

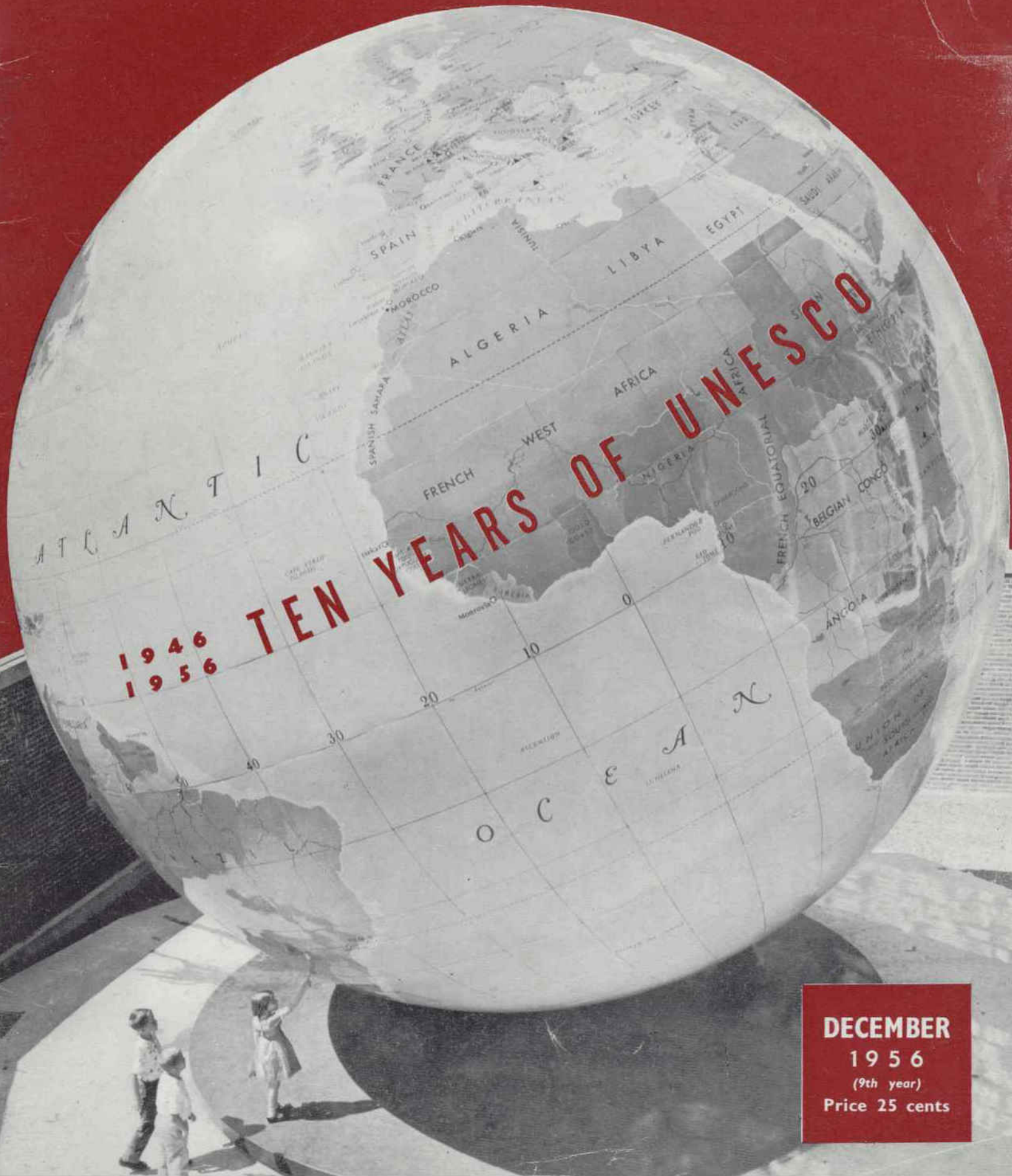
A WINDOW OPEN ON THE WORLD

The



Courier

UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION



DECEMBER

1956

(9th year)

Price 25 cents

NEWCOMER TO PARIS

Three famous landmarks and a newcomer to the Paris scene are shown in this photo of Unesco's permanent headquarters being built on the left bank of the Seine. Beyond Unesco Conference Building (foreground) and Secretariat Building are the Military College (18th century); the Eiffel Tower (987 feet high; built 1889/90) and, across the Seine, gleaming twin semi-circular wings of the Palais de Chaillot, constructed in 1937. (See page 46)

UNESCO - Louise de Béa



Vol. X—No. 6

DECEMBER 1956

CONTENTS

PAGE

- 3 EDITORIAL**
- 6 WITH THESE TWO HANDS...**
- 12 FROM DREAM TO PLAN OF ACTION**
By Ritchie Calder
- 14 FACING THE HAVOC OF WAR**
- 20 TWO PEOPLE OUT OF THREE**
- 24 A HUMAN APPROACH TO PROGRESS**
- 26 250,000,000 CHILDREN WITHOUT SCHOOLS**
- 30 PUBLISHER IN 28 TONGUES**
- 31 FULL AND EQUAL RIGHTS FOR WOMEN**
- 32 REDUCING TENSIONS AND PREJUDICE**
- 34 FREE FLOW OF IDEAS—UNESCO'S KEY WORDS**
- 37 PATHS OF KNOWLEDGE FOR ALL PEOPLES**
- 39 ENDING THE WORLD'S COPYRIGHT MUDDLE**
- 40 THE EXPANDING FRONTIERS OF SCIENCE**
- 45 NOT JUST PREACHING PEACE... BUILDING IT**
- 46 NEW UNESCO H.Q. RISES IN PARIS**
- 50 LETTERS TO THE EDITOR**

**Published monthly by**

The United Nations Educational, Scientific and Cultural Organization

Editorial Offices

Unesco, 19, Avenue Kléber, Paris, 16, France

Editor-in-Chief

Sandy Koffler

Associate Editors

English Edition : Ronald Fenton
 French Edition : Alexandre Leventis
 Spanish Edition : Jorge Carrera Andrade

Layout & Design

Robert Jacquemin

Circulation

Jean Groffier



The UNESCO COURIER'S United States of America edition, printed in Paris, France, is published monthly by the Department of Mass Communication of the United Nations Educational, Scientific and Cultural Organization, United Nations Building, New York 17, N. Y. and is distributed by the UNESCO Publications Center, U.S.A., 152 West 42nd Street, New York 36 N. Y., Pennsylvania 6-0851. Annual subscription price is \$2.50. Second-class mail privileges authorized at New York, N. Y.

Individual articles not copyrighted may be reprinted by permission from THE COURIER accompanied by the following credit line: "Reprinted from UNESCO COURIER." Reprinted signed articles must carry the author's name.

Unsolicited manuscripts cannot be returned unless accompanied by an international reply coupon covering postage.

Signed articles express the opinions of the authors and do not necessarily represent the opinions of Unesco or those of the editors.



Children shown on the cover are dwarfed by the huge world globe at the Babson Institute of Business Administration, Wellesley, Massachusetts, U.S.A.

Photo by Roy F. Whitehouse, copyright Babson Institute.

UNESCO'S FIRST TEN YEARS

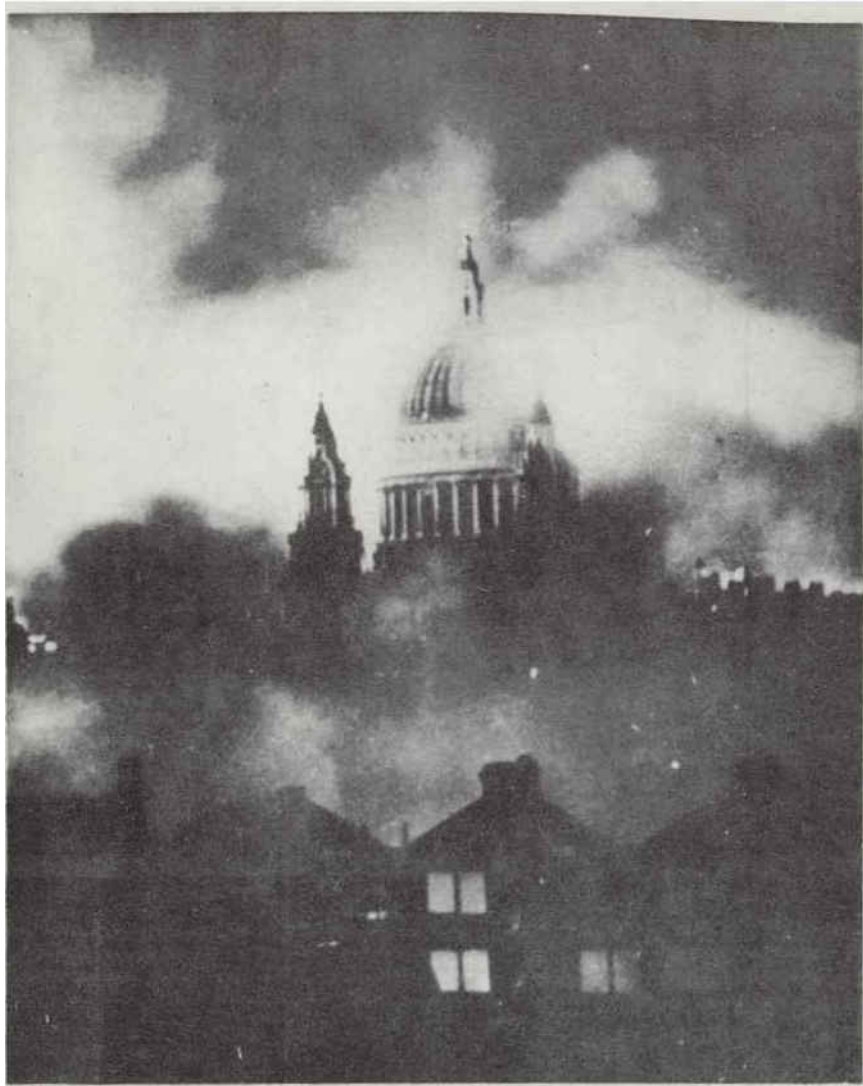
WHETHER humanity has progressed or not since the end of the last war is a question that bothers few people. Most of us are quite happy to note merely that we have survived. Others again, without very good reason, think progress a matter of course and like to consider that if humanity scored, for example, 12 marks at any given moment, it deserves 14 or 15 marks a decade later. But do they ever stop to define the basis of such an evaluation, or to explain the total out of which the marks have been given?

There is, in truth, no universally acceptable measure of progress. Nobody believes that men become more handsome or wiser over the years, and nobody can tell whether they are becoming happier. Increases in comforts can be lightly dismissed as irrelevant in this context. Only one kind of progress seems incontrovertible: the increase in the fund of knowledge, either as discovered by research, or as acquired through education. Knowledge alone will permit humanity to advance gradually—or perhaps at an accelerated pace—in areas that still appear to remain stagnant and that still appear to be closed to it: along the paths of justice, of peace and of intelligence.

UNESCO is an "Organization for education, science and culture" which happens to have been founded just ten years ago. One may therefore appropriately enquire, at this point, what it has achieved so far. Have education, science and culture gone ahead during the past decade?

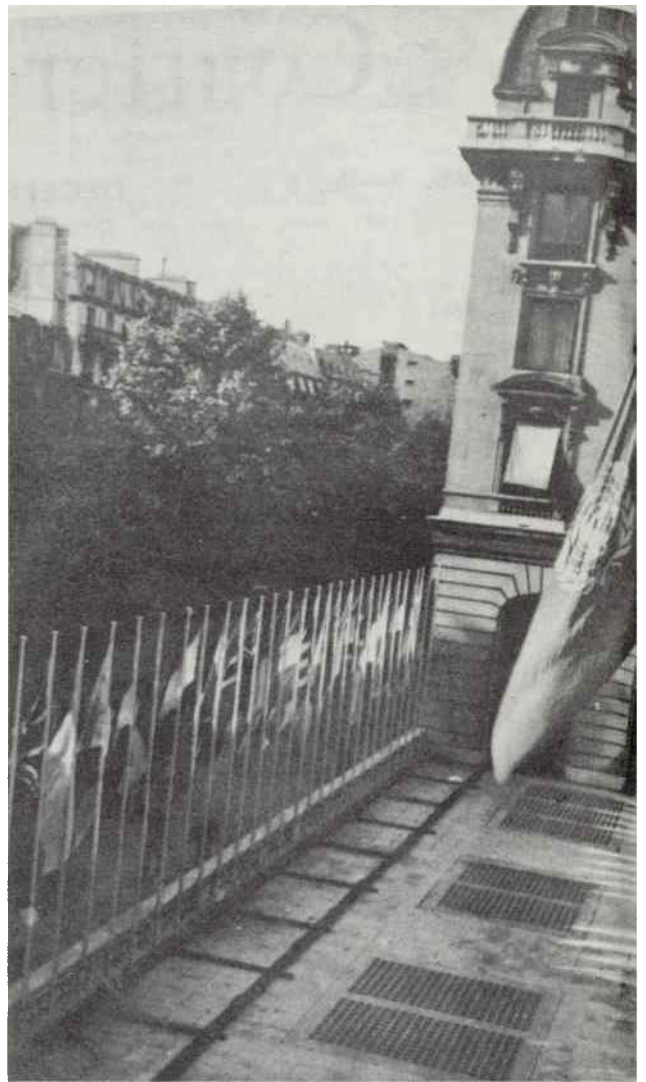
That science has progressed is beyond doubt—as witness atomic energy, chemistry, aeronautics and so on. Are scientists more numerous? Are they better at their jobs? Certainly. Research centres, in particular, have multiplied, the network of laboratories is more closely woven, more

Cont'd
on
next page



BIRTHPLACE. Under the bombs battering London, the Ministers of Education of the Allied Governments met to plan the rehabilitation of educational systems in occupied or war-devastated areas. Following these deliberations, representatives of forty-four countries met in London in November 1945 and there drew up Unesco's Constitution.

Copyright Keystone.



TEMPORARY HOME for Unesco since November 1946 has been the Hotel Majestic, in the Avenue Kleber, Paris—one of twelve great avenues radiating like the spokes of a wheel from the Place de l'Etoile. Here, Unesco officially came into existence on November 4, 1946, with 20 member states. Today it has seventy-seven member nations.

UNESCO'S FIRST TEN YEARS

(Continued)

ample. Every discovery is the joint work of hundreds; the names of one or two individuals become generally known, the rest remain anonymous.

What about education and culture? This is harder to say since humanity as a whole cannot be asked to sit for an examination. Yet there are thousands of new schools, many new universities, millions of adults have learned to read, thousands of tons of books cross frontiers in every direction. Statistics can reveal whether there are more art exhibitions, whether concerts are more popular and their programmes more varied, whether architectural monuments are held in greater respect. Ultimately, however, it is the historians who are the most competent judges. Given a century's retrospect, they will be able to

tell us whether our contemporaries have worked diligently towards the improvement of the world.

If—as today we sincerely hope—they can reach a favourable verdict, they will not have done so because of a few isolated heroes. Progress will not be credited to one person, one nation or even one organization. It will be described in collective terms such as “scientists”, “philosophy” or “television” and also by the name of UNESCO,

in the same manner in which it is already referred to here.

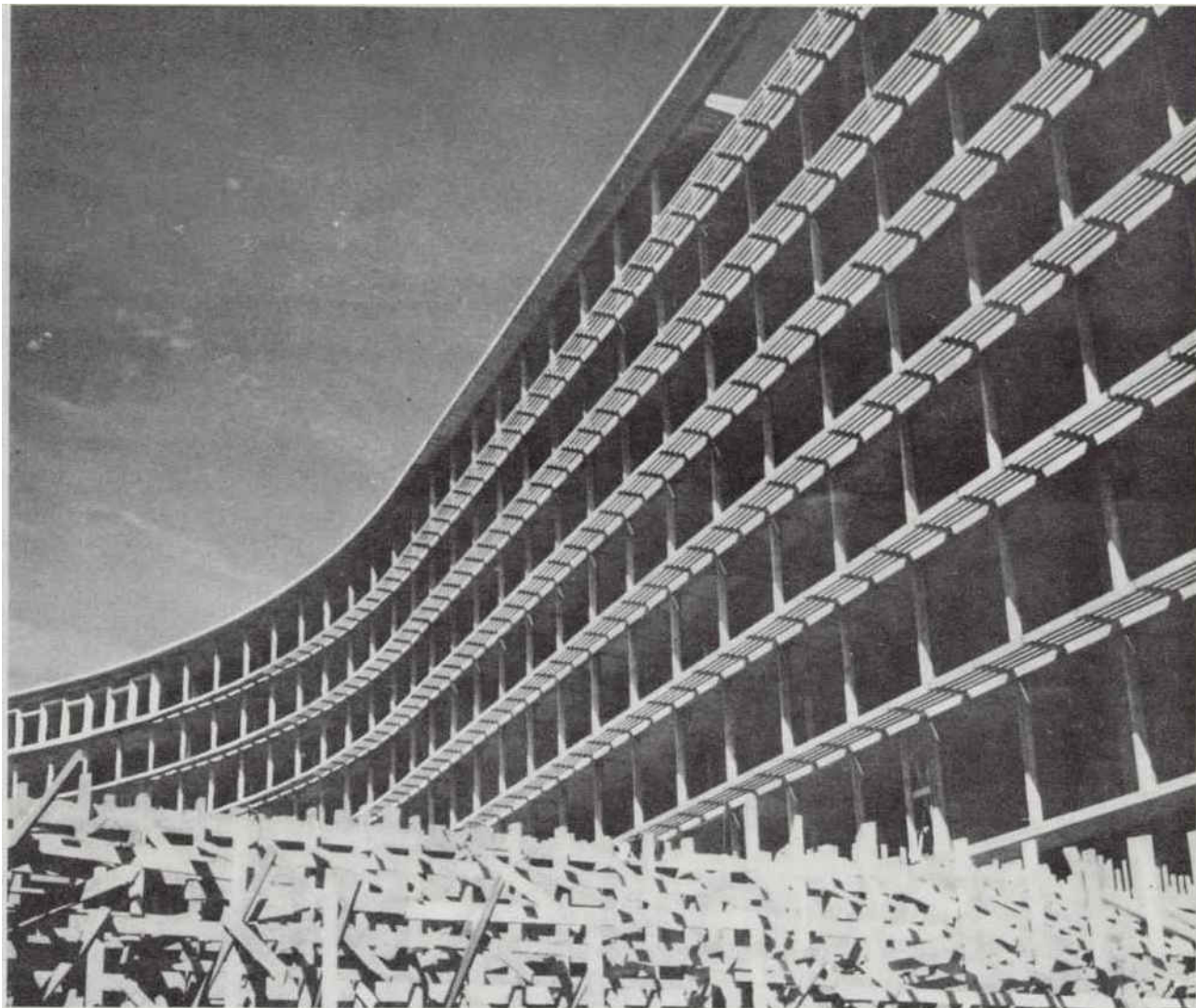
For in this text it is ubiquitous: one reads of what UNESCO has undertaken, whom it has brought together, all of which refers to no reality independent, or outside of the particular task or meeting. The term “UNESCO” is simply a shorthand way of describing groups of men and women, or governments, or associations of scientists, artists,



JULIAN HUXLEY
Director-General of Unesco
from 1946 to 1948



UNESCO



UNESCO-Vorontzoff.

PERMANENT HEADQUARTERS, now under construction near the Eiffel Tower on Paris's Left Bank, includes a seven-storey, Y-shaped structure and a low, trapezoidal conference building. When site, which covers seven and a half acres, is completed in 1957, its architecture will add a new, modern landmark to the French capital. (See page 46)

teachers, and, occasionally, of certain nations as a whole.

This issue offers a picture of the very wide range of activities of which first 20, then 50 and finally 77 States have decided to make a success by pooling their needs and resources. UNESCO is one of their tools. Neither the work it does nor the ideas it spreads belong to anybody in particular.



JAIME TORRES BODET
Director-General
from 1949 to 1952

One might be tempted to think that it is a matter of charity meted out by a supra-national philanthropist to the grateful masses, but nothing could be more misleading. The peoples help themselves. UNESCO's aid to education? You will find that certain countries have found the necessary funds, launched campaigns, built schools, trained teachers—and perhaps thanked three or four international civil servants.

UNESCO contributes to nuclear research? The fact is that 12 European governments have decided to construct and finance an international laboratory. So it continues.



LUTHER H. EVANS
Director-General
since 1953

It is true that governments, scientists and scholars who execute this work occasionally make reference to principles or an ideal which they attribute to UNESCO. But after all, they were themselves the creators of UNESCO. They claim now to derive inspiration from it principles, but these are no doubt their own most basic ambitions, which UNESCO embodies and maintains alive whatever the circumstances.

Let us then speak of "the peoples" rather than of "UNESCO". And let us think of UNESCO as an aim, an ideal. It has been put in the service of peace and progress; about that, no quarrels are possible.



F. Brunel-UNESCO

WITH THESE TWO HANDS...

2,600 MILLION PEOPLE must somehow live together and share the resources of the earth. To an extent which might have seemed inconceivable even 50 years ago, there has come increasing realization that the general impoverishment of any area is a matter of vital concern to all areas.

UNESCO





"O Cruzeiro"-Brazil

AROUND THE GLOBE there is a great thirst for education today. Everywhere people are coming to realize that this is a real way toward helping themselves to a better standard of living.

WITH THESE HANDS (Cont'd)



UNATIONS

MEN STRUGGLING TO SURVIVE cannot be expected to regard literacy as an end in itself. Unesco has linked the three "Rs" to the needs of the illiterate adult—to farming, to the need for better crops, better food, better health and sanitation, in a plan of education labelled "fundamental education". Today it is being put into practice in many parts of the world with the participation of governments and United Nations Agencies such as the Food and Agriculture Organization (FAO), the World Health Organization (WHO) and the International Labour Organization (ILO).



UNESCO

NOT BY BREAD ALONE does man live. Man also needs the beauty found in line and form and style and music and poetry. And it is the appreciation of the creative work of others, revealing to him the best that is in his fellow-men, that Unesco has helped to promote for the past ten years, in the fields of literature, drama, music and art.



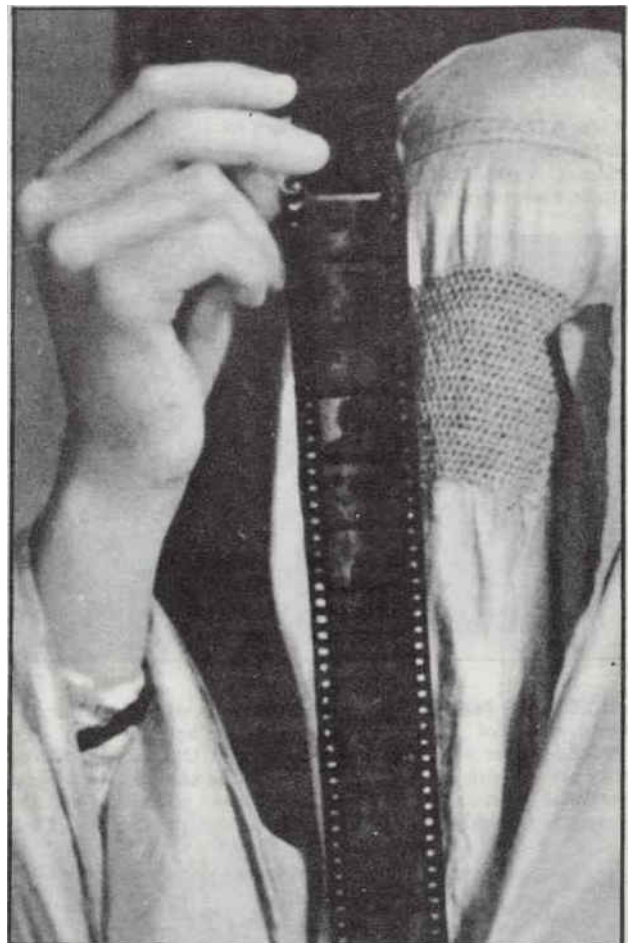
UNESCO

SHARING OF SKILLS is stressed in aid now being given to economically underdeveloped countries. Industries are sprouting everywhere but they need skilled workers, foremen, engineers and research scientists. Here, dozens of scientific documents all on a single spool of microfilm, are packed for shipping at Mexican Documentation Centre, set up with Unesco help, and now serving the whole of Latin America.



C.O.I., London

IN THE SEA there is far more life and food than on land yet the oceans provide only a small fraction of man's food. Plankton from the sea's depths is one of the great unexploited food resources. Unesco's Advisory Committee on Marine Sciences is hopeful that research may eventually lead to its addition to the human diet.



UNESCO

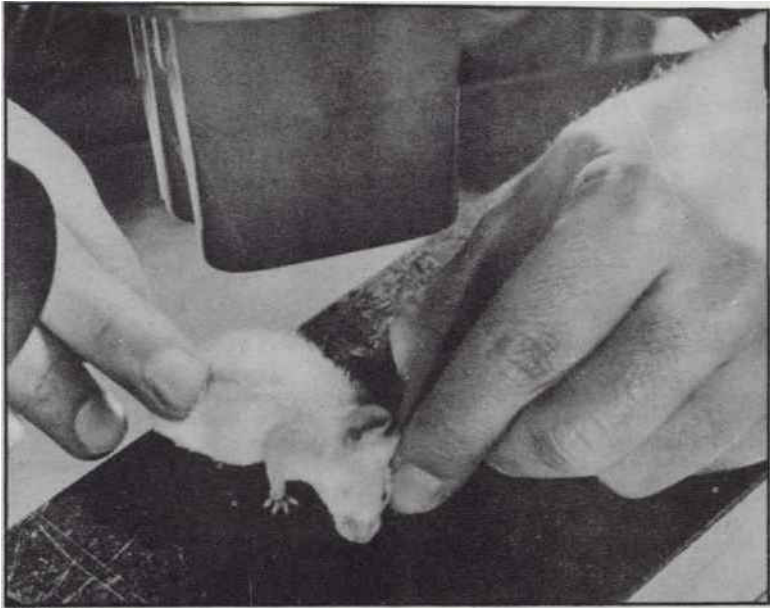
WOMEN OF ALL LANDS are increasingly offered the newest means of learning, as Unesco helps to make a reality of the ideal, enshrined in its Constitution, that all shall have "equality of educational opportunity without regard to race, sex or any other distinctions, economic or social".



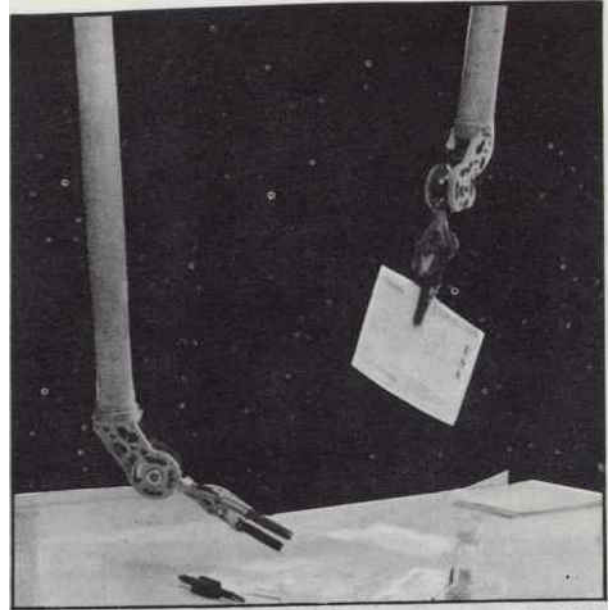
Press Information Bureau. Govt. of India

THE POWER OF THE SUN is a source of energy into which research is being carried out in many countries. A simple, sun-ray oven for cooking food was devised during Indian experiments aimed at solving the desert fuel shortage.

WITH THESE HANDS (Cont'd)



UNESCO

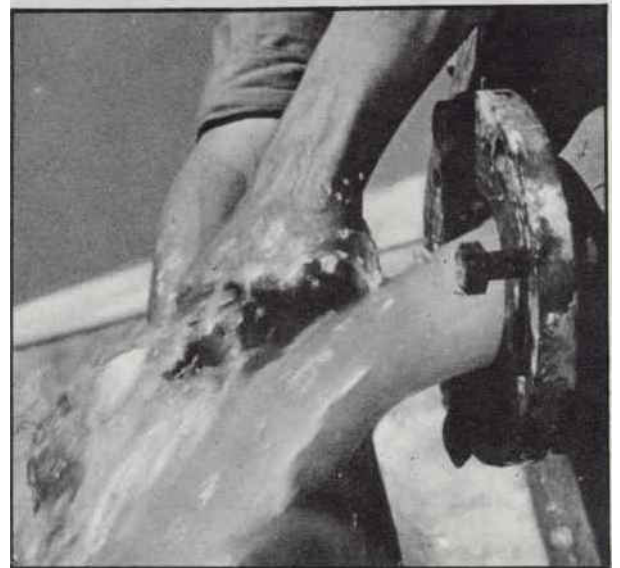


UNATIONS

THE ATOM showed only an evil face for almost ten years. Today, as a result of international co-operation through the United Nations and Unesco, it has begun to show a happier one. Atoms-for-peace research has made possible new benefits in medical treatment (left) in industry and agriculture. A great new research laboratory at Geneva will soon explore the heart of the atom for 12 European countries as a result of Unesco's efforts. Right, remote control tongs handle radio-active materials at recent "Atoms-for-peace" exhibition, organized by the United Nations at Geneva.

