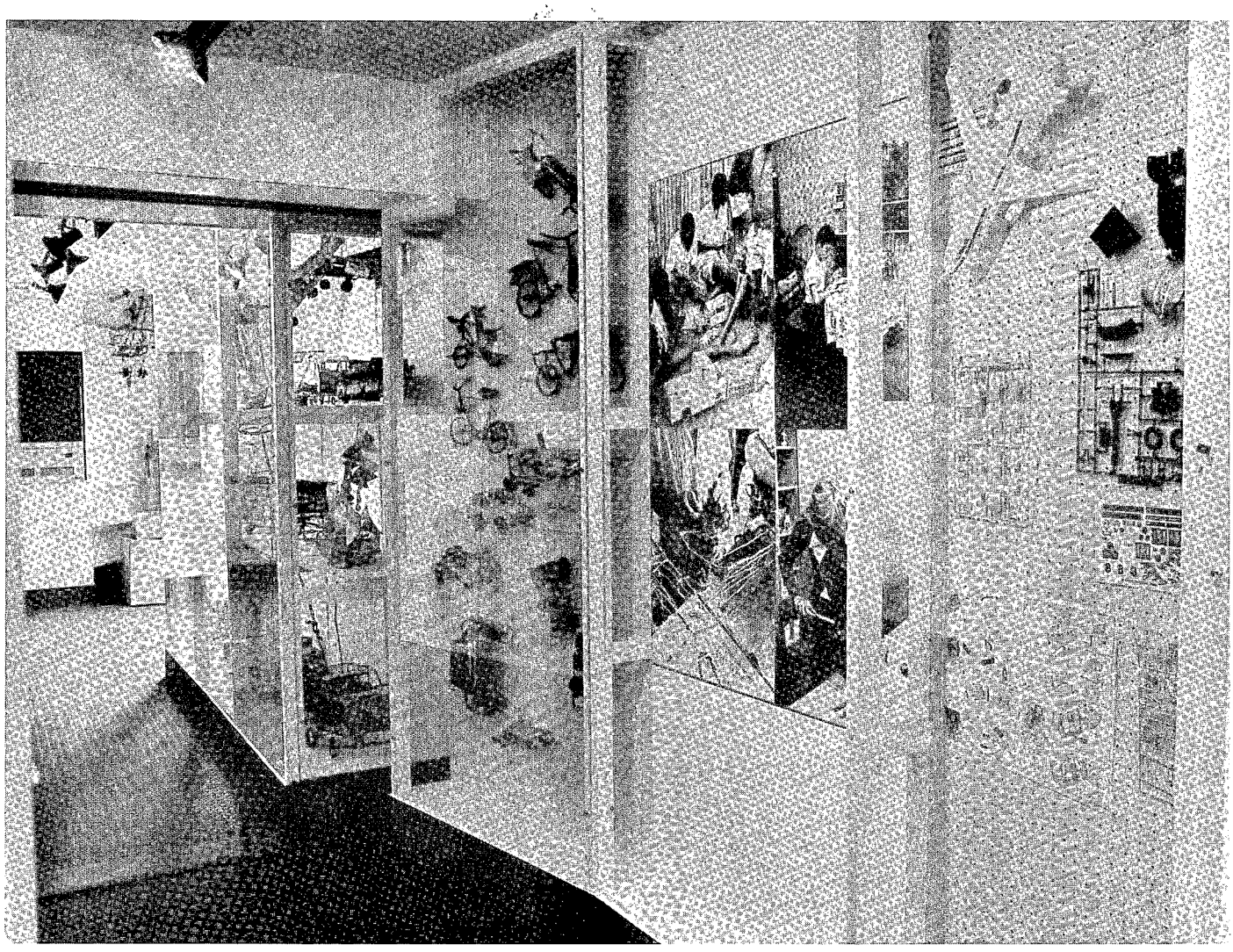
The exhibition is of optimum mobility. It is installed in a large mobile container (12 m long by 2.5 m wide) and can go from one place to another like a bus (Fig. *49*). After its arrival at a certain place, it is ready to receive visitors in less than an hour. This mobility enables us to take the exhibition direct to school playgrounds. Stays of three days to two weeks are feasible.

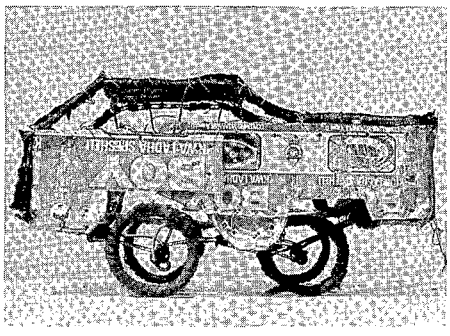
To make adequate preparation possible even for very short stays, members of the Terre des Hommes association in aid of children do the necessary organizational work: they contact teachers some weeks before the exhibition is due to open and supply them with the necessary material so that they can prepare the children for the visit. An important feature of these preparatory efforts is that German children are asked to make toys from waste material just as African children did, without showing them beforehand any of the African toys. Experience has shown that children who have thus been prepared for a visit to the exhibition are eager not only to see the toys made by African children, but also to learn as much as they can about their social situation.

The exhibition inside the container consists of four built-in showcases of different sizes, with the wall of the container forming the back of the case, and three sides equipped with unbreakable glass. There are boards with enlarged photographs, and texts illustrated with photographs, as well as audio-visual equipment. There is also a display demonstrating the different circumstances under which African and German children play (Fig. *50*). In the showcases the African toys made of waste material are displayed (Fig. *51*). On the boards some blow-ups show African children at play or assembling their toys (Fig. *48*), others illustrate the children's living conditions. A map, photographs, and a short text with historical dates, inform the visitor about Kenya's history and its characteristic features.

The audio-visual aids include a taped lecture, illustrated by coloured slides, explaining the historical causes responsible for the development of present-day Kenya. The children who come to see the exhibition are addressed by a (fictitious) African boy telling them about himself and about the story of his country.

A specialist in museum education accompanies the exhibition and gives the children any necessary additional aid. Further information on the exhibition, on the history of Kenya, on the situation of African children living in slums, and also on the general problem of slum districts on the fringes of big cities in developing countries is contained in a catalogue intended primarily for adult visitors. For children there is a kind of copybook, richly illustrated and containing extra space for their own drawings and supplementary notes, as well as questions on the most important features of the exhibition.





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Interior of the container: display showing different games played by African and German children.

51
One of the African toys in the exhibition.

In spaces near the container exhibition the children can play with replicas of the African toys and even organize races. We found that even such quite unsophisticated opportunities to do something in an exhibition are most attractive to children, and that they make use of them and co-operate eagerly. At the same time they learn quite a lot about the methods of construction African children use in making their toys.

The follow-up instruction is again entirely in the hands of the teachers who come to see the exhibition with their school classes. In subsequent lessons they make use of the interest the exhibition has aroused in the children, especially in African children and their situation, supplementing the knowledge they have gained with carefully selected information so as to give them a realistic, fair and positive picture of African people. The copybooks, which are handed out to the children free of charge, can be used by the teachers as teaching aids.

We have tried to document the effect of the mobile exhibition by systematically questioning the teachers who came to see it with their school classes. The results so far have been overwhelmingly positive. A final evaluation is not yet possible as the exhibition is still circulating and the survey was still in progress when this article was finished.

[*Translated from German*]

Educational activities within the framework of the Zoological Museum in Copenhagen

Denmark

Peter N. Haase

In 1970, the Zoological Museum in Copenhagen opened its present exhibitions to the public. It is no longer arranged systematically but from an educational standpoint, which makes it easy to grasp information about central biological problems. The exhibitions deal especially with ecology and behavioural biology, i.e. the interplay between living organisms and the surrounding environment. These are subjects that the individual citizen must understand in order to be able to form an opinion about many of the problems which develop in a modern society.

In this light the exhibitions are naturally of interest to schools as well as to children in general, since it is the children who will have to live in and set their mark on society in the future.

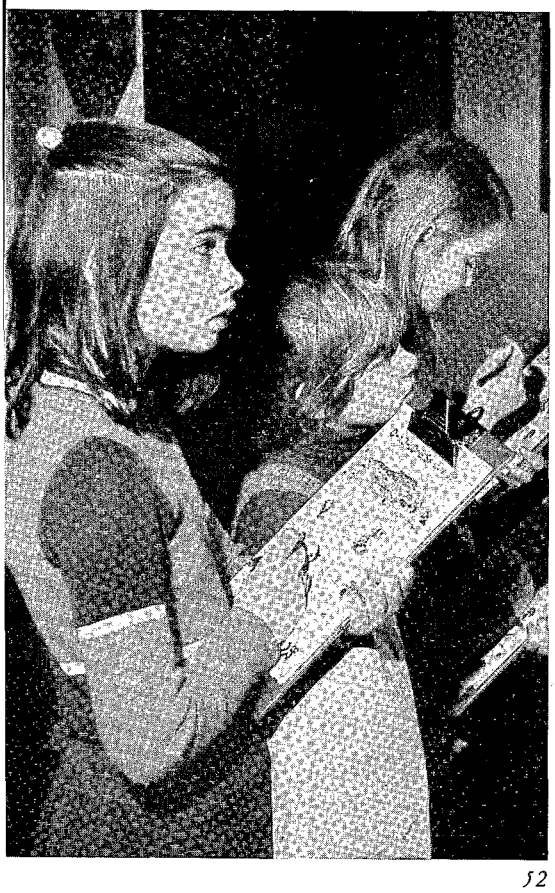
A museum for children

The Zoological Museum is visited yearly by about 300,000 people, of whom about half are children. Some 60,000 children come in connection with their schools as part of an organized educational programme.

