A WINDOW OPEN ON THE WORLD

The UNESCO Courier

JANUARY 1961 (14th year) - Price : 1/-stg. (U.K.) - 30 cents (U.S.) - 0,70 NF. (FRANCE)

In Arab lands: LEARNING MEANS LIGHT

THEY ARE NOT OUTCASTS

For centuries leprosy has been hated and feared as the most hideous of man's afflictions and its victims called "unclean". But medical science now has new drugs to arrest and even cure leprosy. Above, Dr. Tokuzo Yokota (son of the world famous Japanese leprologist, Professor Kensuke Mitsuda) probes areas of a patient's back made insensitive by leprosy; below, physical culture aids rehabilitation. (See p. 27.)

The UNESCO Courier

JANUARY 1961
14TH YEAR

Contents

No. 1

COVER PHOTO

From the derricks of Kuwait to the pasture lands of the Atlas, from the banks of the Orontes to those of the Upper Nile —in all the parched lands of the Arab world there is a great thirst for education. A race is now on between the population increase and schools—and according to a Unesco finding the schools are going to win. (See p. 16) Photo shows secondary schoolgirl in modern Sudan.

Published monthly by
The United Nations Educational, Scientific and Cultural Organization

Editorial Offices
Unesco, Place de Fontenoy, Paris 7e, France

Editor-in-Chief
Sandy Koffler

Assistant Editor
Alexandre Leventis †

Associate Editors
English Edition : Ronald Fenton
French Edition : Célia Bertin
Spanish Edition : Amparo Alvajar
Russian Edition : Veniamin Matchavariani
German Edition : Hans Rieben
Arabic Edition : Amin Chaker

Layout & Design
Robert Jacquemin

THE UNESCO COURIER is published monthly, except in July and August when it is bi-monthly, in English, French, Spanish, Russian, German and Arabic. In the United States of America it is distributed by the UNESCO Publications Center, U.S.A. 801 Third Avenue, New York 22, N.Y. Plaza 1-3860. Second-class mail privileges authorized at NewYork, N.Y. (M.C. 61.1.154 A).

Annual subscription rates: $ 3.00; 10/-stg.; 7.00 New Francs or equivalent. Single copies 1/-stg. 30 cents (U.S.); 0.70 New Francs.

Sales & Distribution Offices
Unesco, Place de Fontenoy, Paris 7e.

All correspondence should be addressed to the Editor-in-Chief.

BECOMING AN EDUCATED MAN IN OUR MODERN WORLD

by Margaret Mead

Photos © Paul Almasy, Paris

IT IS NO LONGER the underprivileged, the illiterate or the villagers to whom a new road gives access to urban life, who as adults learn crumbs fallen from the tables of those who as children feasted on the slowly accumulated knowledge of the past. Now it is the elite among the adults of the educationally elite countries who "go back to school"—even this old phrase is out of date—with fellowships, exchange visits and small international conferences which accomplish in a week more than a year of reading could do.

PERHAPS no field of education has undergone such profound changes in theory and practice as the field once called "adult education," later expanded to include "fundamental education," and now, in those countries which originally supplied the models, more often referred to as "continuing education." We may identify briefly the underlying ideas behind these recognizable stages.

The early effort in adult education took its impetus from the needs of the underprivileged within modern industrialized society, the needs of workers, women, suppressed minorities, of those who had failed to receive "enough" or "their fair share" of that transmissible block of traditional knowledge and skills called "a good education". Programmes designed to make good this deficit were motivated by a growing demand from the under-educated and a growing sense of responsibility on the part of the educated.

The consciousness of educational inferiority or deficit ran through everything that was done; the snobbery which identified a higher class level with a higher degree of familiarity with "the classics", "great ideas" and so forth pervades the topics chosen for adult education Implicitly it was assumed that the gap between those who had read Latin and Greek in the original, and those who had read nothing beyond an elementary school level, could somehow be bridged by reading Latin and Greek works—in translation.

This attempt to make superficially equal the educationally unequal still pervades certain old-fashioned types of workers' education in English-speaking countries. It has also had a considerable effect on the kind of low-level "higher education" given in those countries where secondary school education is becoming the ideal for all normal children. Hastily assembled, superficial versions of what was once taught to the few, as children, and later taught, condescendingly, to the less educated as adults, is now taught to late adolescents.