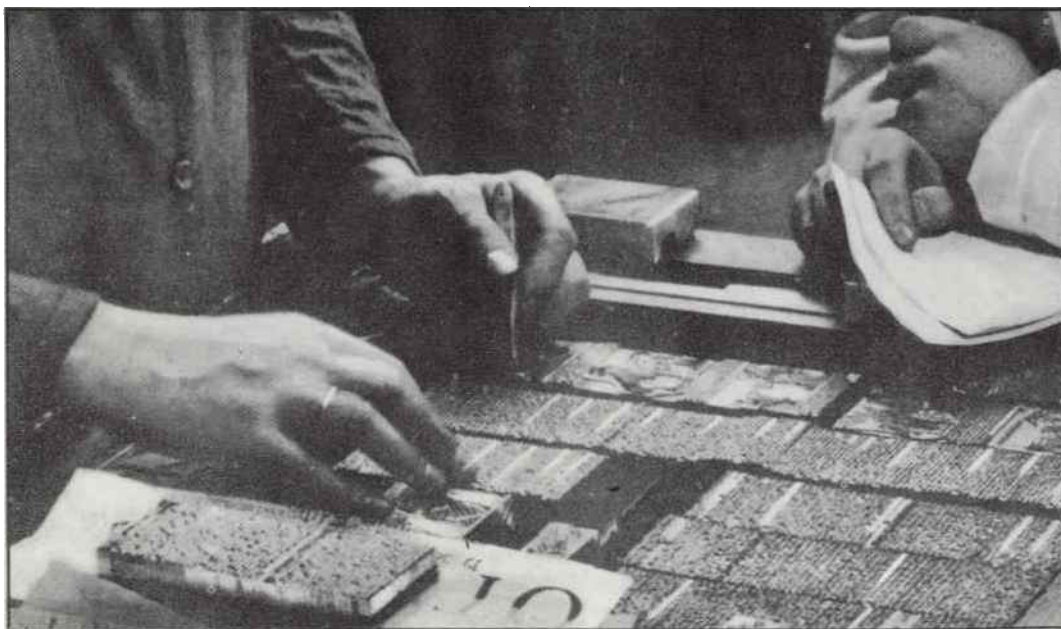


USIS



UNESCO

NEEDS OF NATIONS, from elementary vocational instruction to the training of petroleum geologists, are being met by more than 200 educators and scientists working for Unesco. In 48 countries, they are carrying out Unesco's share in the U.N. world programme of technical assistance, demonstrating how education and scientific research can help to shatter the vicious circle of poverty and ignorance.



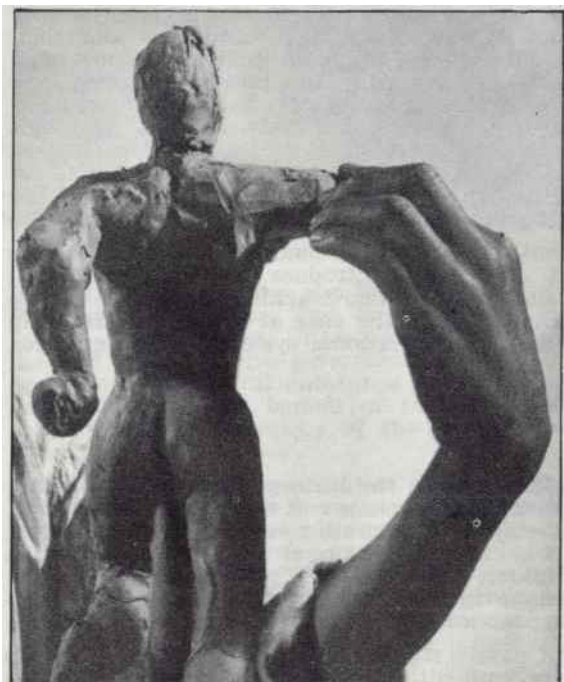
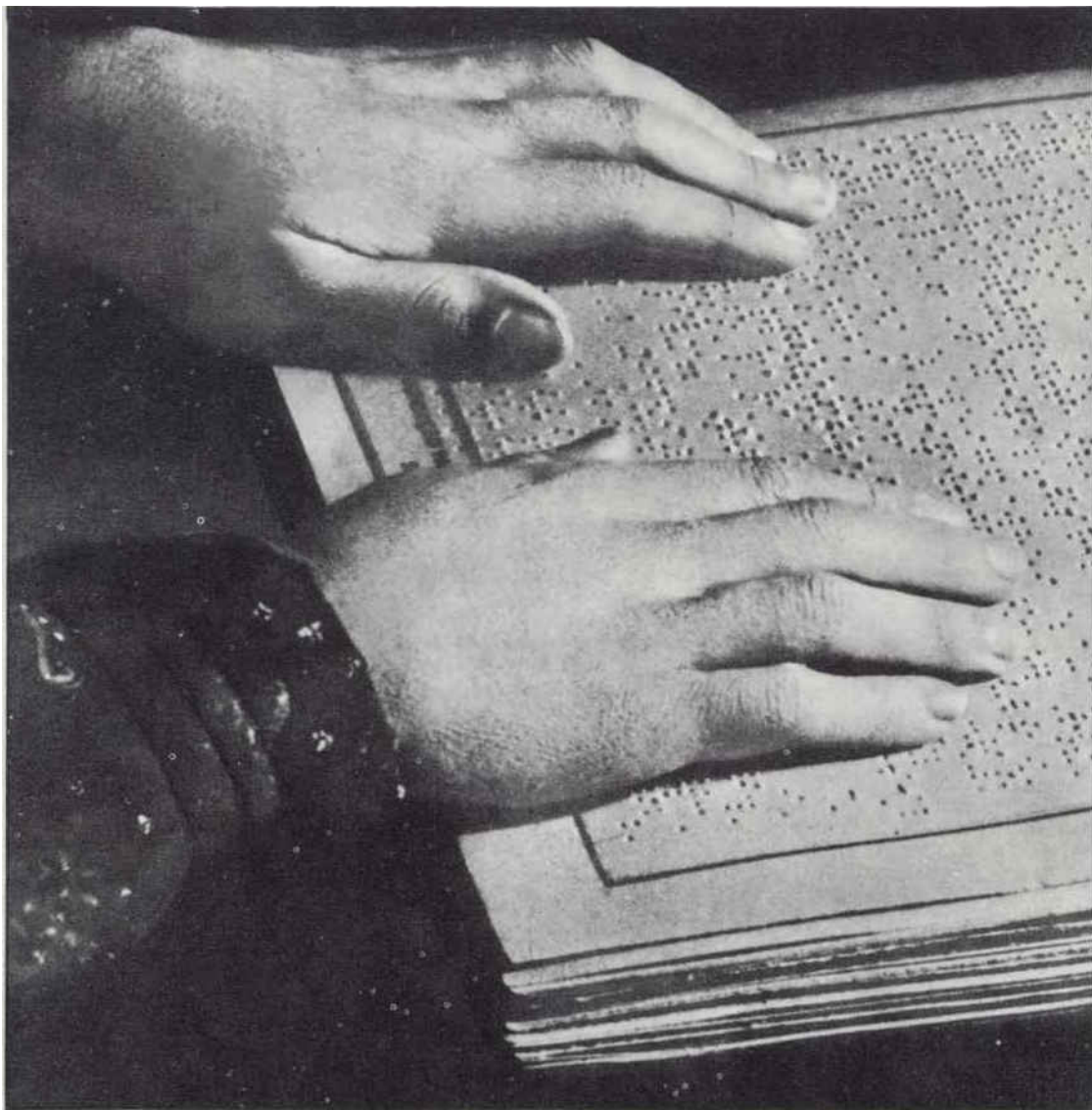
LIFE-GIVING WATER for a parched region. Scientists estimate that one-quarter of the earth's surface is desert. Development of the arid lands is one answer to the world's increasing need for food. Unesco's continuing programme of research and co-ordination is helping scientists and governments to explore many aspects of the problem.

René Zuber

FREE ACCESS TO NEWS and ideas has been called the touchstone of all freedoms. Unesco has promoted "the free flow of ideas by word and image" by working to eliminate censorship, reduce tariff barriers to information materials, press and cable rates, the newsprint shortage, and by helping to build up inadequate information facilities in under-developed countries.

TO 7,000,000 BLIND throughout the world the Braille alphabet of raised symbols is the most powerful key to human freedom and scholarship ever devised. Yet the existence of dozens of variations of Braille have seriously hampered Braille book production. Unification of Braille alphabets is one of tasks which Unesco has already completed.

UNESCO



USIS

APPRECIATION OF THE ARTS should begin in childhood, yet in very few countries have art and music played an adequate part in the regular school curriculum. Unesco has brought creative artists and educators together to see how this can be brought about, and has helped the creation of international societies which aim to foster education through music and also the plastic arts.



From dream to plan of action

by Ritchie Calder

ON a recent visit to UNESCO's Paris headquarters, I made a sentimental journey through the back streets which we, as delegates to the First General Conference of UNESCO, ten years ago, had used as a shortcut from our hotel to the Avenue Kleber. I did not recognise them. I remembered them as much more romantic. Now, they were just ordinary, with the paving stones hard underfoot.

Then I realised that it was not the streets but I who had changed. In 1946, we paced those pavements in the company of our dreams, talking of all the aspirations that we were trying to write into the programme of UNESCO. And all the other delegates, from all the other countries, from all over the world, were likewise walking and talking and projecting *their* dreams of what UNESCO should do.

The result was a profession of faith but scarcely a programme of action. For we wished on to the infant organisation every rose-tinted reverie and high-minded hope and we made life difficult for UNESCO. Yet we were well-meaning. Remember that we were at the end of a ruthless war which had threatened to destroy our civilization, which had distorted the minds of men with hatreds and blinded them to the beauties of our common heritage. Then, exultantly, we saw "Mankind's Second Chance." Out of the ruins we came as bearers of embarrassing gifts to the cradle of this offspring of the United Nations ideal.

When, at the end of that conference, some of us woke up to what we had done (and left undone), I said, "We have made UNESCO the gift of the entire empyrean, of all the stars of the firmament, when all that it needed was a few navigational stars by which to chart its course."

GOVERNMENTS, more realistic than most of their delegates, put a price on the dreams we peddled, and it was not high. But even if it had been ten, or a hundred times as much, UNESCO still could not have given substance to our ambitions. Our difficulties were manifest in the language we had perforce to use: UNESCO, as an intergovernmental agency, could not have power to *execute* and was not given adequate resources to *implement*; so we had to resort to words like *initiate*; *stimulate*; *facilitate* or *investigate*.

One example springs to mind: A proposal that UNESCO, to counteract misleading propaganda and to spread truth, culture and understanding, should have its own world-wide radio network, with its own stations and its own programmes, penetrating everywhere. Apart from political difficulties, the broadcasting realists estimated that the project would cost \$1,000,000,000 and that it would take years to build a listening audience. So the best we could do was to *stimulate* existing networks with any *facilities* which UNESCO might provide and investigate the radio needs of various countries.

It was the same in other spheres as well. We had written into the Charter: "Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed." And we meant it. But there were 2,500 million minds in the world. More than half the population could not read nor write and more than half the children of school-age had no schools to which to go. Over 200 countries and territories had different educational systems—some good, some indifferent and some barely existing. In the mood in which we were in in 1946, we would have liked to have given a tutor to every child!

As one of those "Olympians" of 1946, I came down to

earth sooner than most. I shared the chastening experience of the second conference in Mexico City, when we started pruning our ambitions and forming a more realistic plan of action. But I did not suffer the disillusionment which comes to dreamers because in the intervening years, I had the opportunities of an independent observer of seeing the realities of the practical work which UNESCO can do. I have seen its work in the deserts, in the jungle, and in the lands which had been forgotten. I have seen it at work among the common people, just as I have seen its value to the uncommon people—the educationists, the scientists, the thinkers and the aesthetes.

OUR aspirations, in more commonplace attire, have had to "work for their living" but, from my salutary experience, I have found the quiet work of devoted people in the field more rewarding than the resounding phrases of the conference room.

For instance, ten years ago "fundamental education" was an unfamiliar concept. We talked about "creating the climate of literacy"—making an illiterate adult world sympathetic to the education of the young. A noble object, but how?

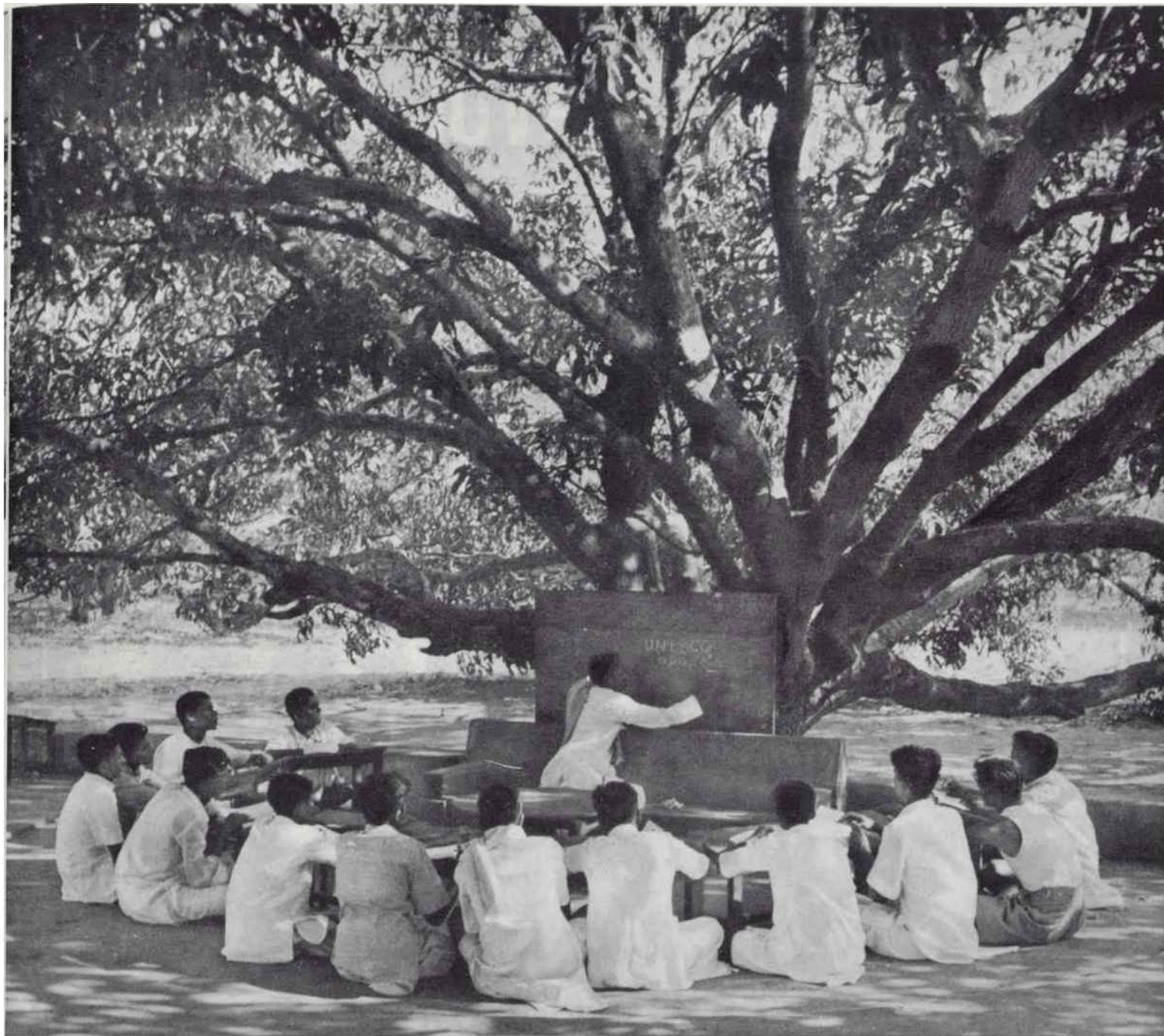
Today, "fundamental education" promoted by UNESCO is a working practice. The object, and the example, of centres like Chao Choeng Sao, in Thailand, and Sirs-el-Layyan, in the Nile Delta, is to spread "fundamental education". And they do. People, even though they are illiterate, are taught the benefits of knowledge. Men and women are taught how to till their fields better; how to care for the health of themselves and their children; how to look after their homes and so forth.

In learning, they improve their conditions and their knowledge. Then they want their children to know more and want schools for them. And they want schools for themselves and the elements of adult education. The experience of this sort of thing derives out of the people and their circumstances—like the singing teacher of CREFAL, the Fundamental Education Training Centre for Latin America, who goes around the villages with her guitar, singing her instructions in lively, rousing fashion.

Governments have turned to UNESCO not only for experts to help set up schools, introduce technical and adult education, and provide radio-teaching for people remote from schools, but, as in the case of Yugoslavia, for help in reorganising the educational systems of six republics.

FOR the first time in the history of mankind—because UNESCO exists—the picture of the needs of education, the geography of ignorance, has at last been drawn, exchange not only of personnel but of experience is constantly taking place and the "plan of action" can be implemented. Principles we discussed in 1946 are being put into practice.

The "S" of UNESCO stands for "Science". Even ten years ago we were eminently practical about the "S". The "Commonwealth of Science", the indispensable exchange of scientific knowledge, existed before the war in the form of the international congresses of the many disciplines of science. The machinery of exchanges had, of course, ceased with hostilities but UNESCO was able to provide funds—"lubricating oil, not even fuel oil"—which restored the functions of the congresses and helped to create international scientific bodies, where needed.



UNESCO

Again there was CERN, the European Centre for Nuclear Research at Geneva. This is costing 200,000,000 Swiss francs—far more than Unesco could provide. But UNESCO inspired it, and twelve governments agreed to co-operate and finance this vital enterprise which will give them—and the world—the benefit of the “know-why” of the atomic nucleus, repository of the energy which can be turned to peaceful uses.

There is the Arid Zone Project. I confess to a personal “stake” in this because five years ago, at UNESCO’s request, I did a reconnaissance of the problems of desert research in a tour of the deserts of North Africa and the Middle East. But, since then, I have seen UNESCO’s work on desert hydrology, plant ecology, human and animal ecology, wind and solar energy and climatology. A lot of “-ology”, some may say, but it is the information amassed from experience and research all over the world which will enable deserts to be wisely developed and produce sustenance for the world’s multiplying population.

And here is one dream which is coming true. I thought I was dreaming when a French scientist with whom I was trudging knee-deep in burning sand in the Sahara said, “Monsieur Calder, we are walking on water!” Either I was dreaming or he was suffering from the *cafard* that madness which overtakes those who are too long exposed

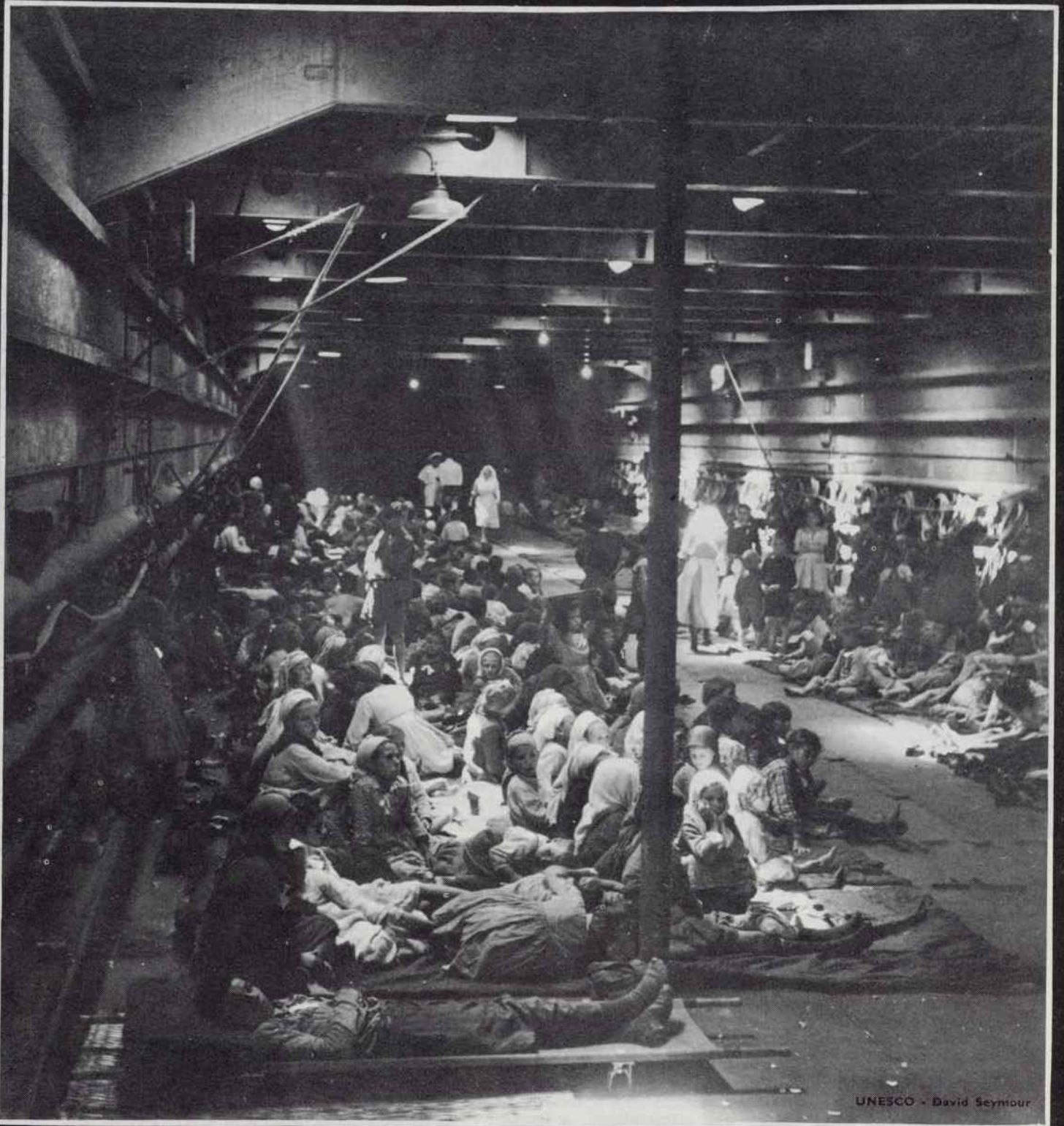
to the desert. That I was not dreaming and that he was not mad is confirmed by the reports to UNESCO.

Under our feet was a great fresh-water reservoir, the nodular sandstone layer of the Albienne Nappe of which subsequent reports said: “It is now known that in a broad belt running north and south under the Sahara, it is possible for artesian wells to be sunk. We can create man-made oases wherever there is a sufficient area of cultivable land in the vast dead valleys... And so it shall be that we will bring life to a howling desert...”

And the desert shall blossom as the rose... A dream that will become a reality, to be added to many other achievements of UNESCO, the more significant perhaps because they are unsung. The help to restore the war-ravaged schools, museums and libraries; the conventions to protect the ancient monuments which are the heritage of all mankind; the convention on copyright; the World Survey of Education; the cultural and scientific history of mankind; the constant exchange of peoples to learn and to teach and the manifold activities which are lighting lamps of understanding throughout the world.

Out of those dreams of 1946 a plan of action has emerged. From that firmament of stars, UNESCO has found the stars by which to steer and it will be judged not by our past hopes but by its future achievements.

FACING THE HAVOC OF WAR



UNESCO - David Seymour

GREEK TRAGEDY. Nine years of continuous warfare in Greece found the country with 380,000 orphans (nearly one-eighth of its children) and 7,625 out of 10,000 schools destroyed or badly damaged. Suffering between 1944 and 1949 was perhaps even greater than it had been during the previous four years. Over 700,000 Greeks had to be evacuated (some of them by sea, above) from the war-torn northern provinces. Governments

and national and international voluntary organizations came forward with aid, and Unesco, concentrating on educational reconstruction, launched appeals: "The refugee children need schools, teachers, and equipment." In 1947, scientific equipment and educational material worth \$300,000 was sent to Greece. Schools were rebuilt and equipped with Unesco's aid and with the funds it received from many countries.

TEN years ago, on November 4, 1946, the agreement founding a United Nations Educational, Scientific and Cultural Organization was ratified by 20 states and came into force. Scholars, philosophers and artists greeted this event with a warmth never before displayed in connexion with an official body. "I have faith in our UNESCO", said Leon Blum, "because I have faith in peace and humanity". The poet Archibald MacLeish declared: "This will prove a great and powerful instrument for the broadest possible purpose, the purpose of the common understanding of man for peace."

Born as bombs fell

UNESCO was begotten by war, and born during a war. Beneath the bombs falling on London, the education ministers of the Allied countries dreamt of a world organization devoted to co-operation and reason. In 1945, they stated: "Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed." They then went on to affirm that "the wide diffusion of culture and the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfil in a spirit of mutual assistance and concern". This was their conclusion: "The peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind."

Ruins and ration-books

AT that moment, the concentration camps in Europe had not yet disgorged all their surviving inmates, and starving children still roamed the streets. In Asia, the silence of death hung over Hiroshima since August 6, 1945, over Nagasaki since August 8. The war was over but the peoples were emerging from it slowly, still inhaling the cinders of destruction.

In battered London, the ministers wrote: "The purpose of the Organization is to contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and funda-

mental freedoms, without distinction of race, sex, language or religion."

Hence in 1946, the Organization was in being, recognized, accommodated with its own budget and secretariat: its services in the cause of international educational, scientific and cultural collaboration were expected. At first, unhappily little could be achieved. It was an area of ruins, of emergency measures and of ration-books for a good two-thirds of the world. Frontiers remained sealed, or else the nations locked themselves into tight power blocs inaccessible from the outside. In the circumstances, material considerations took first place.

Furthermore, the resources of the fledgling UNESCO seemed tiny when measured against its world-wide ambitions and in relation to the universal chaos. Its budget was derided as "less than the sum spent every year to clean New York City's subway system". Could this institution really claim to advance "the mutual understanding and knowledge of nations?" Was this the ideal

moment to talk of popular education, the spreading of culture and to promise help in "the advancement and diffusion of knowledge"? Not a few well-meaning souls preferred to picture the future in terms of decline and terror, and to visualize the Apocalypse.

No rose-coloured future

MEANWHILE, those who were responsible for the first of UNESCO's tasks also explained calmly that they were working for the future. No doubt this was neither a rosy nor a particularly easy prospect, but rewarding in effort and potential. In other words, these pioneers believed in progress. It is a faith that allows poor resources and enormous tasks to be lucidly faced.

At the very outset, in the autumn of 1946, the first Director-General of UNESCO, Julian Huxley, defined the Organization's mission by reference to this faith, which at

Cont'd
on
next page



KOREAN EXODUS from battle areas in 1950 and 1951 uprooted millions of men, women, children, and created vast emergency food, shelter and relief problems. Since then, the people of Korea and the peoples of the United Nations have embarked on long-range reconstruction programme under direction of UNKRA (U.N. Korean Reconstruction Agency). Restoration of educational facilities lost during war—33% of primary schools, 60% of classrooms, 80% of books and equipment—ranks high in reconstruction programme. Unesco missions surveyed and outlined the enormous needs and prepared five-year educational rehabilitation plan. Unesco sought "first aid" for 100 of neediest Korean primary schools by means of its Gift Coupon Scheme, through which children all over the world helped to provide schools and equipment for Korean youngsters. Today, Korean schools receive a steady stream of textbooks from the new National Textbook Printing Plant built at Yong Dong Po through combined efforts of UNKRA, Unesco and the Republic of Korea Government. This modern plant is geared to produce 30 million textbooks a year.

FACING THE HAVOC

(Continued)

'Our minds are like parched earth'

once excludes easy downheartedness and false hope: "not a myth but a doctrine of progress", as he put it.

Critics tried to class the Organization as a more or less technical body tied to particular political policies or ideologies. Huxley rose to this challenge, too.

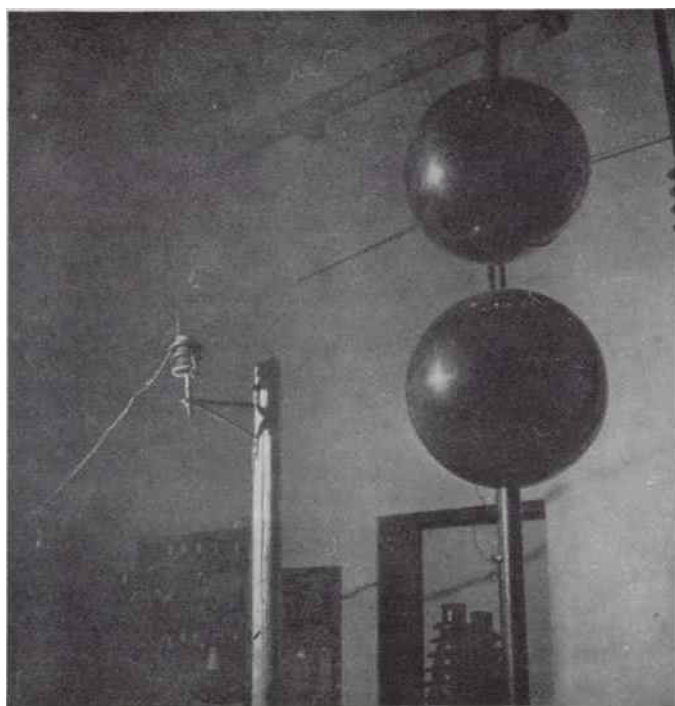
The goal was to be the evolution of humanity; Unesco would make its influence felt in every field of teaching and intellectual endeavour, its utility based precisely upon its universality. "Meanwhile", said Huxley, "anything that can be done to increase the interpenetration of traditions and their fruitful union in a common pool will help, and is itself assuredly a prerequisite of full progress. In this light, the work of UNESCO appears as an essential intervention at a particular stage during man's evolution."