Children experience things not only visually, but also through impressions of touch, smell, taste and sound. If one wishes therefore to teach children as well as adults, it is important that the exhibitions include, for example, sound effects, and that now and then there is a chance to touch some of the stuffed animals. To achieve good results, it is important that the learning situation be as concrete as possible. For many biological subjects, the most concrete experience is obtained by working in and with 'nature'. Work on ecological problems in the field, however, requires a good deal of background knowledge for both children and teachers. It is impossible, or extremely difficult, to observe many fundamental ecological processes with the naked eye. It is, in this connection, among others, that the museum has its justification. By arranging the exhibits from an educational standpoint they can help to give the user a basic insight into and an understanding of the more complicated problems. This can perhaps motivate the visitor to further observations of and experiments in the surrounding environment.

Educational activities

The former museum guards, or custodians, at the Zoological Museum in Copenhagen have been replaced by biology students, which has been especially important from the educational viewpoint. These students inform and guide the museum's visitors and co-operate in planning and carrying out the various educational activities.



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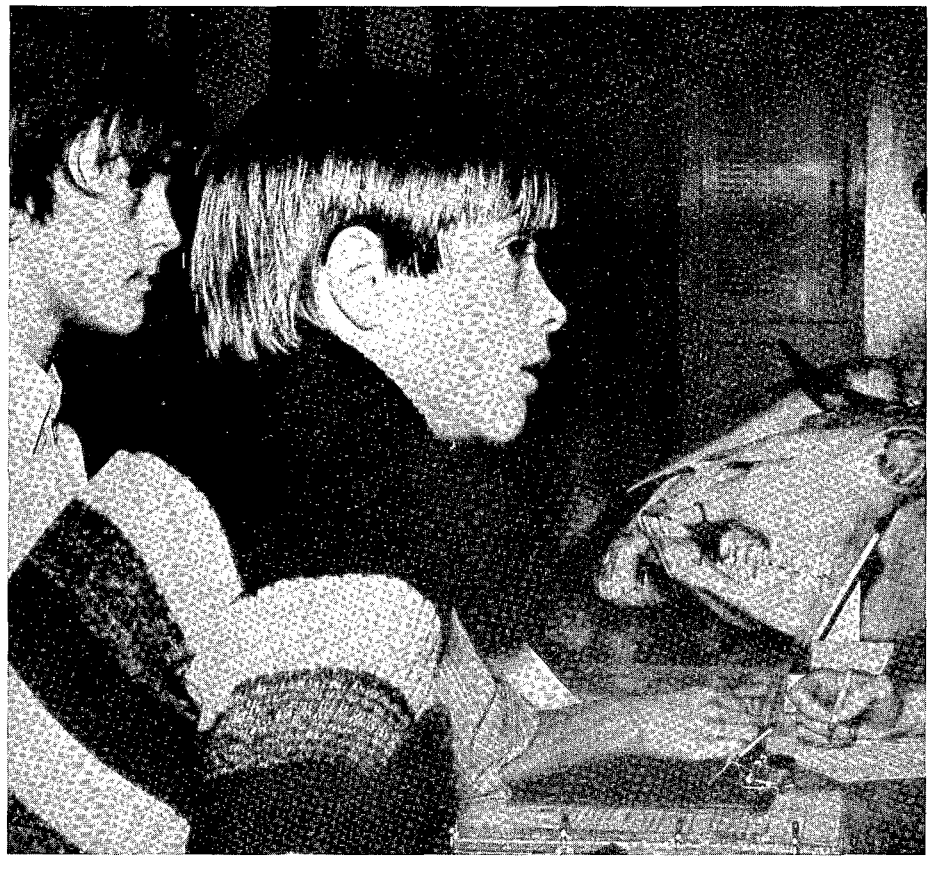

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Each diorama, also constructed from a didactic standpoint, is easily understandable, even for children, but it can be difficult to combine the many impressions and pieces of information so that they form a whole, and in this respect the educational activities can be a help. Admission and all activities are free and open to all visitors.

Worksheets

A wide variety of worksheets are available, ranging from pre-school, i.e. non-reading, to the oldest groups, for example, first-year college students. The worksheets are based on the exhibitions and always take their starting-point in things that can be observed and not in texts. They give the individual child a chance to work through the problems at his own pace (Fig. *52*).

At present the existing worksheets are being revised so as to form a hierarchy, enabling a child to use the knowledge he has gained from one worksheet as a basis for work on others at higher levels. In this way, work with the exhibitions can form the basis for understanding more and more complicated problems.

In order to obtain the desired effect, some follow-up is necessary. This can take place between teacher and pupil at school after visiting the museum, or during the visit through contact with the student-custodians. This contact is made when the child has finished working on one worksheet and before he is handed the next one. Thus the worksheets can be combined according to the individual child's interest, ability and needs (Fig. *53*).

Educational presentation

When a school class goes to the museum, the pupils' work must be focused on the exhibitions, otherwise there would be no point in taking them there. Therefore, the activities carried out in the museum classroom must always be directly related to the pupils' work with the exhibitions. The educational talks are always short and either motivating or explanatory. The information can be presented through discussion, slides, films or educational games related to some of the problems exposed in the exhibitions (Fig. *54*).

55

Further activities

We should very much like to expand our selection of teaching aids to include more resource-demanding activities. Different activities have been tried, but up to now it has not been possible to work these into our programme.

The museum has co-operated with various theatre groups, who have staged performances on subjects related to the museum's exhibitions.

A natural and perhaps necessary continuation of the children's activities at the museum is to let them work in the surrounding environment (Fig. 55). The museum's co-workers have taken part in the preparatory work concerning milieu-school projects.

Moreover, we have acquired a fair amount of experience with short excursions to localities in and around the city of Copenhagen.

Children and the museum–mutual help

As previously mentioned, of the approximately 150,000 children who visit the Zoological Museum in Copenhagen each year, about 60,000 come as part of a carefully planned educational experience. The remaining 90,000 children visit the museum quite independently of the schools, and many return again and again to take advantage of the various opportunities offered from an educational viewpoint.

By working with these children it is often possible to evaluate some of the educational activities, as the children come singly or in small groups and therefore develop a close contact with the museum's custodians.

About half of the 300,000 worksheets handed out each year by the museum are used by children who come by themselves, or with parents or friends. This would seem to indicate that in its educational work the museum has attained an appropriate level.

Through continual improvement of existing aids and development of supplementary activities in the surrounding environment, the Zoological Museum hopes to help make future citizens aware of the environment's importance for our common future.

52
UNIVERSITETETS ZOOLOGISKE MUSEUM, Copenhagen. The fact that a child 'is left' to study a topic undisturbed and at his own speed is a great incentive.

53
Contacts between the student-custodian and the child ensure that the worksheets correspond to his interests, abilities and needs.

54
'The animal race', an activity for the youngest pupils, comes at the end of their visit to the museum.

55
Child drawing a stuffed bird.

Greece

'The Child of Antiquity', an exhibition organized by the National Museum, Athens, for the International Year of the Child. The exhibition contained objects from Ancient Greece which are related to children

