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ROUND TABLE ON THE DEVELOPMENT AND THE ROLE OF MUSEUMS  
IN THE CONTEMPORARY WORLD

Santiago de Chile, Chile 20-31 May 1972

Report from the Director of the seminar:  
Mr. Héctor Fernández Guido  
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Montevideo, Uruguay

FINAL REPORT OF THE ROUND TABLE ON THE DEVELOPMENT AND THE ROLE  
OF MUSEUMS IN THE CONTEMPORARY WORLD

BACKGROUND

By resolution 3.345 contained in document 15 C/5, the Director-General was authorized "... to promote the development of museums in Member States ... (b) by promoting the adaptation of museums to the needs of the contemporary world".

In pursuance of this resolution, an international symposium was convened by Unesco to which museum representatives (various categories of museums), sociologists, educationists and documentalists were invited.

The symposium took place from 24 to 28 November 1969, at Unesco Headquarters in Paris.

It was attended by 22 consultants, invited as specialists in their particular subject, from 21 countries, and observers representing various intergovernmental organizations.

The questions considered at this symposium were the following:

the rôle and place of the museum in the contemporary world;

the museum - the intensification of scientific research and the growth of art production;

the diffusion of culture through museums and their attempts to broaden the range of visitors;

the administrative structure of museums and their management.

The final report of this symposium is reproduced in document SHC/MD/8, Paris, 15 May 1970, under the title "International Symposium on Museums in the Contemporary World".

The General Conference of Unesco, at its sixteenth session, adopted resolution 3.42 whereby the Director-General is authorized to assist Member States in the development of museums, notably: "(a) by publishing the quarterly, Museum, and technical manuals on museographical subjects and organizing international round tables; (b) ..."

The Work Plan relating to this resolution provides for the organization of a round table, bringing together representatives of different categories of museums, educationists and scientists, in a Member State of Unesco during 1972, in order to discuss the development of specialized techniques for imparting, through museums, understanding of the sciences, including the social sciences, as well as the rôle of museums in life-long education.

In response to an invitation from the Government of Chile, the round table was held in Santiago de Chile from 20 to 31 May 1972.

## INTRODUCTION

The round table discussions took place in the meeting room of the Unesco Regional Office for Education in Latin America and the Caribbean in Santiago de Chile (Chile) from 20 to 31 May 1972.

It was attended by representatives of different categories of museums, educationists, sociologists and scientists. The round table constituted a new experience in this type of meeting, as had been the intention of the organizers.

It was, in fact, a productive exchange of ideas between museologists, scientists and educationists, the central theme of which was the following question: is the museum, as an educational institution disseminating scientific knowledge and culture, capable of meeting the challenge presented by certain aspects of social and economic development in Latin America today?

Unlike traditional meeting procedure, experts were not asked to prepare working documents as a discussion guide, but simply to give profound thought, as preparation of a personal kind within their specialized subject and in relation to the question for discussion, to the prospect of the structural modernization of the traditional "museum" institution so that it might be made more relevant to increasingly complex needs and better adapted to the swift changes that scientific progress is imposing on modern society, particularly in regard to the increasingly vital need for life-long education.

## WORKING PROCEDURE

In order to put this new procedure into effect, the choice of participants in the round table was made on the following basis:

- (a) a group of high level specialists with the task of setting out problems and new trends in their respective disciplines, who would be termed "discussion leaders";
- (b) a second group consisting of museum specialists with wide experience in the organization of these institutions, who would be induced by the discussion leaders' statements to propose, on the basis of their experience, solutions or, better still, suggestions concerning the development in, or by museums of new activities that would inform and interest the community and arouse its intellectual curiosity, and, at the same time, provide a means of extending the museum's field of action. This second group of specialists would be known as the "participants".

As can be imagined, the innovation provided by the multidisciplinary character of the round table membership promised to be extremely productive, and such was the case, since it enabled an adequate balance to be struck between the demands of the community, expressed here by the discussion leaders, and what the museums could, according to the experience of the museologists, offer in response.

The discussion leaders' statements were selected in advance by Unesco and dealt with the following subjects:

1. museums and cultural development in the rural environment and the development of agriculture;

2. museums and social and cultural problems of the environment;
3. museums and scientific and technological development;
4. museums and life-long education.

A series of excursions to Chilean institutions and regions was arranged in conjunction with the proceedings of the meetings, in order to provide additional information concerning each discussion theme.

#### DISCUSSION LEADERS

1. Professor Enrique Ensefiat, Faculty of Agronomy, University of Panama, Panama.  
Theme: Museums and cultural development in the rural environment and the development of agriculture.
2. Mr. Jorge Hardoy, architect; research head, Centre for urban and regional studies, Instituto Di Tella, Buenos Aires, Argentina.  
Theme: Museums and social and cultural problems of the environment.
3. Professor Mario Teruggi: Head of the Division of Mineralogy and Petrology, Museo de La Plata, La Plata, Republic of Argentina.  
Theme: Museums and scientific and technological development. This theme had been originally assigned to Dr. Federico Pannier, CONICIT, Caracas, Venezuela, who was unable to attend the round table.
4. Dr. César Picón Espinoza: Director-General of School and Vocational Education, Ministry of Education, Lima, Peru.  
Theme: Museums and life-long education.

#### UNESCO REPRESENTATIVES

- Miss Raymonde Frin, Editor of Museum, Standards, Research and Museums section, Department for Cultural Heritage, Unesco, Paris.
- Mr. Jacques Hardouin, Programme Specialist, Section for the Development of the Cultural Heritage, Unesco, Paris.
- Mr. Hugues de Varine-Bohan, Director, ICOM, Unesco House, Paris.

#### PARTICIPANTS

- Dr. Teresa Gisbert de Mesa, Director, Museo Nacional de Arte, La Paz, Bolivia.
- Mrs. Lygia Martins-Costa, Instituto do Patrimônio Histórico e Artístico Nacional, MEC, Rio de Janeiro, Brazil.
- Dr. Grete Mostny Glaser, Curator, Museo Nacional de Historia Nacional, Santiago, Chile.
- Dr. Alicia Dussan de Reichel, Head, Division of Museums and Restoration, Instituto Colombiano de Cultura, Bogotá, Colombia.

- Mr. Luis Diego Gomez, Director, Division of Natural History, Museo Nacional de Costa Rica.
- Mr. Hernán Crespo Toral, architect, Director del Museo Banco Central del Ecuador, Quito, Ecuador.
- Mr. Luis Lujan Muñoz, Director, Instituto de Antropología e Historia, Guatemala, Guatemala.
- Mr. Mario Vázquez, Assistant Director, Museo Nacional de Antropología de México, Mexico.
- Professor Raúl González Guzmán, Head of Museums and Exhibitions, Dirección del Patrimonio Histórico Nacional, Panama.
- Dr. Federico Kaufmann Doig, Director de Conservación del Patrimonio Cultural de la Nación, Lima, Peru.
- Mr. Carlos de Sola, Director General de Cultura, San Salvador, El Salvador.

#### OBSERVERS

- Miss Emilia Salas, Museo Regional, Universidad del Norte, Antofagasta.
- Mr. Sergio Villa-Señor, Comisión Técnica Nacional de la Dirección de Educación Primaria y Normal, Santiago.
- Mr. Sergio Chacón, research worker, Universidad del Norte, Arica.
- Mr. Sergio Arriagada, research worker, Museo Benjamín Vicuña Mackenna, Santiago.
- Miss Margarita Castillo Pinto, Central Nacional de Museología, Santiago.
- Mr. Gabriel MacKellar, Dirección Nacional de Turismo, Santiago.
- Miss Genoveva Dawson de Teruggi, Museo de La Plata, Argentina.
- Mr. Paul Frings, Asesor Regional de Promoción de Turismo de N.U. Santiago
- Mr. Richard Hughes, Representative of the Secretary-General, Director of the OAS Office in Chile, Santiago.
- Mr. Oscar Avello Avello, Centro Nacional de Museología, Santiago.
- Mr. Ramón Villarroel Gatica, Centro Nacional de Museología, Santiago.
- Mr. Rene Vergara, Museologist, Santiago.
- Mr. Juan Salinas, research worker, Departamento de Recursos Humanos, Santiago.
- Mr. Theodor Fuchs, industrial economist, Departamento Diagnóstico y Política, Santiago.
- Mr. Jorge Irribarren, Curator, Museo de La Serena, La Serena.

## DIRECTOR OF THE ROUND TABLE

Mr. Héctor Fernández Guido, engineer, Director of the Municipal Planetarium "Agr. Germán Barbato", Montevideo, Uruguay.

The inaugural meeting took place in the auditorium of the National Library, Santiago de Chile, on 20 May at 11.00 a.m. and was addressed by Mr. Juvencio del Valle, Director of the Library, Archives and Museums; Miss Raymonde Frin, representative of the Director-General of Unesco; Mr. Héctor Fernández Guido, Director of the Round Table, and Mr. Hugues de Varine-Bohan, Director of ICOM.

Apart from some slight unavoidable changes, the round table meetings took place as foreseen in the agenda.

A summary will be given in the following chapter of the statements made by each discussion leader, followed by an outline of the discussions which were their outcome.

The meeting on 30 May was taken up with the finalization of the various resolutions that had been formulated during the discussion sessions.

The following three committees were set up for this purpose:

- (a) the resolutions and recommendations committee;
- (b) committee for the formulation of guiding principles relating to the integrated museum;
- (c) committee for study of the resolution establishing the Latin American Association of Museology.

The draft resolutions proposed by these committees were considered and approved at the session on 31 May, which was followed by the closing ceremony.

The last chapter, entitled "Resolutions", set out all the recommendations put forward during the particular discussions on each of the themes developed by the discussion leaders, grouped under the following headings.

- I. General resolutions
- II. Resolutions concerning the rural environment
- III. Resolutions concerning the urban environment
- IV. Resolutions concerning scientific and technological development
- V. Resolutions concerning life-long education
- VI. Recommendations to Unesco
- VII. Resolution establishing the Latin American Association of Museology
- VIII. Guiding principles relating to the integrated museum.

## GENERAL CONSIDERATIONS

The results of the round table convened by Unesco can be regarded as extremely successful.