A second stage which later came to be summarized under the term "fundamental education" grew out of programmes for peasant immigrants in countries like the United States, and for peasants who were to be rapidly upgraded into active members of their own modernizing societies in countries like the Soviet Union. Coupled with this was a growing emphasis on the application of modern science to the promotion of health, on new forms of medical care, public health, community organization, agricultural practices, and other new techniques.

Adult education became a device for feeding modern health, technological and organizational practices to communities of adults who were thus being brought up to date, or into line, with more favoured, more urban, or more educated portions of society.

LITERACY became very strictly a means towards the conversion of the backward citizen, subject, colonial or trust territory member, into a receiver and executor of certain necessary techniques: vaccination, immunization, baby-care clinics, food supplements, artificial fertilizers, and the like. Where the older form of "adult education" was grounded in a sense of "educational deprivation" to be made up by acquiring access to higher things, this new form of practical welfare education was grounded in what was seen as either a need already present or one to be stimulated until it became a felt need.

As in the earlier form, the sense of urgency rested with the superior group who were outraged at the low levels of literacy, nutrition, and medical care found in the villages. Considering how much work was required to find community leaders able finally to awaken community participation, the rationale of the whole process seems more than a little suspect.

A tremendous amount of waste motion was involved because the new techniques—modern latrines, modern methods of cultivation, modern methods of handling credit—were introduced without recognition of the importance of grounding them in the culture of the recipients. Their original culture, whether that of a village in South America, an enclave of peasant immigrants in the United States, a village in South-East Asia, or an African tribe, was seen as intrinsically inferior to the modern world, something to be fought with, got over, got around, by hasty, widespread "fundamental education".

Those adults who had learned to read, to order new seeds, to protect their wells, to drain their ponds—those who were "modern" rather than "old-fashioned" or "traditional"—were viewed rather like an army of poorly equipped recruits who had been furbished up with accelerated methods to make it possible for them to operate within the army setting. Although they had a lot of new skills and acceptances, they were not expected to be, in any important sense, changed people, merely a new and less embarrassing sort of inferior people.

This kind of catching up at a low level has effected the elementary educational systems of the less developed countries. As a result, the ideal of universal education which has caught the imagination of peoples all over the world is, in fact, an ideal of raising the bulk of the population of countries now 80 or 90 per cent illiterate up to the standard of elementary third of fourth grade education in countries with established secondary school systems.

To the extent that these new systems of education borrow from the modern industrialized world, and teach 6-year-olds as if they were first year pupils in a 10- or 12-year educational system, the teaching of reading, for example, will include vocabulary and allusions in anticipation of a secondary school education that will never be given. Moreover, the essential lack of connexion between the literacy taught in school and a world in which nothing will ever be read except a few government notices and forms makes the whole system into a mockery.

The edge is being taken off the hunger for "education" —almost more insistent than the hunger for better food, in so many parts of the world—by this reflection, at the elementary school level, of the essentially superficial image introduced by attempts at rapid "fundamental education" for the adult villagers of these societies.

The most recent phase of the emphasis on fundamental or community education indicated a growing acknowledgment of a "widening gap" between the economically highly developed and the economically underdeveloped countries—an idea rapidly replacing our immediately post World War II image of a triumphant attack on ignorance, poverty and ill health right round the world.

The underdeveloped countries were entering the educational scene at a period when the rate of change in knowledge, especially in the sciences, was the fastest mankind had ever known; therefore, however fast these new countries might move towards universal literacy, towards a full complement of elementary schools for all children, towards the beginning of secondary schools, towards a national university, they would fall farther and farther behind in a world race for the number of students in universities.

This lag would be not only quantitative but also qualitative; fewer students would have a chance of getting higher education, so fewer first-rate students would be identified. The bright optimism of freedom from ignorance for all was fading.

Meanwhile, in the most industrialized countries, it is being recognized that the kinds of distinctions which were once made between "education" the orderly transmission of certain parts of our accumulated tradition to the young while they were still *in statu pupillari*, and "adult education", which imparted to adults, in odd hours and off seasons, some things they should have learned when they were young, are no longer meaningful.