Barbara Philippaki

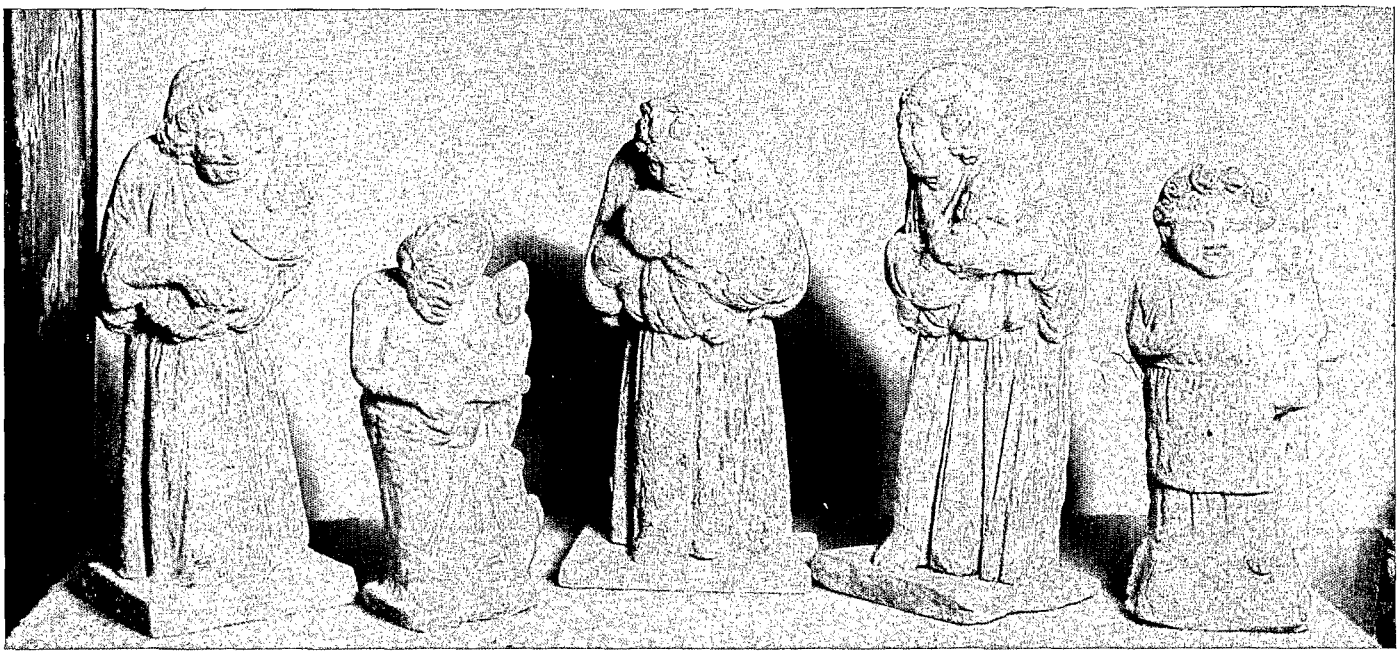
56
NATIONAL MUSEUM, Athens.
Statuette in baked clay, showing a child holding his dog.

This year, the International Year of the Child, humanity turns once more to the child, promising him its whole affection, and at the same time seeking his smile together with hope for a better world. The National Museum is taking part in these manifestations with an exhibition: *The Child of Antiquity.* In so doing, the National Museum wishes to offer today's children, across the gulf of centuries, the smile of the children who have lived in this corner of the earth. Where better could one turn but to the ancient Greeks, whose civilization has as its centre man and his ideals for a healthier and better life?

The objects gathered in this exhibition are mostly clay statuettes, terracottas, small marble reliefs and small clay vases which represent children, their toys and their pet animals, all selected from the rich collection of the National Museum. Most of them belong to the Hellenistic period. Although Greek art very early—already from the fourth millennium B.C.—portrayed the theme of mother and child which through the centuries led to the figure of the Madonna, it is only from the second half of the fifth century B.C. that the child interested Greek artists, and from the next century onwards conquered Greek art. During that period, simple artisans filled the market with charming clay statuettes and toys within reach of the poor and even the slave. These cheap objects, inspired by the works of great artists, are very often real works of art. Their simple language is easily understood by everybody, for it is the language of the child who lives always in us.

This exhibition is one of a series on the private life of the ancient Greeks which the National Museum has planned to offer to the general public so as to bring the ancients nearer to us. There is a growing conviction that museums should take a greater part in education and the popularization of archaeology. Culture exhibitions, i.e. exhibitions dedicated to aspects and ways of life characteristic of a people or a whole civilization, could make a very important contribution in this effort. It is necessary to see the ancient Greeks not only through their great achievements in art, philosophy, politics, poetry, science and the like, but to come to know them in their everyday life as human beings with their weaknesses, worries, fears, superstitions, myths, and customs. Only then can we see how very near they are to us and the museum atmosphere changes and becomes familiar and warm.

In cultural exhibitions the scientific aspect and the popularization element coexist, since the purpose is always to teach. When we were preparing this exhibition we were not so much interested in teaching the general public or giving material to the specialist as in bringing the world of Greek children to life, at least those

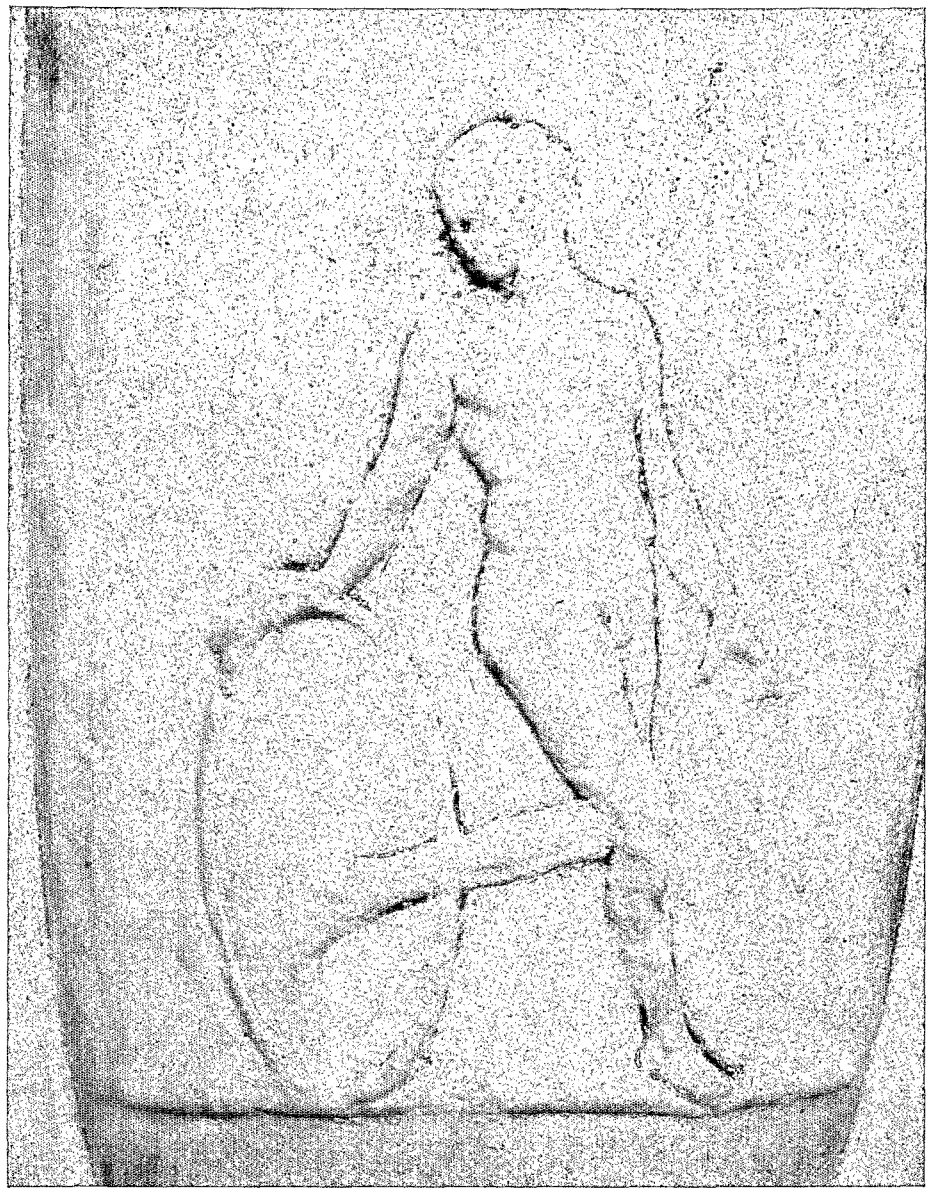


57
Statuettes of nurses.

58
Oenochoé decorated with red figures: child playing with his chariot.

aspects of it which we could cover more or less satisfactorily with the material existing in the National Museum and which could be understood by today's average man and woman, and to some extent by the child. The idea was to show that this remote world was not so very different from the children's world of yesterday and to some degree even of that of children today, poor and dry though it has become through technology.

We have divided our material into small subject units, i.e. babies in swaddling clothes in the arms of their mother or faithful old nurse (Fig. *57*); clay feeders; toys, many toys; small vases used at the Anthesteria, a festival in honour of Dionysus, in which children took part at the age of 3, holding such a clay vase decorated with scenes from their lives, school, athletics, games (Fig. *58*); even funerary reliefs and vases with scenes and epigrams giving an idea of how the Greeks faced the loss of a child. It is amazing to see how visitors react, finding something familiar in the scenes of this exhibition which brings them memories from their own childhood. The centuries are bridged, the differences disappear before the small child, wearing his cape with a hood, clasping in his arms his little dog and



59
White lecythus showing a child playing with his hoop.

trying to stand steady on his fat legs (Fig. *56*). The little girl dreams of the lovely dresses she will make for her clay doll with movable limbs. The little boy sees himself already a general driving his clay chariot on the plain of Argos. In the courtyard—what a paradise!—the mother will soon take from the oven the sweet honey cake and steaming bread which the children will share with their pets—pigeons, hens, dogs or cats. There is plenty of room in the vast courtyard for the boys to whip their hoops (Fig. *59*), the girls to spin their tops and play with the *astragaloi* (knucklebones). In the schoolroom the teacher helps a boy to read from an open papyrus roll which he holds with both hands. Another teacher brings an idle pupil into the classroom where others are already wearing their hats and carrying their writing cases and bags full of *astragaloi.* The magic world of children has not changed much down the centuries. We believe that, at least in exhibitions of this kind, the subject should be presented to the general public in the simplest possible way. What is important is to create the suitable warm and familiar atmosphere needed for direct personal contact. The visitor should be made to forget as much as possible that he is moving among objects from a world that no longer exists, and with which he finds it too difficult and complicated even to try to communicate. 'One of the greatest needs of this troubled, violent and bewildered age is to revive the Hellenic spirit, from which the civilization of modern Europe descends. The unity of Europe depends on its history and its living tradition. Now, more than ever before, there is a need to maintain those ideals which have no national frontiers and are the common inheritance of the civilized world.'