In point of fact, such influence began by being tentative because the general trend of events seemed to indicate at least a slight recession in the tide of human progress. Twelve nations had gutted universities, pilfered libraries, ruined schools and sacked laboratories to show as evidence of "cultural diffusion". In order to diffuse something, one needs a certain number of props; books, for example.

In the first place, therefore, UNESCO had to undertake the job of reconstruction, of make-do and of salvaging. Appeals for help went out, donations were pooled and distributed. From Canada came books for the Orient, from Great Britain microfilm equipment, from the United States tons of school material. Laboratory apparatus was sent to China, Greece, the Philippines, Poland and Czechoslovakia. Everything possible was done, but by 1949, certain things still appeared to be irreplaceable.

Schools and books had been hard hit by the war; some belligerents had, indeed,

marked them down for destruction. These words by Stephen Vincent Benet used to be repeated in 1949: "When they burned the books, that was the beginning, but we didn't know it until later." The catalogue of loss was full enough: libraries razed in Manila, Caen, Louvain, Milan, London, Shanghai; 537 Czech libraries pillaged



UNESCO

SMASHED LABORATORIES and burned-out universities were left to mark the trail of war's red-hot rake across Europe and Asia. One of Unesco's first activities therefore was to join in the tremendous job of salvage and reconstruction. It dug out facts on the most urgent needs of schools and universities and created its own emergency aid fund (later replaced by the Unesco Gift Coupon Scheme). Photo shows equipment in electro-technical department of Vienna's Institute of Technology—one of institutes aided by Unesco's Scientific Reconstruction Programme. Here, dummy telegraph pole holds sample insulator being tested for use on power lines throughout Austria to eliminate radio static. Large spheres are part of 750,000 volt transformer.

from the attic to the cellars; not a single Polish book left in Poland.

By signing an agreement with a body which had hitherto concentrated exclusively on distributing millions of food parcels, UNESCO drew attention to the fact that intellectual and physical famine go hand in hand. The president of the Meiji Gakuin College in Tokyo wrote back: "We have been cut off from the rest of the world so long that our

minds are like parched earth." In the parcels, preserved foods began to give way to scientific works: in one year, over \$1,000,000 worth of books were sent out to help many countries.

Gradually, UNESCO began to arrange its reconstruction work along lines that would allow for more general participation.

By the time that the needs of war-ravaged countries seemed to have become slightly less urgent, still-required aid began to come from more humble sources: the pockets of schoolchildren, who used their savings to purchase "Gift Coupons". Thanks to such anonymous generosity thousands of dollars collected in 18 "donor" countries allowed schools in 46 states or territories to buy books or apparatus. But the important thing, said the organizers, is to establish friendly links.

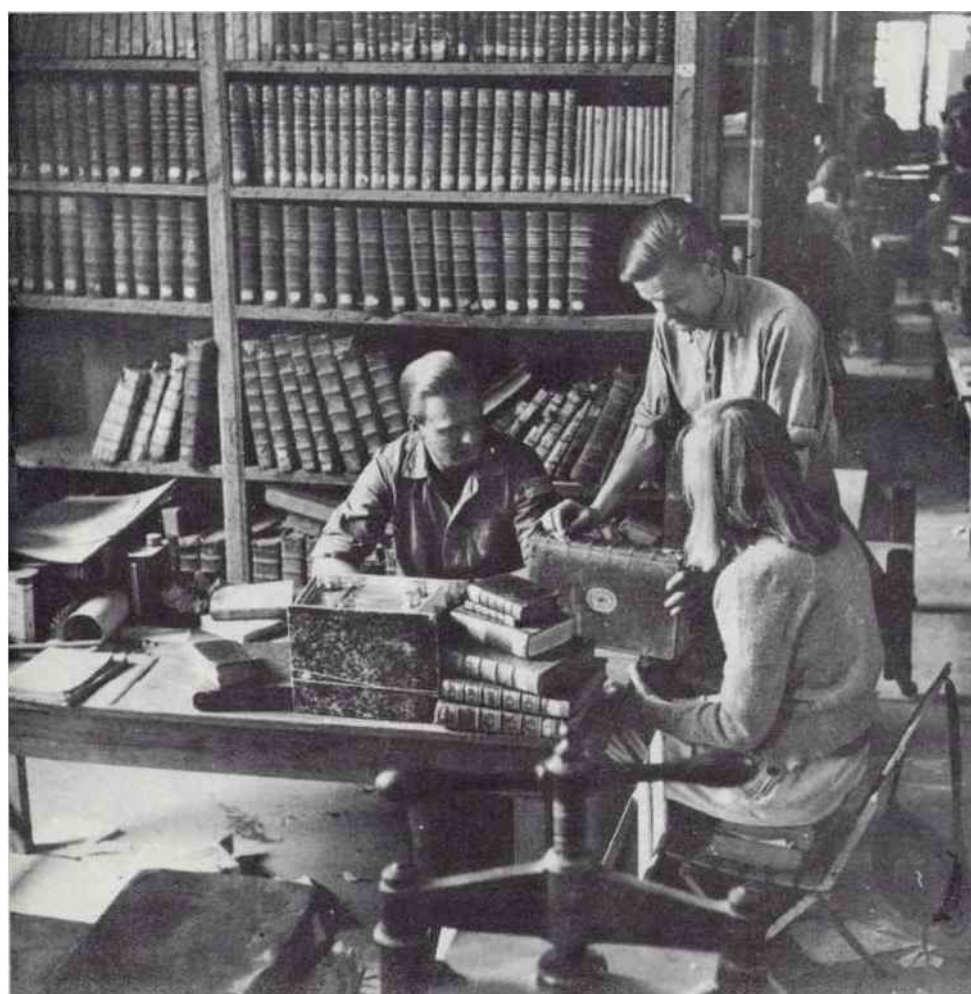
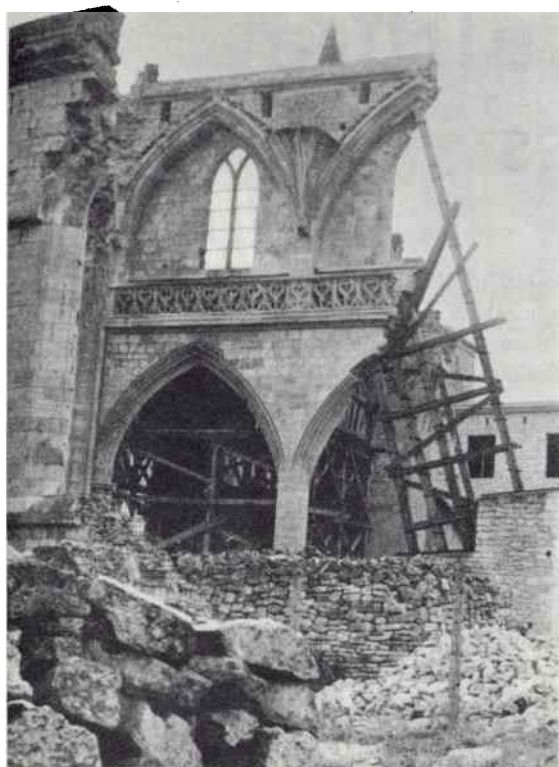
Can it then be said that, after the first two or three years, reconstruction became superfluous? Not all, for destruction had not ceased.

In Greece, nine years of continuous fighting left thousands of school buildings in ruins. Unesco launched repeated appeals: "Refugee children from the northern Greek provinces lack schools, teachers and educational material..." In Palestine, there were eight or nine hundred thousand refugees and later over 1,000,000. The problem of displaced persons appeared again, and called for even more radical mea-

asures than before. UNRWA (United Nations Relief and Works Agency) supplied food, clothes and shelter; it continues to function, thus keeping alive an entire community.

These 900,000 men, women and children, however, must live and not merely exist. They must find means of subsistence, but also an aim in life. For refugees whiling away a

Cont'd
on
page 18



BATTERED BOOKS and empty shelves from Manila to Milan and from Louvain to Shanghai revealed war losses of libraries both from the effects of bombs and shells and through the depredations of men. In Czechoslovakia, 537 libraries were completely pillaged; in Poland, not a single Polish book remained. Unesco helped to restock the ravaged shelves. In co-operation with other organizations it arranged the distribution of more than \$1,000,000 worth of books in a single year. In France, where total library losses were estimated at more than \$6,000,000 bomb-damaged library of the small Normandy town of Valognes (above, left and right) symbolized the plight of thousands throughout the world. Valognes was saved through an appeal by Unesco to the International Work Camp movement. In 1950, 35 Danish and Swedish students (left) spent a summer holiday cleaning and repairing its books, including 16th and 17th century treasures.

UNESCO - Eric Schwab

**FACING THE
HAVOC**
(Continued)

Humanity's 'cultural Red Cross'

forced exile in camps, salvation always lies in hope, which means that it lies with their children, who personify hope.

Since 1949, 300 schools have been opened and equipped within camps in Syria, the Lebanon, Jordan and the Gaza region of Egypt. Over 100,000 pupils attend these and UNRWA is spending more than \$7 million on them this year. Unesco has assumed technical responsibility for this educational mission; specialist advisers in teacher training, technical education, handicrafts, domestic economy and fundamental education have been sent out. It is another of those emergency measures which have become so chronic that one must, alas, resign oneself to their continuation.

Whatever overall solution statesmen may contemplate, there remains an urgent, daily problem: over 100,000 children have the right to work for their

own future, like others who are not growing up in camps. They stand, perhaps, for all the children in the world for whom this right is still a pipe-dream. There will soon be nearly enough schools, but there is still a shortage of really well-qualified teachers. This year, teacher training colleges will open, and help must continue.

25,000 gutted schools

KOREA, next—if only it could be the end of a depressing list! The devastated Republic of Korea also cried out for U.N. help. Last year, over \$120 million were still needed to rebuild and repair factories, power stations, roads, farms, hospitals. Twenty-five thousand schools were gutted during the war. Together with the U.N. Korean Reconstruction Agency, UNESCO again

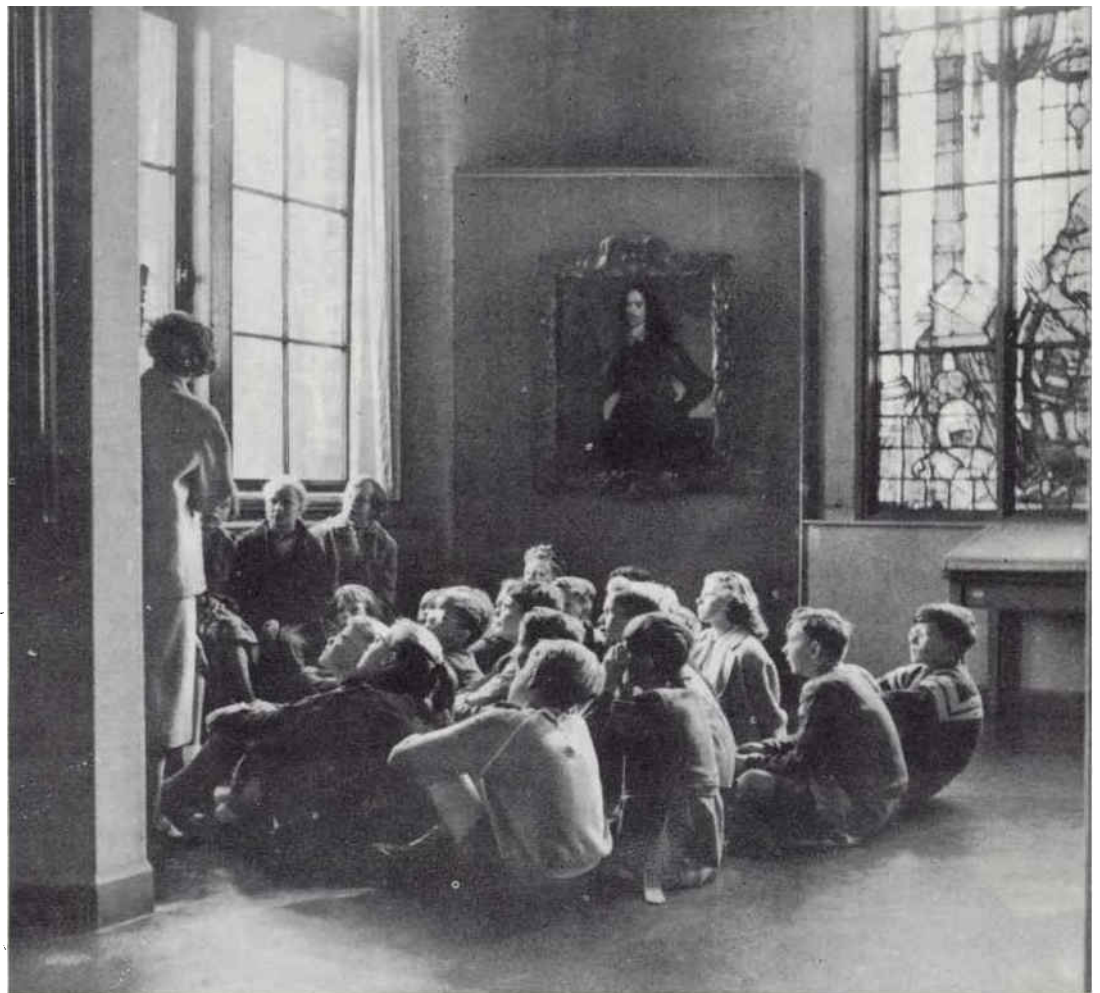
braced itself for the task of reconstruction, which can never be a purely material one. It is helping currently to run a training centre for rural teachers and has supplied equipment to schools. Above all, it was instrumental in founding a printing press in Seoul which is henceforth to supply the 30 million textbooks which are annually required for primary instruction in Korea.

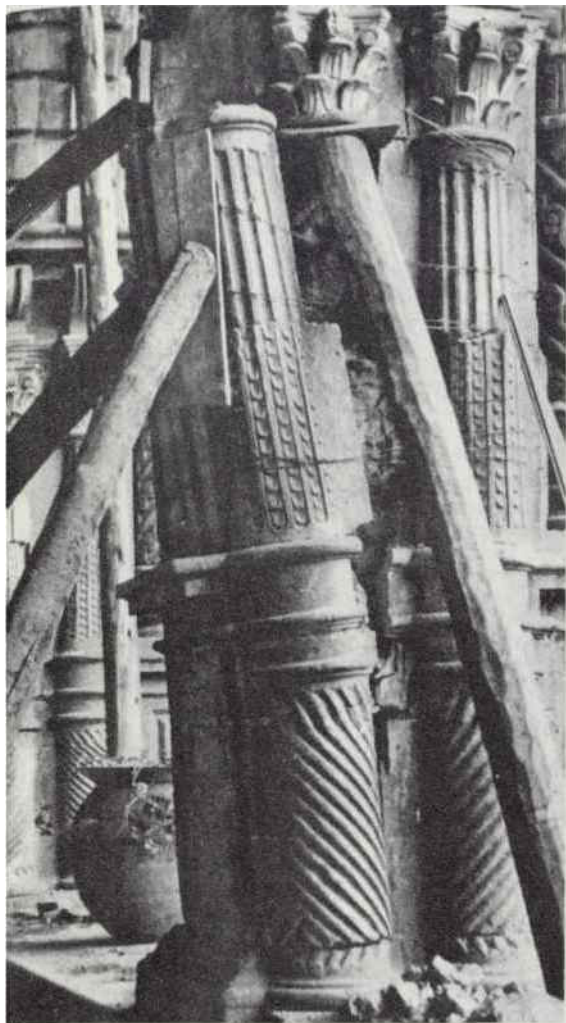
Since only a historical sketch is being attempted here, these selected instances of reconstruction work must suffice. There would be no need to continue if war were, in fact, the only agent of destruction. But every ruin is not the result of war. Men must have a motive in order to burn books, schools or even works of art. But works of art are also exposed to other dangers.

Paintings, statues, temples, cathedrals, the whole heritage of mankind is

UNESCO-Eric Schwab

OVER 5,000 CHURCHES AND HISTORIC BUILDINGS were destroyed or damaged in Europe during World War II. Thousands more need the protective care and skills of chemists, engineers and archaeologists. Often the countries with the most historic treasures have the fewest technicians trained in conservation work. In 1954, representatives of 50 countries, meeting at The Hague, adopted an international convention prepared by Unesco for the protection of cultural property in time of war. This "cultural Red Cross" convention came into force in August 1956. For the first time, historical buildings, museums and libraries where young people (like this group in the National Museum, Amsterdam, right) find civilization's roots and heritage, will receive the same protection traditionally granted in time of war to hospitals.





UNESCO

SIX-SECOND QUAKE killed or injured 300 people and destroyed 3,000 dwellings in Cuzco, Peru, on May 21, 1950. Cuzco is three cities—Inca, Spanish Colonial, and modern. Among the important monuments which suffered damage was the 17th-century Church of Mercy (above). A Unesco mission spent three months in Cuzco, drew up a plan for preserving and restoring the damaged monuments within a wider plan of city reconstruction. Unesco has answered many appeals for advice on restoration problems.



UNATIONS

ONE MILLION ARAB REFUGEES from Palestine are still living in camps in Syria, Lebanon, Jordan and in the area of Gaza. Since 1949, Unesco and UNRWA (U.N. Relief and Works Agency) have opened over 300 schools for about 100,000 of the refugee children who live in the tent and hut camps. Unesco has given aid in teacher training, technical and handicraft training, home economics and fundamental education. The operation came into being as an emergency measure... but the emergency is not yet over.

threatened: to keep them intact requires the restoratory and conservational services of permanent agencies. Not that UNESCO can become the world-wide guardian of those innumerable treasures which the various countries cannot themselves defend against the inroads of climate and indifference.

The groups of experts which have been sent here and there in answer to emergency calls may be compared to doctors summoned for consultation. They have attended to the altar-piece of the Mystic Lamb in Ghent, the da Vincis in Paris, precious and fragile paintings on wood in Lisbon, the Cuzco remains in Peru which the earthquake of May 21 1950 had half destroyed, to the Roman mosaics in Israel, and in Syria and the Lebanon, to cities at once medieval and modern trying to reconcile expansion with historic prestige.

In Yugoslavia, the experts set out to preserve one of Macedonia's most important religious buildings. The arches and chiefly the frescoes of Saint Sophia of Ochrida, a thousand-year-old church which had been made into a mosque in 1466, were threatened for centuries: for once it was possible to do something about repairing the ravages of time.

A threatening spectre

BUT it cannot be denied that the spectre of war continues to haunt those who have been entrusted with the care of monuments, paintings or manuscripts for posterity—all those objects without which civilization would soon have neither roots nor history. In 1952, UNESCO drafted the text of an international agreement for the protection of

cultural property in the event of armed conflict.

Adopted two years later at The Hague during an inter-governmental conference, and signed by 50 states, this agreement was ratified by five governments in May 1956; three months later, it came officially into force. Thus humanity has, in the words of Georges Rouault, acquired a "cultural Red Cross". For the first time, it will become possible to extend to historic buildings, museums, libraries, protection similar to that normally given everywhere in wartime to hospitals and ambulances.

Such a convention clearly marks the general trend of so many efforts expended for reconstruction and protection. In 1954, THE UNESCO COURIER summed it up as "a tribute paid by political power to the rights of art and the mind".

Victims of poverty, disease and ignorance

TWO PEOPLE OUT OF THREE

IF one man lives in opulence and his brother in misery, if some nations display their wealth while others can only reveal their poverty, it becomes difficult to talk of their intellectual and moral solidarity.

UNESCO set out from its earliest days to fight for equality. Without preaching a Utopian levelling of all differences, it maintained that all peoples have equal rights, and that their cultures, their traditions and their ambitions (despite varying degrees of achievement) are all equally worthy of respect.

When the United Nations launched its programme of technical assistance to "underdeveloped countries" in 1950, UNESCO took its share, and was able to put its struggle for equality of opportunity on a practical footing.

No one rode forth to join this battle with rosy optimism. In 1950, UNESCO stated the problem in brutally frank terms, nor is there need to change these terms today: "Two-thirds of humanity live in the underdeveloped regions of Africa, Asia and Latin America. Two out of three men must live on less than \$100—occasionally less than \$60—per year. Their diet never exceeds the bare minimum required to stave off starvation. Their life expectancy is 40 years—in certain countries, 27 years. Infant mortality rates run as high as 36 per cent..." Yes, two-thirds of humanity.

The United Nations technical assistance programme set as its goal the raising of living standards, the increase of employment and the improvement of social and economic conditions which are the prerequisite of progress and development. UNESCO took particular interest in two essential aspects of these conditions for progress: it set out to prove the value of education and scientific research to economic development and to show how aid in these fields may shatter the vicious circle of ignorance and poverty.

Over five years, the sum of \$10,600,000 has been allocated to UNESCO technical assistance. More than 450 fellowships have been awarded to young men and women so that they may become teachers, engineers and scientists in their own countries. They are the replacements who must take over from the UNESCO "experts" at the end of a technical assistance mission.

In the beginning of 1956, there were some 300 of these experts working in 51 countries. Their work was as varied as the needs—all urgent—of the governments they were assisting. A list of these jobs would provide a detailed picture of the educational needs of nations which must build both primary schools and universities.

From master weavers and chemists to psychologists and glassblowers

FOR this programme, UNESCO has recruited school-teachers and physicists, master weavers and chemists, librarians and radio engineers, psychologists and glassblowers. In Monrovia, or Baghdad or Damascus, UNESCO means science professors. In Colombia, it means aid to rural schools taught by radio. In Brazil or Turkey or Pakistan, it means geologists. At Calcutta, UNESCO has carried its message to engineering students. At Minneriya in the wet zone of Ceylon, it has worked among illiterate farmers. In Iran, it has specialized in technical education to train men for agriculture and industry. In Thailand, it has helped in the reform of primary education. This diversity of burgeoning activity is merely an expression of the almost unlimited forms which technical assistance must take to adapt itself to the practical requirements of "economic and social development."

But, at the root of all these missions, there is one common characteristic: their human value. They succeed only through close collaboration and friendship. In 1952, the author of a booklet describing UNESCO technical

assistance missions in four countries of South-east Asia wrote: "Viewed from outside, UNESCO's technical assistance programme is a complicated mechanism of budgets, projects and agreements couched in legal language. But, viewed at first hand, it becomes a simple story of men shedding coats and protocol to do jobs." These jobs all involve teaching at a human level without any trace of condescending charity or mere display of knowledge.

In recent years, the "typical technical assistance expert" has made his appearance and the portrait of this international specialist can now be sketched quite accurately. At first, he is truly foreign—and must adapt himself to ways of living, working and thinking for which his previous experience as a teacher or a scientist have not in the least prepared him. But this stage does not last long: within a few months, he is no more an outsider and his assistance and advice are not foreign. He uses his knowledge to solve the problems of his hosts and these problems soon become as clearly-defined in his own eyes as those of his own country.

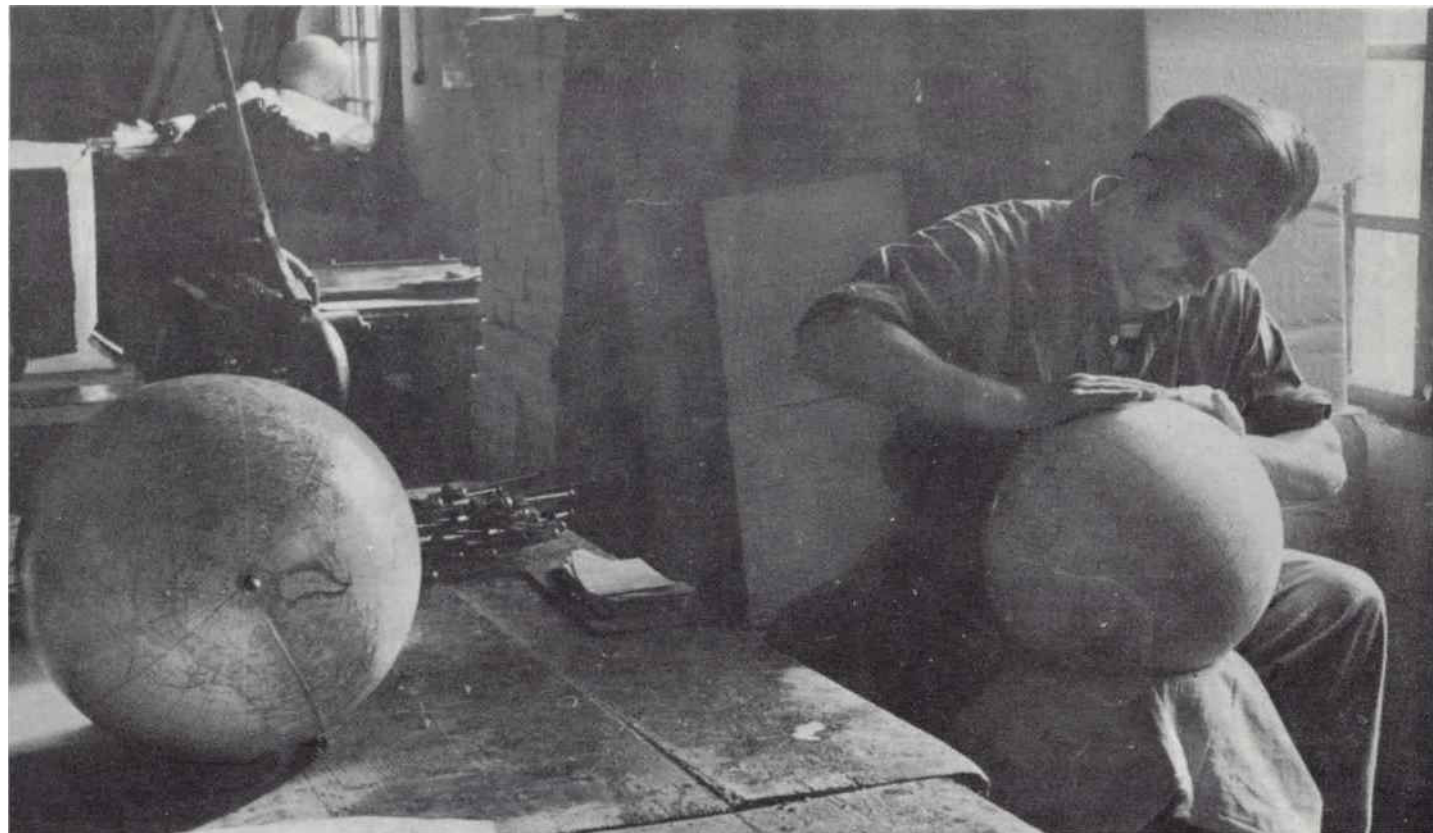
Men on missions who try to work themselves out of a job

TALK to him and he will tell you of local difficulties and resources as though he were talking of his own city or country. His mission may call for him to demonstrate new methods or to teach a new technique but, in every case, it is only part of a much bigger picture. The adventure of social and economic progress in any underdeveloped country always begins before the arrival of an outside expert and it always continues after he leaves. In other words, he must literally work himself out of a job. His contribution can be measured only in terms of those he trains to make his own presence unnecessary.

UNESCO authorities have always emphasized that this assistance does not seek to bring about any magic transformations but rather to stimulate work already begun by various nations. Even with this limited goal, they admit that the programme will remain insufficient to meet world needs for years to come. In addition, therefore, to its share in the United Nations technical assistance programme, UNESCO set up in 1955 its own system of "direct aid to Member States." This aid is not quite the same: instead of giving absolute priority to economic development, it stresses social and cultural factors. There is another difference: while a large share of this programme is set aside for underdeveloped regions, it is available to all UNESCO Member States without exception. By November 1, 1955, UNESCO had decided to send out approximately 100 specialists under its direct aid programme and to award 80 fellowships.

But, at just about this time, the man who had been directing UNESCO's technical assistance efforts for five years warned that, despite these efforts, "many needs remain unfulfilled." He wrote: "One should look at technical assistance without any complacency, in spite of the considerable results already achieved, and work on the assumption that it has only covered a small part of the way to go."

In the face of the vast and urgent needs of two-thirds of the world, it may well appear that the efforts of this handful of experts have been dispersed. But there is another aspect of technical assistance and, from its very beginning, it has produced another result which, while difficult to define, is full of promise. The same writer who refused to judge technical assistance with complacency declared: "If the tasks performed up to date have encouraged and reinforced the ideal of international co-operation, that fact alone is sufficient to rank them very high in that scale of values upon which the future of mankind depends."