A great deal of what needs to be taught to adults today was unknown when they were young. Continuing education throughout life has become a necessity in almost every field of life, from housekeeping to atomic physics. The emphasis is no longer upon the mass of materials and skills contained in a "good education", distributed in unequal amounts among the members of different socio-economic groups within a nation, and among

CONT'D ON NEXT PAGE

STEREOTYPE OF THE 'HORSE AGE' MENTALITY

the peoples of the world, in which all would soon come to have at least a small and inferior share.

Instead, attention is being given to the relationships between old knowledge and old skills, and new knowledge and new skills, and to the difference in the ways of learning of children, uncommitted young adults without family responsibilities, and mature adults with responsibilities.

This recognition is coming on the heels of a period in history when change was slow enough for the difference in the kind of acceptance which was given by grandfather and grandson to a new idea to be explained by the inability of the old to learn new ideas. Elasticity and speed of learning were believed to be unique characteristics of childhood, and all learning was therefore seen, although it was not usually put that way, as a subtle interference with any other learning.

Having learned French made one less able to learn English, having learned to plough with a hand plough made one less able to plough with a draft animal, having learned to make pots by hand made one less able to learn to use a potter's wheel. Grandfather, who grew up in the horse age, was less able to adapt to the machine age than his grandson ; this observation successfully precluded any recognition that the first machines were invented and driven, not by children, but by men who had grown up riding and driving horses.

It was not too difficult to transmute the peoples of Asia or Africa into a kind of exaggerated replica of this view of grandfather—people who would really never learn about the modern world, who would never catch up.

The break may be said to have come when it was not a question of grandfather, whose ignorance could be explained away, but of self, when modern man began to realize that his own education was never finished, that he could fall behind, in any field, almost overnight, that education was no longer a matter of receiving while young a body of static knowledge, but had become a matter of lateral learning—learning not only from one's elders and one's peers, but very soon from those younger than oneself. Now, with much more rapid change, the deficiencies in the old attitude toward learning began to show; the need for a new attitude became apparent.

The merest flicker of recognition of this new state of education where change occurs very much more rapidly than normal human growth and a man can become outdated (or, in that curiously snobbish phrase, dated) not as he attains grey hairs and hardening arteries, but before he has reached middle age, the merest hint of this is enough to change our whole view of what was once called adult education.

It is no longer the underprivileged, the illiterate, the newly migrant, the villagers to whom a new road gives access to urban life, who as adults learn crumbs fallen from the tables of those who as children feasted on the slowly accumulated knowledge of the past. Now it is the elite among the adults of the educationally elite countries who "go back to school"—our words are still out of date—with post-graduate fellowship piled on post-graduate fellowship, with exchange visits and small international conferences which accomplish in a week more than a year of reading could do.

Our most massive endeavours at rethinking educational devices and methods are aimed at teaching physics, or cross-referencing biology. We are experiencing on a vast scale what has happened before on a lesser scale, at times when a new burst of knowledge, or knowledge-producing activity, moved a certain number of men to withdraw from the world and spend a lifetime mastering, moulding, and organizing the new knowledge for orderly transmission to future generations.

But if the knowledge with which men must work, and think, and orient their actions is changing almost daily, there is also a change in the relative positions of those whose forebears were educated—in the old sense—and those whose forebears were primitive men or isolated peasants.

Becoming an educated man does not depend, as it once did, on using the plastic years of childhood to accumulate a vast static body of information, of names of things, of forms of spelling and rhetoric, but rather upon the way in which a child learns to approach change itself. When that which was to be learned was settled and absolute enough to last a lifetime, the child whose parents and grandparents, playmates and neighbours had learned most of the same things could safely be taught that this particular accumulation of knowledge was true.