Experimental project of a laboratory for children at the Brera Art Gallery in Milan

Bruno Munari

The purpose of this project is to make known in the most simple and direct way the rules and techniques of the visual arts. This knowledge should help individuals to express themselves better, not only with more precision of language but also with visual communication. Just as there are rules in verbal language for the construction of a message, in the same way there are also rules in the field of visual communication, as demonstrated to us by the great artists of every period.

The manner in which this particular knowledge is passed on to children is by play. Rules and techniques that can be transformed into play activities understandable to children of 6 to 10 years of age are taken from works of art of every era. Each artist from every period has devised and perfected the rules and techniques that were most suited to him and best expressed his thought. Some of them are being tried out in this experimental laboratory to see how children respond.

The equipment of the laboratory consists of workbenches with vertical chipboard panels, 3.5 metres long by 1.7 metres high, arranged in the centre of the room (Fig. *60*). There are four double-sided panels providing eight surfaces. On these the children find displayed the visual information enabling them to understand a rule or a technique. On the workbench the children have all the equipment necessary for their work.

The techniques and rules visually explained to the children in this first experimental laboratory are:

Pointillism. The child finds (from left to right) reproductions of pointillist works, in colour and of suitable size, which are in the museum: Seurat, Severini, Boccioni, etc. Next to these is an enlarged detail of pointillist technique, in colour, with a sheet of paper beside it on which a pointillist combination in yellow and blue dots has already been done, with the inscription underneath: 'What colour do you see from a distance?' Then there are other examples of colour combinations prepared as patterns—not to copy but to continue. On the workbench are little pots containing primary colours and small round tampons with which to play at pointillism (Fig. *61*): the child will amuse himself composing surfaces with two different colours and then will look at them from a distance to see if a different colour from those he has used appears.

The stroke. Every artist creates or chooses his own personal stroke that characterizes his drawing. The stroke is the line peculiar to the artist in terms of texture, thickness and substance which makes up the drawing: Klee often used a nib to obtain a fine clear stroke, sometimes he also used a thick, heavy one; Hartung makes rapid strokes; Soulages a very heavy, black stroke; other artists use broken lines; Ben Shahn uses his own particular stroke made of little black marks. The

60
PINACOTECA DI BRERA, Milan. Young people studying panels of a display aimed at introducing them to various artistic techniques.

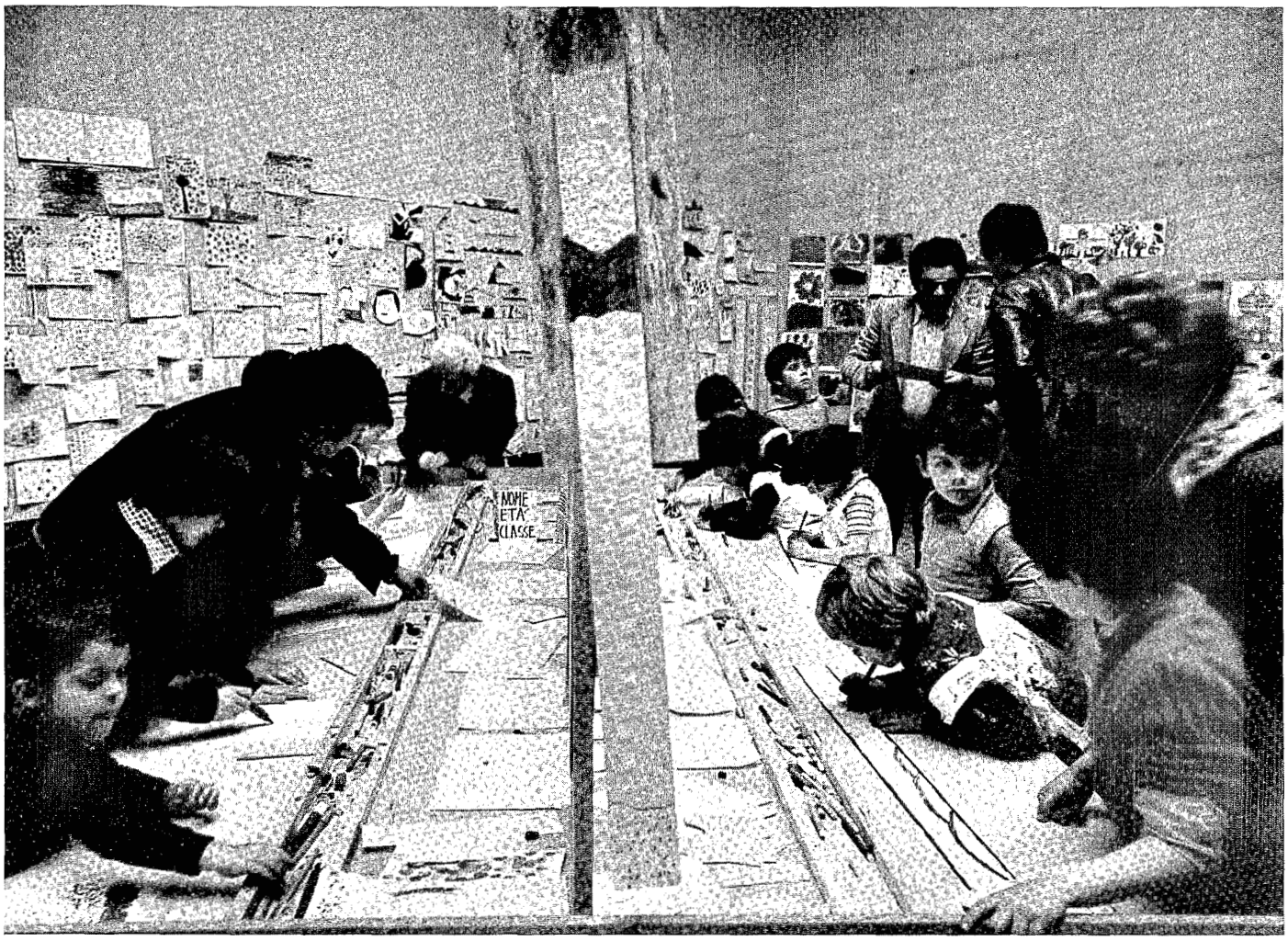
Japanese have brushes shaped like a radish, so that the point can be used to make an extremely fine stroke and the round end a very thick one. On the playbench, there is a variety of implements and blank sheets of paper on which to practise.

Far and near. This is the problem of chromatic perspective: on sheets of post-card-size paper, arranged in a horizontal line, the child sees how the same colour can seem far away or near, depending on whether it has left a light mark on the paper or has been applied more heavily. The references to the museum are reproductions in colour of works by Turner. On the playbench are pastels of all colours and paper only.

Grids. Of course one cannot explain to children what the 'golden mean' or 'harmonic structures' are; instead we speak to them of 'grids' inside which the figures of the composition are placed. On the playbench the children find small sheets of paper already prepared with real harmonic structures selected from works of art of the past, with pens and pastels to draw on them. Later on the child will have appropriate information on these structural rules. The example from the museum is a reproduction of Raphael's *Marriage of the Virgin* with the relevant grid placed over it.

Texture. Artists apply their colours on the canvas in different ways, often even trying to give substance in relation to the image. As a reference to the museum, we find reproductions of works of Tobey, *matière* paintings by Dubuffet and Braque. The surface of the work-table is covered with little drawing tablets in relief, to obtain different textures by tracing. One tablet is covered with rough plaster, one with fine wire-netting, another with rubber with raised lines, etc. On the play-table, there are pastels for tracing and thin paper.

Collage. The reference to the museum is provided by reproductions of works by Matisse, Schwitters, Arp and Picabia. On the visual panel are samples of paper and cardboard presented in order to draw the children's attention to the fact that they have a different appearance if the front, the back or the inside is used. Paper of all types is used smooth, crumpled or in other ways. On the bench, paper, glue and scissors are provided.



61
Children working in the workshop under the guidance of their teachers.

Composable shapes. On the information panel are small shapes of coloured cardboard which can be combined with one another in many different ways. The museum references are reproductions of works of the Constructivists. On the playbench, there is an adequate supply of composable shapes such as triangles, lozenges, curved forms; again cards and glue are provided for each child to make his own combination.

Different formats. Artists do not always paint their works in conventional formats. Often the artist decides on the format best suited to his message, but some are forced to decorate a half-moon, a long, narrow rectangle or an irregular space. On the playbench are sheets of paper of unusual, strange shapes, colours, pens and pastels. Each child can choose the shape he prefers and do whatever comes into his mind.