YUGOSLAVIA: "Globemaker" is working at Zagreb centre which produces urgently needed school equipment. Unesco has sent many

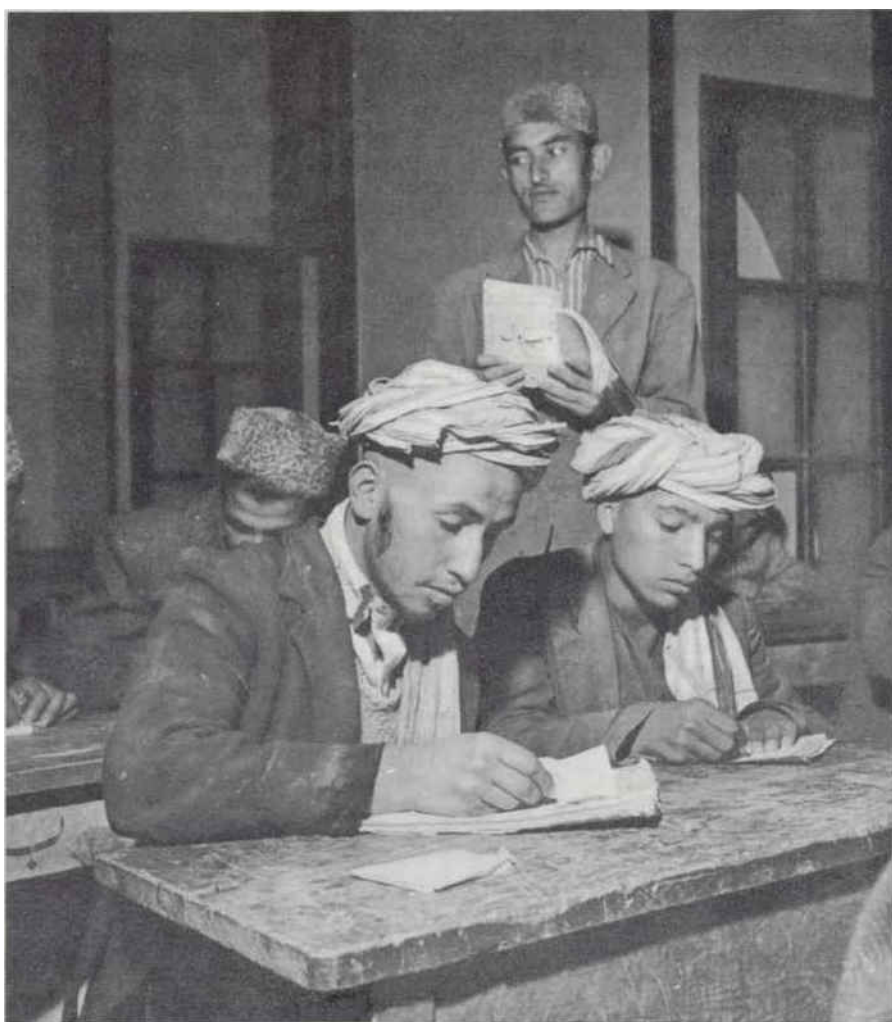
teachers and technicians to assist Yugoslavia in executing its long-term educational re-organization and development programme.



LEBANON: Psychological test for pupil in laboratory set up by expert on Unesco mission which aids government revision of educational system.



NICARAGUA: People in farming communities will benefit from national pilot project in fundamental education staffed by Unesco-trained teachers.



AFGHANISTAN: Many more schools are needed to give the country a workable system of compulsory education. Government has approved Unesco mission plan for educational reform, and vocational training—vital for country's future economic development—has started.

UNATIONS and UNESCO

'Ambassadors' in shirtsleeves

October 16: "A British geology technician, Mr. E.O. Rowland, whose speciality is the reduction of pieces of rock to the thickness of cigarette paper, is arriving in Pakistan this month on a Unesco mission. At Lahore he will instruct laboratory workers in the technique of 'thin-section cutting of rocks' to make microscopic slides for use in petroleum geology."

October 8: "Mrs. Anine Rud, a Danish librarian and a pioneer in Denmark's system of using children's libraries as an aid to classroom work, arrives in Indonesia this month on a Unesco mission. In Jakarta, she will help to develop children's and school libraries."

September 26: "Educators from Belgium, France, the Netherlands and Switzerland have been sent by Unesco to take part in Yugoslavia's long-term programme of educational re-organization and expansion. The educators will lecture and lead seminars in Belgrade, Zagreb and other cities. Unesco will send 11 educators to Yugoslavia this year. Last year, more than 50 Yugoslav educators received Unesco fellowships."

September 14: "An adviser on English teaching has arrived in Laos on a Unesco mission... **September 6:** A former professor of Palermo University has been sent by Unesco to the Engineering School of the Syrian University at Aleppo... **September 6:** A Swiss expert in home economics is now working in Kabul with Afghan educators... **September 4:** A Swedish electronics research engineer has been sent by Unesco to the University of Calcutta... **August 28:** A Dutch expert is helping to create a geology museum in Syria..."

These facts taken from recent Unesco press releases tell something of the worldwide programme under which more than 200 educators and scientists ("men and women who shed coats and protocol to do their jobs") are carrying out 106 technical assistance projects at the request of the governments of 47 countries. Unesco's share in the U.N. world programme of technical assistance for economic development, has amounted to \$17,500,000 since the programme began. Even so, supply has not yet caught up with demand: since the programme was launched five years ago 392 requests for aid have come to Unesco from 57 countries.

So far, 544 experts have, been sent on Unesco assignments 339 of which have been completed to date. Unesco has awarded nearly 700 fellowships so that its missions could eventually be replaced by nationals of the countries in which the missions were working. Although technical assistance stresses a sharing of skills rather than massive economic aid, equipment must sometimes be supplied. This year, for example Unesco is distributing some \$1,400,000 worth of equipment.



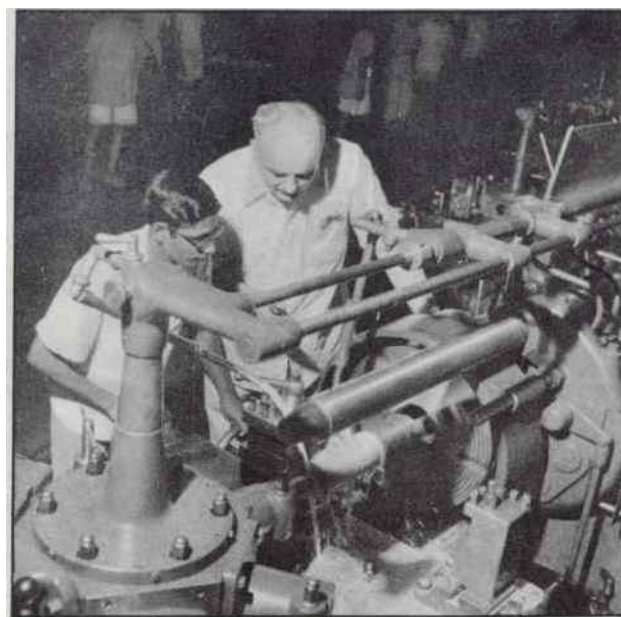
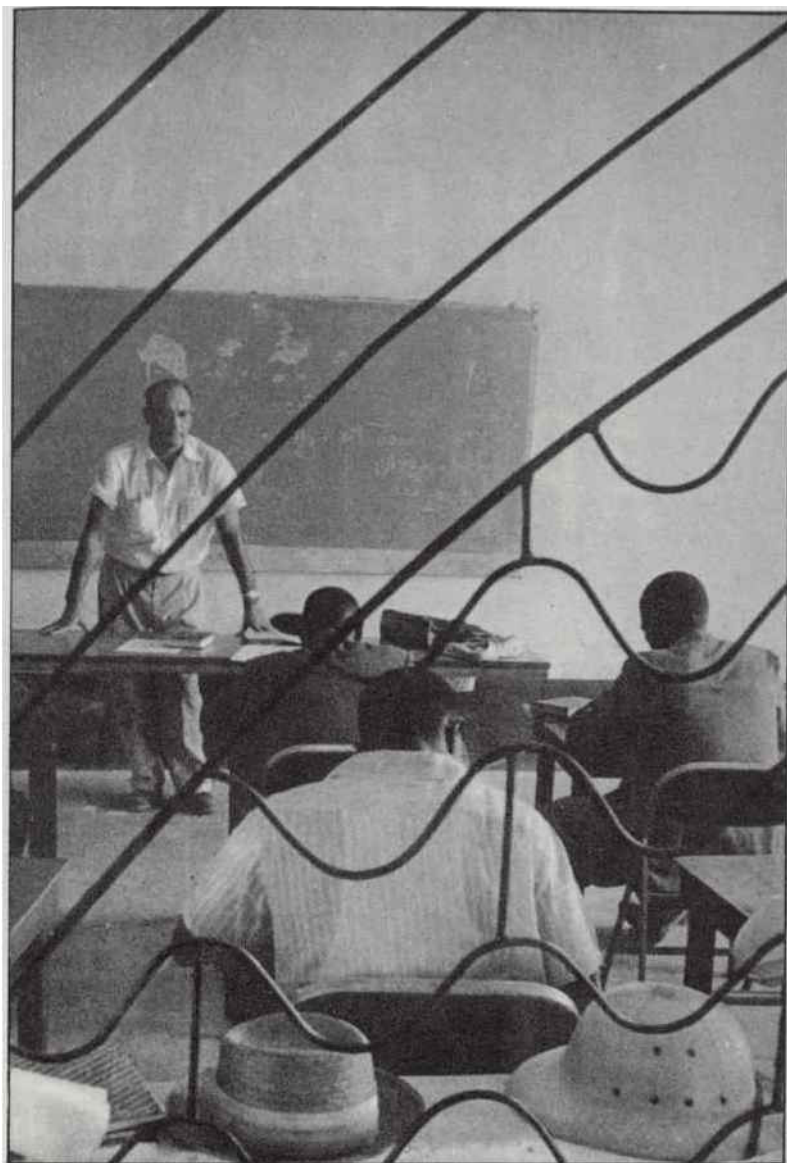
COLOMBIA: Textbooks and posters for classrooms without teachers are devised by Brother Fulgencio (left) and Brother Idi-nael assigned by Unesco to work with Radio Sutatenza's school-of-the-air, now reaching hundreds of thousands of isolated pupils.

SYRIA: How to read the meaning of fossil imprints left in rocks ages ago is discussed at the Syrian University in Damascus by a university student and Professor Raymoon Raven, Dutch geologist and member of Unesco's technical assistance team teaching in Syria.



BURMA: Use of the theatre as a vivid way of bringing home lessons to youngsters is one of the techniques stressed at a teacher-training centre in Rangoon where Unesco has sent a team of educators to work with Burma's educational authorities.





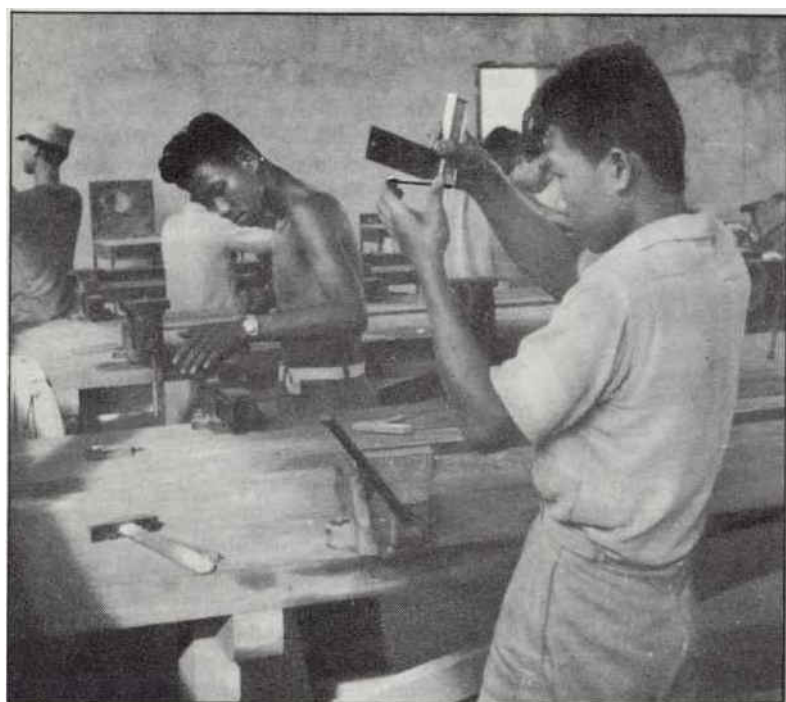
UNESCO photos

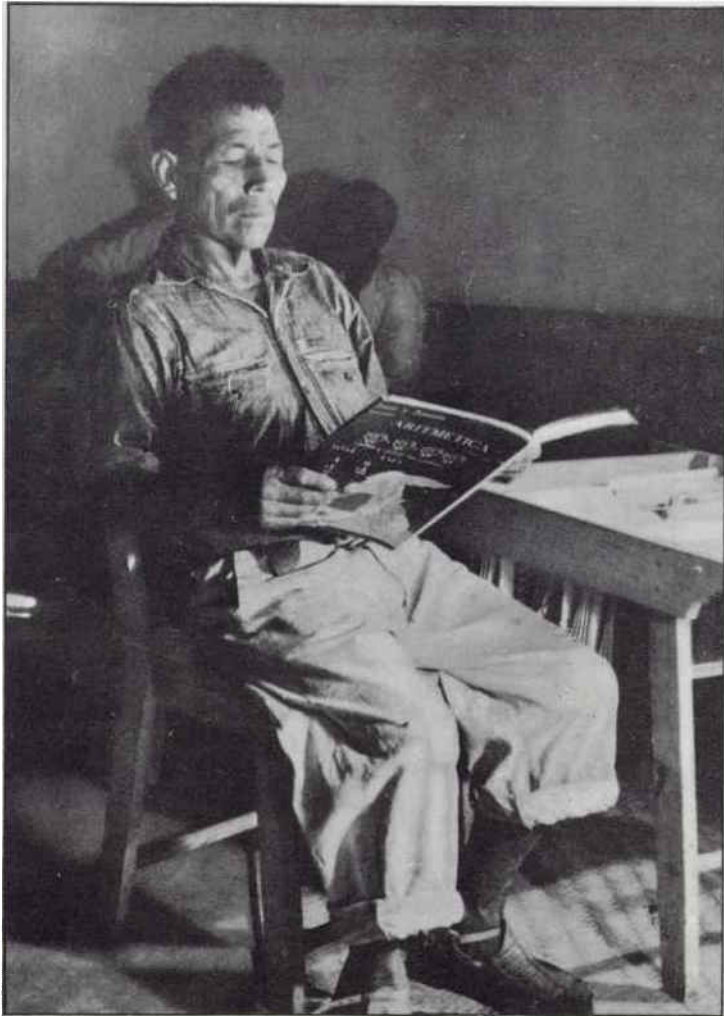
INDIA: Production-line-in-miniature has been set up for training purposes by a Unesco engineer at the Indian Institute of Technology.

LIBERIA: From all corners of the globe, Unesco missions have brought science teachers into new University of Liberia at Monrovia.

LAOS: Age-old traditions of craftsmanship ripen into modern skills at Savannakhet's vocational school where Unesco mission works.

GOLD COAST: Book hunger of new literates is being met by a "vernacular literature bureau" operated with Unesco mission's aid.





A HUMAN APPROACH TO PROGRESS

TODAY we hear a great deal about "international co-operation". What does it really mean? Who does the co-operating? The answer is Ministers, officials, technicians. We cannot assume that all the peoples are consciously co-operating. Often they are not even aware of the agreement drawn up on their behalf in the cause of peace and signed in their name.

The aeroplane... the radio and TV set... the nuclear reactor. The modern world is often summed up in these three marvels. It is a world which laughs at oceans and mountain ranges, which is alive with a perpetual flow of ideas, images and discoveries, and which is on the threshold of enjoying fabulous riches wrested from the very heart of matter.

This picture is not false one—it is merely premature. A splendid machine may swallow up 1,000 miles in little more than two hours, but they may be 1,000 miles of unexplored jungles. Hertzian waves flash at even greater speed across even greater stretches where no one can receive them. Power lines stretch over villages still living in neglect and pylons carrying the modern power grid are planted in fields still cultivated by the hoe.

Industrial civilization has girdled the

globe so quickly that it has left immense zones untouched.

In 1951, UNESCO's Director-General Jaime Torres-Bodet wrote: "We all remember with horror the concentration camps, but it appears we do not realize that more than 1,200 million human beings, men and women, still live in the implacable, invisible prison of ignorance. We distribute the text of the Universal Declaration of Human Rights and I am amazed that we dare call it universal when we know there is not one man out of every two who is able even to read it."

No dreams of magazines or election posters

AT that time, a rather ambitious phrase was born: the crusade against ignorance. It meant that there was general acceptance for the fact that no longer could forgotten peoples remain exiled from what we call progress. The crusade took the form of literacy campaigns and then more thorough efforts summed up as "fundamental education".

Within a few years, these early efforts produced undeniable results. Certain countries in Latin America and southern

Asia saw their illiteracy rates drop from 60 to 40 per cent and even lower. In the Near East, evening classes for adults sprang up faster than schools, although schools were being built at a furious rate—in Syria, for example, where the government opened 350 in five years.

But no one claimed that ignorance could be conquered by teaching the alphabet and the multiplication table. If hundreds of millions of men suffered because of ignorance, it was not because they were dreaming of arithmetic, magazines or election posters. They were suffering from hunger or filth or sickness—or all of these at once—and they were suffering from humiliation.

Under such conditions, fundamental education was defined as a concerted attack on precise obstacles whose continued existence could not be suffered. These obstacles bore the names of routine, inertia and isolation. It was not enough to teach individuals or even privileged groups: this form of education had to reach entire villages, and districts.

It quickly became obvious that in raising the living standards of a rural village—whether in India or Africa or Peru—each step led to another. The pioneers of fundamental education learned that what we call poverty is not

a superficial misfortune growing out of a single, clear-cut cause to be eliminated once and for all. Rather, it is a complex maze of causes almost impossible to attack one by one.

Farming, livestock raising, hygiene, cooking, child-care and—according to the region—weaving, building, pottery or metalworking: all these must be taught at the same time as reading and writing. All these and self-confidence.

Who could take on such a task? School-teachers? Priests? Village Mayors? If they could be trained in this new form of education, yes, but the methods had yet to be perfected. Leaders must be trained so that their teaching and experience could radiate to every province and village in their own countries. In other words, an entirely new type of teacher-training school had to be devised. These new schools became known as regional and national fundamental education training centres.

The first battle— vanquish fatalism

IN 1951, the first UNESCO international fundamental education centre was opened at Patzcuaro, Mexico. A reporter asked the director of the centre, Lucas Ortiz, to outline its objectives. "We intend to show students how to encourage the improvement of life in rural areas through the four cardinal points of fundamental education", he declared. "First, man must protect his health. Secondly, he must make the best use of the natural resources surrounding him. Thirdly, he has the right to a dignified home life, both materially and spiritually. Fourthly, he has the right to enjoy leisure and he must be given the opportunity to do so." The reporter interrupted: "But what about teaching him to read and write?" Mr. Ortiz answered: "As far as we are concerned, it is no use teaching a man to read and write unless you can convince him it will help solve the problems of his daily life. We teach literacy when we teach health, home economics or agriculture."

These were the questions studied by Patzcuaro's trainees—men and women from 16 Latin American countries—and it was in these spheres that they did practical work in villages surrounding the centre.

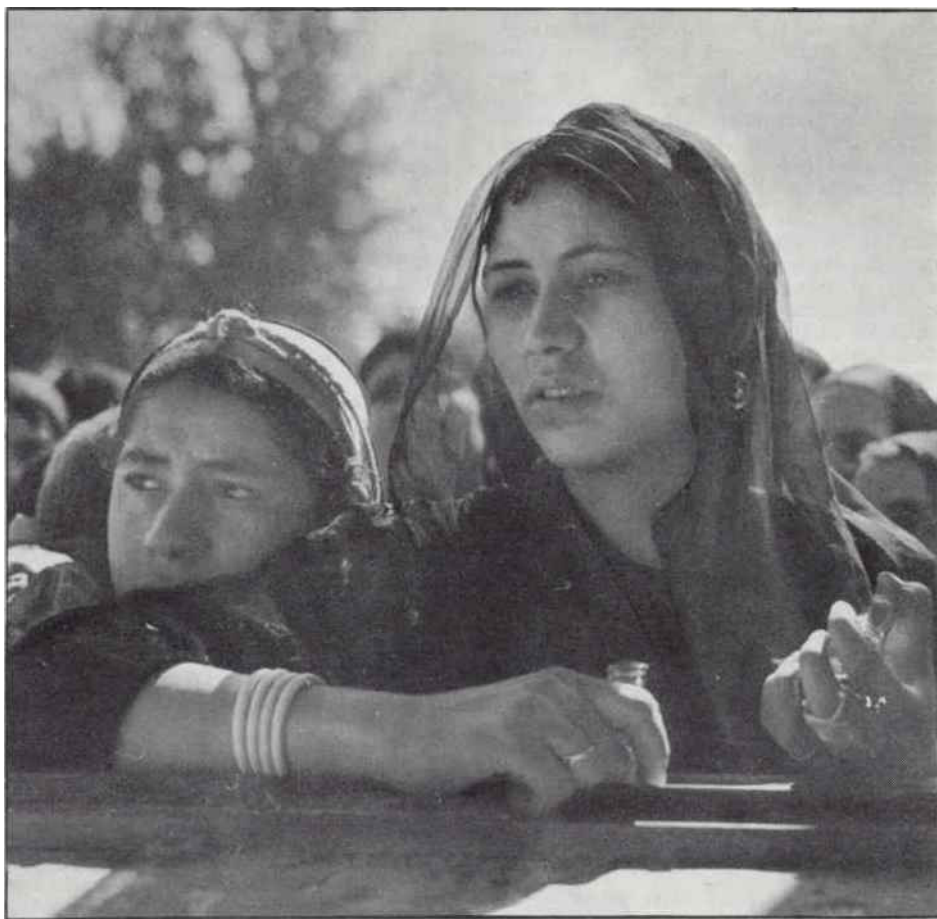
A second centre, destined to serve the Arab world, was opened in 1953 at Sirs-el-Layyan in Egypt. In the same spirit as their predecessors in Latin America, the students came to Sirs-el-Layyan. Teachers, social workers, agricultural engineers, nurses and adult education specialists from Egypt, Iraq, Jordan, Lebanon, Syria, Saudi Arabia and the Yemen learned how to put their specialized knowledge to work.

In Egypt as in Mexico, they worked in "pilot villages". Of course the major task of the trainees at the two centres was not to bring progress to the Tarascans of Patzcuaro or the fellahs of the Nile Delta. But the students quickly realized that this "laboratory work" had to succeed. If they failed during their two years of study, how could they hope to succeed later?

They did not fail. They learned that the secret of fundamental education lay in developing a spirit of co-operation with the people to be educated. They did not come with handouts nor did they establish charitable institutions. Instead, they learned their job and they acquired a priceless store of practical experience. This experience taught them a lesson: the first step to be taken in helping the under-privileged of any country is to free them from fatalism. People become resigned to misery because they believe it to be their fate. They must be taught that misery is not the work of fate, that sickness, interest rates, hunger, and infant mortality are not simply afflictions of destiny.

National fundamental education centres in Haiti, in Iraq, in Thailand, in Ceylon and in Liberia have reached the same conclusion. In 1954, a Sirs-el-Layyan trainee supplied this answer to a questionnaire: "Fundamental education is not merely a reform movement aimed at combating poverty, ignorance and disease through certain techniques. It is a revolutionary movement which sets out to transform the mentality of scientifically and economically underdeveloped peoples. It sets out to stimulate them to an awareness of their needs and to give them the will to raise their standards of living through their own resources. It does this by guiding them and by showing them how to make use of their forgotten resources and their hidden strength."

Organizers, educators, leaders of social progress—all of them must be recruited to head a mass movement. This was the task laid down for the two international centres. At present, 228 of them have been trained at Patzcuaro and 91 at Sirs-el-Layyan. Thousands are needed. Some day, there will be thousands.



CREFAL-UNESCO

TWO OUT OF THREE PEOPLE in the world today are undernourished. One person out of two in our atomic age is unable to read and write. This is the grim result of a vicious circle of ill-health, poverty and ignorance. To break this circle and to raise living standards, education is required—not only in the 3 R's, but also in agriculture, hygiene, home economics, handicrafts and livestock breeding. This new form of education which has been called "fundamental education" is desperately short of teachers. In co-operation with other U.N. Specialized Agencies, Unesco has created regional centres to train leaders in fundamental education who, in turn, train others when they return to their own countries. At CREFAL (Regional Fundamental Education Centre for Latin America) at Patzcuaro, Mexico, one of the local Tarascan Indians (opposite page) grapples with arithmetic problems. Above, an Egyptian girl comes for medicine to the social welfare service of ASFEC (Arab States Fundamental Education Centre) at Sirs-el-Layyan, Egypt. (See pages 28-29)

250,000,000 CHILDREN WITHOUT SCHOOLS

FOR every ten children in the world, five (i.e. over 250,000,000) have no schools, four complete only a few years of elementary schooling and only one has an opportunity for secondary or higher education, according to the World Survey of Education, published by UNESCO in 1955.

The world's most formidable task in education and the goal of both national and international efforts is therefore free schooling for all children. UNESCO, aiming to give real significance to the right to education proclaimed in the Universal Declaration of Human Rights, has undertaken three main tasks: improving education through the exchange of information, extending education, and promoting education for international understanding.

UNESCO has sent educational missions to survey resources in many Member States and to suggest how these might best be used to lay the foundations of modern school systems. Afghanistan, Burma, Korea, Libya, the Philippines and Thailand are just a few of the countries aided by UNESCO in this way.

After a UNESCO mission had studied Thailand's educational system, for example, the government launched a ten year plan to improve all aspects of education. In Chao Choeng Sao some 70 miles from Bangkok, UNESCO specialists working with their Thai counterparts (each adviser works alongside a Thai teacher) helped to set up a school system in miniature, ranging from kindergarten classes to teacher training colleges. Techniques proved successful by this experiment (now four years old) are being extended to other parts of the country.

In 1955 alone, UNESCO, answering requests from 22 countries and territories, sent to each of them teams of experts in the development of elementary education. UNESCO has convened regional conferences at which teachers and school administrators have exchanged experiences and discussed common problems. It has published monographs on primary education in six countries and studies on the prolongation of schooling and the employment of child labour.

Problem of the year

IT is estimated that 55% of all persons over ten years of age have never been to school. Pending the full development of school education an emergency measure is needed for these people—estimated at more than one thousand million—so that they may begin to help themselves to a better life.

For the past five years UNESCO has given high priority to fundamental education, so called because it aims to

give the minimum knowledge needed by illiterate people to begin to improve their health, food supply and family life. (See pages 24-25)

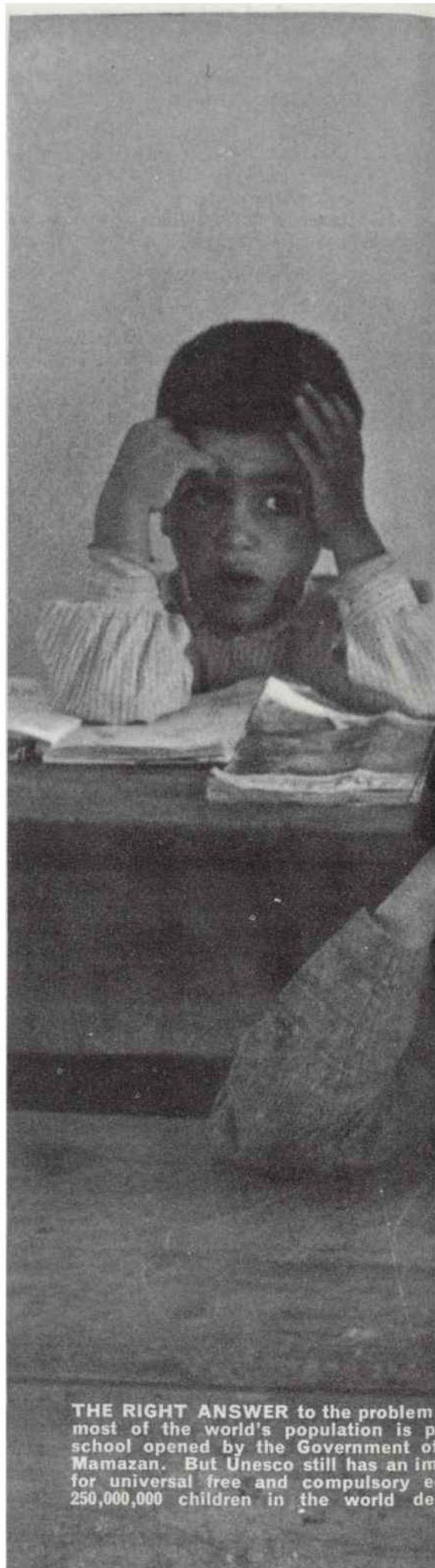
Each year UNESCO sponsors with the International Bureau of Education an international conference to discuss major educational problems. In 1955, for example, the conference discussed the financing of public education. The previous year, discussions had centered on the teacher shortage and ways in which teaching can be made more attractive, as a profession. For these meetings countries prepare reports on progress made over the past year so it is possible for the first time to have a world-wide picture of educational developments and needs.