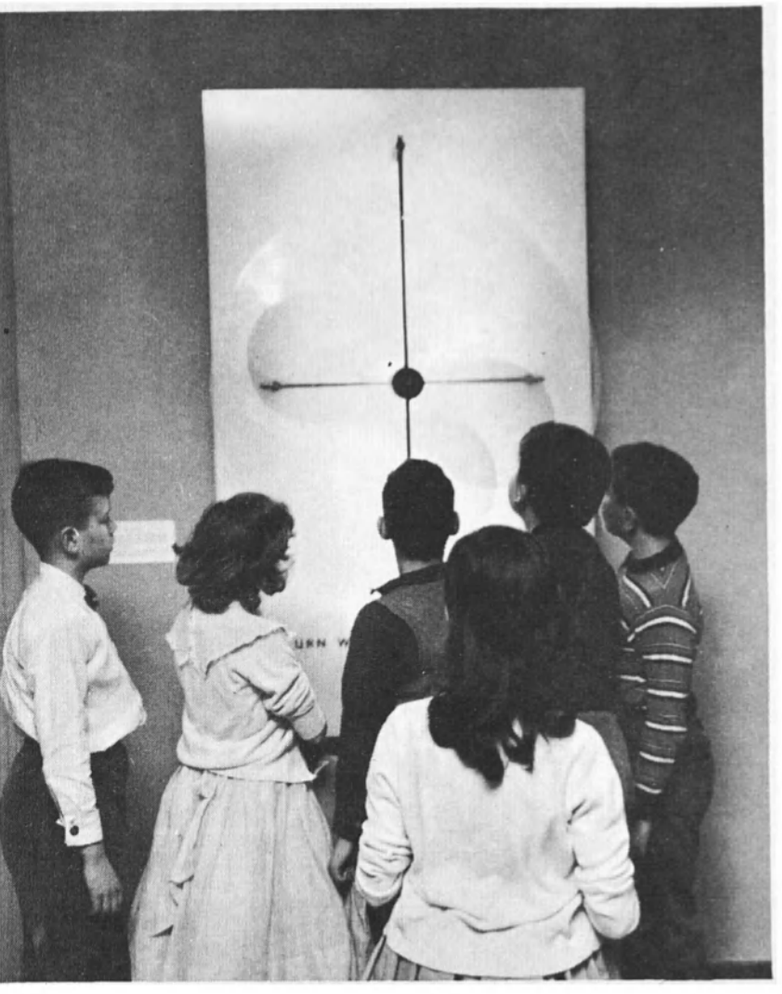
What once constituted an education—a hodge-podge of old and new ideas about the universe, old wives' tales and modern untried medical research, the spelling and pronunciation of one's language currently approved in the grammar books and dictionaries, the relative status of different countries, the intrinsic merits of particular forms of government, special forms of law and punishment, the whole mass of materials of different ages, different degrees of accuracy, provinciality and usefulness—this sort of education once served well enough to get each individual through his lifetime in the state of life in which he had begun it.

And such an education also served effectively to prevent much learning of new things. The observation that it was easier for an English boy to learn Latin than it would have been for a Nigerian was partly grounded on the ubiquity of Roman-derived elements in English culture, but even more on the expectation that an English education included Latin. An attempt to introduce Chinese into both a contemporary English school and a contemporary Nigerian school would meet objections because, in both the English school and in the Nigerian school modelled on the English school, Chinese was not something schoolboys learned.

The educated man simply acquired more little pigeonholes which it was appropriate for him to fill, sometimes even such bold little labels as a bit of "comparative religion" or "oriental languages" for the very few; he was prepared to add in certain ways, in certain little boxes, "the results of research" as long as they did not contradict too gravely what he had already learned—in which case he fought them as furiously as an Asian peasant resists a new type of field division. As soon as this was recognized, it also became apparent that what was crucial in the ability to assimilate changing information was not what had been learned but how it had been learned.

The child who had been solemnly taught that there is only major categorization of languages, a real language spoken by its own group, and "the way foreigners talk," is as effectively blocked off from new learning as the peasant who was taught to cling, with the desperation of the man who grasps only a part of his culture, to the way things were done in "his village," or as the nineteenth-century rationalist who believed that all problems of the relationship between Science, spelled with a capital, and religion had been solved by abolishing religion or relegating it to the level of "superstition."

Under the old system, children learned better than adults; they filled their notebooks and their minds with orderly sets of prejudices so arranged that there was less and less room for genuinely new ideas which would mean fundamental rearrangements at the root of the system.



© Three Lions, New York

THE GREAT CAPACITY for learning which is found in early childhood will in future be needed for something rather different than in the past. Childhood learning was once devoted to impressing on young minds a mass of facts ranging from the eternal and the trivial to the provincial and the special. For the world of tomorrow children will need to learn about the nature of numbers, the nature of time, ways of thinking about space and similar problems. Here, children learn how separate colours fuse with each other to form new tones.