Colour. A separate section is devoted to the analysis of colours. Here the children can do anything they wish, but with only one colour at a time. At the beginning there may be only red, but many reds of every kind: light, dark, brilliant, opaque, etc. From red they can go to blue, then to green: one by one all colours will be tried out. Each child must write his name, age and school on his work. Each section is supervised by an assistant.

At the end of the experiment, the Faculty of Psychology and Pedagogy of the University of Geneva will examine the material collected and establish statistical data.

A documentation and information centre on the question is to be set up at the Brera Art Gallery. Now and then seminars could be held, with teachers for educational problems, with artists for research on basic elements of rules and techniques to teach to the children, and with the public at large to make the problem better known.

Along these lines, planned for children from elementary schools, it will be possible to study different communication methods for nursery schools and for secondary schools.

[*Translated from Italian*]

Romania

Co-operation between kindergartens and museums

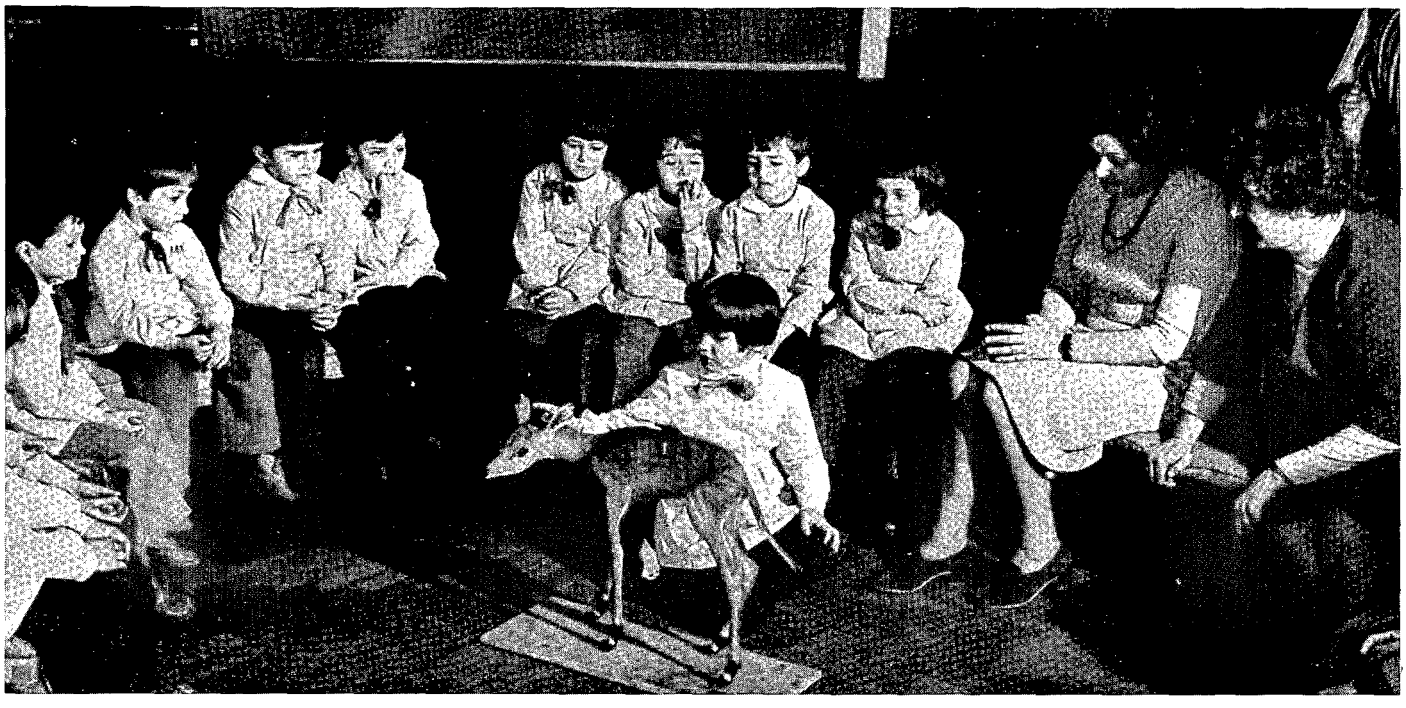
Ana Marossy and
Mariana Olariu

Romania, a fast-developing country wide open to modern technological progress with the intention of raising its people to advanced levels of civilization and culture, is also constantly striving to secure a physical environment favourable to man's everyday life and preserve the balance of his admirable natural setting. Protection of the physical environment and the rational utilization of it thus form an integral part of the policy of the State. That policy is implemented by means of legislative measures, specifying not only the practical and directly protective steps to be taken but also the important educational tasks devolving on the specialized institutions, among which museums occupy a leading place.

Modern museums have the resources to provide information in the form of the original object itself (which is highly effective) and in complementary ways made possible by modern technology, enabling a dialogue to take place between visitors and museum staff, so that visitors can obtain prompt additional information. This characteristic of museums is very important for children of all ages, who are our most precious and most faithful public. The educational activities of the Natural Science Section of the Museum of the Criş Region cater first and foremost for children, from kindergarten level up to the senior classes of secondary school. Our recent experiments have concentrated on kindergarten children aged from 3 to 6, an approach that has now become standard practice in our museum. Children of that age are greatly attracted to the plants and creatures around them and are very receptive to anything that is new to them. Our principal aim, therefore, has been to test the museum's potential for forming scientific notions concerning nature or for developing ecological awareness in very young children. Collaboration between the museum and the kindergarten began with the provision of psychopedagogical training for museum workers and of information concerning the kindergarten syllabus.

The activities took place mainly at the museum, but the museum workers also visited the kindergarten and sometimes took the children out into the countryside, mostly to the nature reserves which we regard as a living museum. We never lose sight of the children's age, using suitable methods so that all the activities are within their reach, enjoyable and presented as a game.

We introduce them to the museum in stages so that they assimilate ideas gradually. The children have visited the museum several times and have thus become familiar with its atmosphere. During such visits, we have been able to note their interests and preferences. The guide explains things to them and encourages them to talk. When we show the children slides, we get them first of all to comment on them, so that we obtain an idea of their level of knowledge of natural pheno-



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NATURAL SCIENCE MUSEUM, Oradea, Romania. The 'I want to know' group. The children are allowed to touch the objects.

mena. Afterwards, they draw and model the things they have seen, and we exhibit their work from time to time.

One of our activities is called 'I want to know' and is very popular with the children. It takes the form of a quiz on the exhibits, the objects we have in store, film-strips and films (Fig. *62*). With children of 5 and 6, we have also successfully used the microscope, the children showing themselves capable of drawing what they have seen on the slide. Another activity is 'Museum morning', with a scientific, literary and artistic programme in which museum workers, puppeteers, musicians and children take part. This activity deals with plant and animal themes, which are presented scientifically and illustrated by stories, fairy tales, poems and music. Its guiding principle is to teach the children the importance of protecting the natural environment.

There are also contests entitled 'Who knows wins'. These have been held as part of an exhibition (see Fig. *63*). They are among the children's favourite activities, and parents also take part.

Some activities take place away from the museum. Small exhibitions made up of items taken from the museum collections, with slides the children can discuss with the museum workers, are put on in the kindergarten schools. During excursions, especially to the nature reserves, the children are shown in their natural setting animals they have already seen in photographs or stuffed and mounted. This makes it easy for the children to see the relationship between the things of nature and the museum environment, while at the same time acquiring the habit of observing nature. When time permits, the visit to the exhibition is followed by a visit to the zoo, where the children can see the animals in movement. There is a 'Friends of the Museum' club composed of children who have shown particular interest in the museum and in learning about plants and animals. On the field trips that are organized for these children, they collect specimens of plants, insects and so on, which they later mount at the museum (Fig. *64*). They have also made up simple biogroups, which they then show at the kindergarten. The girls make flower arrangements (Fig. *65*), and some of the children learn to take photographs.

Following these activities, we carried out tests to ascertain the children's interests and find out what else they wanted to see or do either at the museum or elsewhere. The results, briefly, were as follows: most of the children want to see the animals and plants they have heard about in stories, tales and poems (foxes, deer, woodpeckers, frogs, crickets, etc.); they want to touch them, especially those children living in towns and deprived of direct contact with nature. Since

63
'Who knows wins' contest.

64
Children on an excursion to a nature reserve with their teacher.

65
Little girls practising flower arrangements.

the museum is not equipped to house a vivarium, we help kindergartens to set up a 'living things corner' (e.g. aquarium, terrarium, plants) that is tended and looked after by the children under the supervision of their teacher.