The innovation in the round table procedure led to exceptionally productive discussions which gave a new perspective of all types of activities of museums in general. It also laid the foundations for more extensive and active exchanges among museologists in Latin America who are somewhat remote from the general issues affecting museums in the more developed nations.

The most striking conclusions emerging from the round table discussions can be summed up as follows:

- (a) the concept of a new approach to museum exhibitions in general, whereby objects or themes of the exhibition are placed within the social, economic, cultural and anthropological context of the community in which they originated;
- (b) the need to introduce multidisciplinary representation into the governing boards of museums, through the participation of educationists, sociologists, historians, and specialists in the exhibition theme;
- (c) the advisability of introducing a permanent system for the evaluation of exhibitions in order to find out the interests and degree of assimilation of the community served by the museum;
- (d) the setting up of an association for the exchange of information and experience concerning the rôle fulfilled by the museum in the environment in which it operates;
- (e) the establishment of in-service training programmes for teachers with a view to ensuring a greater impact by museum exhibitions at the various educational levels;
- (f) a request to Unesco for the setting up and strengthening of centres for the training of museum specialists.

MUSEUMS AND CULTURAL DEVELOPMENT IN THE RURAL ENVIRONMENT  
AND THE DEVELOPMENT OF AGRICULTURE

Discussion leader: Mr. Enrique Enseñat, Engineer

Before embarking on the subject of our discussion, I must comment on the timeliness of Unesco's initiative in including this important issue in the round table on the development and the rôle of museums in the contemporary world. It has come at a time of crisis in the rural environment, since the traditional methods of social and economic advancement are not producing the expected results.

Museums, like radio and television, are extremely effective instruments for the transmission of messages, but, unlike them, they have not achieved the development needed to give them their rightful place among the agencies of social change and economic advancement in the rural milieu.

I should make it clear that the concept of "cultural development" applied to the rural environment will, in what I have to say, depart somewhat from the classical approach to the study of culture as such. I shall, instead, deal mainly with those cultural factors that represent a real obstacle to the overall development of rural communities. In adopting this standpoint we must inevitably give

consideration to the agrarian structures within which the cultural elements that produce, at a given time, the main link in this culture - the rural dweller - are operating.

There is a risk of conflicting opinions when the process of rural development comes under discussion, due to differing views as to whether this is solely an economic phenomenon or a political one.

For our purpose we shall use the definition proposed by the Second World Food Congress held at The Hague in 1970. According to this definition, rural development consists in the motivation, training and organization of the population, providing it, through government aid policies, with the facilities and services that will enable it to reach higher standards of living and play an effective part in the improvement of the community and the nation.

It is, furthermore, vital to get the magnitude of the problem before us into focus, using indicators that will reveal its true significance. We see, thus, that in 1965, according to the Economic Commission for Latin America (ECLA), the number of persons employed in agriculture, forestry and hunting in Latin America was 35.6 million or 46.2% of the active population in the region which, for that year totalled 76.8 million.

What was the educational level of this important part of the active population? If we use illiteracy as an indicator, we see from the Unesco Statistical Yearbook for 1968 that rural illiteracy in Latin America was six times as high as that in urban areas. Furthermore, during the period between the 1950 and 1966 censuses, the absolute number of illiterates in Latin America - mostly rural - rose, despite the fact that the illiteracy percentage fell from 42.2% in 1950 to 33.9% in 1960.

If we try to assess the income of the rural population, we find that the average annual income of two-thirds of the Latin American agricultural population - numbering 70 million people - does not reach US \$100 per person. The conclusion of some who have studied this question is that probably half of this group, approximately 35 million persons, have an annual income of no more than fifty or sixty US dollars. Naturally such incomes can only mean survival under inhuman conditions.

The eminent economist, Previs, maintains that Latin American agriculture suffers from a lack of income effect due to slow general economic growth and uneven distribution of income. He believes that solution of the problem will depend on the achievement in 1960 of a minimum growth rate of 5% for the agricultural sector, in which the growth of the rural population would be 1% and agricultural productivity 4%.

Describing occupational activities which provided the economic framework for this situation, Solón Barraclough referred recently to a survey carried out five years ago by the Inter-American Committee for Agricultural Development covering the question of land ownership in Peru. According to this study, 1% of the rural population controlled 80% of cultivated land. These landowners were in control of almost all agricultural loans, irrigation water and technical assistance; they were the sole users of modern machinery and only they had access to national and international markets. They controlled local government and had great influence at the national level.



The 80% of the rural population consisting of small farmers and field labourers had very little land (5% of the total) and, furthermore, did not share the privileges of the landowners. The majority of them were poor, illiterate and without prospects.

Day-labourers often worked for an employer in exchange for the right to cultivate a tiny plot of land; salaries were very low or even non-existent. The important landowners had their own police and prisons.

There is a fairly wide measure of agreement concerning the measures required to solve these problems. We can, thus, assert that both the reform of obsolete agrarian structures and the development of technology are generally considered as the issues to be tackled if a solution is to be found to the agricultural problem in Latin America.

Among the most important processes of change the much vaunted agrarian reform takes pride of place. It is interesting here to go back once more to the conclusions of the Second World Food Congress which established that agrarian reform constitutes a prerequisite for the implementation of other measures on which the welfare of the rural population depends. Unless the control by a small sector of the population over almost all the land is ended, and until this is done, the mass of the rural population will not even be able to organize itself to make known its needs, increase its income or feed and house itself better.

As far as technology is concerned, we can define this more clearly if we identify it with the "green revolution". The two outstanding features of this are the new high yielding varieties of wheat and rice which are changing the productivity rate of crops that are of great importance for regions such as Asia, Africa and Latin America.

To illustrate this more effectively I may mention that this is, in the first case, the production of so-called dwarf wheat, varieties that are unaffected by the length of daylight and which can tolerate large quantities of fertilizers. They produce up to eight tons per hectare and the average crop is six tons. Dr. Chandler, Director of the Rice Institute in Los Baños, Philippines, has produced the IRI varieties of rice whose production under exceptional conditions reaches 27 tons per hectare, and 12 tons on an average.

These figures mean that with the same area of cultivated land production has been tripled and, at times, quadrupled.

As a result of such technological innovations, Mexico, a maize and wheat-importing country, exported in 1968 more than one million tons of maize and 72 thousand tons of wheat. In the same year the Philippines became self-supporting in rice for the first time since 1908.

In 1968 again, Ceylon exceeded its highest previously recorded production of rice by 13%. Pakistan increased its highest wheat production figure by 30% while India exceeded its largest harvest by 12%.

The area under cultivation with high yielding seed has increased in a startling way. From an area of scarcely 80 hectares for the 1964-1965 season, high yielding wheat and rice cultivation had already reached 13 million hectares in 1968-1969.

In referring to the effect of technology in Mexico, Edmundo Flores has pointed out that both these high-yielding varieties and modern systems of cultivation constitute the basis of the increase in the average per capita income, which has almost tripled from US \$200 in 1959 to US \$560 in 1969.

From the 1948-1952 period to the present time, 24 times as much nitrogen, 10 times as much phosphate and 5 times as much potassium fertilizer has been utilized in Mexico. As a result of all this, the gross agricultural product has, during the last 30 years, grown at an average annual rate of 4.4% at constant prices, a growth rate exceeded only by such countries as Israel and Japan.

It must, however, be clearly established that technology cannot, and must not, be considered as the "ultimate solution" for the backwardness of Latin American agriculture. The alarm already voiced shows us the danger of deluding ourselves with easy solutions. Our history, indeed, abundantly illustrates the fact that new technologies do not always mean an improvement in the living conditions of the people.

The colonial era has shown us in dramatic fashion that technological advances were effected through a slave labour structure. On that occasion technology gave it its force and established a system that allowed the ignominious exploitation of man by man.

Because of this many of us are agreed that before going ahead with technological development, conditions must, through social and political changes, be such as will make these technical advances really serve to improve the living and working standards of the rural dweller.

In referring to this situation, Paulo de Tarso maintains that in our countries many rural development strategies of the last decade were limited to one-sided development - technological change as a means of increasing production and productivity. The need, thus, to create new forms of ownership, to redistribute the revenue derived from agriculture and to adopt a new policy in respect of the structure of government and forms of access to culture, was either underestimated or rejected.

The results of this one-sided approach were negative, even in achieving the sectoral objective and, thus, while the population was growing at an annual rate of 2.9% during the period between 1960-1962 and 1966-1968, the figure for production expansion was only 2.5%.

It was precisely a situation of this kind that led the Second World Food Congress to state that social injustice is the most serious and fundamental problem in many developing countries. This points, thus, to the uneven distribution of wealth that means that a large proportion of national revenue is shared among only a few. This stems from the relationship between labour and capital, landowners and tenants, entrepreneurs and field workers. Because of the exploitation of agricultural workers and the poor administration and utilization of land and natural resources, plus the fact that the wealth and benefits accruing from them have been concentrated in the hands of the few, villages have been condemned to a life of poverty, ignorance and insecurity.

To achieve progress, development demands recognition of the human dignity of agricultural workers and country people in the practical conduct of everyday life, as well as a relationship based on equality. The criterion of progress is not primarily the growth of the national gross product. The real proof of progress is the justice that governs the production, distribution and the consumption of goods among members of a society and the justice and charity that prevail in the mutual relations between the different classes of people that make up such a society.

In his recent book entitled "Vieja Revolución Nuevos Problemas" Edmundo Flores approaches this situation from a different angle. According to him, in so far as we are unable to create a modern productive structure that will provide work, food and housing for the large majority, so it will be necessary to resort to repression in order to prevent this majority from taking over power.

The obvious question is: what is the rôle of the museum in regard to the problems set out here? I do not believe that the museum can, things being as they are, limit its action to development merely of the scientific and technological aspect and the contribution that these two methods can and must make to the progress of agriculture and stock rearing. This is an important issue and must not be overlooked, for the museum does indeed have an important contribution to make in this sector.

If it is to fulfil its task adequately in the contemporary rural milieu, the museum must also establish itself as a factor of social change that will, while working for the greater dignity of the country dweller, contribute to the process of growing social awareness within whose context changes are destined to take place in the obsolete structures that are hampering the real evolution of the man who cultivates the land.