Learning a language was not a matter of learning about languages—which could be expanded to include all known languages, artificial languages, and the creation of new languages—but was rather a condensation of the tremendous piece of learning, learning to speak, and the acquisition of a single language viewed in such a way that the learning of most, if not all, other languages was successfully prevented. Each knob and twist of the system, each local article of food or hygiene, was elevated into a state of absoluteness within which change could be introduced only in carefully prescribed areas where there were such matters as "fashion" or "new products".

But even in the old system, an adult did generalize far more than he was required to. He learned not only about francs or shillings or dollars, but enough about "money" so that even though he never treated the money of a foreign country as real he could still manage to use it. A man who had lived in a city knew something about the nature of cities, knew how to look for terminals and hostels and markets, for places of exchange and accommodation—things that, as in the case of money, no child knew. As men learned a particular culture, were educated in a particular way, they acquired a kind of back-handed, semi-realized knowledge of culture itself, although this knowledge was heavily hampered by the absoluteness with which they learned their own system.

Now today, the premium will be placed on individuals who are most able to preserve the kind of charts of possible knowledge and possible action into which each new experiment and innovation can fit. It will be the adult who has incorporated a new generalization, that is, the possibility of change at every point of his whole system of knowledge, who will be able to learn most and go furthest. The tremendous impetus to learning possible in early childhood will be needed for something rather different than its past uses.

CHILDREN will have to learn that their own language is one among many, their own alphabet only one of the ways of writing down speech, their own system of mathematical notations only one among many; that these are not the final systems, and often not the best. Childhood learning was once devoted to printing indelibly on young minds such matters as

Sixty seconds in a minute,
Sixty minutes in a hour,
I wish I were a little linnet
Singing in a leafy bower,

or:

First William the Norman
Then William his son,
Henry, Stephen, and Henry,
Then Richard and John.

or:

'I' before 'e'
Except after 'c'
And when pronounced 'ay'
As in neighbour and weigh.

Instead of committing to memory this dreadful heterogeneous pickle of the eternal, the trivial, the provincial and the special, children will be required in the future to learn about the nature of numbers, the nature of time, ways of thinking about space.

This shift in what the young need to be taught will have a profound effect on the ability of adults, whether adult members of a New Guinea tribe, adult peasants, adult migrants to a big city, or adult scholars who haven't looked at science for forty years, to learn completely new things.

THOSE who have learned that there are many systems in the world—language systems such as the many unwritten tongues spoken by the adjacent tribesmen, or systems of weights, and measures such as the English and the metric systems, or systems of transportation (human backs, jeeps, planes) rapidly replacing one another within the span of a few years—those adults will be recognized as the ones who are able to learn new things fast; their experience and expectation of contrast and change will be part of the equipment which they, as adults, bring to any new required piece of learning.

Instead of pityingly, tolerantly, helping adults to catch up with a little symbolic erudition or a few strictly utilitarian skills, we shall make a real search for adults who, just because they are adults, can build new knowledge on old in a way that the young child cannot. We won't particularly seek out adults who have learned their quota as children, nor steer away from those who failed to learn their quota as children; rather we shall place our emphasis on the kind of adult mind which is able to make swift, accurate transference from older experience to newer experience, because neither is felt as absolute or exclusive.

The next few years will be particularly valuable as we explore the extent to which adults with extraordinarily simple backgrounds but with this one requirement —an experience and expectation of change—can move into our complex modern culture and contribute new models for the way it can be learned, not only by adult savages but by adults everywhere.

This article originally appeared in Unesco's quarterly bulletin "Fundamental and Adult Education", vol. XII (1960), *N°* 3.