To what extent do the children influence the museum? As a result of the continuing dialogue with our young visitors and of the many questions they ask us, we achieve improvements in the display of exhibits; we have organized mobile mini-exhibitions in several kindergartens and we are seeking new and interesting ways of satisfying the children's curiosity and of making them want to return to the museum and even bring their parents, to whom they in turn serve as guides. Of all the different people who visit the museum, we find that children aged from 3 to 6 present the most interesting challenge. Highly receptive at that age, they soon feel at home in the museum environment, and we are able to help them to accomplish activities such as collecting, preparing and conserving exhibits. Children take the problem of protecting nature very seriously, and a knowledge of ecology can be acquired very early in life. Children are severely critical of adults in the matter of protection of the environment and take an unequivocal stand against those who do not respect its principles.

We also extend our observations to the primary school, in an attempt to determine the extent to which the interest in museums is maintained. We have found that these children become loyal proponents of the principles they have learnt and ask their new schoolmaster or schoolmistress to take them and their schoolmates to the museum where, very proud of being recognized by the curator, they enjoy answering the questions he puts to them.

All this educational work with pre-primary schoolchildren calls for enthusiasm, hard work and special aptitudes on the part of the museum worker. Only thus

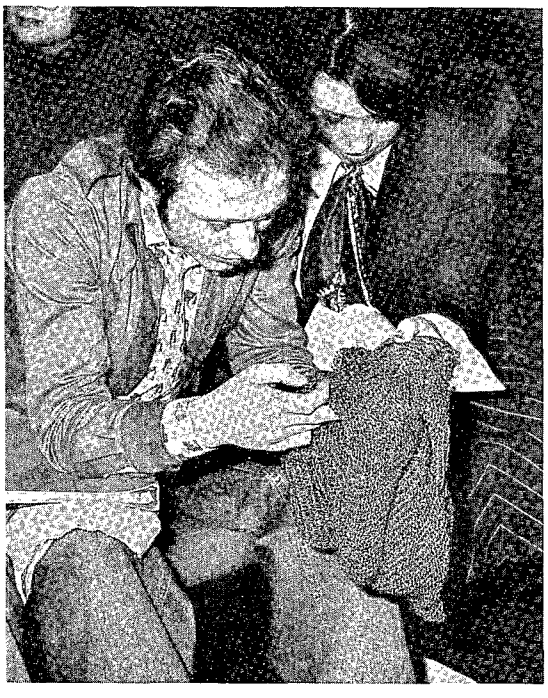
can the museum fulfil its noble role as a many-sided training and educational institution for developing an ecological conscience in people of all ages.

[*Translated from French*]

United Kingdom

Excursions to museums, sites and monuments as 'sources of knowledge'

Alison Heath



66
THE TOWER OF LONDON. A suit of chain mail repays close study as part of a lesson in medieval warfare.

The increasing urbanization of our society is causing a fundamental change in the educational needs of young people which should be reflected in a development of the role of museums.

When the British education system was first created children had plenty of first-hand experience of life: the family was a closely knit unit, covering the whole age range. Every aspect of work and relaxation was apparent within the local community. On the other hand it was difficult for young people to find out about the world outside their own immediate neighbourhood. Their education was, therefore, based on secondary sources, books, drawings, photographs, etc. Now, television and radio have reinforced the printed word to make this 'other world' more easily accessible, if still at second hand. It is direct personal experience that is now more likely to be missing: families are fragmented and places of work are often outside the immediate locality. Hence, the child sees and understands far less of the activity of the community.

It is for this reason that our teaching is increasingly based upon direct personal experience for the child outside the classroom walls. This means that museums, sites and houses have come to play an important part. It is the immediate reality of the objects and the buildings that is the crucial key. The museum, site or historic house is a very special extension of the classroom, and provides a learning situation that is difficult, if not impossible, to re-create within the school. Museums no longer see their role in the simple terms of collecting and preserving. It will not suffice to put an object in a glass case with a label, or erect a railing around a building and carefully tend the grass.

The essential wonder and intrinsic interest of object or place are only part of the story. The museum, site or historic house is becoming part of a web of learning for the child, reinforcing and developing his knowledge and experience.

All our senses are involved in the learning process. Although nearly three-quarters of all our learning is visual, we should not ignore the potential of touch, taste and smell. To handle a Roman pot, a suit of chain mail (Fig. *66*), or the thimble used by a housewife a hundred years ago, will greatly enhance the learning experience. But how much richer will that experience be, if, as part of the study, we can see the kind of room in which the Roman pot or the thimble might have been used, try on the suit of chain mail, taste the meal the medieval knight might have eaten before he rode into battle (Fig. *67*), visit the castle in which he lived or the battlefield on which he might have fought?

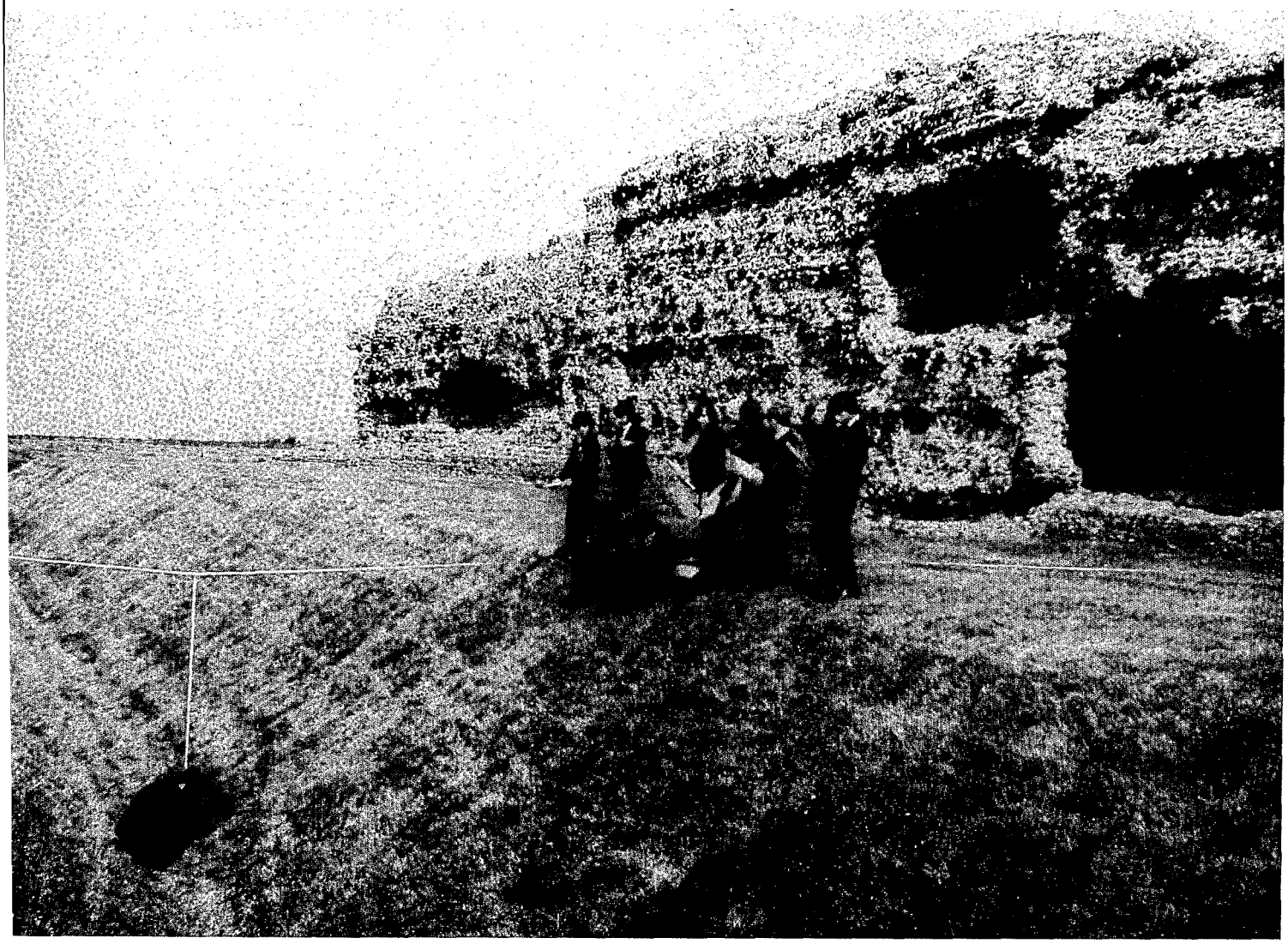
Museums in the United Kingdom have been experimenting in this way for a number of years. At the Geffrye Museum we ran the *Spitalfields Project.* The

67
THE TOWER OF LONDON. A medieval feast.

museum itself is a series of period room displays illustrating English interiors from the sixteenth to the twentieth century. Near by is the Spitalfield district of London where, in the late seventeenth century, many thousands of Huguenot silkweavers from France settled. Because the silks they wove were finer than anything previously available, silk became very fashionable and the weavers prospered. They built themselves fine houses and a magnificent church (Fig. *69*).

The conservation issue became obvious in a short walk round the streets of once beautiful, but now all too often derelict, eighteenth-century buildings. How best to make children aware of this fascinating heritage and so help to protect it? The first step, with the help of the Greater London Council Historic Buildings Department, was to prepare a 'history trail' which included a written guide for adults accompanying children, and activity sheets for the children to use to note their observations and make sketches as they went around. The interiors of the houses were studied by comparing them with the eighteenth-century displays in the museum, and by visiting Uppark House in Sussex, a fine eighteenth-century house with its original decoration and furnishings.