Having regard to the particular character of the rural population, museologists and technicians in charge of museum institution must intensify the development of mobile exhibitions so that the museum may, from the instrumental aspect, have the desired impact on the rural population.

#### MUSEUMS AND THE RURAL ENVIRONMENT

#### DISCUSSION

Discussion proceeded along the following lines:

#### ANALYSIS OF THE PRESENT SITUATION IN REGARD TO MUSEUMS AND STAFF RESPONSIBLE FOR THE ORGANIZATION OF EXHIBITIONS

Present lack of museums dealing with rural problems or relating to the needs of the community.

Need to improve the display and organization of exhibitions. This means guidance by specialists and liaison between the museum and other organizations dealing with the underlying theme of the museum exhibitions. Multidisciplinary groups should be set up to assist museums in regard to the appropriate programming of exhibitions and fundamental questions concerning the planning of museum activities and their link with community problems.

The trend should be towards museums planned by specialists (including sociologists) who would assist in defining problems and supply scientific and technical guidance in the presentation of exhibitions, in this way providing the focus on social changes.

Although the question of the urban environment was dealt with as a specific subject of the round table, it also figured in this discussion since the rural and urban environment make up, in fact, a continuous and inseparable whole. There is a need, thus, to combine problems of the rural milieu and those of the urban environment in exhibitions. Their separation is artificial and can only be justified on the grounds of specialist study.

Museum operations should be planned in relation to the problems of the community and in such a way that members of the public are brought into close association with the specific activities of the museum.

Museums must, furthermore, draw the attention of visitors to the natural resources of the region and their complete utilization, so that they form a two-way information system between technicians and the public.

Agricultural technicians can, here, meet the needs of the community by providing information about modern techniques and proposing solutions for problems in the area.

There is a need to develop exhibitions which bring home clearly the harmful consequences of erosion, deforestation, and the use of pesticides and show methods of preventing and/or remedying them.

Advantages to be gained from the utilization of modern agricultural techniques, use of agricultural machinery, fertilizers, irrigation, high-yielding crops, and so on.

It is clear that these solutions cannot be of a general nature since agricultural problems vary from one country to another and even between regions in a single country.

It must be borne in mind that the rural community is the least catered for by museums at the present time.

Attention was also drawn to the influence of museums as a standard-setting factor in craft production, both in regard to the development of handicrafts and the encouragement of those which are dying out or have disappeared.

#### CONCERNING MUSEUM STAFF

Need for museologists to seek guidance from specialists in other sectors - in this case agricultural officers - so that they may serve the community more effectively. Need to arouse the interest of agricultural development organizations and universities. Need to make the urban population aware of agricultural problems.

Latin American museologists should be encouraged to gain intimate knowledge of technical, social, economic and anthropological problems so that they may be reflected in the planning of their exhibitions.

Need to support existing training centres for high-level museum personnel, and, if considered necessary, set up new ones.

CONCERNING THE EXTENSION OF THE MUSEUM'S CULTURAL RANGE

Extension of the museum's cultural range was approached from the qualitative and the quantitative standpoint.

In regard to the former aspect, everything that has so far been said concerning the need to relate specific museum exhibitions to the social, economic and anthropological features of the region is valid here.

In dealing with the second question, the quantitative aspect, two distinct types of solutions were proposed which were not exclusive but, indeed, complementary.

One of these consisted in the establishment of small "zonal" museums in specifically agricultural regions, providing information to the inhabitants concerning major agricultural problems and possible solutions which would naturally be related to the zone in which the museum was located.

The idea is, furthermore, that museum staff should study the most urgent problems faced by inhabitants; these might then form the main theme of exhibitions which would place them within their economic, social, ecological and anthropological context.

These would naturally be small museums and a network of them might even be set up; they should, therefore, come under the authority of larger museums in the region which would help them in the solution of their problems.

The other alternative would be the organization of mobile exhibitions arranged by urban museums. Various examples of these were referred to during the discussion: the museobus, the exhibition boat, the "culture train", and so on.

It was pointed out that the rural areas had been completely excluded in regard to the general themes of such exhibitions.

It was considered vitally important to bring to the rural areas - through facilities of this kind - the information that was needed to raise the population's living standards.

Lastly attention turned to the question of the impact of the museum in relation to outlay. There was a need, it was considered, to establish a permanent evaluation system in regard to exhibitions through the use of questionnaires, making it possible to adjust exhibitions to the educational level of the visitors and thus increase the efficiency of the museum's work.

During discussion of this subject, participants were invited to consider, in view of the isolation experienced by various museums in Latin America and notwithstanding recognition of the efficient work carried out by ICOM - a proposal concerning a Latin American Association of Museology and, subject to general approval, to recommend its creation.

As might be expected, the specific question of the rural environment was dealt with in this discussion in conjunction with the general problems faced by all museums. Because of this the recommendations that emerged from the discussion will be found in the resolutions chapter in the individual section, the general resolutions section or in the recommendations to Unesco.

## A GENERAL SURVEY OF URBAN DEVELOPMENT IN LATIN AMERICA IN 1970

Discussion leader: Jorge E. Hardoy, Architect

1. The rapid population growth experienced in Latin America, coupled with the migration of large population groups from rural areas to the towns, are the causes of the urban mushrooming that can be seen in almost all countries in the area. Migratory movement between countries in the area is negligible, while migration from outside the area is slight at the present time. Urbanization in Latin America has not yet produced a visible decrease in the birth-rate. On the other hand, improved preventive medical services and better care of the new-born and infants under two years of age have meant a substantial reduction in mortality rates, particularly in infant mortality. It is logical to expect, thus, that general population growth and urban population growth in particular will continue to be the most rapid in the world, as they were during the last decade. Between 1960 and the year 2000 the Latin American population will have tripled - from 200 to 600 million inhabitants at least - and the urban population will have quadrupled - from 90 to 360 million. There are forecasts of an urban population of 430 million within the overall figure of 650 million. In short, existing or future Latin American cities will have to absorb between 270 and 340 million new inhabitants between 1960 and the year 2000. A number of censuses were carried out in 1970 in various countries in the area and when statistics are published it will be possible to make an accurate check on the projections of the last ten years.

With the exception of Mexico, Guatemala and, obviously, countries with no outlet to the sea, the present urbanization trend follows the traditional peripheral pattern that dates back to the first century of the Spanish and Portuguese conquest. Urbanization in Latin America began in certain regions such as central Mexico, central Guatemala, the Peruvian-Bolivian plateau and the coast of Peru. Two thousand years ago the two great pre-Columbian political and administrative ventures, the Aztec and the Inca, spread from the interior to the coast. By about 1580 nine of the ten cities which, in 1960, had one million or more inhabitants were already established. With the exception of Mexico City and Bogotá, these cities - Buenos Aires, Rio de Janeiro, San Pablo, Caracas, Lima, Santiago and La Havana - were ports or were near ports of international or regional importance during the colonial period. Montevideo, also a port, was the only city to be founded later than this group that numbered more than one million inhabitants in 1960. Among cities added, in 1970, to this list of one million or more inhabitants are a number of inland examples: Belo Horizonte, Medellín, Monterrey and Guadalajara. Cordoba and Cadiz were approaching a million inhabitants. Others in the group are Salvador, Recife and Porto Alegre (ports), Rosario and Belen (river ports). The main conurbations are coastal: La Plata-Rosario, Santiago-Valparaiso; the triangle formed by Rio de Janeiro, São Paulo and Santos and Belo Horizonte; La Guaira-Caracas-Valencia-Maracay-Barquisimeto-Maracaibo; the Rimac Valley; the exceptions are central Mexico and La Sabana-Bogotá. All those cities formed the focal point of the transport and urban development pattern during the colonial period and the hub of Spanish and Portuguese commercial interests in America.

In other words, the peripheral pattern of Spanish and Portuguese colonization became more firmly established. Each European colonial power brought with it the type of town that practical experience had produced in the country of origin. Spain, mediaeval in regard to urbanization at the time of the conquest, nevertheless achieved, through systematic and practical experiments that were in

advance of legislation, the classical model; Portugal - mediaeval experiments; Holland - urban expansion technique, commercial facilities outweighing topographical advantages; France and England - less important experiments. As the political independence of Latin American countries failed to give rise to a similar change in the commercial relations with the imperialist European powers - only a substitution for them - the regional urban pattern in the nineteenth century confirmed the trend begun in colonial times. The later construction of transport networks and siting of industry for the production of consumer goods for local markets, and for the processing of primary products (cold storage plants, flour mills) did no more than accentuate the national importance of each country's market centres, which were now converted into its political, administrative and cultural capitals. This peripheral and vertical urban development pattern ill-serves the country's interests, since it concentrates the population, investment and highest skilled human resources in a restricted area that does not coincide with the country's geographical centre, while the inland territory continues to be an enormous unpopulated void, poorly utilized in some countries and with almost unrealized potential. A recent example - Argentinian copper.

The urbanization process has gone through widely differing phases in each country. Countries which, from 1870, were affected by the impact of immigration and the influence of European capitals, such as Argentina and Uruguay, were the first to undertake urban development and have, in fact, the most urban development at the present time. This was also the case of southern Brazil and, later, Chile and Cuba.

These four countries are, from the urban aspect, the most stable in Latin America since they have an urban population representing over 65% of the total population, plus a low rate of total and rural population growth (Cuba has, since 1960, introduced integrated rural and urban development policies). None of these countries has encouraged foreign immigration during the last few decades. In contrast, all the other countries in the area show, on the basis of these three indicators, urban instability - to a marked extent in some cases. Ecuador, Haiti, the Dominican Republic and Central American countries provide the most severe cases of this lack of stability. If we look at the two extremes of this situation, we see that between 1970 and 1980 Uruguay will have to absorb some 40,000 new urban dwellers each year and Brazil some 2,300,000, Mexico 1,500,000, Colombia 910,000 and Peru 500,000.

2. Even if present demographic growth rates are maintained, there will still be a very strong rural economic and social basis in future Latin American societies - notwithstanding the spectacular expansion of the urban population. In other words, within a generation there will be a population in the rural areas of Latin America which is equivalent to the present total population and more than double the present rural population. Irrespective of the success achieved by agricultural expansion programmes and the stimulus given to the development of natural resources in each country, such a substantial increase in the rural population will create pressure in the rural areas that will hardly be consistent with the restrictions imposed by present land ownership and cultivation systems and the limitations in employment of labour as a result of the necessary technological innovations for increasing production.