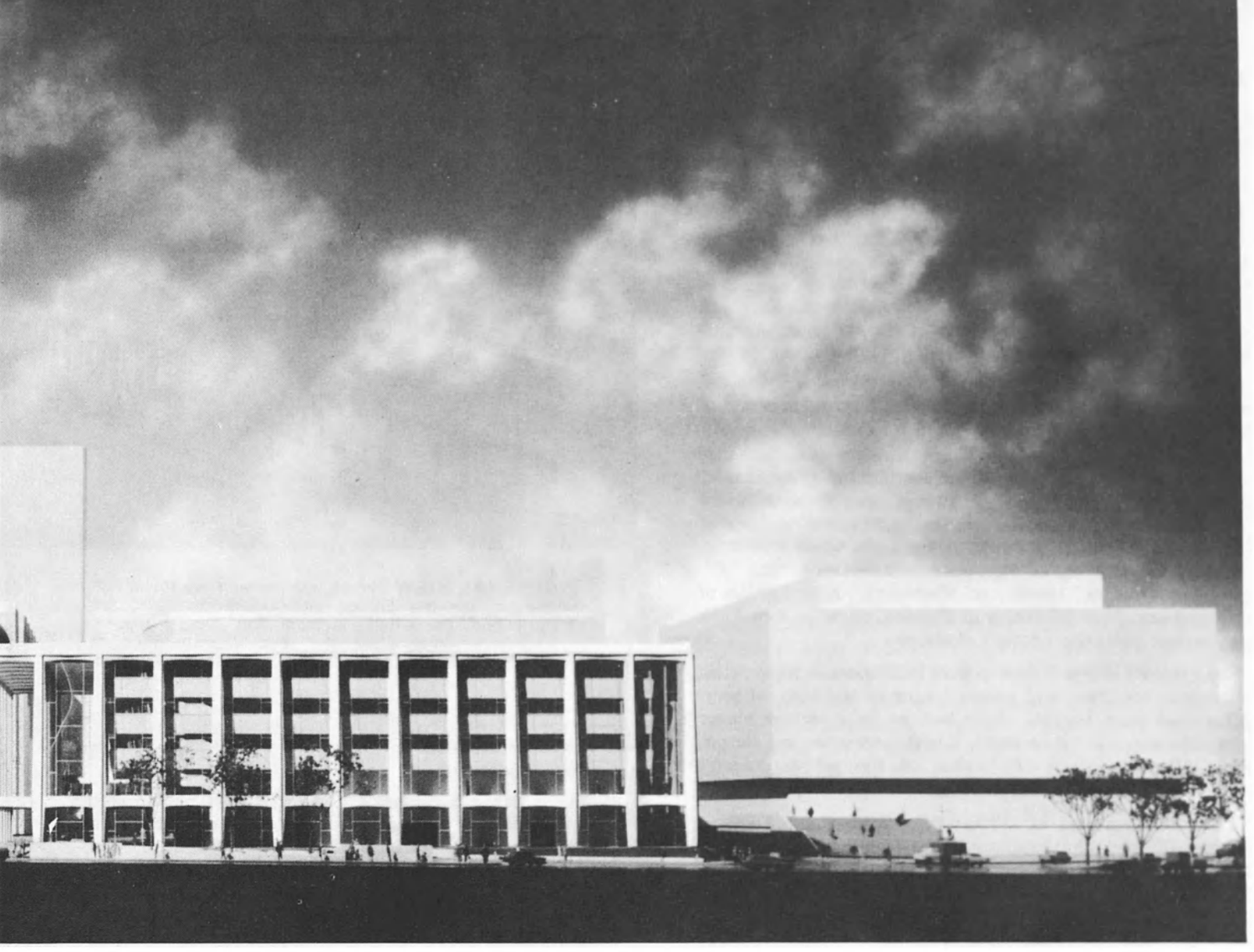
LINCOLN CENTER

AMERICA'S CAPITAL FOR DRAMA MUSIC & DANCING

by Peter D. Franklin

Photos © Ezra Stoller, New York

PANORAMIC VIEW of Lincoln Center for the Performing Arts as it will appear when completed is realistically represented (top of page) by latest architectural model of the $140 million project. Above, the center's section spanning New York's 65th Street. On the left, is the Philharmonic Hall; in background, is the new Metropolitan Opera House.



A CULTURAL renaissance is taking place in New York City on a fourteen acre site once dotted with slums. It is embodied in a bold and imaginative project, called the Lincoln Center for the Performing Arts, undertaken to satisfy the rebirth of interest in the arts, an interest generated not only by New Yorkers and Americans but by peoples of other lands as well.

"Here will occur a true interchange of the fruits of national cultures," said President Eisenhower at the groundbreaking ceremonies for the center on May 14, 1959. "From this will develop a growth that will spread to the corners of the earth, bringing with it the kind of human message that only individuals, not governments, can transmit."

Upon its scheduled completion in the spring of 1964, Lincoln Center will offer seven theatres, concert halls and educational buildings in which the world's greatest music, drama and dance will be performed before more than 3,200,000 people a year. Costing more than $140,000,000, it is probably the most ambitious civic project ever undertaken anywhere for the arts.