What about the silk? We borrowed silkworms and the children became fascinated by the progression from egg to adult moth and by the cocoons that provided the raw silk. A visit to the Science Museum explained the weaving techniques used by the Huguenots, and the Victoria and Albert and Bethnal Green Museums taught us about the fabrics and the fashionable clothing made from it. In the meantime, the museum workshops were a hive of activity where children drew, painted, printed and experimented with their own weaving, cooked eighteenth-century recipes, became involved in role play and wrote their own play which was filmed for showing on London Schools Television. The conservation issues were also discussed avidly and solutions for the problems proposed. Local



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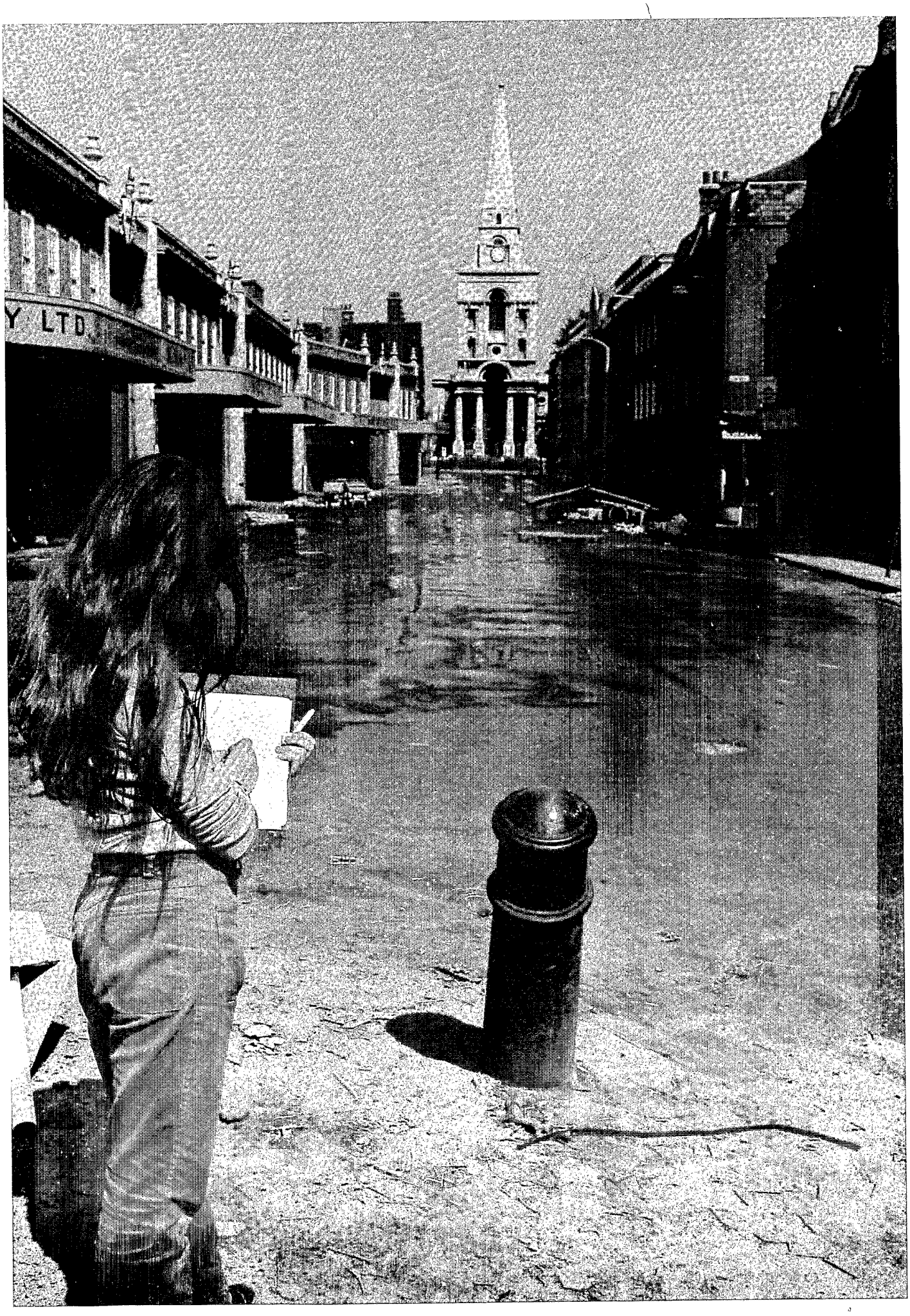
Group of students measuring the great ditch of the Roman fort at Rutupiæ (Richborough).

conservation societies gradually became involved, and with the help of local people a beginning was made to the rehabilitation of the buildings.

This is just one example of the kind of programme that can be developed by a museum turning outside its own walls and making use of the skills and knowledge available within the community. When once one begins to realize the potential of such an integrated study it becomes obvious that almost any object or site (Fig. *68*) can be studied in this way. The stuffed owl in the museum case needs also to be studied for its skeleton, in the zoo and in its natural habitat, for one to be able to gain anything like a complete understanding. Any object as small as a coin can be used to teach history, art, politics, geography, commerce, costume, etc. It may lead us to a study of the building where it was found and the people who used it. The possibilities are endless.

Many of the suggestions I have made in this article are not the prerogative of museum education officers, who are so few in number in this country that they could never hope to meet demands upon their time, but are the kind of experience that can be a part of any integrated study within the school. For this reason the pre-service and in-service training of teachers is an essential element of our work. In conjunction with local education authorities and the Department of Education and Science, we organize seminars and short courses to encourage the development of the educational use of the rich resources our heritage offers. By training teachers in this work we can hope to multiply the benefits of skill and knowledge. Understanding, enjoying and caring for our special heritage should be the concern of us all. Children need to be encouraged to appreciate and protect the past in order to understand the roots of their civilization. In the long term, public awareness and sympathy will make the task of protecting, preserving and conserving our heritage much easier.

69
Hawksmoor Church, Spitalfields.
Project work on the Spitalfields History Trail organized by the Geffrye Museum, London. A small girl drawing the Hawksmoor church, built by Hugenot silk-merchants in the heart of the historic district of Spitalfields.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National Diploma of Painting. Diploma of the École du Louvre. Has also studied history of modern art, aesthetics and art sciences. In 1965, she was Curator in the Art Museum of Marseille. Teacher at the Marseille School of Art and Architecture. Lecturer in museology at the University of Aix-Marseille. In 1968, she set up the first Children's Museum in Marseille, together with some thirty exhibitions of contemporary art. In 1973, was in charge of the teaching programme at the Georges Pompidou National Centre for Art and Culture, Paris. In 1975, initiated Children's Workshop of which she is in charge. Publications: articles and studies on art and the child; exhibition catalogues on contemporary art; *Ch. Camoin* (Marseille, La Savoisienne) and *Le Musée et la Vie* (Paris, Documentation Française). Member of the International Association of Art Critics (IAAC—France) and ICOM and its International Committee for Education and Cultural Action.

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Degrees in science, education and theology. Since 1975, Lecturer in Museum Studies, University of Sydney. Previously Senior Education Officer, Queensland Museum, Brisbane. In 1971, awarded Churchill Fellowship to study museums as effective educational institutions in North America, United Kingdom and Europe. Publications in *Kalori:* 'Simulation Games', December 1977; 'Drama in a Museum Education Programme', November 1974; 'Audiovisual and Participatory Exhibits', June 1978. Honorary Secretary of the Museums Association of Australia. Member of the Board of the ICOM International Committee for Professional Training and Member of CECA.

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Higher education in natural sciences, University of Babes-Bolyai, Cluj-Napoca (Romania). Teacher of natural sciences. Head curator at the Criş Regional Museum, Oradea (Romania). Numerous articles including 'Co-operation between the Museum and the Pioneers for the Protection of Nature', *Nymphaea,* 1975; 'The Role and Place of the Natural Science Museum in the Modern Concept of Protection of the Environment', *Revista Muzeelor si Monumentelor,* Vol. 12, No. 1, 1975; 'The Nature Reserve—An Open Air Museum', *Nymphaea* (Oradea), 1976, and other scientific publications.

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BRUNO MUNARI

In 1933, exhibited his kinetic objects called 'useless machines', and his first abstract paintings. He achieved projects with polarized light, compositions of changing colours, exhibited at the Tokyo Museum. In 1967, he was invited to give a course in advanced research for visual communication at Harvard University, Cambridge (United States). In 1977, he planned a laboratory for children at the Art Gallery of Brera, Milan.

SYLVIO MUTAL

Engineering and social science studies. At present Chief Technical Adviser of the Unesco/United Nations Development Programme Regional Project in the Andean Area of South America. Has been associated with the United Nations system since the late 1960s as Inter-Regional Adviser for Youth Policies and Programmes and later Deputy Resident Representative of UNDP in Peru. He

has participated in youth-training programmes since the early 1950s when he initiated training programmes for European student-volunteers to be museum guides and animators for youth groups. Later he directed community development and fundamental education projects in Latin America. Has organized exhibitions of African, Pre-Columbian Primitive Art in Europe and in many developing countries.