I emphasize these aspects because I consider that the urban development process, particularly in those countries in the area which show instability in this regard, is much more likely to show even greater acceleration if the present structural situation is maintained during the next decade. The absorption during each

of the next ten years of eight million new urban dwellers means the creation in the area of between 2.8 and 3.2 million new urban employment openings in the secondary and tertiary sectors of the economy. It is a gigantic task and one that no country is carrying out satisfactorily. Not only is urban development taking place without the indispensable industrial expansion, but there is no matching rural development. The elimination of unemployment should be the main target, but the net economic growth rate in the majority of countries in the area is still either too low or too erratic to create the necessary stimulus for sustained industrial development. The proportion of adults excluded from, or underemployed in productive economic activity has risen. In 1960 56.5% of the total urban and rural population were employed, whereas in 1965 the figure was 54.2% (report by the Department of Scientific Affairs, Organization of American States, at the Conference on the Application of Science and Technology to Latin American Development (CACTAL), Brasilia, 12-19 May 1972). Furthermore, everything seems to point to the persistence of the historical trend to concentrate economic activities in one, two or three centres, a tendency that is accentuated by the financial and technological demands of all modern industry. That is to say, it hardly seems possible for the secondary sector to cope with the task of absorbing its part of such a large labour supply, forcing the services sector to expand unnecessarily - in terms of efficiency - and resulting in continued unemployment or unstable employment for many millions of urban dwellers.

3. I know of no Latin American country, apart from Cuba, which has introduced basic urban development policies at the national and regional levels and local urban planning policies as an integral part of natural economic and social development planning.

This is hardly surprising when we see that environmental and social aspects of development have scarcely been considered in the economic development plans that practically every country in the area has drawn up and tried to implement. The only exception is Cuba where there is an increasing tendency to promote the development of areas as alternative focal points to La Havana.

Even in the absence of comprehensive national, regional and local development planning, urbanization is the result of investments, either made directly or through promotion measures, in the public sector (the national government, provincial authorities and/or their autonomous organizations) which are complemented by the private sector in particular. In this context municipal authorities are the passive subjects of a process in whose planning and policy they have scarcely any say. With no significant political authority, without financial possibilities, operating with a technically obsolete administration and, with minor exceptions, lacking incentives, municipal authorities are in no state to promote, co-ordinate and implement the solutions that a dynamic and complex process such as urban development requires. However, traditionally it is the municipal authorities that are responsible not only for submitting basic schemes, but also for putting them into practice. Almost all national investment projects affect urban life both quantitatively and qualitatively. The construction of a steelworks or petrochemical plant, the development of an industrial complex, the building of an oil or gas pipeline, the putting up of a high-voltage transmission line, the establishment of a university, the implementation of a road scheme or airport project, all affect, in geographical terms, urban development trends within a country or one of its regions while determining the future pattern of growth and the quality of life of a city. In the creation of employment, the building of housing accommodation, schools or hospitals, the laying of water and sewage systems and power and telephone cables, and in technical and scientific development, the rôle of the



national governments in Latin American countries is, in all these activities, fundamental. In all these cases the part played by the municipal authorities is restricted, at the best of times, to attempts to secure the siting of a certain project within the area for which it is administratively responsible and complement it with certain services. But its administration does not affect either the pattern or pace of urban development. It is too weak to control speculation in land and urban and suburban housing, and does not make any important contribution to the provision of accommodation, public services and community facilities that a continually expanding population needs. The immense and, in my view, vital responsibility faced, at this stage of development, by the national governments of the Latin American countries in regard to the urban development process, has not, it must be emphasized, been assumed by them. Although the financial resources available to these countries are restricted and obviously inadequate to tackle simultaneously the different development programmes that the present social and economic situation requires, it is none the less true that all countries in the area - with the exception, perhaps, of Costa Rica - are spending an amount on armaments that reaches something like 1,500 million dollars annually. Such a sum could provide housing, water, sanitation, electricity and roads, schools and dispensaries for at least one and a half million new urban dwellers. This figure is scarcely 10 or 15% of the amount that should be invested each year in such facilities, but it would certainly supplement the inadequate efforts that are being made.

The reason for the failure of governments to assume responsibility for establishing national and regional urban development policies lies in the basic conceptions underlying such policies; development, for those responsible for analysing, planning and implementing it, has meant exclusively economic development. The professional bias and limited concepts of the economists who - to the exclusion of other disciplines - hold practically all the key positions in national planning bodies, have resulted in a proliferation of ambitious and unrealistic plans, sectorally restricted or slanted, which arouse no popular enthusiasm.

This is a political issue, because the powerful groups that govern our countries are opposed to structural reforms and the urban development process we are experiencing cannot be tackled other than by simultaneous agricultural and urban reforms based on State intervention in the urban and suburban building land markets and in credit policy; again, there has been inadequate reform in regard to the intermediaries and the laws, institutions and techniques involved in the urban development process, while existing concepts concerning the nature of property limit possibilities of action. Is urban land a transferable asset on the market or a social resource that belongs to society?

4. Urban development in Latin America is not accompanied by the minimum capital investment needed to create employment and provide housing, public services and community facilities for the new urban population. As there are no schemes for making up the existing leeway or plans setting out an annual replacement quota for obsolete housing, services and facilities, it is my impression that Latin American cities, particularly the larger ones, are gradually deteriorating, despite the impression that a casual visitor might gain from seeing the spectacular motorways, new architecture and costly public buildings in some of them. No Latin American country is building enough housing accommodation to keep pace with the natural growth of the population; neither is the right number of employment openings being created to meet a labour market that is in rapid expansion and transformation and which is already burdened with a high proportion of real and disguised unemployment.

The amount that would have to be invested each year to cover housing, services and facilities is so high and present shortfall is so great that no short-term solution is possible if the present governing authorities persist in their approach and objectives. If the current trend continues there is no doubt that the percentage of the urban population without work, housing or services will increase. Only in the sectors of education and preventive medicine have substantial efforts been made by the majority of countries.

The future model of the Latin American city will not be a magnified version of present towns, ten or fifty times their size. In Latin America in the year 2000 there will be at least one metropolitan area with 20 million inhabitants (São Paulo) and two with 15 (Buenos Aires and Mexico City); there will be several, moreover, with over 10 million inhabitants and a great many more with over 5 million. It is quite probable that more than 40 or 50 metropolitan areas will exceed one million inhabitants. The largest urban growth and greatest demand for employment, housing and facilities will take place in some of the countries that, on a short- and medium-term basis, have comparatively fewer investment resources, such as Brazil, Colombia and the Central American Republics.

If the present trend continues it is possible that the initial advantages derived from concentration in a few centres in each country will be lost, without any parallel development in other areas of the human, institutional and technological resources needed to ensure sustained development and achieve better regional and national integration.

5. A number of Latin American countries have attempted or formulated regionalization schemes as a means of implementing national development policies. In some federal countries such as Argentina and Venezuela, or unitary nations, such as Chile, regional division and the promotion of regional development is the responsibility of the national government which, through national planning offices, formulates the sectoral targets of national development and co-ordinates the tasks of the regional offices. In other countries such as Brazil, Colombia and Mexico, where regional planning has a long and distinguished tradition, it has been in advance of national planning. But none of these countries and, in fact, no Latin American country, with the exception of Cuba, can show a co-ordinated planning system that integrates the different levels of administration and/or decision. National and regional urban development policies have scarcely been broached in some cases, and then only in respect of promotion plans for development centres, as in Brazil or Venezuela. But, in fact, no country in the area has faced up squarely to the urban development process that is taking place in spite of the economic, social and political implications for each country's future and for Latin America as a whole.

Such an explosive process as this briefly analysed urban development phenomenon should be tackled by the simultaneous application of medium- and long-term policies and immediate measures for the solution or relief of the most urgent problems and the establishment of certain prerequisites for a more acceptable type of urban development. Despite the evident financial and technical limitations at the present time in regard to the simultaneous introduction of short- and long-term policies, in spite of the gigantic task implied in the promotion of industrial development along with rural expansion, I consider that they should be launched without delay. Much can be gained by the better co-ordination, in geographical and sectoral terms, of public and private capital investment and the assignment of clearly-defined responsibility between the various levels of public administration. But the basis lies in urban reform on a national scale, founded

on concepts other than the prevailing ideas concerning urban and suburban property dealings which will enable the gains from urban development appreciation to be used for the benefit of society instead of profiting speculators and minority groups.

## 6. The environment

An immediate effect of uncontrolled urban development is the gradual destruction of the natural landscape. In some towns the natural landscape was incredibly beautiful (Rio de Janeiro, Quito), enhanced by mountains (Bogotá, Santiago perhaps, Caracas) or by large stretches of water (Montevideo, Buenos Aires, La Havana).

The natural landscape can be easily preserved and enhanced by the hand of man if the necessary measures are taken in time. Once destroyed it is practically irreparable - or more often, totally irreparable or only at great cost. Natural forests are destroyed, hills are razed or riddled with quarries, streams are converted into culverts, the coastal areas - oceans, bays and rivers - are laid waste because of uncontrolled exploitation that prevents access for recreational purposes and turns them into an increasingly unpleasant eye sore. No one seems to pay attention to the destruction of the natural landscape. However, in the large city or metropolitan area of the future, with ten or twenty million or more inhabitants, it will be a fundamental aesthetic element as well as being of great recreational - and, hence - social importance. In a city with 100,000 inhabitants or less, the natural landscape is within a few minutes walking distance, whether this means the plains as in the case of towns in central Argentina, rivers, as in Paraná and Corrientes, mountains and intensely cultivated fields as in San Juan, or the sea in the case of towns in the Province of Buenos Aires. The town is part of the natural landscape. Each town has different human and natural resources which are the human and physical elements with which we have to work. In each case there is a variety of possible lines of action, choices and decisions. In each case the results, i.e., utilization of resources, intensity of exploitation and degree of acceptability, will be different (beaches near La Havana). I believe that with the solution of social and economic problems and the political participation of the population we are faced by a process of ecological changes that is increasing in pace. We live in a city in which some attempt to advance at the expense of others - or rather we do not know how to advance together - and if we do not change, this inevitably means retrogression. The rehabilitation of an ecological system can be done through collective sympathy and effort (Cinturón de La Habana) but if the environment is squeezed dry in order to extract the greatest speculative gain there can be no solution (e.g. Bariloche, south Atlantic coast, Uruguayan coast). It is socially unjust and ecologically unethical. I cannot foretell the shape of these immense agglomerations, with their tens of millions of inhabitants. Many political, technological, psychological and cultural factors will intervene. I find it almost impossible to visualize these. But there are things of which my intuition gives me clear knowledge: values will be very different although I cannot say by what means we shall attain them. Within a short period, however - the next 30 to 50 years - certain aspects will become more marked, and, I hope, will become self-evident. Among these will be respect by the new generation for the natural environment, since beauty, as Gropius said, is an integral element of life as a whole.