The concept of a cultural center has been discussed for years by many individuals and organizations but the seeds of the Lincoln Center were sown in 1955 when the Metropolitan Opera and the New York Philharmonic Orchestra each sought a new hall to better their existing facilities. Their joint eight-month study revealed that performing arts audiences were larger than ever before and the point had been reached on the American scene when advancement of these arts must become a community responsibility, in the same way as health, education and welfare.

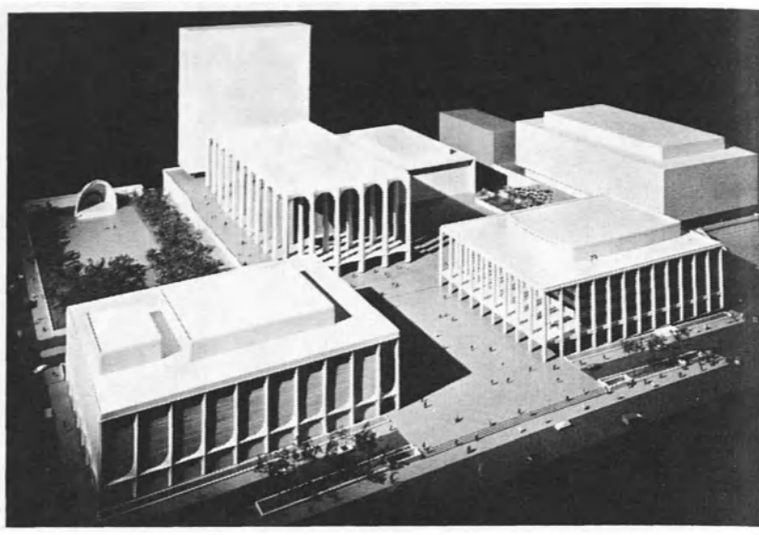
Under the chairmanship of John D. Rockefeller III further studies were undertaken to determine just what problems would lie in a cultural center's path and where that path should lead. The following June, Lincoln Center formally came into being to provide New York, the United States and other countries with "a new landmark... a symbol of our national regard for the arts and our recognition of their importance in the lives of the American people," the center's new president said.

A site was bought from the city at public auction on Manhattan's Upper West Side under a Slum Clearance programme. More than 1,600 families were relocated to apartments better than or the equal of those they had left. One hundred and eighty-eight buildings were reduced to rubble. And a fund raising programme was undertaken to solicit grants and contributions from foundations, corporations and individuals. The initial campaign goal was $75,000,000, but because of rising costs and expanded concepts this was recently increased to $102,000,000.

Finally, in May 1958, the architects were chosen. Wallace K. Harrison, who had designed the United Nations Secretariat, Rockefeller Centre and Idlewild Airport, all in New York, was named co-ordinating architect for the center as well as the designer responsible for the new Metropolitan Opera House. The other architects are Max Abramovitz, for the Philharmonic Hall; Eero Saarinen, collaborating with Jo Mielziner, on the Repertory Drama Theatre; Dr. Pietro Belluschi, dean of the School of Architecture and Planning at the Massachusetts Institute of Technology, who will design the new Juilliard School of Music; Philip Johnson Associates, for the Theatre for the

CONT'D ON NEXT PAGE

NEW YORK'S NEW SKYLINE OF ART



GENERAL VIEW shows, clockwise from lower left, Theatre for the Dance and Operetta, Damrosch Park and bandshell, Metropolitan Opera House, Repertory Drama Theatre and Library-Museum, the Juilliard School, and the Philharmonic Hall.

Dance and Operetta, and Skidmore, Owings and Merrill, preliminary design consultants for the Library-Museum of the Performing Arts.

To get the best possible sight lines, acoustics, stage areas, etc., for each of the performing halls, a team of experts, led by Mr. Harrison, toured more than thirty of Europe's finest concert stages and interviewed dozens of star performers to get their opinion on what was best. In addition a group of European authorities in the field, such as Walther Unruh of Germany, Alvar Aalto of Finland and Sven Markelius of Sweden, came to New York to consult with the center's designers.

So detailed was this survey that it included a report that American hip sizes had grown larger in the last century. Therefore each theatre chair had to be designed bigger and, for the sake of comfort, the theatres became larger, too. "Unfortunately, the voices of the artists haven't become any bigger," Mr. Harrison said.