As others see them

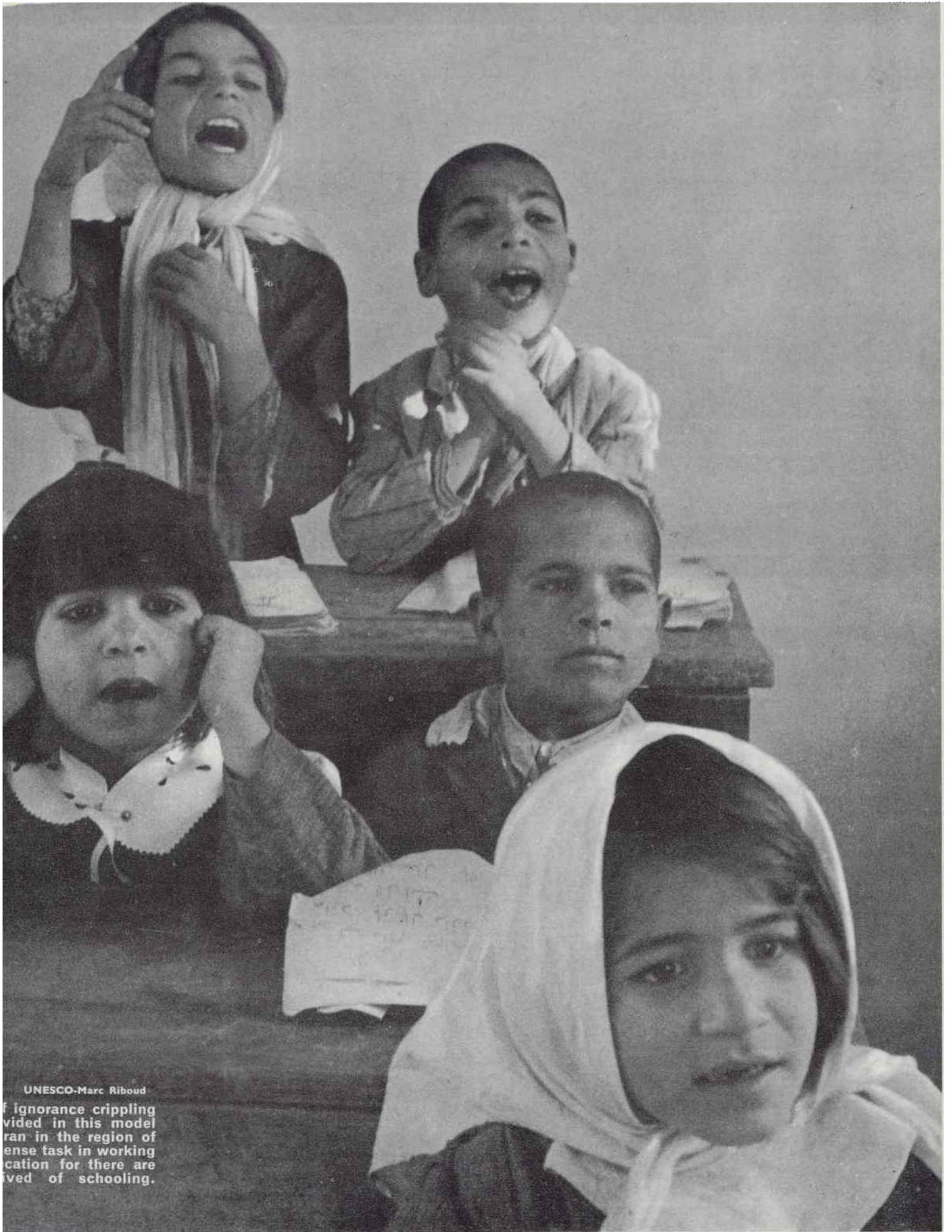
UNESCO organized regional conferences for educators to discuss problems common to their own area: Southeast Asian countries have concentrated on the introduction of free and compulsory education; Middle East discussions have focused on means of introducing technical education.

The kind of education which can lead to better international understanding aims at developing both a national civic sense and a sense of international responsibility. But "international understanding" cannot be tacked on to conventional school programmes. As it has to be an integral part of an education adapted to a new situation UNESCO has reviewed problems of curricula, methods and materials and has suggested solutions. UNESCO seminars and publications, particularly on the teaching of history and geography have led educators and publishers in many countries to analyse their textbooks and to invite neighbouring countries to comment on ways in which they may feel they have been misrepresented. On UNESCO's invitation, 23 Western countries have taken a look at their textbooks to see how much is being taught about Asia. Eastern countries are to make similar studies of their textbooks about the West.

In U.N. rehabilitation programmes the need for emergency education is great. Schools and adult education classes may offer the first semblance of normal life in refugee camps or temporary homes. UNESCO has helped to rebuild education in Greece, Palestine and Korea. Outstanding example was aid in education of Arab refugees, some 160,000 of whose children are enrolled in primary schools and 20,000 in secondary schools set up by UNESCO and the United Nations Relief and Works Agency (UNWRA). (See THE UNESCO COURIER, N° 7, 1955; U.S. Oct.)



THE RIGHT ANSWER to the problem most of the world's population is poor school opened by the Government of Mamazan. But UNESCO still has an aim for universal free and compulsory education for 250,000,000 children in the world.



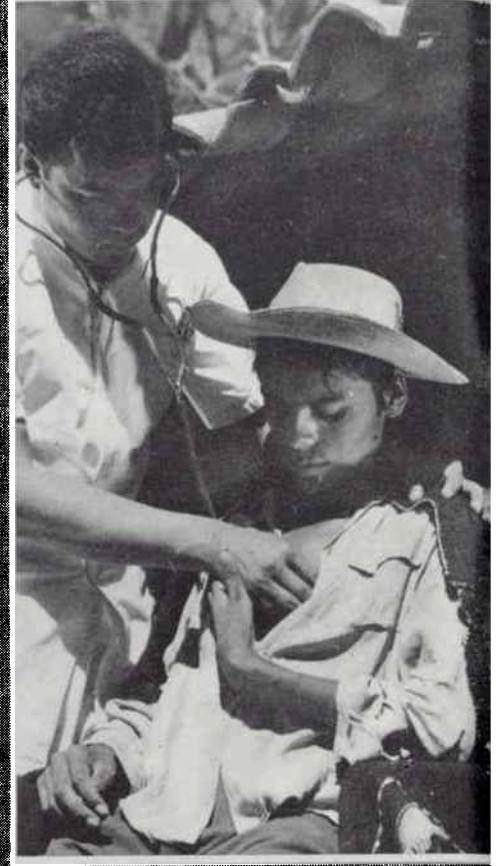
UNESCO-Marc Riboud

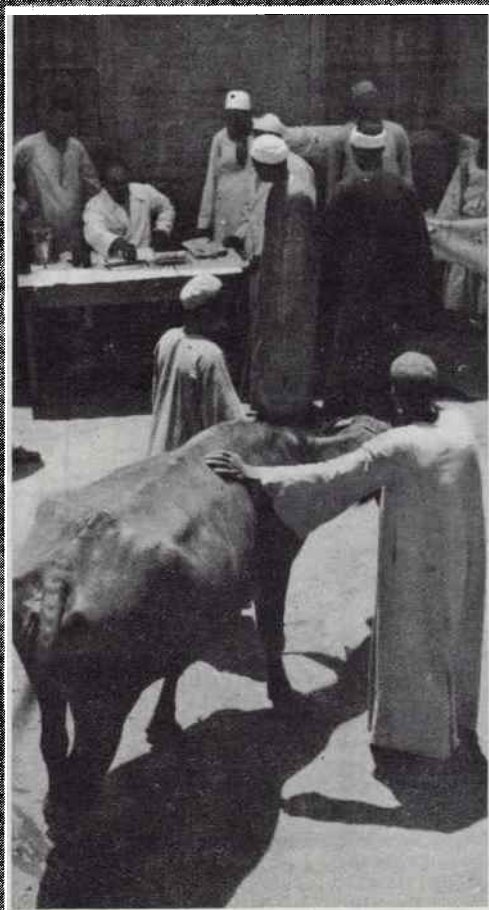
f ignorance crippling
vided in this model
ran in the region of
ense task in working
cation for there are
ved of schooling.

PATZCUARO

The Regional Fundamental Education Centre for Latin America (REFAL) was opened by Unesco in 1951 at Patzcuaro, Mexico, because the two dozen or so villages scattered around the shores of Lake Patzcuaro and on islands in the lake represented a faithful reflection of problems confronting Latin America. More than half the population of Latin America—that is, 70,000,000 human beings—face these problems of ignorance and poverty. Several courses of trainees from practically all countries of Latin America have already graduated from REFAL and are now instructing people in their own countries in ways of improving standards of living. In 1955, 125 trainees—45 of them women—from 18 countries studied at REFAL and 54 of them graduated in October. This year the centre has received about the same number of trainees. Photos, from left to right, illustrate three of the subjects taught at REFAL—adult education, public health, and improvement of working and economic conditions.

REFAL and UNESCO

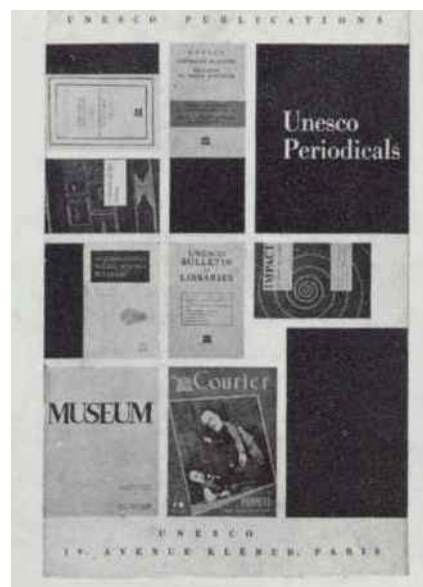
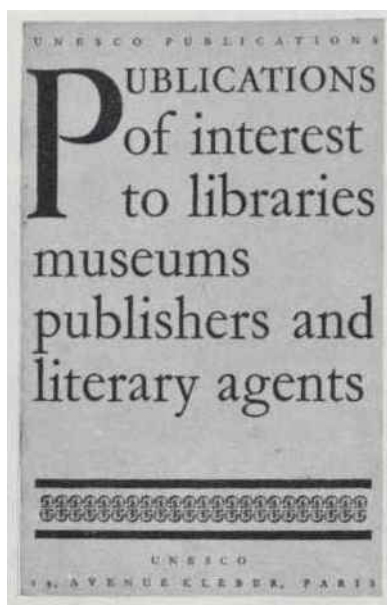
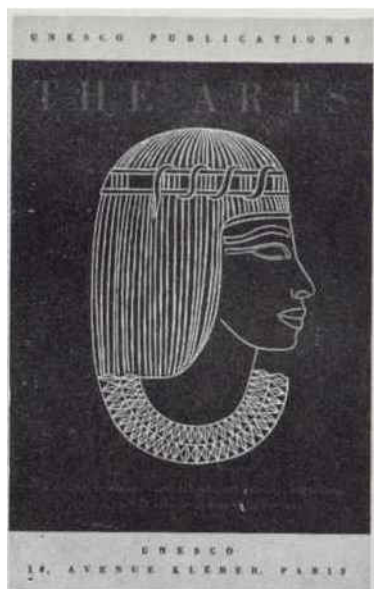




SIRS-EL-LAYYAN

The Nile Delta of Egypt, most densely-populated region on the face of the earth, offers an ideal testing ground for fundamental education. Within a radius of a few miles one can visit and study a hamlet, a small city and five or six villages of different sizes. Some may be relatively prosperous, others are poverty-stricken. Some are peopled by small farmers, others by day labourers and by landless workers. That is why the Arab States Fundamental Education Centre (ASFEC) was created by Unesco in 1952 at Sirs-el-Layyan in the Menoufia district of the Nile Delta. Trainees studying there (they numbered 120 at the beginning of 1956) will later carry fundamental education to the Arab lands of the Middle East. At Sirs-el-Layyan, however, they already have a replica of the same kind of peasant society found, with many variations, in their own countries and throughout the Arab world. Photos show (from left to right) a general view of Manawallah, one of the centre's "laboratory" villages; irrigation work in the fields; and an examination of livestock being made by the centre's veterinarians.

ASFEC and UNESCO



PUBLISHER IN 28 TONGUES

DURING the past ten years over 1,000 UNESCO publications—surveys, handbooks, studies, monographs, reviews, dictionaries, manuals and bibliographies, to name only some of their types—have been produced. UNESCO's publications—one of its important programme activities—serve a world-wide audience, composed in the main of specialists. Some, however, such as *THE UNESCO COURIER*, explain UNESCO's aims and interests to the general public.

All the UNESCO fields—the arts, science and technology, libraries and museums, education, the social sciences, communications and exchange of persons—are covered by publications. (Details are given in catalogues, several of whose covers are reproduced here). UNESCO also produces ten periodicals, four of them monthly ones.

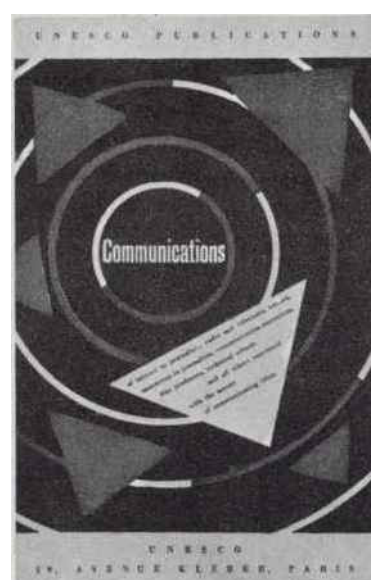
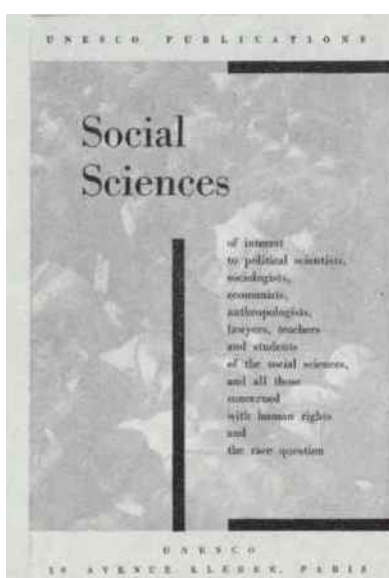
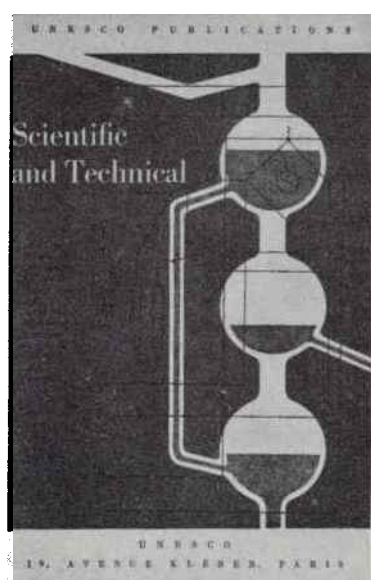
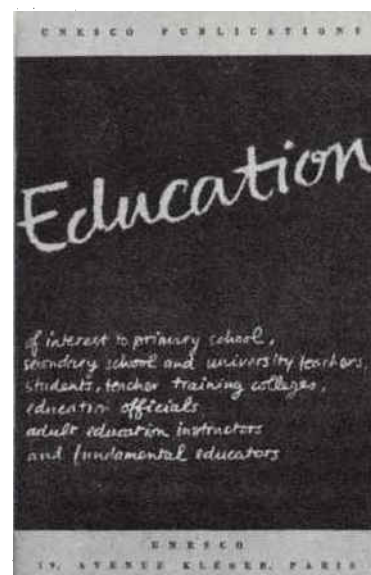
UNESCO publications have so far appeared in 28 languages, ranging from Icelandic to Japanese and from Tamil to Hebrew, although the greatest number have been printed in English, French, Spanish and Arabic—in that order.

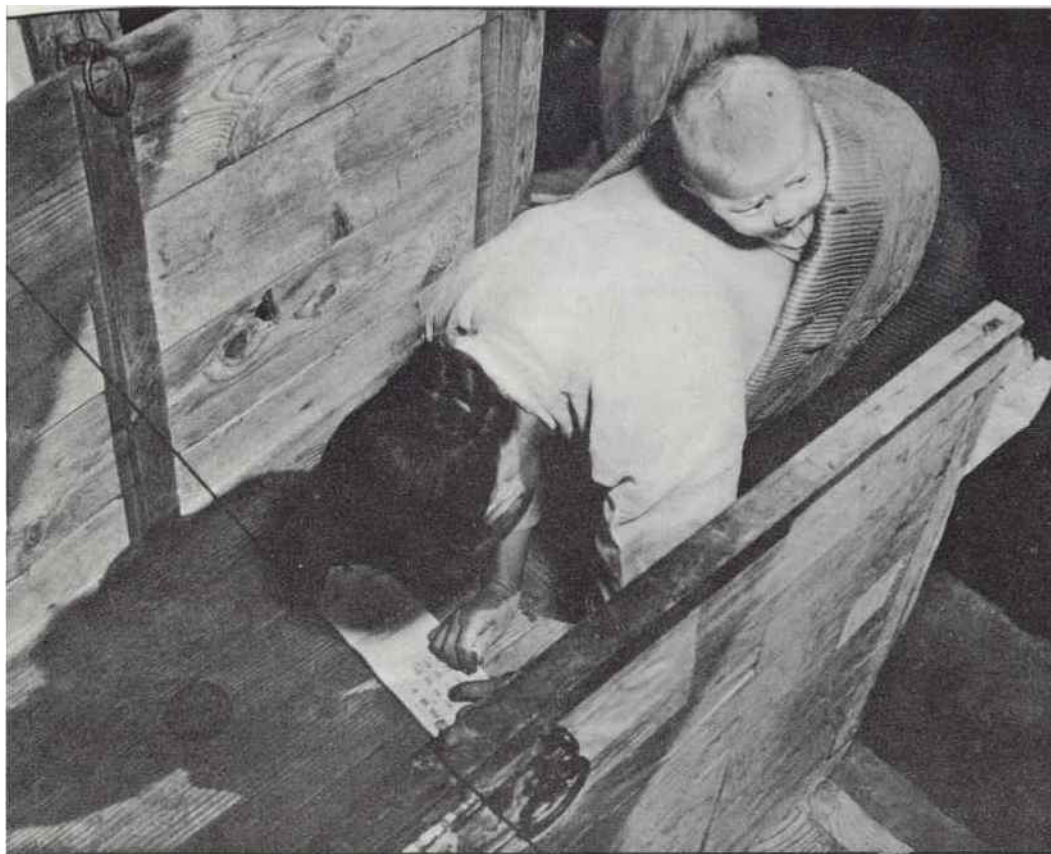
Broadly, they can be classed under three headings:

(1) Facts and figures collected by UNESCO, acting as an information "clearing house". Examples: "The World Survey of Education"; "Index Translationum".

(2) Technical information. Examples: "Reviews of Research on Arid Zone Hydrology"; "Bulletin for Libraries" which supplies libraries with lists of publications for exchange, and news of library developments.

(3) Special fields of UNESCO action. Examples: "The Universal Declaration of Human Rights, a guide for teachers"; three series on race problems.





A Unesco goal :

Full and equal rights for women

VOTING RIGHTS FOR WOMEN are today a reality in 72 countries—exactly double the number in which they were accorded ten years ago. Only 13 countries now reserve this right for the “stronger sex”. Campaigns to remove discrimination against women waged by the United Nations, Unesco and other Agencies have helped to influence governments in this respect. Here, a Korean woman going to the polls for the first time in her life, records her vote.

UNATIONS

RACE, colour, sex... the time will come when discrimination based on these three will be abolished, together with fear and contempt. At present, however, the world goes about its business with some men still refusing to admit that all human beings are born free and equal in dignity and in rights.

Nevertheless, there are no longer many countries where women are treated as perpetual slaves—almost as beasts of burden. It is more and more rare to find statutes declaring them legal minors and the inferiors of men. But it is equally rare to find countries where women and men of equal talent have the same rights and the same opportunities. It is a fact, however, that since the United Nations and its Specialized Agencies began to exert influence upon governments, the number of countries where women have the right to vote has risen from 36 to 72. There are now only 13 countries which continue to reserve this right for the “stronger sex”. In several other countries, women must be able to write or show a primary school diploma before going to the polls.

Now one fact is certain: out of every 100 illiterates, 70 or 80 of them are bound to be women. Emancipation must follow and not precede progress in education. In this field, UNESCO has worked constantly for the past ten years with the International Bureau of Education and the International Labour Organisation. UNESCO has studied the slow erosion of prejudices and the slow social and psychological evolution which is paving the way for women to gain full access to their rights. UNESCO studies have investigated the participation of women in the political life of both communities and nations and they have also measured the true influence of women in economic and cultural life.

Nevertheless, the problem of education has remained the most urgent. No one has yet contested this statement often

repeated in books published on this question by UNESCO: “The number of girls receiving an education in a given country is in direct proportion to the degree of cultural and political development which that country has attained.”

This does not merely mean that we should deplore the backwardness of nations where girls hardly have the right to learn to read—if they can find a school. In Europe, for example, or in the United States, the question takes another new form. Here, girls have the right to all forms of education, or nearly all. But they remain in a minority as soon as a higher level is reached: the percentage of women among university students rarely exceeds 35 per cent. This means that the countries proclaiming themselves as “highly advanced” can still make progress in their “cultural and political development”. UNESCO’s goal is not merely non-discrimination between the sexes or a legal equality which should be part and parcel of any civilized nation, but the participation of women in all fields of human endeavour as “full partners”.

C.O.I. Crown Copyright Reserved

LABORATORY ASSISTANT

handles radio-active isotopes with rubber gloves let into the walls of a “dry box” at a British research institute. This is used when handling toxic substances which are placed in box through the small chamber on its right.



IN the social sciences—the sciences concerned with people and their relationships to each other as groups and individuals—UNESCO has been trying to organize international co-operation between relatively new branches of study in which there are not always enough specialists to cope with the work waiting to be done.

It has given an important place to the social sciences principally because their development offers one of the best ways of promoting mutual understanding between individuals and nations, of counteracting the evils caused by ignorance and of finding the causes of tensions and removing them. It has therefore tried to provide the organizations and the tools needed by these sciences and to bring them to analyse and find rational solutions for some urgent modern problems.

★

BECAUSE most of the social sciences are of recent origin there has been only little international exchange of information in this field. Until ten years ago, there was not a single international organization covering the activities of sociologists or psychologists. UNESCO had therefore to intervene more directly in this field than in many others so as to fill the many gaps that existed in the ranks of international associations, in the flow of information on research and in the standardization of technical terms.

★

SINCE 1946 UNESCO has been responsible for setting up international professional organizations in the following social sciences: economics, political science, sociology, legal science, scientific psychology and statistics. To aid collective efforts of specialists in different disciplines, special committees for the distribution and exchange of information have been set up with UNESCO's aid.

★

THE establishment under UNESCO's auspices of the International Social Science Council in 1953 created a central co-ordinating mechanism for all branches of social science, parallel to the International Council of Scientific Unions, the co-ordinating body for all branches of pure science.

★

EACH year UNESCO supports the work of the professional social science organizations through grants-in-aid which make possible conferences, symposia and other meetings and the publication of their results. In their turn, the organizations co-ordinate research programmes among their members and stimulate professional associations in countries where they need strengthening.

★

UNESCO's Field Science Co-operation Offices in Cairo, New Delhi, Jakarta and Montevideo have progressively extended their work to the social sciences and have added specialists in these disciplines to their staffs. UNESCO set up a special clearing house for information in Paris to collect documentation on social science problems and to keep a register of social science experts throughout the world. To aid research workers it has published bibliographical directories and bulletins of abstracts, aided by an International Committee for Social Science Documentation. Its quarterly publication,

the International Social Science Bulletin, has been a link between scientists all over the world, providing a forum for the discussion of important topics.

★

UNESCO has promoted social science teaching and the training of experts in all its branches capable of studying social problems objectively and providing public authorities with a sound diagnosis. It has sent missions to establish, reorganize or develop teaching at the university level in many countries. Its investigations have covered the teaching of the social sciences as a whole, and some of the first reports it obtained, covering 30 countries and published under the title of "Contemporary Political Science," constitute the most extensive and useful directory in this field today.

Instead of attempting to carry out large-scale research itself, UNESCO has facilitated research at the international level, and has collected from organizations and individual research workers information which it has synthesized and distributed. It has used the social sciences to analyse the causes of tensions that exist between individuals, groups and nations. In this way it has been able to help several Member States: Studies in India on tensions existing between different religious communities; a research programme on tensions in the new State of Israel, and an investigation of tensions among German and Japanese youth.

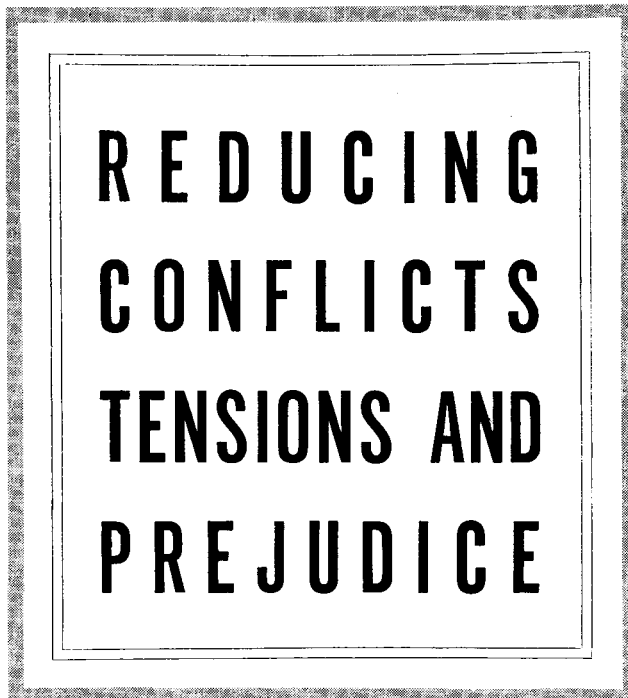
★

UNESCO has used the resources of the social sciences in seeking ways to smooth difficulties encountered by the United Nations and other international organizations in the course of their rapid growth. It has enlisted the aid of historians, jurists, political scientists, sociologists and other specialists, to investigate, among other questions, the present effectiveness of a number of international co-operation programmes.

In some countries tensions are liable to be created by industrialization and the shift of populations from rural areas. UNESCO considers that by using the knowledge and methods of the social sciences governments can do much to improve the conditions under which people adjust themselves to changes brought about by modern science and techniques of today. It has surveyed situations of this kind and has reported on the conditions under which the impact of social and technical changes can be reduced and tensions minimised. Since 1953, an International Research Centre concerned with these questions has been working in Paris under the International Social Science Council. UNESCO has also investigated social aspects of land reform, and population and migration problems.

★

THE social sciences can be used to promote human rights. UNESCO has so employed them in relation to race problems, for race prejudice, with the discriminatory measures which result from it, is one of the main obstacles to the implementation of human rights. The pseudo-scientific justifications for racial discrimination were denounced in the Race Declaration published in 1950 by an international group of sociologists, anthropologists and geneticists. Since then three series of UNESCO pamphlets—The Race Question and Modern Science, The Race Question and Modern Thought, and Race and Society—have helped to spread rational concepts about racial equality.





POST-WAR JAPANESE YOUTH and its changing attitudes were studied by Japanese social scientists aided by Unesco in 1951 in one of a series of studies of national behaviour patterns and the formation of social attitudes. Results, published in "Without the Chrysanthemum and the Sword", gave a revealing picture of the outlook and ideas of a generation of young people in whose country the old order had undergone a complete upheaval. Other Unesco research teams have studied group tensions poisoning relations between different communities in India and problems concerning the successful assimilation of the thousands of immigrants in the State of Israel.

Copyright Magnum

KEY WORDS OF UNESCO

the free flow of ideas & information

DURING UNESCO's early days, civilized life had only begun to reassert itself. The railway map of Europe offered a symbolic picture of the wounds inflicted on civilization: it consisted of segments of lines running from blown-up bridges to burned-out stations and linking only the most important cities—not very successfully, at that. Men, materials, ideas were almost unable to move. If such a paralysis had continued, immense regions would have slipped back into the drear chaos of isolated villages. People might not have died, but they would have vegetated.

Free movement has become a basic condition for civilized life. In the language and in the action of UNESCO, free flow have become key words. There must be a flow—like that of blood in the arteries, or of electricity.

At first, this meant sparing no effort to enable ideas to move again. The network indispensable to the existence of centres of study and research had to be re-established or else created. Every break in this current and every obstacle, whether moral, material or political, required quick action.

First came books and the networks linking libraries. UNESCO has achieved one of its most clear-cut successes over the past ten years in encouraging the exchange of papers and publications among libraries and scientific institutions. At first, contacts were established with a few hundred libraries. In 1955, the number of these libraries had risen to more than 10,000. These institutions represent more than 100 countries or territories and their regular exchanges amount to half the world's annual volume of publication exchanges. Before the second world war, there were 50 national centres maintaining a steady flow of books and information. UNESCO action had already some years ago raised this number to 65. This year, it is 99. These are the centres which

organize the exchange of learned publications and scientific documents which are offered by more than 3,500 institutions.

But other lines had also to be cleared. Political and economic controls had laid a heavy hand on books and, at the same time, on newspapers, films and phonograph records. In 1914, countries had stopped all trade in articles not required by war. The

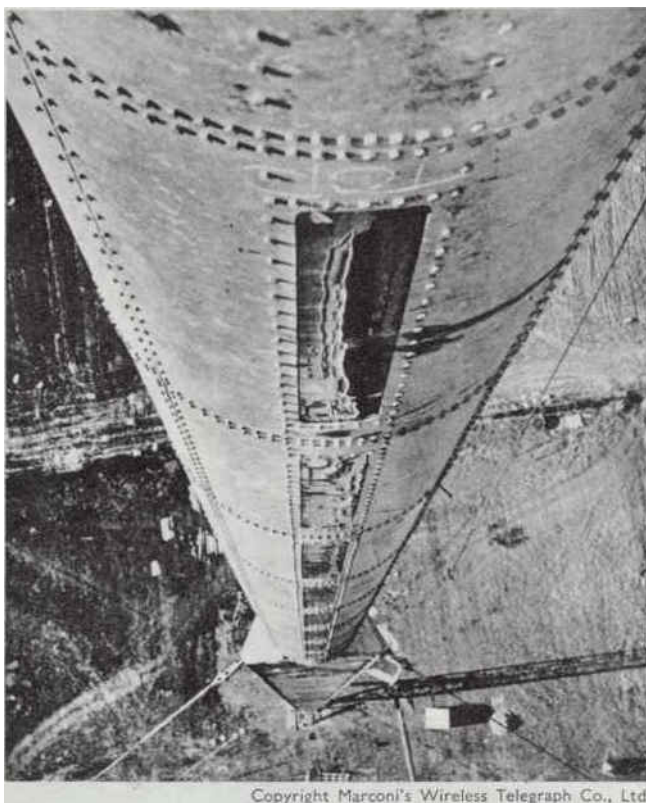
international agreements. The first of these went into effect in 1952 and it eliminated customs duties on the importing of a wide range of articles: books, publications and documents; works of art and collector's items; audio-visual materials destined for recognized institutions; scientific instruments and apparatus; and objects destined for the blind. At the beginning of 1956, this agreement was being applied by 21 nations.