## MUSEUMS AND THE URBAN ENVIRONMENT

## DISCUSSION

The survey presented by Mr. Hardoy, the discussion leader, concerning the future demographic pattern of Latin America is alarming in view of the compulsive form that this will, according to him, assume in the next few decades. It will force us to adopt a social and cultural approach that will affect our future in many different ways, from fundamental education to studies at the highest level in science and technology. It will also involve issues linked with land ownership, supply and demand, and unemployment, and ranging from the provision of minimum services for the population to the question of the maintenance of the biological balance.

The discussion prompted by the presentation of the theme and its demand by musologists centred on the following points:

## THE TASK AND UNDERLYING THEME OF MUSEUMS IN RELATION TO THE URBAN ENVIRONMENT

Taking as their basis the definition of the museum provided by Georges Henri Rivière - the museum is an institution that assembles, conserves and displays objects and evidence of the development of nature and man for study and cultural purposes - members of the round table attempted to define the task and underlying theme of museums in regard to the urban environment.

Museums should present a realistic picture of the state of the nation, in its national, international, regional and local aspects.

Exhibitions should present problems in concrete form and provide alternative constructive solutions.

Provision should be made in museums as a whole, of rooms showing the history of town-planning; an effort should be made to bring about awareness of the need to protect the landscape; museum exhibitions should be arranged in such a way that the public will realize the dangers arising from disturbance of the biological balance caused by man's insistence on development that is out of harmony with nature, of which he is an integral part.

Exhibitions will have to be arranged especially for the rural areas and marginal zones on the city outskirts in order to show the possibilities of agriculture and the risks of migration to population centres; this is with the clear and specific aim of encouraging a stable rural population, dramatizing, if necessary, living conditions in the marginal zones.

This aim could also be encouraged by mobile exhibitions to promote craftsmanship training and light industries in the rural zones, mainly intended for young people.

Bearing in mind the fact that approximately one-third of city dwellers are young people, urban museums should also promote craft training either through exhibitions or the organization of out-of-school or informal educational activities.

Reference was also made to the need for the production of publications on urban development in Latin America, following the example of works dealing with the history of American culture.

It was suggested in this connexion that Unesco might prepare a history of Latin American urbanization, consisting of a technical publication and a matching popular version.

Similarly, reference was made to the need for Unesco to consider the production of films on the development of towns: (a) pre-Columbian; (b) Colonial era; (c) predecessors of contemporary urbanization; and (d) contemporary urbanization.

It was observed that the production of books and films should, in both cases, be based on reliable documentation to be provided through research conducted by museums of archaeology and history.

Unesco could, once this documentation was made available to it, take up the question of the production of the publications and films requested.

It should also be borne in mind, moreover, that requests to Unesco are not decided by the Secretariat; they are, thus, proposals of a long-term nature and their consideration by the General Conference would be aided if an issue of MUSEUM were devoted to the proceedings of the round table. Unesco might then convene a meeting of experts to prepare a project for submission to the General Conference.

In regard to the film series, it was noted that the Radio and Visual Information Division of Unesco had a Spanish section that had already produced and distributed a film on Peru.

The request could be dealt with by this Division, provided that there was a national counterpart to provide the corresponding personnel backing.

It was also suggested that the film series should dramatize the living conditions in Latin American cities that had resulted from the completely unplanned urban development process.

The danger of disturbing the biological balance and the question of the deterioration of the landscape as a result of town and transport development should be dealt with by museums, emphasis being laid on the harmful effects that might be produced.

It was the museums' task to spread knowledge concerning environmental problems. To achieve this they should widen their theoretical and technical approach and utilize the services of specialists.

In order to improve museum exhibitions on this subject, the advice and collaboration of specialists in town-planning, anthropology, sociology and rural problems should be sought.

#### TRAINING OF MUSEUM STAFF

It was recognized that the large majority of museums in Latin America were directed by persons with no training in museology; even in cases where trained staff existed, they were generally specialists who were too immersed in their specific discipline.

In addition, these were sometimes persons who had grown old in their posts, without troubling to seek advice concerning the adaptation of the museum's task to the needs of the modern world.

In the face of this situation - which is much more prevalent than one would imagine - there was a need to introduce training courses in museology and secure the support of international organizations for existing training facilities.

Sociologists, agricultural engineers and other professional staff should be given specialized training in museum techniques with a view to the improvement of museum exhibitions.

It was recognized that many museologists, even those attending the round table discussions, were affected by professional bias and had to get used to the need to break with old canons and introduce revolutionary techniques if museums were to go on transmitting messages.

#### LATIN AMERICAN ASSOCIATION OF MUSEOLOGY

This initiative arose in connexion with the need for the exchange of experience and information among museum staff in the various Latin American countries. Reference was made, as the first step in overcoming this problem, to the need for a regional information bulletin containing details of the work of museums in the region. The idea was then broached of a Latin American Association of Museology in view of the fact that ICOM, from the practical aspect, was out of immediate reach. Bearing in mind, furthermore, the enormous size of the American continent, it was proposed that such an organization should have at least three centres, corresponding to the geographical areas of Isthmian America, the Andean countries and the Southern cone. A group was appointed to study the structure and statutes for consideration at the meeting to discuss resolutions.

#### THE SOCIAL MUSEUM

Finally, almost at the conclusion of the session on the task of the museum in the urban environment, an idea that had been taking shape almost from the outset of the round table emerged in the form of a practical proposal. It had begun with the question of the integration of rural and urban problems, and continued with the contribution of multidisciplinary groups in the organization of exhibitions - sociologists, anthropologists, educators. Finally, the Argentinian participant, Dr. Mario Teruggi, suggested the creation of a new type of museum in which man would be shown in conjunction with his environment. Every exhibition, whatever its theme, and whatever the museum, should link the object with the environment, with man, history, sociology and anthropology.

Such a museum should, in fact, be a research centre staffed by specialists in various disciplines, bringing a different approach to study of the same object.

The creation of this new type of museum would not be an easy task and experience would need to be acquired.

The representative of Mexico offered the Museo Nacional de Antropología as the centre for a temporary exhibition which would serve as a pilot project. The institution would meet the necessary costs. There was a possibility that other

museums might also prepare similar exhibitions on other themes in order to speed up the process of carrying out the scheme.

The idea was enthusiastically received and a group was appointed, consisting of the originator of the idea, Dr. Mario Teruggi, Mr. Mario Vázquez and Mrs. Dussan, to work out the scheme and establish the basis for the "social museum" as it was initially termed.

Discussion leader: Professor Mario Teruggi

The discussion leader craved indulgence and apologized in advance if his treatment of the subject was not as orderly as he would have wished since, as the participants knew, in the absence of the scheduled speaker, he had consented, at the Chairman's request, to prepare his statement at only one day's notice.

He stressed that the application of science and technology was the essential condition of development in Latin America. And it was precisely during the last sixty years that the gap between the developed countries of Europe and North America and the countries of Latin America had widened enormously. One of the basic reasons for that situation lay in the meagre development of indigenous research and technology in the Latin American countries. In Latin America, science tended to live in an ivory tower; it was not popularized and it ignored the needs of the community.

In modern society, science and technology were acquiring a leading position in development as compared with that occupied by the humanist in earlier periods. The humanist was deeply concerned with social problems, whereas the approach of scientists and technologists to those problems was limited precisely by their scientific outlook. The difference between the humanist and the scientific approach to the problems confronting society was becoming continually more marked and the human sciences unquestionably constituted the bridge between the two. The latter did not create anything new; they analysed; they corrected mistakes; but they produced nothing explosive, which changed the face of the world. On the contrary, in the process of scientific research, even the smallest research laboratory might at any moment set off a bomb - if one might so express it - since a new scientific discovery could produce tremendous changes in the progress of civilization (e.g. genetic engineering).

The effects of technology on social development were clearly illustrated by the fact that the production of consumer goods was doubling every two years.

Science was carried on in private undertakings and in public institutions. In Latin America, not much scientific work was done in private undertakings, which meant that technologies - many of which were obsolete and had already been abandoned in the developed countries - had to be imported. That situation was extremely detrimental to the development of indigenous technologies better suited to the Latin American countries; it encouraged the promotion of companies to exploit the unsuitable technologies and was harmful in that it subjected the Latin American countries to the economic domination of more developed countries. The result was that the more developed countries continued to exert tremendous economic, social and ideological pressure on the developing countries.

In Latin America, the bulk of scientific research was carried out in the universities and in practice very little was done in those countries to ensure

that the universities participated in solving the problems confronting the community. In most cases, the reason for that situation lay in interdepartmental jealousy between the university and the national government.

In most Latin American countries, inadequate use was made of the available "brains", which facilitated, and sometimes promoted, their emigration.

There existed in fact a whole series of factors which affected such emigration, among which might be mentioned:

1. economic factors - the mercenary mentality which induces people to seek the highest payment for the services they render;
2. reasons of general policy;
3. the frustration felt especially by young scientists who had been training in their speciality in the developed countries and, on returning to their country of origin, saw their achievements obstructed by the lack of economic resources, by the cumbersome bureaucratic system, by lack of continuity in the direction of their efforts and by lack of information; and
4. the underestimation of the national product, another factor which was often overlooked, but which was of great importance.

To sum up, if research was to develop profitably in Latin America, economic resources, facilities, training, co-operation between universities and State institutions, etc., were needed.

Technological development in Latin America was following a very uneven course.