S. M. Naïr

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University degree. Before becoming Assistant Curator she was a teacher. In 1972, was the winner of the 'Museums Association', United Kingdom. Curator of the National Museum and Art Gallery, Gaberone, and responsible for education services. Editor of the annual *Botswana Notes and Records.* In 1975, visited the United States as a participant in the Foreign Museums Professionals' Tour of America.

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Teacher. Article: 'Co-operation between the Natural Science Museum and Teachers, Kindergartens', *Nymphaea,* 1977.

Barbara Philippaki

In 1940, graduated from Athens University. Diploma in classical archaeology (1948) and Doctor of Philosophy with the thesis 'The Attic Stamnos' (1950), Oxford University. Membership of Princeton Institute for Advanced Study (1951-52). Epimeletes of Antiquities in Samos. Ephor in Delphi, Thebes and National Museum (assistant director and director). Now General Ephor of Antiquities in the National Museum. Organized exhibitions at the following museums: Brauron, Marathon, and Chios, and the vases in the temporary exhibition of Thera in the National Museum, Athens, where there is a temporary exhibition on 'The Child in Antiquity'.

Niched Suntornpithug

B.Sc. (physics), Chulalongkorn University; M.A.T. Physical Science, Michigan State University; Ph.D. (education), University of Southern California. Successively Principal of both Nakornpathom Teachers College and Ayuttaya Teachers College after having been Head of Science Department, Nakornpathom Teachers College. Since 1976 Director of Centre for Educational Museums, Department of Educational Techniques, Ministry of Education.

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Studies in Indology and Cultural Anthropology, and in 1957 Ph.D. at the State University of Leiden. From 1957 to 1962 worked in the Educational Department of the State Museum of Ethnology in Leiden. Since 1962, Head of this department. Chairman of the Netherlands group of museum educators, 1967-71. Since 1977, President of the ICOM Committee for Education and Cultural Action (CECA). Teacher at the Netherlands Training School for Museum Personnel in Leiden. Publications: *Educatief Werk in Musea* (Groningen, H. D. Tjeenk Willink, 1975); articles in Netherlands and international periodicals.

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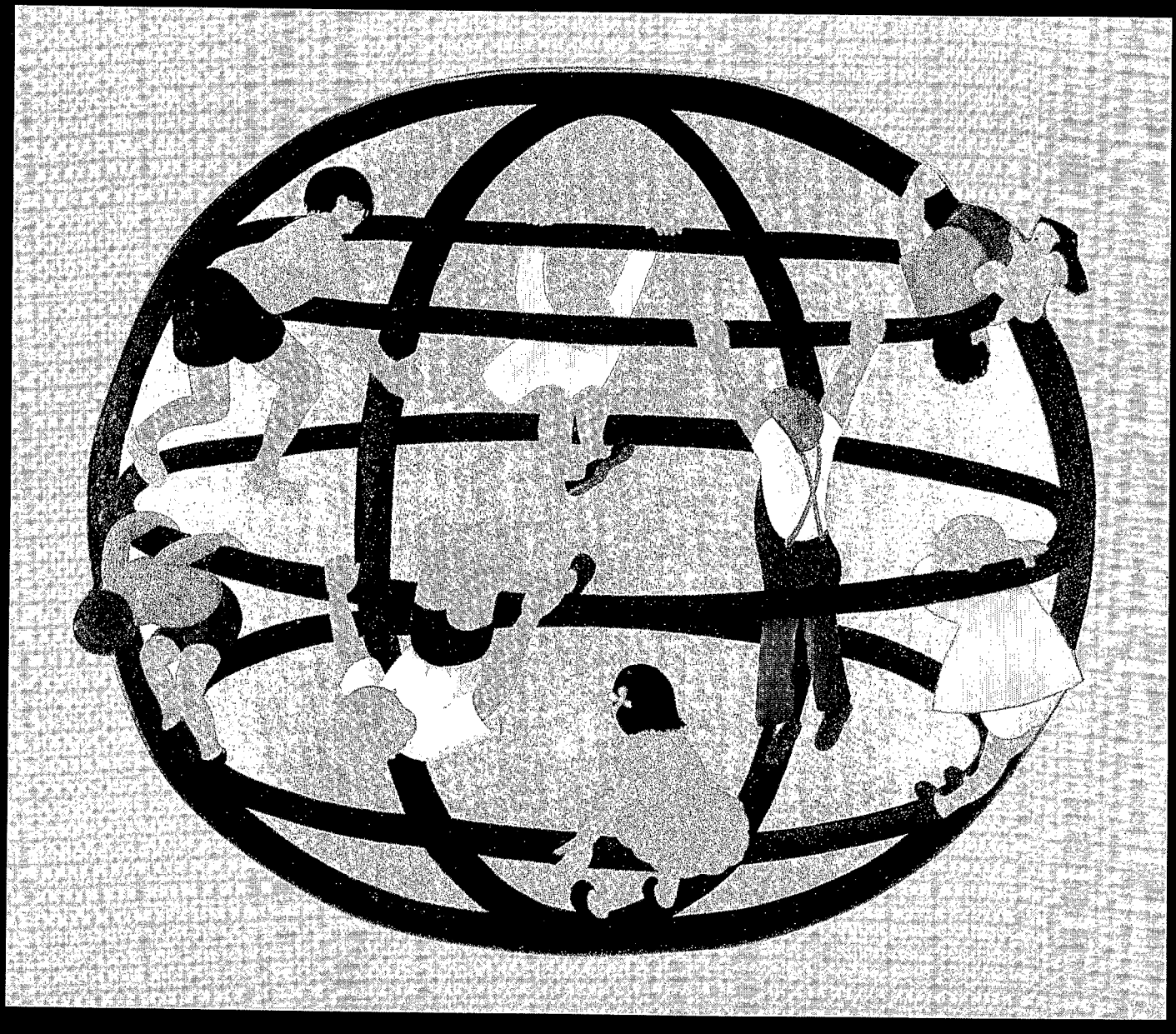
unicef

The United Nations International Children's Fund (Unicef) produces every year its well-known greetings cards and sells them throughout the world for the benefit of children in developing countries. Nearly 1,000 million have been sold so far.

Unicef, at the request of these countries and within the framework of its long-term planning, also provides materials and goods to help feed, educate and generally take care of the children.

In declaring 1979 the Year of the Child, the United Nations entrusted Unicef with the responsibility of co-ordinating and promoting programmes for children.



Declaration of the rights of the child

1979
international
year
of the child

Principle 1
The child shall enjoy all the rights set forth in this Declaration. All children, without any exception whatsoever, shall be entitled to these rights, without distinction or discrimination on account of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, whether of himself or of his family.

Principle 2
The child shall enjoy special protection, and shall be given opportunities and facilities, by law and by other means, to enable him to develop physically, mentally, morally, spiritually and socially in a healthy and normal manner and in conditions of freedom and dignity. In the enactment of laws for this purpose the best interests of the child shall be the paramount consideration.

Principle 3
The child shall be entitled from his birth to a name and a nationality.

Principle 4
The child shall enjoy the benefits of social security. He shall be entitled to grow and develop in health; to this end special care and protection shall be provided both to him and to his mother, including adequate pre-natal and post-natal care. The child shall have the right to adequate nutrition, housing, recreation and medical services.

Principle 5
The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required by his particular condition.

Principle 6
The child, for the full and harmonious development of his personality, needs love and understanding. He shall, wherever possible, grow up in the care and under the responsibility of his parents and in any case in an atmosphere of affection and of moral and material security; a child of tender years shall not, save in exceptional circumstances, be separated from his mother. Society and the public authorities shall have the duty to extend particular care to children without a family and to those without adequate means of support. Payment of State and other assistance towards the maintenance of children of large families is desirable.

Principle 7
The child is entitled to receive education, which shall be free and compulsory, at least in the elementary stages. He shall be given an education which will promote his general culture, and enable him on a basis of equal opportunity to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society.
The best interests of the child shall be the guiding principle of those responsible for his education and guidance; that responsibility lies in the first place with his parents.
The child shall have full opportunity for play and recreation, which should be directed to the same purposes as education; society and the public authorities shall endeavour to promote the enjoyment of this right.

Principle 8
The child shall in all circumstances be among the first to receive protection and relief.

Principle 9
The child shall be protected against all forms of neglect, cruelty and exploitation. He shall not be the subject of traffic, in any form.
The child shall not be admitted to employment before an appropriate minimum age; he shall in no case be caused or permitted to engage in any occupation or employment which would prejudice his health or education, or interfere with his physical, mental or moral development.

Principle 10
The child shall be protected from practices which may foster racial, religious and any other form of discrimination. He shall be brought up in a spirit of understanding, tolerance, friendship among peoples, peace and universal brotherhood and in full consciousness that his energy and talents should be devoted to the service of his fellow men.

Declaration adopted by the United Nations General Assembly, on 20 November 1959.