Twelve governments are applying a second agreement which came into effect in 1954 and covers audio-visual materials such as films, microfilms, sound recordings, models, wall charts, maps and posters. If these articles are of an educational, scientific or cultural nature, they are exempted from customs duties, import licences and all quota restrictions in countries where the agreement has come into effect.

In order to meet the problem of currency shortages, UNESCO also launched an international coupon system in 1948. Under this scheme, soft currency countries were able to buy coupons from UNESCO and sell them to institutions or individuals who were then able to use them to buy books, films or scientific materials in hard currency areas. These coupons were backed by UNESCO's hard currency reserve.

At the beginning of 1956, 38 countries in Africa, Asia, Europe and the Americas were participating in this scheme as either buyers or suppliers. The total value of UNESCO coupons issued exceeded \$9,000,000.

In all these fields, the response of governments has demonstrated that they are becoming more and more determined to eliminate obstacles to the free flow of ideas. Support from the press and public opinion for UNESCO's campaign has raised the hope that, sooner or later, the tools of knowledge will be brought within the reach of peoples in all parts of the world.



TEACHING BY TELEVISION has been encouraged by UNESCO with practical results. The success of an experiment in rural education and entertainment conducted by the French National Radio through tele-clubs in lonely country villages has led to similar experiments with UNESCO participation in Italy and Japan. UNESCO surveys also provide a world picture of the amazing strides in television in the past decade, as symbolized by this photo, taken from the top of a giant television mast at Sutton Coldfield, England.

depression of the 1930's saw even more rigid controls adopted. Then came the destruction of the second world war and foreign currency problems to deal a *coup de grace* to international exchange. Neither books nor teaching materials nor works of art were officially considered as "essential articles."

UNESCO has waged a steady campaign over the past decade to overcome these obstacles by sponsoring



National Film Board of Canada.

NEWSPRINT SHORTAGE ALARM

was sounded by Unesco in 1949 when its Director-General declared: "Even if present newsprint manufacturing capacity were fully utilized and the most up to date methods applied, it could not fill immediate needs, still less the needs of tomorrow." Unesco stressed the need to encourage research into the possibility of using other raw materials. At its request, the U.N. Economic and Social Council discussed the newsprint problem in 1951 and proposed both short-term and long-term action to meet it. Today the hunger for books, magazines, newspapers and every kind of printed publication is greater than ever. Unesco is conducting studies on aspects of the newsprint problem, particularly as it affects underdeveloped areas where rising literacy is creating new readers—and new consumers of newsprint. A long-term programme to expand paper production has been undertaken by a sister U.N. agency, the Food and Agriculture Organization. Left, huge logs destined for the pulp mill are guided down a river in Canada, which is the world's largest producer of paper.

UNESCO

UNESCO'S GIFT COUPONS SERVE 50 NATIONS. Since 1951, more than 300 institutions in 50 countries—mainly in Asia, Africa and Latin America—have received equipment and other forms of practical aid to the value of \$750,000 through the Unesco Gift Coupon Programme. Its operation is simple. Unesco selects a list of institutions (schools, universities, laboratories) needing equipment, and a sponsoring organization—perhaps a women's association in England, a high school in Holland or a Unesco Club in France—chooses a project from this list and raises money (through concerts, lectures, film showings or exhibits) to buy Gift Coupons. These are sent to the chosen project which then buys the equipment it needs, using the coupon as a sort of international money order. Unesco in turn redeems the coupon for the supplier in his local currency. In the process, direct contacts are established between the donor and the recipient. Small boy from India (right) is learning to walk again thanks to Gift Coupons. A victim of infantile paralysis, he is being helped to recover his sense of balance on special apparatus at the Bombay Society for the Rehabilitation of Crippled Children. French schools and American voluntary organizations gave equipment to the Bombay Centre through the Gift Coupon Programme.



What Unesco has done to...

Spotlight the world's needs in fields of communication

People in highly industrialized countries are apt to take newspapers, radio, films and television for granted. They are surprised when they read, as they did recently in UNESCO's publication "World Communications", that Africans, Asians and South Americans together only buy 24% of the world's daily newspapers, whereas Europeans buy 38% and North Americans 24%, and that while 50% of the

world's radio receivers are in North America, only 11% are in Africa, Asia and South America.

Striking facts like these have been brought to light and publicized by UNESCO since it began to make investigations in 1947 into how many printing presses, film studios, news agencies, radio stations and receivers and similar resources existed in different countries. Between 1947 and 1952 UNESCO surveys covered the structure, equipment and operation of mass communication media in 173 countries and territories. The facts, widely publicized, have been used in campaigns and missions, studies and monographs.

With technical assistance programme funds, experts (and materials) in the communication field have been sent to underdeveloped countries. By the end of 1955: 85 fellowships awarded; missions working in 15 countries.

A study of the Canadian Farm Radio Forum broadcasts in 1952-53 was put to practical test in India's campaign for adult education by radio. Specialists from 30 countries pooled experience and techniques at a UNESCO Seminar on Visual Aids in Fundamental Education in Sicily, in 1953, and produced the first catalogue of films and filmstrips for this kind of education and eight sets of travelling libraries of visual aids.

UNESCO publications on mass communication questions have been aimed both at the general public and specialists. Titles from "Press, Film and Radio in the World Today" series reveal range and variety of these studies: "Professional Training of Journalists", "Training for Radio", "The Problem of Newsprint and other Printing Paper", "Radio in Fundamental Education", "The Film Industry in Six European Countries", "Low-Cost Radio Reception". In 1954 UNESCO published "Television—A World Survey", covering 44 countries where TV was either in operation already or in the planning stages. Fourteen more countries were surveyed in 1955

Assist the spread of international understanding

As well as improving the methods and media of mass communication through co-operation at the international level, UNESCO works through all means of communication for mutual understanding between peoples and countries.

Television is a case in point. Several countries asked for help in arranging the exchange of TV techniques and programmes which could be used to teach about

other peoples and customs. UNESCO and the British Broadcasting Corporation in 1954 convened the first seminar ever held on this subject. Producers and educators from 12 countries took part. In 1955, film and TV producers met at an international conference in Tangier to discuss obstacles to the exchange of films and television kinescopes.

TV viewing through community tele-clubs (first developed in France) offers another means of breaking down isolation within countries and (since the growth of international TV programme co-operation) within continents. In 1954 UNESCO and the French TV service produced a

series of educational telecasts aimed at rural populations. These are helping tele-clubs now springing up in countries like Japan and Italy.

In April 1956, UNESCO convened the first international gathering devoted exclusively to education in journalism, which suggested ways in which UNESCO could help to fill some of the training gaps, and drew up a plan of action on a broad international scale.

UNESCO has enlisted the aid of editors, journalists, film producers and broadcasters to make known what has been accomplished by peoples who are working to build up through education, science and culture, a peaceful international community based on respect for Human Rights.

In 1949 UNESCO created the World Braille Council and aided the unification of Braille in the various languages of the world, with the aim of creating an easy written medium for the blind student to learn, read and communicate in other languages than his own. Results were published in "World Braille Usage" in 1954.

Remove man-made barriers to ideas and information

Man-made barriers to the free flow of information, ideas and knowledge between countries and to the international circulation of educational scientific and cultural materials are legion. Some obstacles: currency and travel restrictions, censorship, quotas and tariffs. UNESCO tackled the problem in three ways: sponsorship of international agreements to remove obstacles, action in co-operation with other international organizations, publication of studies focusing public attention on the issues.

international organizations, publication of studies focusing public attention on the issues.

As a first step UNESCO tackled the currency problem in 1949 by providing a "Coupons Scheme" under which coupons (a kind of international money order) were made available for the purchase of books, films and scientific equipment (later extended to educational travel). Through the scheme, people and institutions in soft-currency countries have been able to buy badly needed items from countries with hard currencies. Coupons worth \$9,000,000 had been issued by the end of 1955.

UNESCO sponsored an international agreement on the importation of educational, scientific and cultural materials. This eliminates customs duties on books, newspapers, magazines, works of art and a wide variety of other educational items. Its effect: such materials are easier to get and cheaper to buy in the 22 countries which have ratified it to date.

To help remove barriers in particular fields, UNESCO works with other international organizations. Examples:

— With the International Telecommunications Union (ITU) on the question of press rates throughout the world. The flow of news and information is impeded by the high and divergent rates between different nations. (A press message costs 2.04 cents a word when sent from London to New York and 5.54 cents in the opposite direction.)

— With the Universal Postal Union (UPU) on postal rates and concessions which might be granted to publications. By the end of 1954 over 30 governments had granted concessions in response to these efforts.

— With the International Air Transport Association (IATA) to reduce charges on the despatch of information materials by air. In April 1954 a concession came into effect whereby books were granted a discount of up to 50% of normal airfreight charges in non-European regions and up to 33 1/3% within Europe.

The aim of UNESCO at all these conferences is to make it easier and cheaper for information to circulate from country to country, whether in the form of a newspaper sent through the mail or a press despatch sent by cable or a radio broadcast intended for listeners abroad.

PATHS OF KNOWLEDGE FOR ALL PEOPLES

EVEN when books, films and paintings are able to cross frontiers, they still have to reach the men and women who need them the most urgently . . . and who are often not even aware of their need. From its earliest days UNESCO encouraged the growth of libraries in cities and villages and of mobile libraries, whether transported by bus or boat, in isolated regions. It organized seminars and published manuals to help governments, local authorities and educators to create new libraries or to improve existing ones so that they might serve as cultural centres at a broad level. Then UNESCO passed from preaching to practice. With the co-operation of governments and communities, it opened model public libraries in India, Colombia and Africa. The "oldest" of these, the Delhi Public Library, was set up in 1950; five years later, it had loaned nearly a million books to its 30,000 regular readers.

Similar assistance obviously had to be offered museums as one of the most effective instruments for the spread of knowledge. For far too many years, too many museums considered their role as one of jealously keeping the public away from the treasures of history on the pretext that this was the only way of preserving them. The true role of a museum, however, is to serve the public and to contribute to its education in the largest sense of the word. By establishing international co-ordination for museums, UNESCO helped them modernize. With the International Council of Museums, it has carried out campaigns to bring the people into museums, so that the people—and not merely a handful of specialists—might have access to the treasures of art, history, folklore, science and technology.

Museums can even go to the people. UNESCO organized travelling exhibitions of colour reproductions of ancient and modern paintings and sent them on an odyssey to villages and cities, town halls and universities in more than 60 countries. Other exhibitions took the road to reveal to millions who had never set foot inside a museum, the drawings of Leonardo da Vinci, Japanese prints, Chinese art and Persian miniature. Then UNESCO opened—through its new series of Art Albums—

an imaginary museum displaying priceless collections which not even the most seasoned of travellers had been able to contemplate in their entirety: the Ajanta cave paintings, Egyptian tombs and temples, Yugoslav medieval frescoes, Australian aboriginal paintings, and the wooden stave churches of Norway.

The gates barring universal access to the wealth of literature, drama, music and science had to be unlocked. Despite startling technical progress, we live in an era where the world's great civilizations still dwell in mutual ignorance of their achievements.

Masterpieces of literature which form a perfect expression of the traditions and spirit of a people often remain unknown on the other side of national boundaries. Certain books, rated as the master works of a particular civilization, had been awaiting for centuries the translators who could make them known to the rest of the world. This meant an immense undertaking and UNESCO made its contribution by publishing a collection of representative works—works which private publishers had hesitated to translate owing to language difficulties or limited sales possibilities.

In March 1956, seven years after this work was begun, UNESCO had published translations in either English, Arabic, Spanish, French or Persian of works from 25 sources: Arabic, Argentine, Bengali, Bolivian, Brazilian, Chinese, Colombian, Cuban, Dominican, English, French, German, Greek, Hindi, Italian, Japanese, Marathi, Mexican, Punjabi, Persian, Sanscrit, Siamese, Spanish, Tamil and Uruguayan.

As far as the theatre was concerned, the main problem was to set up channels of co-operation and exchange from one country to another. This liaison task was given to the International Theatre Institute founded in 1948 and, since then, national centres have made their appearance on all continents. Information and research were also among the Institute's tasks. For the past seven years, a bilingual quarterly, "World Theatre," has reflected a faithful picture of theatrical activity. International



EVENT OF THE WEEK for children and adults in outskirts of Medellin, Colombia, is arrival of bookmobile from the city's model library opened as a pilot project by Unesco and Government of Colombia in 1954. Carrying more than 5,000 books, the bookmobile covers an area of about 100 miles, making stops each week at 45 places. Medellin Public Library has set off a chain reaction in public library development in Latin America, just as a similar project, the Delhi Public Library, has done in India.

Cont'd
on
next page

**PATHS OF
KNOWLEDGE**

(Continued)

Doors opened to World's wealth of music and drama

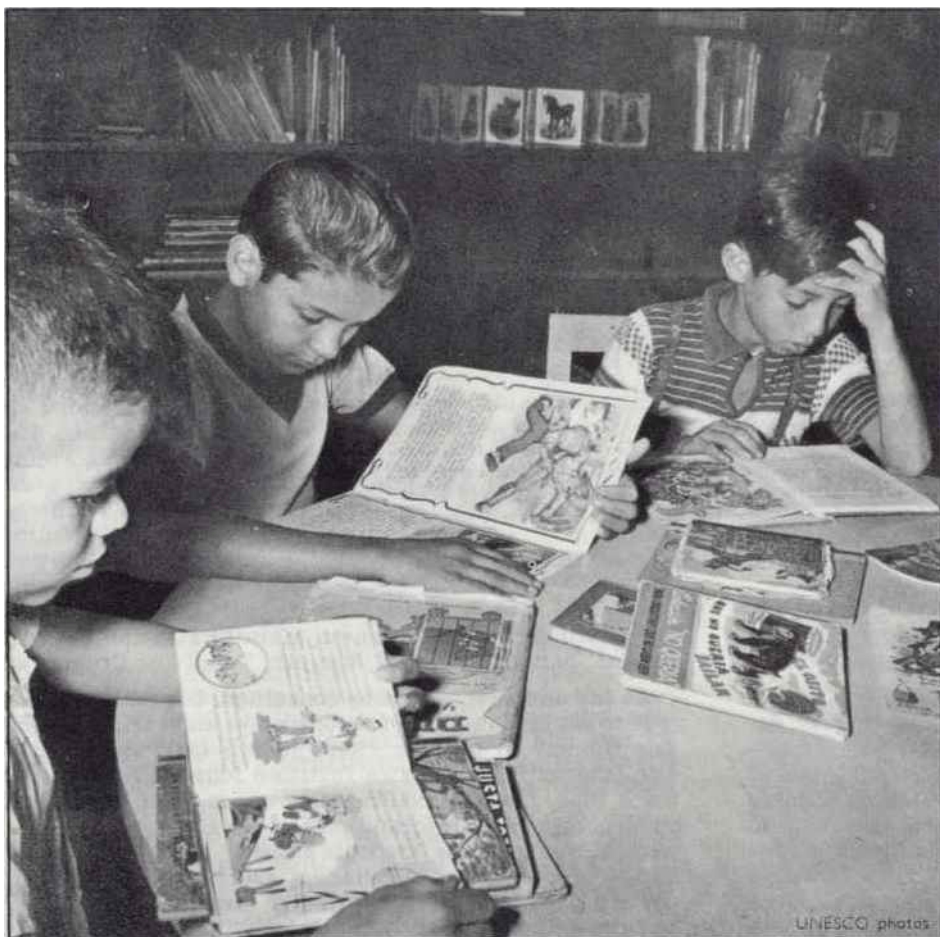
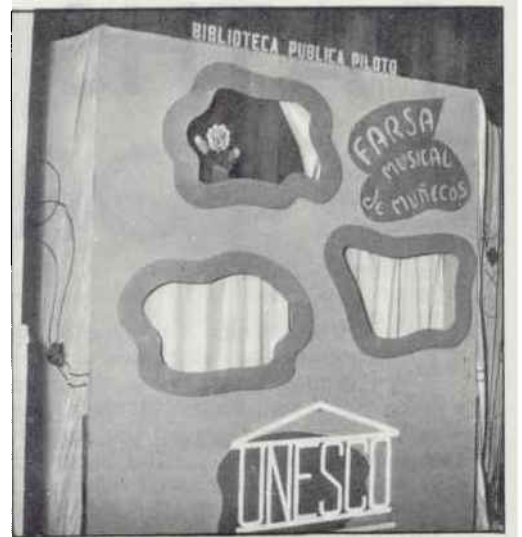
Theatre Weeks and international festivals have also been able to bring to many countries foreign plays which can help international understanding and thus serve the cause of peace. The Institute has paid particular attention to the influence of the theatre upon youth and, indeed, much of its work has dealt with various educational aspects of the theatre and with plays produced by young people as part of school programmes.

A similar institution, the International Music Council, was created in 1949 with the object of making known contemporary music and folk music, of assisting the publication of works of musicology and of encouraging, among both adults and young people, the appreciation and the

playing of music. Recordings of traditional popular music have been made in 35 countries. In addition, works have been commissioned from relatively unknown young composers and international works on the history of music have been published.

The role of music in education—a basic role in the eyes of so many philosophers and yet largely ignored today—has been examined in numerous studies and in international discussions bringing together educators and musicians; various methods have been put to practical test and recommendations made to authorities. Returning music to its rightful place in our culture may be an almost superhuman task, but it is one well worth trying.

EAGER YOUNGSTERS took the Medellin Library by storm after a campaign in schools to encourage readership. Because of previous lack of public libraries and outside bookloan services in Medellin, many people predicted that there would be no readers for Colombia's model library. But it has outgrown its present home, is building a bigger and better one. Photos show some of many extension activities which include children's choir, musical puppet shows, dramatic society, discussion and study groups, weekly concerts, and exhibitions on art and other subjects. Future plans include new branch libraries, and services to hospitals, homes for the aged and orphanages.



ENDING THE WORLD'S COPYRIGHT MUDDLE

FUTURE generations of authors and publishers may well remember September 16, 1955 as the day when a small ray of light penetrated the legal jungle of international copyright protection, a jungle where many an unsuspecting author had seen his works swallowed up.

This date marked the coming into effect of the Universal Copyright Convention sponsored by UNESCO. Since Sept. 16, 1955 a Spanish author or publisher, for example, has been able to obtain copyright protection in the United States with no other formalities than a line of type bearing the symbol C, his name and the date of publication of his work. This holds true, of course, for an American author's works in Spain and for the works of foreign authors, composers and other creative artists in all the 21 countries which have to date joined the Universal Copyright Convention (1).

The Convention came into force three years after its adoption by an intergovernmental conference convened by UNESCO at Geneva in September 1952. Although it is still in its infancy, its effects have already been felt. The United States, in implementing this international agreement, has wiped out a provision of its copyright law which stated that full copyright protection could be granted foreign authors writing in English only if their works had been printed from type set in the United States. The exemption from this "manufacturing clause" applies to authors in all countries adhering to the Convention. One of the principal beneficiaries will be the United Kingdom where existing copyright laws are now being revised so that the Convention can be ratified.

Behind the adoption of the Universal Copyright Convention lies the centuries-old story of the author's struggle to earn a living by his writing. The "successful" author is, after all, a relatively new being: Cervantes kept body and soul together by working as a tax collector; Spinoza ground lenses in Amsterdam for his living and Shakespeare relied on acting for his main source of income.

The 19th Century saw a wave of national legislation instituting copyright protection for authors. Unfortunately, the 19th Century also saw a wave of international literary piracy. It became quite obvious that national law could not protect the author whose works were being plagiarized abroad

just about as fast as they came off the presses in his own country.

Back in 1842, one of history's most famed victims of plagiarism, Charles Dickens, drank a hopeful toast in New York to "international copyright, the only turnpike between the readers of two great nations". But the turnpike had yet to be opened in the 20th century. It was not until 1946 that the idea of a universal copyright convention was brought up at the United Nations and the problem turned over to UNESCO. It was one of the items of unfinished business which the U.N. inherited from the League of Nations.

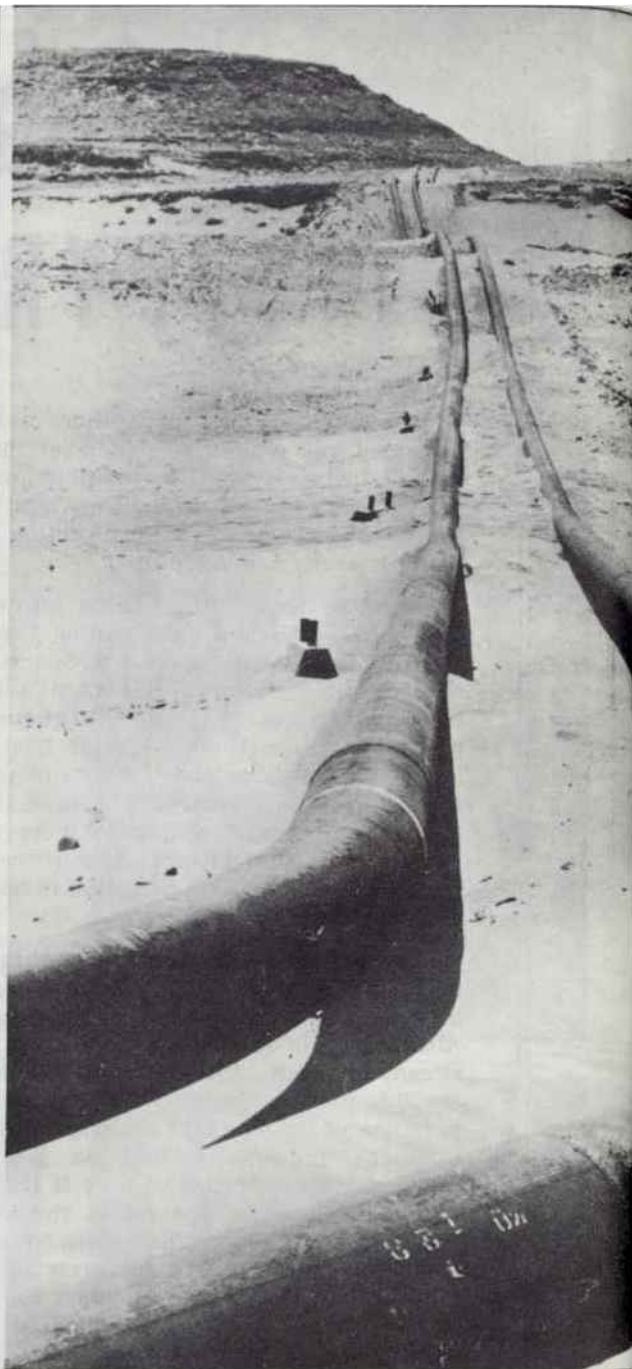
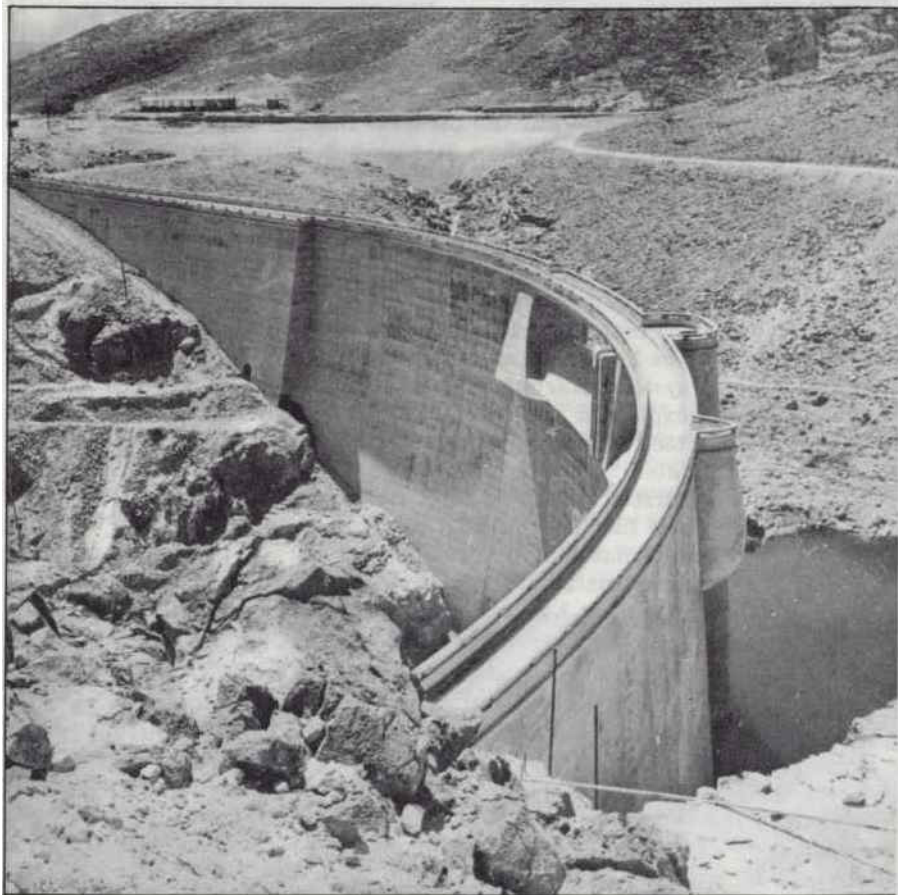
Preparatory studies revealed two basic reasons for the failure of previous attempts to build a worldwide system of copyright protection and, in particular explained why the Berne Copyright Convention of 1886 and that of Montevideo, signed three years later, were not as effective as had been hoped. Firstly, sufficient allowance had not been made for the fact that certain countries could not adhere to international agreements because of provisions in their national legislation and secondly, too little attention had been paid to the economic effects of copyright law.

It was with this in mind that UNESCO drew up a realistic convention. It is a complex technical instrument designed to meet a complex technical problem, but it expresses certain basic principles which stand out clearly. Countries which are party to the Convention undertake to give the same copyright protection to foreign authors as to their own nationals, if the foreign authors come from a country adhering to the Convention or if their work has been published in such a country. The minimum period for copyright protection is fixed at 25 years, with the exception of photographs and works of applied art for which the minimum is 10 years. The author is given the exclusive right to make or authorize the translation of his work for seven years after publication. If no translation has been made in that period, a country may restrict this right subject to the fulfilment of certain conditions protecting authors such as payment and the assurance of a correct translation.

Many of these principles already existed in the Berne and Western Hemisphere conventions but it is as part of a worldwide agreement that they can be most effective. The Universal Copyright Convention draws the world together and bridges the three watertight compartments into which it was formerly divided: the Berne Union countries, the Western Hemisphere countries and the countries which had never joined any convention.

(1) *Andorra, Cambodia, Chile, Costa Rica, France, the Federal Republic of Germany, Haiti, the Holy See, Iceland, Israel, Japan, Laos, Liberia, Luxembourg, Monaco, Pakistan, the Philippines, Portugal, Spain, Switzerland and the United States.*

THE EXPANDING FRONTIERS OF MODERN SCIENCE



THE world of tomorrow will be a peaceful one supporting two or three times its present population only if the courage and the determination of all those who are seeking new knowledge—especially the men of science—are mobilized today.

Scientific discoveries are no longer the monopoly of a privileged élite whose members used to meet regularly in the academies of Europe. The great discoveries of our time, rather than being the fruit of the work of a group of scientists in a given centre, are usually the sum total of fragmentary results achieved by scientists on every continent. This geographic expansion of science, however, has complicated the problem of co-ordinating research. It was primarily

in order to tackle this problem that UNESCO established its network of science co-operation offices. In Montevideo, Cairo, Delhi and Jakarta, these regional offices have become important factors in the scientific life of three immense areas of the world: Latin America, the Near East and southern Asia.

Meagre resources and total disorder

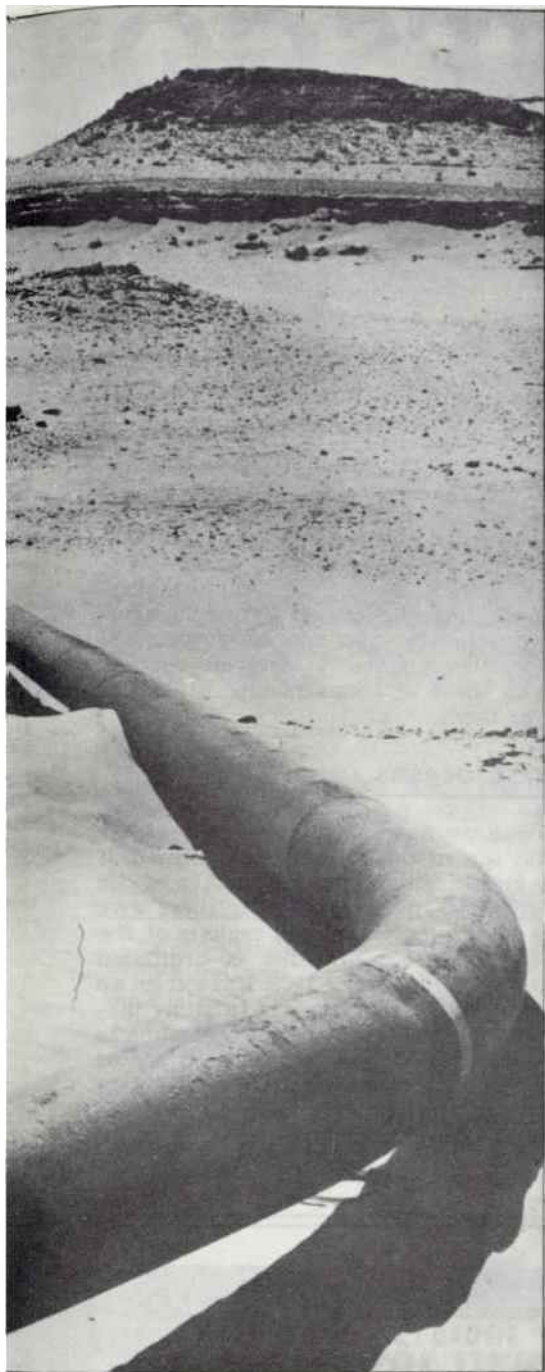
CREATED to encourage international exchanges and to combat the isolation of universities and laboratories they have already supplied a remarkable impulse to scientific work in the three regions which they serve.