One of the major causes of that was the shortage of museums of science and technology. There was a systematic failure to establish such museums. The museum should be a factor in the education of young people.

A new problem in relation to the development of Latin America was that of the transfer of technology.

That situation had already been considered by certain international organizations and various solutions had been proposed, including the creation of regional technological research centres. Latin America should move towards integration in the field of technology. Planning was obviously the key to the solution of Latin America's development problem. But who should do the planning? The humanist? The sociologist? The politician? The scientist? The problem was not simple, and to find an adequate solution, the scientists and technologists must be integrated with the experts in the social, human and political sciences.

The problem was not so simple, and planning was particularly difficult in a field where changes occurred so rapidly as in science and technology. To arrive at an adequate solution, it would be necessary to integrate the scientists and technologists with the specialists in the social and political sciences, i.e. to create a multidisciplinary group of experts. Owing to its past history, its special problems and the type of immigrants it received, Latin America as a whole was poor; but it possessed tremendous potentialities which encouraged it to react and to make the efforts necessary to achieve its ambitions.



A general feature of the Latin American countries was the small proportion of the total number of university students who enrolled for technical subjects. That situation was still further aggravated by the large percentage of students who failed to finish the course; that percentage is high in all faculties, but particularly so in those which were of special importance for national development.

To bring out fully the unfavourable position of the Latin American countries in their desperate pursuit of social and economic development the effects of the "brain drain" should be added.

It was also pointed out that among the factors mainly responsible for the brain drain from the Latin American countries were the international organizations, which absorbed a large number of highly qualified specialists from Latin America.

Another feature, perhaps not so widespread, was the lack of short- and medium-length courses and, in general, the marked absence of training institutions for more or less highly skilled workers. It should not be forgotten that the problem of underdevelopment lay not only in the training of highly qualified technicians, but more essentially in the training of intermediate level technicians and skilled workers.

It must be remembered that the last two categories of human resources constituted the indispensable infrastructure for the development "take-off".

It was rightly argued that, while technology and applied science were based on "pure" scientific research, it should not be forgotten that the developing countries must concentrate on research in applied science. While in the developed countries research in the basic sciences could, and perhaps even should, have priority, for the developing countries the techniques to be applied had already been studied and what remained to be done was to apply them in the developing environment, perhaps in certain cases after adapting them to the needs and possibilities of the country concerned.

The common background to all those problems was obviously the teaching of the basic sciences and, basically, the stimulation of young people's interest in the study of the sciences. The main preoccupation of the Latin American countries should be to arouse interest, to excite scientific curiosity, and to provide guidance in the choice of a career.

To assist the developing countries in that respect, the international organizations had organized courses for the improvement of teacher training, investigations into teaching methods in the basic sciences and had offered technical and economic assistance to improve the equipment of laboratories working in the basic sciences.

That, however, was not enough and - as stated above - it was essential to arouse scientific curiosity and interest in the study of the sciences, to provide career guidance and to start students thinking.

An appropriate way of meeting those needs was to promote out-of-school scientific activities and to establish museums of science and technology to centralize those activities.

The need to do that was reinforced by the consideration that Latin American educational systems, and particularly the secondary schools, were incapable of performing the functions indicated above.

Thus the museum of science and technology could help to promote the training of technicians of various levels who were so vitally needed for development.

At the same time, they could help to stimulate the community's awareness of the need to direct human activities in such a way as not to disturb the ecological balance of the biosphere, a problem which was now attracting world-wide attention.

The natural history museums could be made responsible for drawing attention to the problem of the conservation of the environment.

It was also pointed out that, as a result of the scientific progress achieved during the present century, pure and applied science in reality constituted a continuous whole which, in view of its impact on society, could not be regarded as separate from the humanities and the social sciences.

It will be noted how, in this discussion as in the previous ones in which it was similarly pointed out that the problems of the rural and of the urban environment constituted a continuous whole and that consequently they should be considered jointly within the social and economic context of the community, a new approach to the activities of museums was being adumbrated, which was very opportunely and clearly brought out by Professor Teruggi, the leader of the discussion, when he referred to the possibility of integrating the museum through its exhibitions.

The discussion leader drew attention to the desirability of ensuring that whenever an existing museum, of whatever nature, held an exhibition on a particular subject, it should be supplemented and integrated, by means of cross-references, with other human activities; and that through the exhibitions planned by different museums, the theme of the exhibition should be linked with the historical development of the community, its social and economic impact and thus establish a close connexion between the museum and the environment in which it worked and developed.

The museum must not be isolated from its environment and should assist in the all-round education of the members of the community it served.

The remainder of the discussion centred round that new conception of the museum.

Starting from that idea, the possibility was considered of disseminating a knowledge of science and its applications through the exhibitions - integrated in the manner suggested - of existing museums, in particular natural history museums, without the need to establish costly museums of science and technology, which many Latin American countries could not at present afford.

It was suggested that, experimentally, the new museum might be organized initially as a permanent room in at least one of the existing museums.

Ninety per cent of existing museums were devoted to the "humanistic" side. The question arose as to whether the economic and social development of a community could be achieved through an essentially humanistic cultural development or whether it needed a combination of the humanities and science. The rôle of the museum in the community would depend on the answer given to that question.

Another question to be considered was whether the problem of museums should be included in the scientific development programmes of the international organizations.

The idea of the integrated museum did not really involve the establishment of new museums, but on the contrary a change of focus in the exhibitions of existing museums.

During the discussion, the point was once again made that the museums rôle should extend beyond the walls of the museum itself. The possibility was suggested that, by means of mobile museums, it might be possible to create a demand for museums in remote townships, as had happened in the case of circulating libraries, which had made it necessary to establish local libraries in many areas.

During the discussion, the problem of fellowships was once again raised and the following ideas and conclusions were expressed.

#### FELLOWSHIPS

Fellowships should be designed to complete the technical training of museum staffs with a view to improving the presentation of exhibitions.

Four categories of fellowships should be taken into consideration: multi-lateral, bilateral, endowment and national fellowships.

In accordance with ICOM, one must distinguish intra-regional and extra-regional fellowships, study and research fellowships, and fellowships for visiting museums with a view to taking decisions on the establishment of museums.

From the standpoint of efficiency, the best fellowships were those which were utilized within the region. Extra-regional fellowships, and particularly those in developed countries, tended to add to the "brain drain".

Research fellowships were usually highly efficient, though that obviously depended on a proper selection of candidates and on choosing a subject which was not too highly specialized.

Unesco regarded that as an extremely difficult problem and accordingly devoted much attention to it. A statistical study of the fellowships granted and the results obtained had been initiated, and it could be said that the results so far were somewhat discouraging.

That was due in general to the quality of the trainees, who were not always well selected. Hitherto, fellowships had been granted to candidates recommended by Member States, but it was proposed in future to reserve the right to reject candidates who were not considered to be qualified. To improve selection, it was proposed that fellows should be selected by the universities or by specialized bodies.

Another point worth mentioning was that fellowships were granted to graduates and not at lower levels at which they were perhaps more necessary.

## MUSEUMS AND PERMANENT EDUCATION

Discussion leader: Dr. César Picón Espinoza

Permit me first of all to point out a number of peculiarities to be found in nearly all educational systems in Latin America.

We shall begin by analysing:

## I. EDUCATION IN LATIN AMERICA AND NATIONAL REALITIES

It is a fact that educational systems in the Latin American countries have always turned their backs on the social and economic realities of their respective countries.

During the last few years it has begun to be realized that educational systems cannot and must not ignore national realities.

This is due to the experience of the past ten years, which has made it clear that an educational system cannot be organized without having regard to the overall political and social situation in the country in question; it was therefore not surprising that educational reform movements sought to introduce those parameters.

Educators should be constantly aware of the problems of society and education should be a factor contributing to the solution of the country's economic and social problems. The educational system should be conscious of its commitment in that sense.

By this, we do not of course claim to set up a single model for the whole of Latin America. There are doubtless common problems, but there are also obvious peculiarities and problems specific to each country. The first consequence of such individuality is that there can be no uniform solution.

## II. THE GAP BETWEEN THE EDUCATIONAL SYSTEM AND REAL LIFE

The educational system's whole programme of teaching is based on the assumption that pupils are to receive an education of the whole personality, but will later pass on to a second stage in which they will make a contribution to national life. Accepting this assumption, is it possible to achieve the training of the individual in the first stage? Is it not essential to bring his education up to date in view of the ever more rapid changes taking place in the world? Can the first stage be regarded as the final stage?

If that is the case, is the education given the most suited to the realities of the national situation?

The present structure of educational systems does not prepare the citizen for life; it is very remote from national realities - hence the profound concern felt today throughout Latin America to introduce educational reforms tending to provide pupils with a better understanding of the real situation in their country.

### III. INFLEXIBILITY OF EDUCATIONAL SYSTEMS

The general characteristic of the various levels and streams of Latin American educational systems is their inflexibility.

Programmes are drawn up by a central body on the basis of an assumed uniformity of the human beings for whom they are intended. We should bear in mind, however, that such uniformity is not only impossible to achieve, but would be undesirable if it were achieved.

Our educational systems forget the great teaching of experience, but attach exaggerated importance to certificates and diplomas.

### IV. THE DEMOCRATIZATION OF EDUCATION IN LATIN AMERICA

We preach equality of opportunity, but all that we achieve is that the benefits of the educational system are exclusively enjoyed by a privileged minority. The democratization of education remains an unrealized aspiration.

It should be remembered, as we have already pointed out, that the education of the individual takes place not only in teaching establishments, and from this standpoint only the few possess a background suitable for their proper education.

### V. THE PREDOMINANT FEATURE OF EDUCATIONAL SYSTEMS: THE ACADEMIC, INTELLECTUALIST, CLASSROOM CONCEPTION OF EDUCATION

Here arises the dilemma: should education concentrate its attention on academic training, or can intellectual skills also be obtained outside the educational system?

Should education be centred around systematically acquired knowledge or can other types of education be admitted?

The fundamental ingredient of traditional education was memorization and classroom teaching, so that the student tended to play a purely passive rôle. The best student was the one who memorized the most.

### VI. THE LAG BETWEEN THE DEVELOPMENT OF EDUCATIONAL TECHNIQUES AND THEIR INCORPORATION IN THE SYSTEM

The educational system has always been one of the most conservative structures in Latin American countries.

The reforming drive which has arisen in other fields has not extended to education or, at best, not to a sufficient extent.

When it was proposed to incorporate technology in the educational system, the technology applied in more developed countries was simply transferred blindly, without the smallest adaptation to the environment in which it was to be applied. That is not what we need or desire, but rather a thorough study of the new developments in teaching methods with a view to adapting them to our conditions. The ideal would be the development of an indigenous technology and during the last few years some interesting endeavours in this direction have been observed.

## VII. VOCATIONAL TRAINING

Qualitative and quantitative deficiencies in the training of our human resources have been found in the Latin American countries.

Highly specialized training courses have been established for each profession or trade. But inflexibility has appeared once again. Now it is urged that training should not be so specialized, but on the contrary more general, so as to promote the dignity of the individual in his work. Training should allow for the introduction of factors other than the purely vocational, in order to stimulate the critical analysis of national realities thus bringing about creative initiatives better suited to its development. Some countries have already achieved such an all-round education of the individual.

The qualitative and quantitative deficiencies to which we have referred have led us to introduce provision for retraining. We live in a dynamic world whose different facets are changing ever more rapidly. This makes retraining indispensable. This necessity of the modern world, which is evident in relation to technical and scientific subjects, is no less essential for cultural and humanistic education in general.

The educational system should offer the opportunity for retraining at all levels, including that of unskilled workers.

A man should be learning all his life.

## VIII. THE MYTH OF AN EDUCATION DIRECTED SOLELY BY MINISTERS OF EDUCATION

Education today, we may say, is the business of educators. In view of the changes which are taking place, it is necessary to redefine the rôle of the teacher and to have recourse to specialists in other disciplines and fields to interpret the various problems in the general context of the national reality.

It is now a generally recognized fact that the human being begins to learn in the home, that learning later continues in the environment in which he grows up and a third stage starts with his entry into the educational system; but that the latter stage makes the smallest contribution to his total knowledge.

Investigations into the various contributions made to the knowledge a human being acquires in the course of his life have shown that the contribution of the educational system amounts to about 12 to 15%, that the home's contribution is of similar magnitude and that the remainder, up to 100%, comes from the individual's incorporation as an active member into his community. Educators do a supporting job but, as can be seen, it is a relatively minor one.

To improve this situation, recourse must be had to other institutions, including, of course, museums, radio, television, the cinema and, fundamentally, participation in meetings, which provide the individual with an effective training for life.

It is essential to redefine the position of the teacher within the system as well as that of the system itself. The community can no longer be kept out of education.

More and more countries in Latin America are becoming aware of the need for a radical change in their educational systems. These systems need a new structure.

#### IX. PERMANENT EDUCATION

It must be emphasized that, from the beginning of their conscious life to their death, human beings are engaged in a continuous process of education. Education is not only the product of the formal educational system.

When a child goes to school for the first time, he is not at zero level, but has already mastered what has come to be called "the hidden curriculum". The process starts from the first day of his life, and that is as it should be; the development of the child's intellectual capacities should begin very early if subsequent handicaps are to be avoided.

Parents and the community must be oriented in that direction; they must be taught how to teach. Children should go on learning outside school and outside the school year; but they should also be taught to unlearn what they have learnt, when the latter is not adapted to existing social conditions. We must fit them to acquire such an attitude.

Some countries have institutionalized their permanent education systems, and this should be done by all countries, since permanent education is not just a new fashion, but is something which the community must impose on those who have left the educational system. It is being driven home ever more forcibly that the school is not the only institution which educates, but that there are many others with resources and potentialities for teaching.

One should endeavour, therefore, to synchronize them, or better, to co-ordinate such institutions in order to accelerate the educative process.

Another idea which is gaining ground is that of educational planning.

Up to now, a number of forms of unsystematic education have appeared, and the time has come to ask whether, on the one hand, such casual education does not need some form of organization or systematization and, on the other, whether systematic education does not need more flexibility or, if you prefer it, to become rather less systematized.

How can permanent education be organized when we are not even capable of attaining the minimum targets for normal education?

The discussion leader went on to explain his "conception of the museum" at different periods of his life and at different levels of the educational system.

At the primary stage, he thought that museums were intended for very special people.

At the secondary stage, a museum seemed a cold, rigid and unattractive place.

At the university, he thought they explained little and taught nothing.

The basic aim of the museum is to perform an educative function which it does not perform. The museum should arouse the visitor's curiosity and stimulate

his interest. If a museum exists only to exhibit objects, it should present them in such a way as to humanize them by setting them in a living and dynamic context, not merely as something belonging to the past, but basically as something of the present and future, closely linked to man's life and to the civilization which gave them birth.

The museum has an enormous educational potential which should be utilized to the maximum. It remained to inquire whether museums really have the staffs they need.

A tentative list of museum staffs might include: technicians, educators and administrators.

The technician, or expert in museum techniques, may not be, and usually is not, a good administrator.

The educator is essential if we wish to take the maximum advantage of the museum's teaching possibilities.

Basically, the administrator is necessary for planning, organizing and running the museum's activities.

It is obvious that this will require an adequate budget, but if museums and education are kept separate, if there is no policy for their co-ordination and mutual support, the educational possibilities of museums will be wasted.

Dr. Picón's exposé was followed by a discussion which centred around the points indicated below.

## MUSEUMS AND PERMANENT EDUCATION

## DISCUSSION

### INTEGRATION OF THE MUSEUM IN THE COMMUNITY

New strategy for reaching the community.

The exhibit should be located in its environment and linked to the community.

It is in particular the art museums, which are characteristically the least active and dynamic, which lend themselves best to providing, through the objects they exhibit, a reflection of the community in which those objects originated.

This would be facilitated - and this applies to museums in general - if explanations at popular level were published concerning all the museum's exhibitions. Specialists should therefore be enlisted to prepare such popular publications. Great works ought to be popularized because they possess an extraordinary cultural value which should be placed at the service of the community.

### COLLABORATION BETWEEN EDUCATORS AND MUSEOLOGISTS

The most important point made by the discussion leader was that concerning the lack of co-ordination between museums and the educational system.



The museum possesses very great educational and formative potentialities which could be used to the best advantage through the combined action of educators, museologists and specialists in museum techniques.

The museologist, who is a specialist in a particular discipline, cannot be regarded as sufficient in himself to plan such complex activities as those which it is proposed to assign to the museums.

To attain our goal, therefore, it will be necessary to set up multidisciplinary groups.

Some speakers went even further, saying that the educational work of museums should be considered at the educational planning level, and for that purpose they suggested the convening of a round table of museologists and educationists in each of the various countries.

The need to modernize the museums was stressed; but that is not enough. One must go deeper, and change their entire structure.

But who is to carry out this reorganization?

On this question, opinions differed. Some thought that the reorganization should be carried out by the museologists, others by the educationists; others again thought that it should form part of the reform of the educational system.

The restructuring of the museums should be viewed in the context of the aims of education.

Even if the museologist should assume responsibility, he will doubtless need the advice of experts, including educationists. One of the basic problems for the museum, and hence for museologists, is to make communication with the public, and for that purpose the help of the educationist is needed in planning the museum's exhibitions. The solution is perhaps to be found in the correct composition of multidisciplinary groups.

Education, the national reality and the museum should be integrated in a single whole.

Attention was also drawn to the need to change the outlook of museologists, since it is they who decide on what is to be done with the building and the exhibits.

Since 1956, combined groups of museologists and educationists have been set up in Mexico; moreover, at the Anthropological Museum in Mexico City, there is an Educational Department, but that is not sufficient; the attitude, the mentality of museologists must be changed, since it is they who have to decide what is to be done with the building, and how the exhibits are to be presented.

#### THE ROLE OF MUSEUMS

The museum has tremendous possibilities for permanent education. Museums should possess groups of lecturer-guides to assist student groups and also the general public. They should provide courses during vacation periods and give opportunities for out-of-school activities.

In connexion with permanent education, it is important to bear in mind that exhibitions must be planned in such a way as to be easily comprehensible by the least gifted visitors, and in particular by marginal and illiterate groups. Hence the importance - indeed, the necessity - of including educators among the organizing staff of museums.

It was also pointed out that, in the case of museums, as with most communication media, the communication process was one-way, without any possibility of feedback. Hence the need to have ways of evaluating the museum's work, which could be done by means of suitably-designed questionnaires for finding out the reaction of the visiting public, its likes or dislikes. Exhibitions could be re-planned in the light of the replies to such questionnaires.

The museum should have a technical and psychological impact on the visitor. It should not merely give him an aesthetic pleasure, but stimulate him to develop his inner potentialities.

#### RESOLUTIONS

The social, economic and cultural changes occurring in the world, and particularly in many underdeveloped areas, constitute a challenge to museology.

Mankind is living through a profound crisis:

Technology has produced an enormous advance of civilization which is not matched by cultural development. This has led to an imbalance between the countries which have achieved great material development and others which remain on the periphery of development and are still enslaved as a result of their history. Most of the problems revealed by contemporary society have their roots in situations of injustice and cannot be solved until those injustices are rectified<sup>(1)</sup>.

The problems involved in the progress of societies in the contemporary world call for an overall view and integrated treatment of their various aspects; the solution is not confined to a single science or discipline any more than the decision concerning the best solutions and the way of implementing them belongs to a single social group, but rather requires the full, conscious and committed participation of all sections of society.

The museum is an institution in the service of society of which it forms an inseparable part and, of its very nature, contains the elements which enable it to help in moulding the consciousness of the communities it serves, through which it can stimulate those communities to action by projecting forward its historical activities so that they culminate in the presentation of contemporary problems; that is to say, by linking together past and present, identifying itself with indispensable structural changes and calling forth others appropriate to its particular national context.

(1) The above preambular paragraph was approved by a majority of seven votes in favour - those of Professors Mario Vázquez, Raúl González, Hernán Crespo Toral, Luis Diego Gómez, Luis Luján Muñoz, Carlos de Sola and Federico Kauffman - to four against - those of Professor Mario Teruggi, Mrs. Lygia Martin Costa, and Messrs. Enrique Enseñat and Héctor Fernández Guido - who disapproved of some of the terminology employed.