This is no cause for complacency.

Scientific research must travel a long road before it is equal to the possibilities—to say nothing of the needs—of our modern world. For that matter, research has never really been well organized in the past—except for war and destruction. “We worship research”, a great thinker and scientist who recently died declared a few years ago, “and yet narrow-mindedness, meagre resources and total disorder are still the lot of present-day research.”

With the help of international scientific organizations, UNESCO has at least been able to encourage and co-ordinate research in certain key fields, such as nuclear physics and the development of the world's arid zones.

UNESCO brought into being the



S.T.E.P. and Esso.

European Organization for Nuclear Research and the Organization is now constructing a laboratory near Geneva. The 12 nations which founded this Organization under UNESCO sponsorship contribute to its annual budget of several million dollars. Huge accelerators will be built for research in high energy particles to add to basic knowledge of the structure of the atom.

Another international laboratory, the International Computation Centre, is being created in Rome. Similar steps will probably be taken over the next few years in such specialized branches of science as cell growth (a contribution to cancer research) or in developing the use of radio-isotopes in physics, chemistry and biology.

The problem of the world's unproductive wastelands has become an urgent one in recent years and the Food and Agriculture Organization of the United Nations has clearly demonstrated the need for solutions in the face of an ever rising world population. It has often been repeated that "forest may precede civilizations, but deserts follow them". More than one-quarter of the world's land area is now useless and the desert is one of the greatest challenges facing man and science.

Wind & sun energy for fuel-poor lands

THERE is no easy solution. First, the causes of the lack rainfall must be studied in each country facing this problem. The geologist must step in to analyse the structure of rocks and the composition of soils and sands. Underground water tables must be discovered and a close study made of the plants and animals which have adapted themselves for desert survival. Finally, full use must be made of the energy of the wind and the sun—the only natural resources of fuel-starved lands, and resources which have been virtually ignored until now.

The problem of deserts and semi-arid regions affects no less than 37 nations. No single country can hope to carry out all the research implied, but all countries can benefit from the success achieved by one. UNESCO's task is to encourage research aimed at solving this problem and to teach people to apply the results of this research to their daily lives.

To halt the advance of marching sands

IN 1951, UNESCO founded its Advisory Committee on Arid Zone Research to organize new research programmes and to bring together information on research already carried out. Meeting successively at Ankara, Montpellier, Delhi, Paris, and Tucson (Arizona), this committee has conducted symposiums in subjects vital to the struggle against the desert: hydrology, plant and animal ecology, energy sources for arid zones and soil study.

Over the past five years, UNESCO has offered financial aid to centres and to laboratories working to salvage arid or semi-arid zones. This assistance will in future be considerably expanded. Arid

zone research is among the major projects upon which, it is proposed, UNESCO should concentrate its efforts and resources for the next five or ten years if need be. This is UNESCO's answer to the recent warning of one of the scientists collaborating in its arid zone programme: "Up to the present, the desert has kept the upper hand and we have not been able to halt its advance. Most of the work already accomplished has been qualitative rather than quantitative: we have still to establish a co-ordinated research programme capable of meeting the situation."

UNESCO has also launched research in other fields. An advisory committee on the ocean sciences has been set up to apply our basic sciences to oceanographic study. By grouping together physicists, chemists, biologists or geologists for the study of specific problems, UNESCO may contribute to the development of fishing industries or the tapping of plant and mineral resources in the oceans. But it will also encourage additions to human knowledge in a field where unbelievable gaps still exist.

Hidden wealth of oceans and forests

SCIENTIFICALLY speaking, no ocean has ever really been studied and there are great stretches of the Indian Ocean and the South Pacific which remain completely unexplored. During a meeting called by UNESCO at Tokyo in 1955, one oceanographer recalled the eternal, universal attraction of the sea. "The study of the oceans," he added, "is a source of wealth for man." Other scientists have found equal wealth in chemistry or in geology or in the study of virgin forests. The goal of every branch of science is to conquer the world, not through violence but through knowledge.

To scientists, the 15 million square miles of humid tropical zone also represent unknown territory, even in cases where they are overpopulated. They make up one-third of the world's useable land area, but the study of soils and forests and hydrological, botanical and zoological research have barely scratched the surface in these regions. Here, too, it is quite clear that while local economies will be the first to benefit from research, the scientist must set his sights higher than the improvement of agricultural or industrial conditions. The most urgent need of all is the need for knowledge.

THE 'S' IN UNESCO

Links for world science

It can be said that international scientific activity is guided today by two organizations—UNESCO and the International Council of Scientific Unions (Icsu). Icsu was set up in 1919 to co-ordinate research in pure science but its activities were for long hampered by lack of funds. It has gained new importance through work made possible by the financial support it has had from UNESCO in the past ten years, and today it is a centralizing link between no less than 200 separate Unions.

When UNESCO came into existence some branches of science still lacked a centralizing agency like Icsu. UNESCO saw the need for councils on the Icsu pattern for the medical and technological sciences and therefore helped to establish the Council of International Organizations of Medical Sciences in 1949 (50 members today) and the Union of International Engineering Organizations in 1950 (13 members today). Together Icsu and these two newer international bodies receive total annual subsidies from UNESCO of about \$200,000 to assist them in their work.

Institute of the Hylean Amazon

As its first attempt to set on foot new kinds of international scientific co-operation UNESCO proposed to set up an Institute of the Hylean Amazon. This region of South America has never been explored in a co-ordinated or systematic way. Tremendous research possibilities exist there in many fields: types of wood suitable for building, medicinal plants, geology, mineralogy and meteorology.

In 1947 eight states signed a convention stipulating that the Institute would start work after five countries had ratified it. These five ratifications were never secured and the project ended in complete failure. The basic idea, however, was later revived in the form of a programme of research for the humid tropical zone (see next column).

World's arid lands

In 1948 when it was proposed to establish an Institute of the Arid Zone, UNESCO, mindful of the lessons of the Hylean Amazon project, examined the question cautiously. In 1950 it set up an Arid Zone Advisory Committee which has since focussed attention each year on one particular problem concerning the world's arid lands: hydrology, plant ecology, the sources of power available in the arid zone, particularly wind power and solar energy, human and animal ecology, and arid zone climatology.

Other activities have been encouraged including the preparation of maps, and of reports on the purification and use of saline water, dew research, etc. The Arid Zone programme is developing smoothly and the project, important in itself, is also a significant experiment in international co-operation. Under the leadership of the Arid Zone committee, specialists in many lands are put in touch with one another

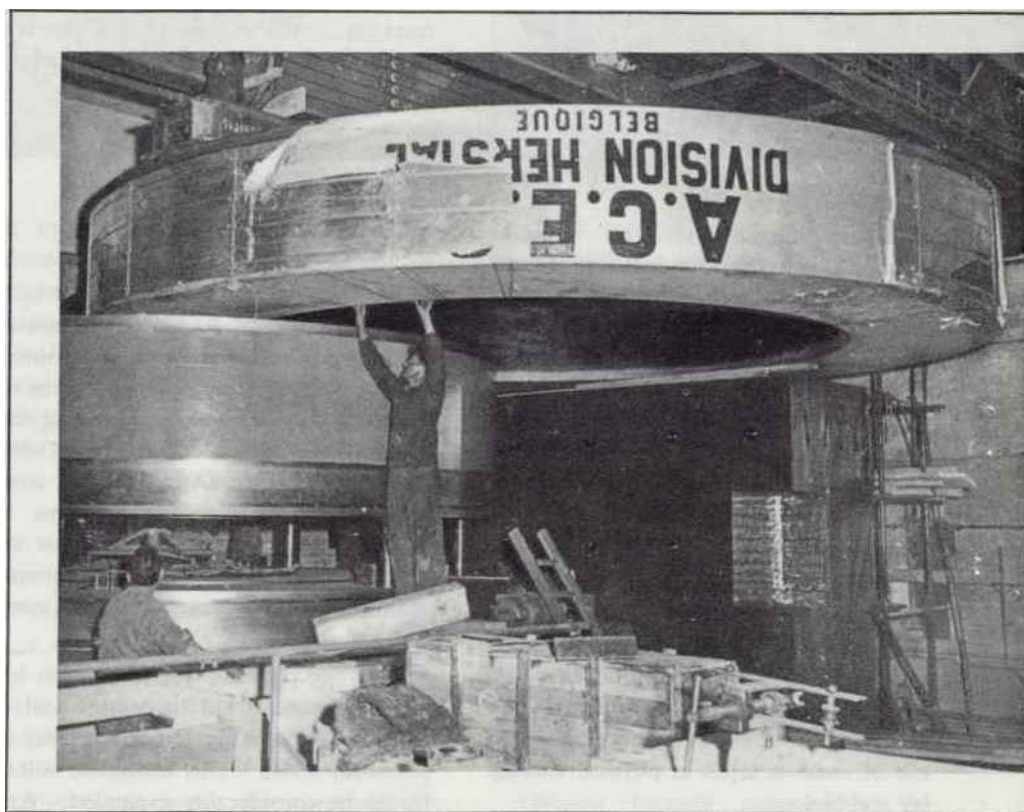
through publications and at meetings such as the Wind and Solar Energy Symposium at New Delhi in 1954 and last year's meeting of arid zone specialists at Albuquerque, New Mexico.

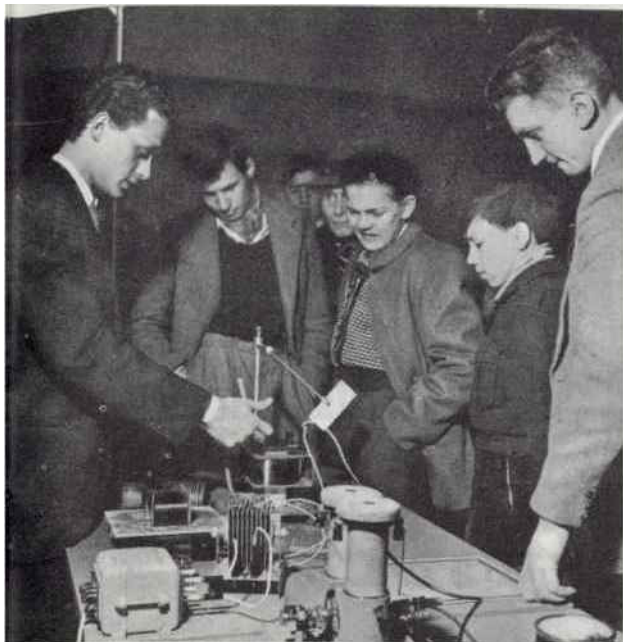
Humid tropical zone

Experience gained in launching the Arid Zone project should serve to guide UNESCO in its new international enterprise relating to the humid tropical zone. Surveys of institutes carrying out humid tropical zone research have been made and a meeting of specialists engaged in this type of research was held in March 1956 at Kandy (Ceylon), together with a symposium on methods of studying tropical vegetation. Recommendations from the meeting outlined the most useful areas for initiating and developing research. Other meetings of specialists and symposiums will be held and fellowships for specialized training in foreign institutes will be awarded to research workers. Experts will be sent to those of UNESCO's member states who make requests for them.

Exploring the vast oceans

Among deep sea areas we have little knowledge of the South Pacific and still less of the Indian Ocean which, it has been said, is less known to us than the surface of the moon. But recent advances in the basic sciences give hope that knowledge of the least explored regions of the world's oceans can be developed, provided co-ordinated use is made of the new techniques. In 1955, UNESCO set up an Advisory Committee on Marine Sciences to study methods of developing the scientific study of the ocean and to supply information which would lead to increased use of marine resources. It modelled this committee on the Arid Zone Committee. The marine experts have since made many suggestions as to where and how research could





Science on show around the world

Few people would question the importance of science to society or the individual. Yet educating the public in the achievements of modern science requires ways and means which are not within the reach of all countries. Unesco has been able to support the efforts of many governments to improve science teaching in schools. It has also contributed to science education through articles in specialized publications and in the general press, and through its travelling exhibitions which have well proved their worth in all parts of the world.

The first of these exhibitions, (recent discoveries in physics and astronomy) toured 13 Latin American countries between 1950 and 1952. It consisted of charts, photographs and also apparatus on which visitors could themselves conduct experiments.

Its success (13 countries visited, 470,000 visitors) led to the organization of other travelling exhibitions: "Our Senses and the Knowledge of the World", on display for four years in the Far East (8 countries, 650,000 visitors); "New Materials", first shown on the shores of the Mediterranean before leaving for South America (7 countries visited since 1952, 630,000 visitors); "Man Measures the Universe", touring Europe since 1954 (4 countries, 200,000 visitors). "Energy and its Transformations", (photo, left) shown first in Paris in March 1956; will tour the Far East for three years.

In addition to these exhibitions, each of which had demonstration apparatus and which sometimes weighed as much as seven tons, Unesco organized a series of exhibitions made up of photographic panels. These included: "Man Against the Desert" (shown in Jerusalem in 1953); "Zoological Gardens—Wild Life and Mankind" (Indonesia, 1954); "Balance and Unbalance in Nature" (prepared with help from Unesco by the International Union for the Protection of Nature); "The Construction of Laboratory Apparatus for Schools" (Cairo, 1955).

most usefully be carried out. The use of an international research vessel operated jointly by a group of UNESCO Member States has been proposed.

Nations pool their resources

In 1950 UNESCO was asked "to assist and encourage the formation and organization of regional research centres and laboratories." Out of this Conference resolution came CERN, the European Organization for Nuclear Research, now building an international laboratory for basic research into the structure of the atom, at Geneva. (See below)

Another international laboratory project "catalysed" even earlier by UNESCO is the International Computation

Centre, but here progress has been disappointingly slow: the convention establishing the centre in Rome still requires ratification by five more countries to bring it into force.

During the past two years UNESCO has been studying problems involved in research into cell growth. Further steps it now proposes in its programme for 1957/58 include: the encouragement of contacts between different disciplines in the field of cell biology, symposia, fellowships and research, the setting up of centres for breeding pure lines of laboratory animals and preparations for a regional institute for the study of life under controlled conditions.

Cont'd
on
next page

Europe's Laboratory for Nuclear Research

Few governments can afford a major nuclear research programme by themselves. It takes large, expensive and highly organized expeditions to cross the frontiers of atomic science. The only solution is international collaboration.

It was by being a catalyst for international scientific collaboration that Unesco was able to bring into being the European Organization for Nuclear Research and its research centre now being built at Meyrin, near Geneva.

In 1950, Professor Rabi, Nobel prizewinner and member of the U.S. delegation to Unesco's General Conference in Florence, defined the idea of an international laboratory which has since found its place in Unesco's doctrine of international co-operation. He urged that a centre should be established in Western Europe and devoted to nuclear research, pointing out that scientists in the U.S.A. and to a lesser degree in the United Kingdom had at their disposal facilities which for financial reasons were not available in the rest of Western Europe and elsewhere.

Professor Rabi urged that Unesco should try to combine nations in regional groups so as to set up research centres comparable to those existing in the U.S.A. He thought Unesco should serve as a catalyst for world science, not operating research centres, but drawing up preliminary plans and seeing they were satisfactorily carried out.

After several intergovernmental conferences called by Unesco, the European Organization for Nuclear Research (usually referred to as CERN from the French title of the temporary body that preceded it: *Conseil Européen pour la Recherche Nucléaire*) reached its final form in

a convention now ratified by 12 countries, which came into force at the end of 1954, after three years of preparatory work.

The CERN laboratory is not concerned with atomic energy, but with basic research on the structure of the atomic nucleus. Study of the mechanism and behaviour of nuclear forces is focussed on the very high-energy particles found principally in cosmic rays which reach the earth from outer space, but which can be created artificially by bombarding atomic nuclei with the help of giant machines called particle accelerators.

So CERN set up teams of leading specialists from its Member States to design two accelerators: a 600 million electron-volt synchro-cyclotron and a 25 thousand million electron-volt proto-synchrotron. The speed of the particles generated in the second accelerator will approach the speed of light—the absolute ceiling. (See the Unesco Courier special number on "The Promise of Atomic Power", No.12, 1954; U.S. March, 1955).

This is the first international organization for scientific research set up by an inter-governmental convention. Its 1956 budget amounts to about 40 million Swiss francs and the cost of the building premises and plant, about 200 million Swiss francs, is being contributed by CERN'S 12 member states. The cyclotron is expected to be finished by the end of 1957 and the more powerful proton-synchrotron at the end of 1960. Photo, left, shows one of the two energizing coils of the synchro-cyclotron electro-magnet being placed over the pole plates.

THE 'S' IN UNESCO (Cont'd)

Explaining and teaching science

Since 1950 science teaching and dissemination has had an important place in UNESCO's programme. One of its most successful activities has been the travelling science exhibition (see page 43). Inventories of apparatus and materials for science teaching have also played an important part in this programme. A series of eight volumes deals with the teaching of science in primary, secondary and vocational schools, universities and in six types of technical colleges. These inventories have helped to solve many problems of equipping school laboratories in countries now in the throes of development. Published in several languages they also provide a multilingual glossary of scientific and technical terms.

In 1948 UNESCO published a little book entitled, "Suggestions for Science Teachers in Devastated Countries" to aid teachers whose work was handicapped by lack of equipment. It has since published manuals for instructors in countries where science teaching is developing for the first time, explaining how to build simple apparatus using easily obtainable materials.

To draw the attention of legislators, statesmen, administrators and the organs of public opinion to the social, political and economic consequences and possibilities of science and technology, UNESCO publishes "Impact of Science on Society." Now in its seventh year, this quarterly, appearing in English and French, is largely devoted to original studies on the social aspects of science (1).

Guiding the steps of research

During the past two years, the development of science on a really world-wide scale has been helped by the work of an International Advisory Committee on Scientific Research. It was established by UNESCO to "promote international co-operation between the national councils and centres of scientific and technical research in fields of common interest" and to advise UNESCO's Director-General on "research and related matters in the Natural Sciences Programme of UNESCO." The Committee can advise UNESCO on the order of priority to be given to international undertakings and, by organizing meetings like the one at Milan in 1955 for representatives of national research centres, it can help to stimulate the formation of new national research centres in countries where none so far exists.

Field Science Co-operation Offices

Latin America, the Middle East, South Asia and South-east Asia—all these vast areas are now covered by scientific missions in the shape of UNESCO's Field Science Co-operation Offices. The Latin American Office (in Uruguay since 1949) has done much to co-ordinate and develop scientific research in this continent through meetings, courses in modern research techniques, associations for the advancement of science and science exhibitions. The Middle East Office (Cairo) has helped to solve thousands of individual problems for scientists and has concentrated chiefly on arid zone studies. The South Asia Office (New Delhi) and South-East Asia Office (Jakarta) have helped scientists in these vast areas to overcome many obstacles and to establish contacts with each other. Set up to aid scientific liaison and becoming, by force of circumstance, UNESCO liaison offices, they are now situated in the centre of the latest trend in UNESCO's policy toward direct participation in the efforts of Member States, at their request, and a more judicious implementation of the Expanded Programme of Technical Assistance.

(1) A detailed and impartial account of ten years of science at UNESCO by Professor Marcel Florkin is given in the latest issue of "Impact", (Volume VII, No 3, September 1956).



CHARTER AGAINST INJUSTICE

IN December 1948, the U.N. General Assembly adopted the Universal Declaration of Human Rights. UNESCO, which had contributed to its preparation, immediately decided to make this declaration known as widely as possible—a decision which it is still carrying out. For UNESCO found in the Declaration of Human Rights a source of support and encouragement. Charged with "reinforcing the moral and intellectual solidarity" of mankind, UNESCO was able to remind the world that such solidarity could exist only if it were solidly based upon respect for the individual.

All of UNESCO's activities contribute directly or indirectly to the realization of human rights. Through technical assistance and fundamental education in the less developed countries, it has worked to improve economic opportunities and raise standards of living. It has helped to extend free and compulsory primary education, so that more and more children might enjoy the right to education, and to improve teaching methods and materials. It has aided in the development of education for international understanding through seminars, publications and experimental programmes in schools. It has helped to promote artistic and cultural activities and the advancement of science, and to bring their benefits within the reach of more and more people.

For UNESCO, The Universal Declaration of Human Rights is not only a definition of standards, but a programme of action as well, and every task it undertakes is aimed at making a living reality of the principles of the Declaration. Above, the U.N. stamp issued for Human Rights Day (December 10) 1956. Below, the stamp commemorating U.N. Day (October 24) 1956.



Not by preaching peace ...but by building it

It is mankind that counts in the long run. Man is always the final goal of research. If this world is making progress, then it is thanks to the union of science and of a humanism open to all traditions and to all spiritual forces. In this respect, the work now being undertaken on the publication of a scientific and cultural history of mankind will serve a useful purpose by shedding light on the unanimity of hopes and the diversity of efforts which, over the centuries, have built the heritage we call civilization.

UNESCO has already shown how present-day man manages to profit only poorly from this heritage. He teaches his children an almost exclusively national "history", thus giving them a deformed, inadequate and occasionally absurd image of the story of mankind. He painstakingly studies each relic of "his" literary or artistic traditions, exalting their superiority over all other traditions. He boasts of his great men and preaches their philosophies, casting only scorn upon the glories and the philosophies of others—when he is aware of their existence.

Realistic exchanges between the cultures of East and West; education stripped of political prejudices and more receptive to the contributions of literature, the arts and religion without any arbitrary exclusions: these are the goals sought by the teachers, the writers and the philosophers who have been called together on many occasions by UNESCO to compare curricula and teaching methods. A host of contacts has been established, books have been published, and practical results have been achieved in such fields as textbook revision in some lands.

In carrying out a great part of its work in this field and in all fields growing out of a broadened and rejuvenated humanism, UNESCO has received the assistance of many associations which it grouped together in 1949 in the International Council for Philosophy and Humanistic Studies. The activities carried out with the support of this council run from archaeology to the history of religion, from Hellenism to ethnography or from Orientalism to medieval philosophy. However, the objectives of this work are revealed in the review *Diogenes* published by the council since 1952.



Last year, in defining itself as "a crossroads with signposts indicating where man stands today among all cultures of which he can be equally proud to have been the author", this international review at the same time drew the image of a future toward which UNESCO must work. This extension of the domain of the humanities to the fifteen or twenty centres of civilizations which have given modern man unequal but equally irreplaceable gifts, has placed him in a position where he can no longer afford to grant exorbitant privileges to one centre.

These results could not have been achieved had UNESCO not declared, ten years ago, that one of its foundation stones was "the intellectual solidarity of mankind", and decided that it would favour "all action leading to a stronger union of traditions".

Throughout the entire world—and not merely in

the 77 countries making up UNESCO in 1956—men have embarked on this intellectual collaboration from which all sources of civilization must benefit. Over the past ten years, many barriers, once believed immovable, have fallen and many prejudices have disappeared. Every time a breach has been opened in the walls of ignorance, routine and fear, it is because men have chosen knowledge rather than resign themselves to a twilight existence.

This is the exploration of all the landmarks in the last decade of the cultural life of nations. Free, compulsory education has been given to millions of children whose fathers never had the right to schools. Through books, films and the radio, a huge mass of knowledge has reached an ever-growing audience. Cities and nations have awakened to their historical and artistic treasures—and to the human value of such treasures in general. In every case, there have been leaders and pioneers—and it is they who make up UNESCO.



So, in this respect, it would be wise to watch in the future the work of UNESCO fellowship holders. At present, they number more than a thousand and, to many of them, their countries have entrusted special responsibilities upon their return from study abroad. Whether educators, scientists, sociologists, writers or artists, they have been able to perfect their methods and techniques. More important, they have acquired experience in international co-operation. If they teach what they have learned from this experience, the results of their apprenticeship will be incalculable: in Europe, more than 3,000 workers representing almost every trade have already been able to visit their counterparts in other countries. Students, too, are travelling in greater and greater numbers: an annual directory published by UNESCO lists more than 50,000 fellowships for foreign students throughout the world (1).

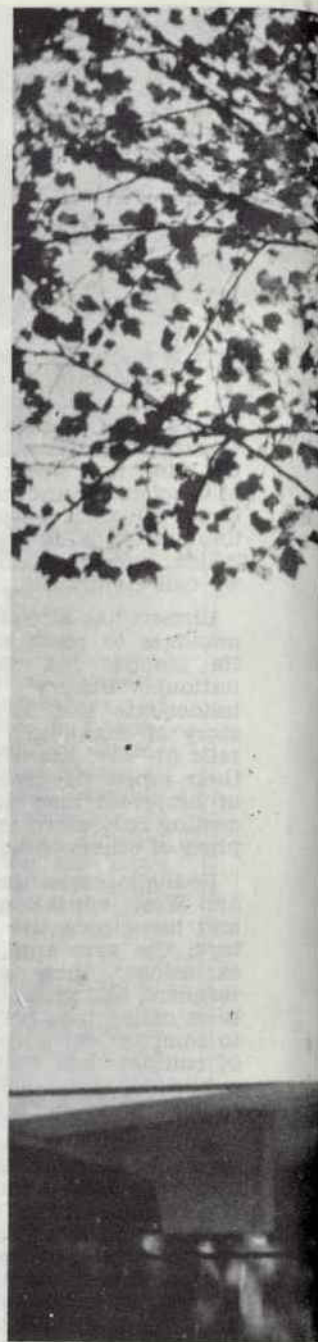
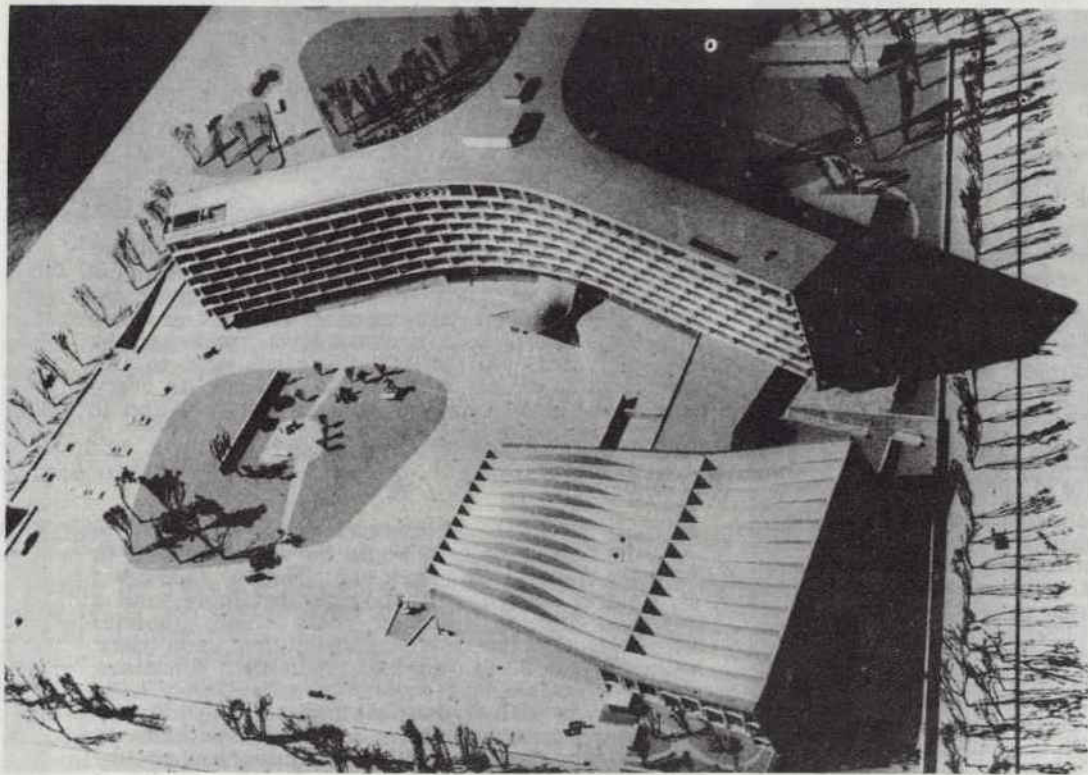
Here, too, youth organizations have played a major role of which the international work camp movement is only one example. For the past decade, their organizations have learned to know each other, to profit mutually from their experiences and to settle their differences. Youth has found, especially in fundamental education work, a chance to use its generosity and its love of action.

These associations also help to constitute UNESCO, a UNESCO reinforced by 400 international non-governmental organizations. Thanks to them and thanks to the UNESCO National Commissions of Member States it is now possible to co-ordinate the efforts of all men who seek to work for the progress of reason and justice. In this way an immense intellectual network is being built, a network resembling a nervous system whose sensitive tips reach out to unite scientists in laboratories, workers in fields and factories, and students in schools and universities.

It is in this way that modern men can work "in the service of peace". Not by preaching peace . . . but by building it.