This approach does not deny the value of existing museums, nor does it imply abandoning the principle of specialized museums; it is put forward as the most rational and logical course of development for museums, so that they may best serve society's needs. In some cases, the proposed change may be introduced gradually or on an experimental basis; in others, it may provide the basic orientation.

The transformation in museological activities call for a gradual change in the outlook of curators and administrators and in the institutional structures for which they are responsible. In addition, the integrated museum requires the permanent or temporary assistance of experts from various disciplines, including the social sciences.

The new type of museum, by its specific features, seems the most suited to function as a regional museum or as a museum for small and medium-sized population centres.

On the basis of the above considerations, and bearing in mind that the museum is an institution in the service of society which acquires, preserves, makes available exhibits illustrative of the natural and human evolution, and, above all, displays them for educational, cultural and study purposes, the round table on the development and the rôle of museums to the contemporary world,

## RESOLVES

### IN GENERAL

1. That museums should widen their perspectives to include branches other than those in which they specialize with a view to creating an awareness of the anthropological, social, economic and technological development of the countries of Latin America, by calling on the services of advisers on the general orientation of museums.
2. That museums should intensify their work of recovering the cultural heritage and using it for social purposes so as to avoid its being dispersed and removed from Latin America.
3. That museums should make their collections available in the most convenient possible manner to qualified research workers and, so far as possible, to public, religious and private institutions.
4. That traditional museographic techniques should be brought up to date in order to improve the visitors' comprehension of the exhibits.

That museums should preserve the character and atmosphere of permanent institutions, without resorting to the use of costly and sophisticated techniques and materials which might encourage a tendency to extravagance unsuited to Latin American conditions.

5. That museums should establish systems of evaluation in order to verify their effectiveness in relation to the community.

6. Having regard to the findings of the survey on current needs and the shortage of museum staffs to be conducted under the auspices of Unesco, the existing training centres for museum staffs in Latin America should be strengthened and expanded by the countries themselves.

The system of training centres should be amplified with regional integration as an ultimate objective.

Facilities should be provided at the national and regional levels for the re-training of existing personnel and provision should be made for training courses abroad.

#### IN RELATION TO RURAL AREAS

It is recommended that museums should be used to help create wider awareness of the problems of rural areas and the following methods were suggested:

1. Exhibitions of technologies which might be applied to community improvement.
2. Cultural exhibitions setting forth alternative solutions to social and ecological environment problems with a view to increasing the public's awareness and strengthening national ties.
3. Exhibitions relating to rural areas in urban museums.
4. Mobile exhibitions.
5. The establishment of museums in rural areas.

#### IN RELATION TO URBAN AREAS

It is recommended that museums should be used to help create wider awareness of the problems of urban areas and it is suggested:

- (a) that city museums should lay special emphasis on urban development and its problems, both in their exhibitions and in the research facilities provided;
- (b) that museums should organize special exhibitions illustrating the problems of contemporary urban development;
- (c) that, with the assistance of the large museums, exhibitions should be held or museums established in suburbs or rural areas with a view to acquainting the local populations with the possibilities and disadvantages of life in large cities;
- (d) that the offer of the National Anthropological Museum in Mexico City to try out the museological techniques of the integrated museum by holding a temporary exhibition of interest to Latin America should be accepted.

#### IN RELATION TO SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

It is recommended that museums should be used to help create wider awareness of the need for further scientific and technological development, and it is suggested:

1. That museums should stimulate technological development based on actual conditions in the community.
2. That museums should be included in the agendas of meetings of Ministries of Education and other bodies specifically responsible for scientific and technological development as one of the means for disseminating the progress made in those fields.
3. That museums should promote the dissemination of aspects of science and technology by decentralizing themselves through the organization of mobile exhibitions.

#### IN RELATION TO PERMANENT EDUCATION

It is recommended that museums should intensify their function as the best possible agent of permanent education for the community in general by making use of all the communication media, through:

1. The inclusion of an educational service in museums which do not possess one, and providing it with adequate equipment and resources to perform its teaching rôle inside and outside the museum.
2. The inclusion in the national educational policy of the services to be offered by museums on a regular basis.
3. The dissemination of audio-visual programmes on important subjects for the use of schools, including those in rural areas.
4. The use of duplicate materials suitable for educational purposes, through a system of decentralization.
5. Encouragement of schools to make collections and hold exhibitions of items from their cultural heritage.
6. The establishment of training programmes for teachers at different educational levels (primary, secondary and university).

These recommendations reaffirm those made at various seminars and round tables on museums organized by Unesco.

#### RECOMMENDATIONS TO UNESCO

1. The round table considers: that one of its most important achievements has been to identify and define a new approach to the activities of museums: the integrated museum, designed to give the community an overall view of its natural and cultural environment, and it requests Unesco to use the publicity methods at its disposal to promote this new trend.

2. That Unesco should continue and extend its assistance in the training of museum technicians - both at intermediate and at university level - as it does at the Paul Coremans Regional Centre.
3. That Unesco should promote the establishment of a Regional Centre for the preparation and preservation of natural specimens, for which the existing Regional Centre of Museology at Santiago might serve as a nucleus. Apart from its teaching function (training of technicians), its professional museographical function (preparation and preservation of natural specimens) and the production of teaching materials, that Regional Centre would have an important rôle to play in the protection of natural resources.
4. That Unesco should grant research and training fellowships for museum technicians at intermediate educational level.
5. That Unesco should recommend that education ministries and bodies responsible for scientific, technological and cultural development should consider museums as one means of disseminating the progress made in those fields.
6. That in view of the magnitude of the town planning problems in the region and the need to inform people about them at various levels, it is recommended that Unesco should arrange for the publication of a work on the history, development and problems of Latin American cities. Such a work should be published in two versions: scientific and popular. In addition, to reach wider sectors of the population, it is recommended that Unesco should produce a film on the subject, designed to appeal to all types of audience.

#### LATIN AMERICAN ASSOCIATION OF MUSEOLOGY (ALAM)

##### CONSIDERING:

that museums are permanent institutions in the service of society which acquire and make available exhibits illustrative of the natural and human evolution, and, above all, display them for educational, recreational, cultural and study purposes;

that, particularly in the Latin American region, they should meet the needs of the broad masses of the population, which is striving to attain a better and more prosperous life through a knowledge of its natural and cultural heritage, past and present, which in many cases obliges museums to assume functions which, in more highly developed countries, are performed by other bodies;

that, with few exceptions, Latin American museums and museologists encounter difficulties of communication owing to the great geographical distances which separate them from each other and from the rest of the world;

that the significance and potentialities of museums for the community are not yet fully recognized by the authorities nor by all sections of the public; and

that at the Eighth General Conference of ICOM in Munich and at the Ninth General Conference in Grenoble, the Latin American museologists present referred to the need to set up a regional organization, the Round Table on the Adaptation of Museums to the Contemporary World.

RESOLVES:

to set up the Latin American Association of Museology (ALAM), open to all museums, museologists, museographers and research workers and educationists employed by museums, for the purpose of:

providing the regional community with the best museums, based on the total experience of all the Latin American countries;

creating a means of communication between Latin American museums and museologists;

promoting co-operation among the museums of the region through the exchange and loan of collections, information and specialized staff;

creating an official body to express the desires and experiences of museums and the profession in relation to its own members, the community, the public authorities and other related bodies.

In order to achieve its aims in the best possible manner, the Latin American Association of Museology may affiliate to the International Council of Museums and adopt a parallel organizational structure, while its members should at the same time be members of ICOM.

For operational purposes, ALAM will be divided into four sections corresponding, provisionally, to the following four areas:

1. Central America, Panama, Mexico, Cuba, the Dominican Republic, Puerto Rico, Haiti and the French West Indies;
2. Colombia, Venezuela, Peru, Ecuador and Bolivia;
3. Brazil; and
4. Chile, Argentina, Uruguay and Paraguay.

The undersigned, participants in the Round Table on the Adaptation of Museums to the Contemporary World, convened by Unesco, constitute themselves as an Organizing Committee of the Latin American Association of Museology and will appoint a working group of five members, four representing one each of the four above-mentioned areas and the fifth acting as general co-ordinator. This group will be responsible - within a period of six months at the most - for:

- (a) preparing the Association's statutes and regulations;
- (b) agreeing with ICOM on forms of joint action;
- (c) giving extensive publicity to the new organization; and
- (d) calling elections for constituting the various organs of ALAM.

The provisional headquarters of ALAM will be at the National Anthropological Museum in Mexico City.

The above-mentioned working group will be composed of the following persons representing, respectively, the following areas:

<u>Area</u>	<u>Representative</u>	<u>Country</u>
1.	Mr. Luis Diego Gómez	Costa Rica
2.	Dr. Alicia Dussan de Reichel	Colombia
3.	Mrs. Lygia Martins-Costa	Brazil
4.	Dr. Grete Mostny Glaser	Chile
Co-ordinator:	Professor Mario Vázquez	Mexico

#### GUIDING PRINCIPLES OF THE INTEGRATED MUSEUM

The development of science reveals that reality is one and should be apprehended as such. Moreover, contemporary scientific development is based on multi-disciplinary work and compartmentalized views are disappearing even from school textbooks. The variety and diversity of the problems confronting modern man will finally compel him to look on the world as one world, to be tackled as an integrated whole. All this implies that the trend should be towards the establishment of integrated museums whose subjects, collections and exhibitions are inter-related with one another and with the natural and social environment of mankind.

The basic function of museums is to show their visitors their place in the world and to make them aware of their problems as individuals and as members of society. To achieve this purpose, museums should present those problems as well as indicating the perspectives that give a constructive meaning to human existence.

This approach does not deny the value of existing museums, nor does it imply abandoning the principle of specialized museums; it is put forward as the most rational and logical course of development for museums, so that they may best serve society's needs. In some cases, the proposed changes may be introduced gradually or on an experimental basis; in others - for instance, museums not yet established or not yet definitively organized - it may provide the basic orientation.

The transformation in museological activities requires suitable personnel, which implies a gradual change in the outlook of the curators and administrators themselves and in the institutional structures for which they are responsible. In addition, the integrated museum will require the permanent or temporary assistance of specialists from various disciplines, including the social sciences.

The new type of museum, by its specific features, seems the most suited to operate as a regional museum or as a museum for small and medium-sized population centres.