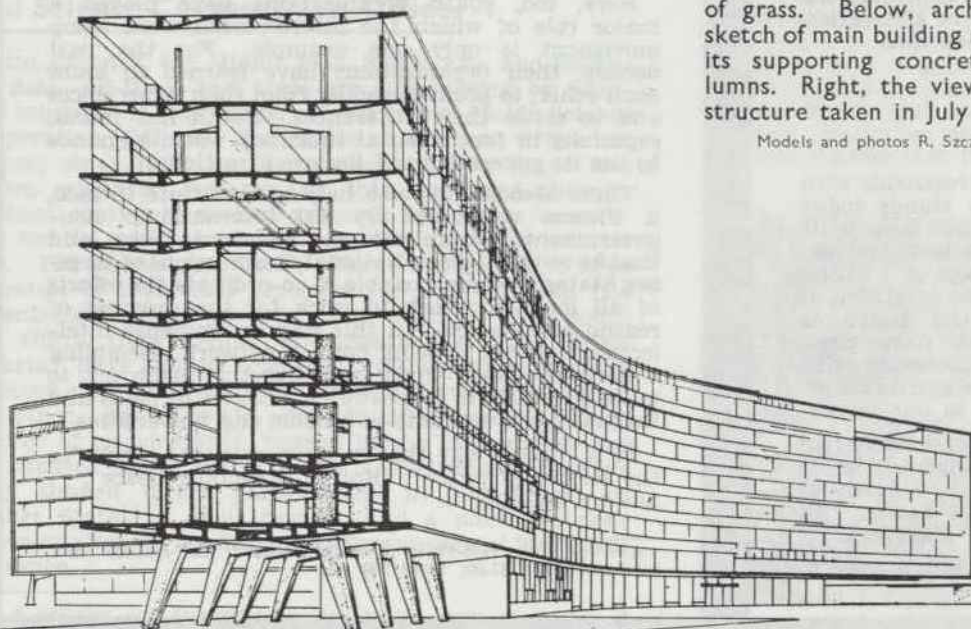
(1) Vol. VII, 1956-57 of "Study Abroad" has recently been published. Price \$2.00; 10/6; 500 frs.

NEW UNESCO H. Q. RISES IN PARIS

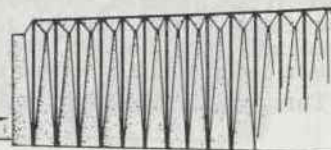


Above, scale model of Unesco Headquarters site, showing Secretariat Building (top), Conference Building with its concertina-like roof and the vast, paved piazza with an "island" of grass. Below, architect's sketch of main building reveals its supporting concrete columns. Right, the view of a structure taken in July 1956.

Models and photos R. Szczesnowicz



F E E T 0 10 20 30 40 50
M E T R E S 0 5 10 15





UNESCO, whose Paris headquarters for the past ten years has been a hotel near the Arc de Triomphe, will soon have a new permanent home on a seven and a half acre site near the Eiffel Tower, on the left bank of the Seine.

Comprising two buildings of striking design in a setting of gardens, trees and patios, the new headquarters is an architectural innovation for postwar Paris. The larger of the two buildings, a seven-storey, Y-shaped structure, 90 feet high, is for the UNESCO staff. It is supported on "stilts" so that it appears to be suspended in the air, and its reinforced concrete frame is enclosed by 50,000 square feet of glass in some 950 windows.

Thanks to the Y form, each of the 600 offices overlooks Paris. The ceiling of each is sound-proofed and slopes up gradually until it meets a large window. The building also houses staff meeting rooms, a medical centre, restaurant, cafeteria and bar for delegates and staff. Three systems of heating—hot water radiators, radiant heat and temperature-controlled forced ventilation—will be used to meet the needs of different areas.

In the basement are five radio and television studios, workshops, a cinema, central heating equipment, a

telephone switchboard with 100 outside and 1,300 internal lines, emergency electricity plant and storerooms. Workshops where UNESCO documents and publications are printed cover a total surface of 21,500 square feet.

Standing in the curve of one arm of the main building is the low trapezoidal structure grouping conference halls and services. The largest of its main halls seats about 700 people, including members of the public. Each hall is fitted with the latest equipment for simultaneous interpretation in the four official languages of UNESCO.

The H.Q. was designed by an international team of architects—Bernard Zehrfuss of France, Pier Nervi of Italy and Marcel Breuer of the United States—aided by an advisory committee of five famous architects: Lucio Costa (Brazil); Walter Gropius (U.S.A.); Charles Le Corbusier (France); Sven Markelius (Sweden); and Ernesto Rogers (Italy). Chief Engineer in charge of building operations on the site is the American engineer and architect, Eugene H. Callison.

The designers were required to complete the vacant half of the semi-circular Place de Fontenoy laid out by the 18th century architect, Jacques-Ange Gabriel, creator

Cont'd
on
next page

New Unesco H.Q.

(Continued)

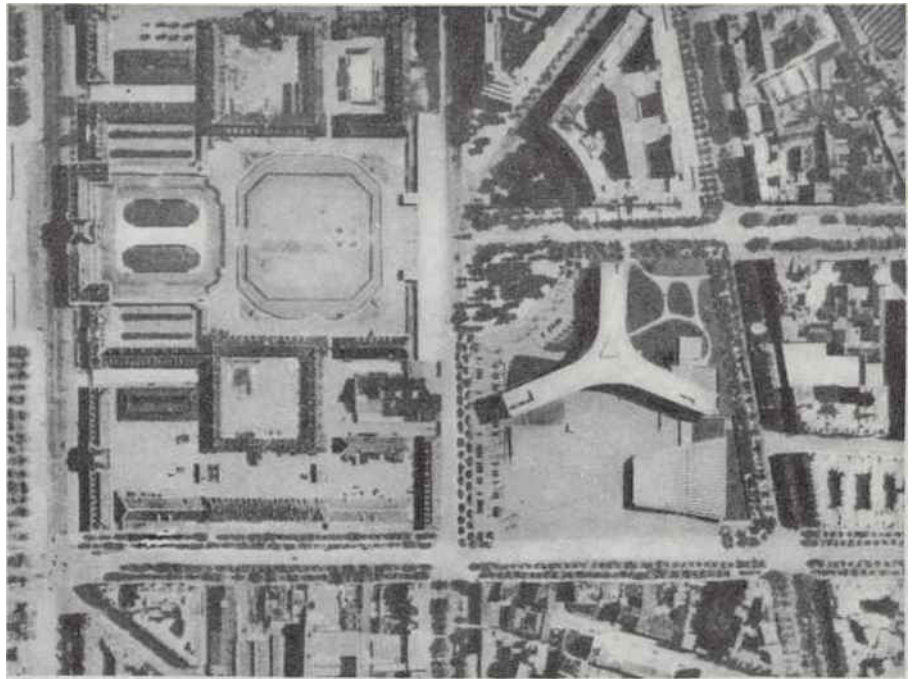
of the Paris Military College and the Petit Trianon at Versailles. They were also restricted to a height of seven storeys. Working under these limitations, they designed a building in the form of a Y, whose curved prongs form three unbroken façades, one of which completes Gabriel's plan for the Place de Fontenoy.

For the decoration of the new H.Q., UNESCO's Director-General is advised by a committee of art specialists. So far, six internationally-known artists have agreed to execute works. Pablo Picasso, for example, is to produce a mural covering 1,100 square feet in the Conference Building. A monumental sculpture for the main piazza will be made by Henry Moore of Great Britain. France's Jean Arp will do a bas-relief or some other decorative work on the outer wall of the library, Alexander Calder of the U.S.A. will design a mobile for the garden, Spain's Joan Miro will execute a ceramic mural, forty feet by six feet, and Isamu Noguchi (Japan) will arrange the decoration of the delegates' patio and a 20th-century garden based on traditional Japanese gardens. A number of UNESCO's Member States particularly reputed for their achievements in interior decorating have been asked to carry out the decoration of six committee rooms, the library and the press room.

Floor surfaces of the two buildings add up to over seven acres, but only one-eighth of the total H.Q. site is occupied by buildings, leaving room for gardens, patios and parking space for cars. Cost of construction and equipment being carried out by firms from six countries is covered by an interest-free loan from the French Government.

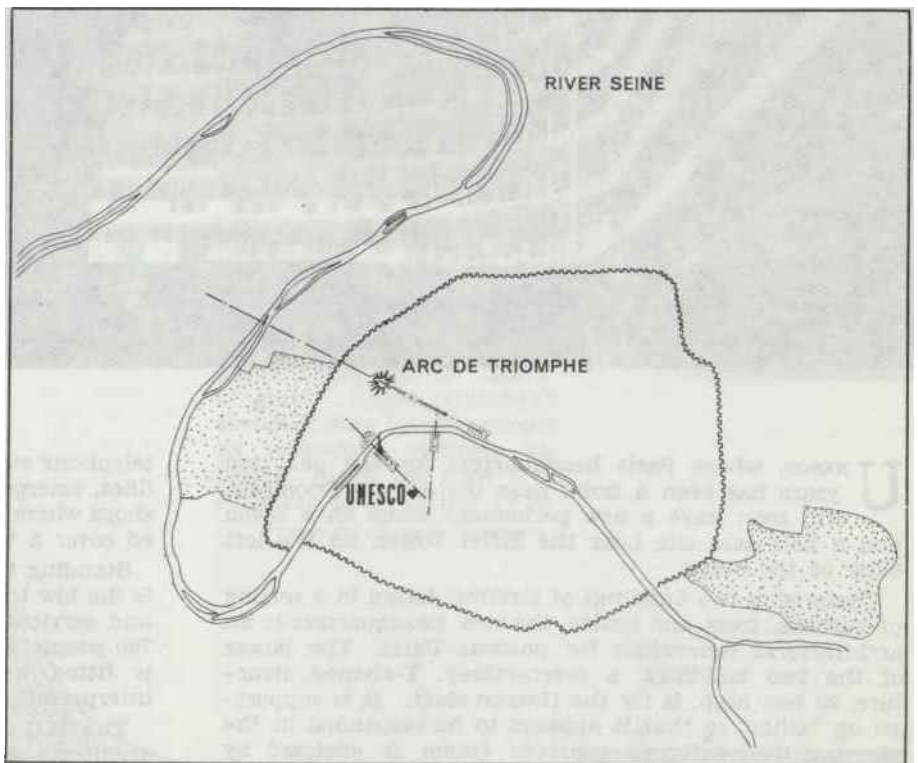
Ground was broken on the new site (leased to UNESCO by the French Government for 99 years at a symbolic annual rent of approximately two dollars and eighty cents) in April 1955 and structural work on both buildings was completed in July 1956. The installation of services and the interior decorating are due to be finished by the autumn of 1957, when the UNESCO staff will move to the new H.Q. from its present temporary quarters.

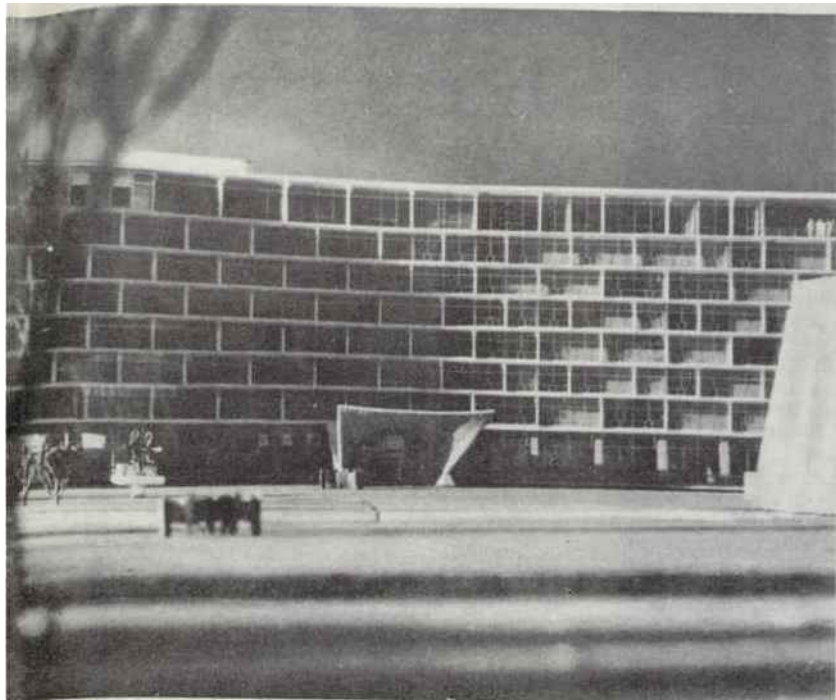
When completed, UNESCO's Headquarters will undoubtedly become one of the show places of Paris, "embodying", as Dr. Luther Evans, UNESCO's Director-General, has put it, "as far as architectural design can, the inheritance of our past and the hope of our future."



UNESCO

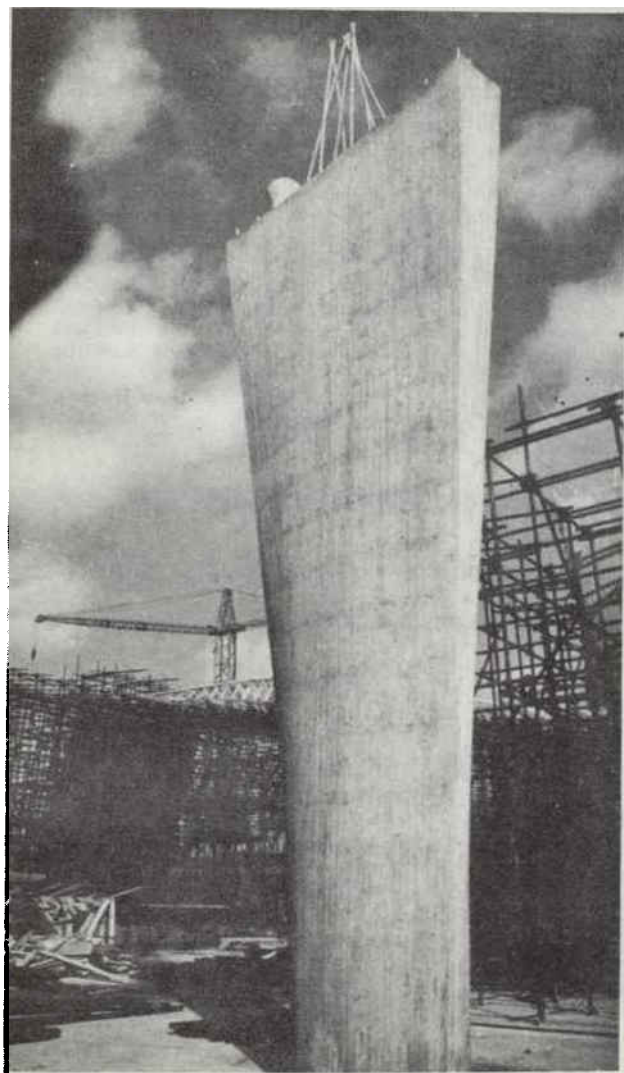
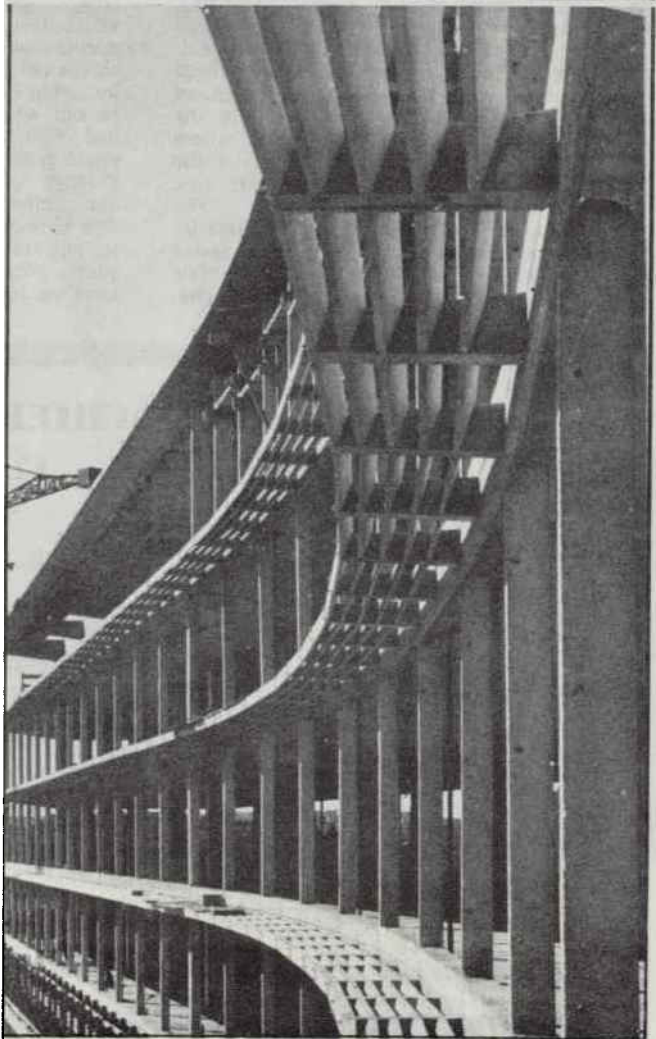
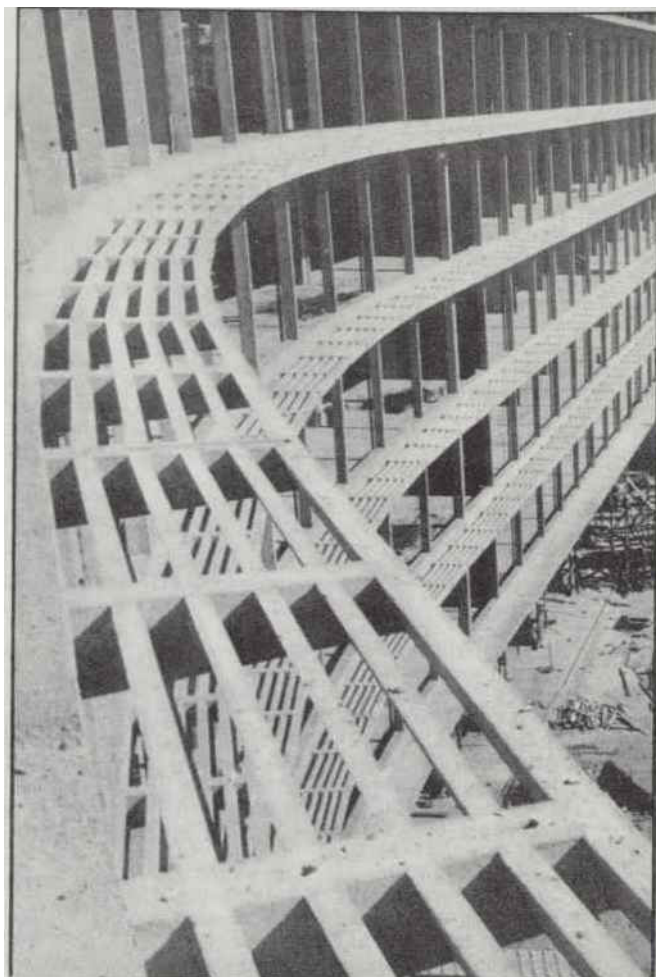
Above, air view of Unesco H.Q. site and Paris Military College Below, location in Paris of Unesco site. Woods, indicated by dots, are Bois de Boulogne (left) and Bois de Vincennes. New Unesco H.Q. extends axis of three famous Paris landmarks—the Palais de Chaillot, (not shown in diagram, bottom of page), the Eiffel Tower and the Military College. Dome rising above Unesco buildings is the Invalides, where Napoleon was buried in 1840.





Model and photo R. Szczesnowicz

MAXIMUM AIR AND LIGHT are assured for offices by design of main Unesco building. Lifts, services and passages are in a central core; all offices look out over Paris. Model shows it as it will appear when completed. At centre is main entrance.



UNESCO

MASSIVE YET GRACEFUL trapezoidal concrete pillar is one of supports for Conference Building roof. The wooden forms into which the concrete was poured have left their marks on the supports— so that they become a planned decorative element.

Letters to the Editor

Sir,

After reading the article by Dr. E.H. Ackerknecht, "No 'Hocus Pocus' in the Medicine Man" [THE UNESCO COURIER, July-August 1956: U.S. September], I am convinced that primitive medicine is on a par with that taught by the great European Faculties of Medicine. Would you therefore be kind enough to give me the address of a good medicine man who might be able to rid me of my headaches.

Michel Demaret.

Lille, France.

Editor's note: If our correspondent cares to inform us how much he is willing to spend for his journey, we will gladly supply him with a reliable address in Africa or Melanesia.

Sir,

In his article "Haunting Museums Hidden in the Jungle", describing Bahnar cemeteries in Indo-China, [THE UNESCO COURIER, September 1956: U.S., October], Frantz Laforest writes: "Tombs, now in ruin, have four small megaliths round them, and also mysterious figures. These 'thinkers' at the corners recall the *korwars* of Melanesia. Are these statues 'companions' for the souls of the dead? Some represent couples locked in an embrace. Do they symbolize a rebirth or a survival? The wooden phantoms in these haunting museums will eventually disappear, taking their secret with them." These "thinkers", seated with elbows on knees and head in hands (in the Solomon Isles, supporting the head in the hands is a ritual gesture used to indicate the spirit of a dead person) are also found in the Philippines and in New Guinea where they represent ancestor spirits which the living wish to conciliate with offerings, marks of respect and prayers. The "thinkers" of the Bahnar cemeteries resemble much more closely the ancestor figures of the Philippines and New Guinea than the *korwars* of Melanesia,

mentioned in the article. Here also ancestors are represented but the attitude is slightly different, a *korwar* being a seated man leaning on a shield.

The Bahnar cemetery "thinkers" are undoubtedly ancestor figures like those of the Philippines and New Guinea and I do not think we can say a true "mystery" surrounds them. This is simply one minor detail from the amazing complexity of the mysterious Megalithic culture to which Frantz Laforest has referred so pertinently.

Might I, at the same time, congratulate you on the general standard of your articles. You have managed to gain a large readership without in any way yielding to the temptation of the facile solution. Within a world framework of cultural development you are doing a remarkable job of popularization. Without lowering your standards, you arouse in the non-specialist reader an interest in questions that the public generally leaves to experts. You do it so effectively that the reader feels an urge to find out still more, to go beyond the bounds both of the material limitations of your articles, and the limit of his own knowledge.

Bernard Peirani.

Paris, France.

Sir,

I am president of a small club—the United Nations Youth Fellowship—which is a junior branch of the U.N. Association in Adelaide. Our 150 members include many nationalities, including Europeans and Asian students. In our six years of existence we have had little contact with similar U.N. youth groups in other parts of the world. Perhaps we might be able to compare our activities and interests through THE UNESCO COURIER, thus gaining ideas to add more variety and life to our yearly programmes. Has there been an issue on international cooking and ways

of eating yet? I'm sure we have much to learn here in Australia on that subject.

A.C. Adams.

**North Adelaide,
South Australia.**

Sir,

I find that your article, "No Right to Despise a Fellow Creature" by G.P. Malalasekera ["Twenty-five Centuries of Buddhist Art and Culture", UNESCO COURIER, June 1956: U.S. August] is an extract from Buddhism and the Race Concept written for UNESCO jointly by Professor Malalasekera and me. I therefore have to presume that since you have published this as an article exclusively by Prof. Malalasekera without recognition of my authorship, this is due to inadvertence on your part.

K.N. Jayatilleke.

University of Ceylon,

Editor's note: The editors sincerely regret the inadvertent omission of Professor Jayatilleke's name. The study in question, scheduled for publication in 1957, is for the UNESCO series, "The Race Question and Modern Thought".

Sir,

Aged 16 and a half, I am in the senior class of a French secondary school. I have been a subscriber to THE UNESCO COURIER for the past year, and consider it a remarkable magazine. Interested in all questions of a general cultural nature, particularly ethnography and archaeology, I have always found your magazine full of interesting facts. Furthermore, its articles have the great advantage of being within everyone's grasp and it never has the dull and tedious character of so many scientific publications.

Leo Hughes.

**Strasbourg (Bas-Rhin),
France.**

Reserve your **UNESCO COURIER** at your magazine stand now — 25c per copy

Subscribe today — \$2.50 per year — Two years \$4.50

Fill in this subscription blank and mail it with your check or money order to:

UNESCO PUBLICATIONS CENTER, U.S.A.

152 West 42nd Street, New York 36, New York

Please enter my subscription for the UNESCO COURIER One year \$2.50 Two years \$4.50

Name.....
(please print)

Address.....
(please print)

City..... Zone..... State.....

NEXT MONTH
A SPECIAL
NEW YEAR GIFT

**Our January 1957
Issue**

**TEN PAGES OF FULL
COLOUR PLATES OF
ANCIENT MASTER-
PIECES OF WORLD
ART**

**An extra-special
52-page issue devoted
entirely to the art of**

**IRAN
SPAIN
ITALY**

SINGLE COPY PRICE :
50 cents, 2/-, 100 Fr. fr.

***Subscribers will receive this
special number at no extra
cost. SUBSCRIBE NOW.***

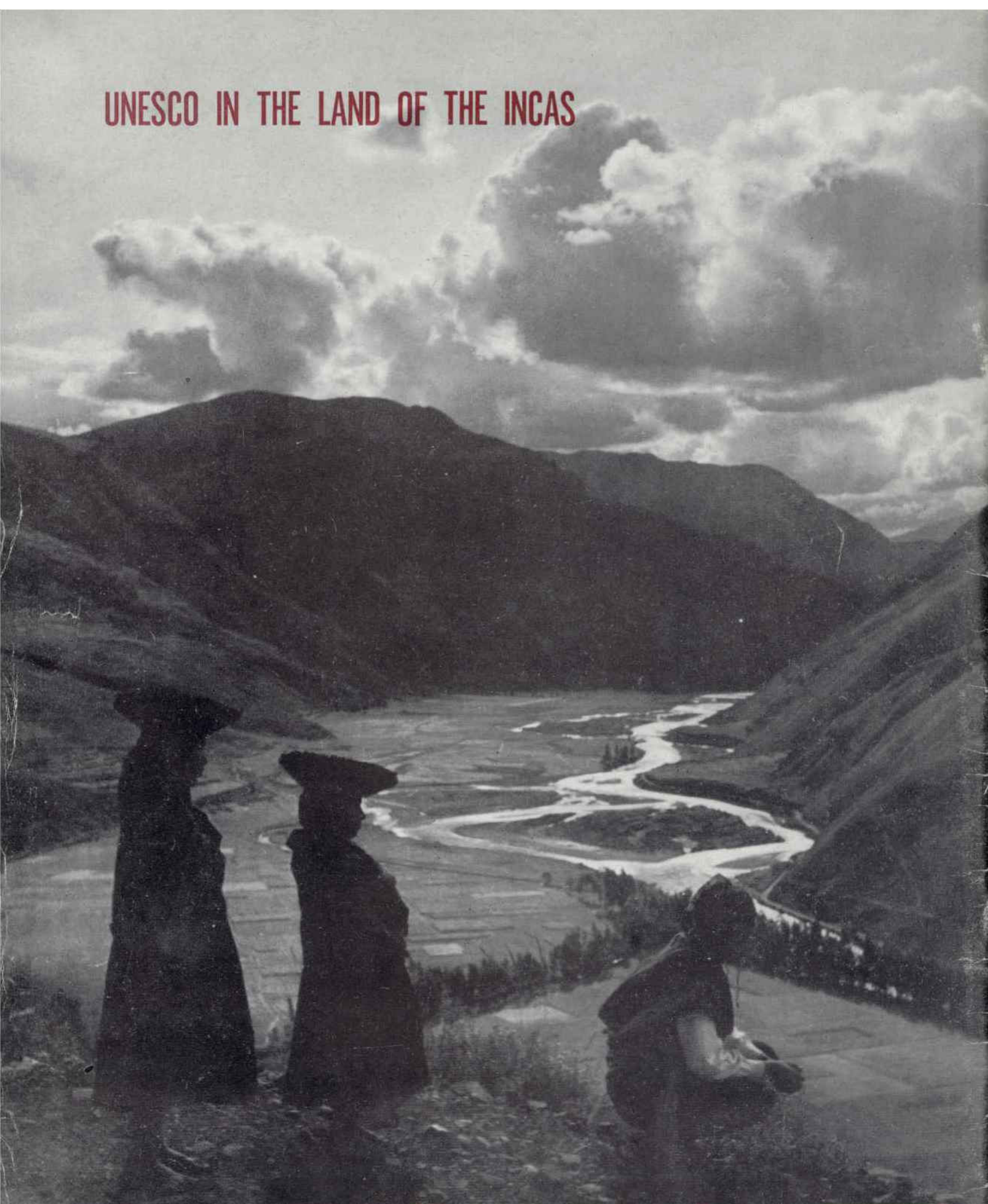
***Send a gift subscription
to your friends.***

Annual rate :
\$ 2.50; 8,-; 400 Fr. fr.



ADAM AND EVE driven out of Paradise. Detail of one of Masaccio's great frescoes in the Brancacci Chapel, Church of Santa Maria del Carmine, Florence.
Taken from the forthcoming Unesco Album, "Masaccio".

UNESCO IN THE LAND OF THE INCAS



In the mountains overlooking Cuzco, ancient capital of the Inca Empire, and the Rio Villcanota Valley (shown here) the Peruvian Government has set up a fundamental education project. It is being run by teachers trained in the Regional Fundamental Education Centre for Latin America created in 1951 by Unesco and the Mexican Government. Today Unesco aids six national fundamental education centres and supports projects in 30 countries. (See page 24)

UNESCO - de Reparaz.