The prima donna of the center will be the $32,000,000 air-conditioned Metropolitan Opera House at the head of a giant plaza. It will be fronted by ten-story high columns separated by glass walls. Behind the lobby and stage areas (there will be at least four stages) will rise a twenty-story tower, housing a central air-conditioning system for the entire project, office space, and shops for the opera's productions, such as wig and costume rooms and scenery storage.

Although revered Carnegie Hall has now been saved from destruction, it will no longer be the home of the New York Philharmonic Orchestra which is scheduled to open its 1961-1962 season in a new $13,200,000 hall within Lincoln Center. Construction has already begun on this 2,600 seat auditorium, second only to the 3,800 seats at the Met. Here, too, the time-tested recipes for fine orchestral music from Europe have been incorporated in

Photos © Ezra Stoller, New York

FOR OUTDOOR CONCERTS, a bandshell overlooking Damrosch Park (foreground) will be an attractive feature of the Lincoln Center. Flanking the park (left) is the Metropolitan Opera House with its façade of ten-storey columns separated by glass walls. On right is the Theatre for the Dance and Operetta, a "not so small opera house" with enough room for 2,500 patrons.

the modern design with the latest structural and acoustical developments. The highly flexible stage area will be able to accomodate with equal ease solo artists, dance recitals, small instrumental groups as well as a full symphony orchestra with chorus.

Competing with Old Vic, Comédie Française and The Abbey Theatre will be Lincoln Center's Repertory Drama Theatre, designed to seat 1,100 persons and to capture the true spirit of the theatre with great intimacy and closeness of the entire audience to the stage. The Theatre for the Dance and Operetta, "a not-so-small opera house" for 2,500 patrons, will serve the center as an Opera Comique and bring to audiences major repertory companies and light opera groups from the United States and abroad.

"But the center must be more than performance halls," affirms its president. "It must place an important emphasis on education and creative work." Therefore the Juilliard School of Music, one of the finest institutions of its kind in the world, will be a major constituent devoted exclusively to advanced training of highly gifted students in the performing arts.

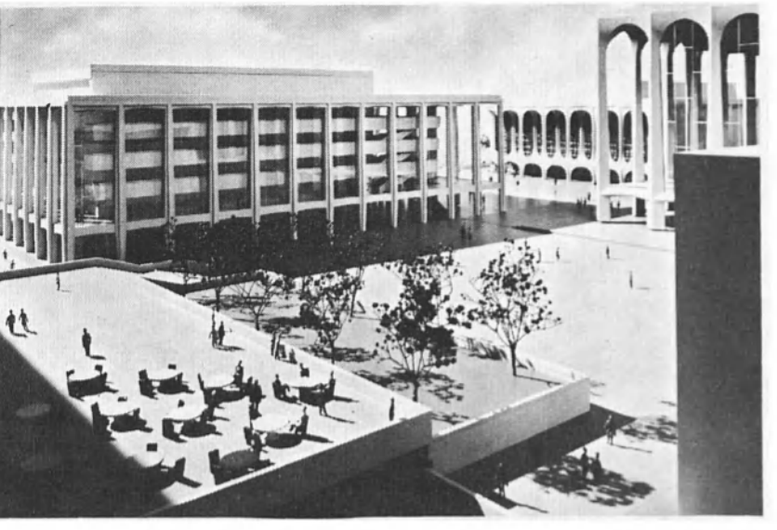
Along these same lines a Library-Museum of the Performing Arts was incorporated into the center offering hundreds of thousands of books, records, sheet music and other memorabilia on the arts to encourage creative scholarship. Here, too, will be facilities for viewing motion pictures and slides, playing records and tape recordings and a children's theatre for puppet shows and the like.

For outdoor concerts a band shell overlooking a park will be an attractive feature, especially in the warm and humid summer months. And underneath the entire site spaces for the parking of 800 cars is planned.

New York may not be the only city in the United States which is undergoing a "cultural explosion," as one writer has put it. But "nowhere else are premier performing institutions in all the performing arts joined together with artistic education in one dynamic union dedicated to the service of the people," says the center's president.

The major task still lies ahead, that of actually putting the brick and mortar together for artistically perfect results. But when that work is done and the house lights go down for the first production, then New York will be the centre of the cultural renaissance of twentieth century America.

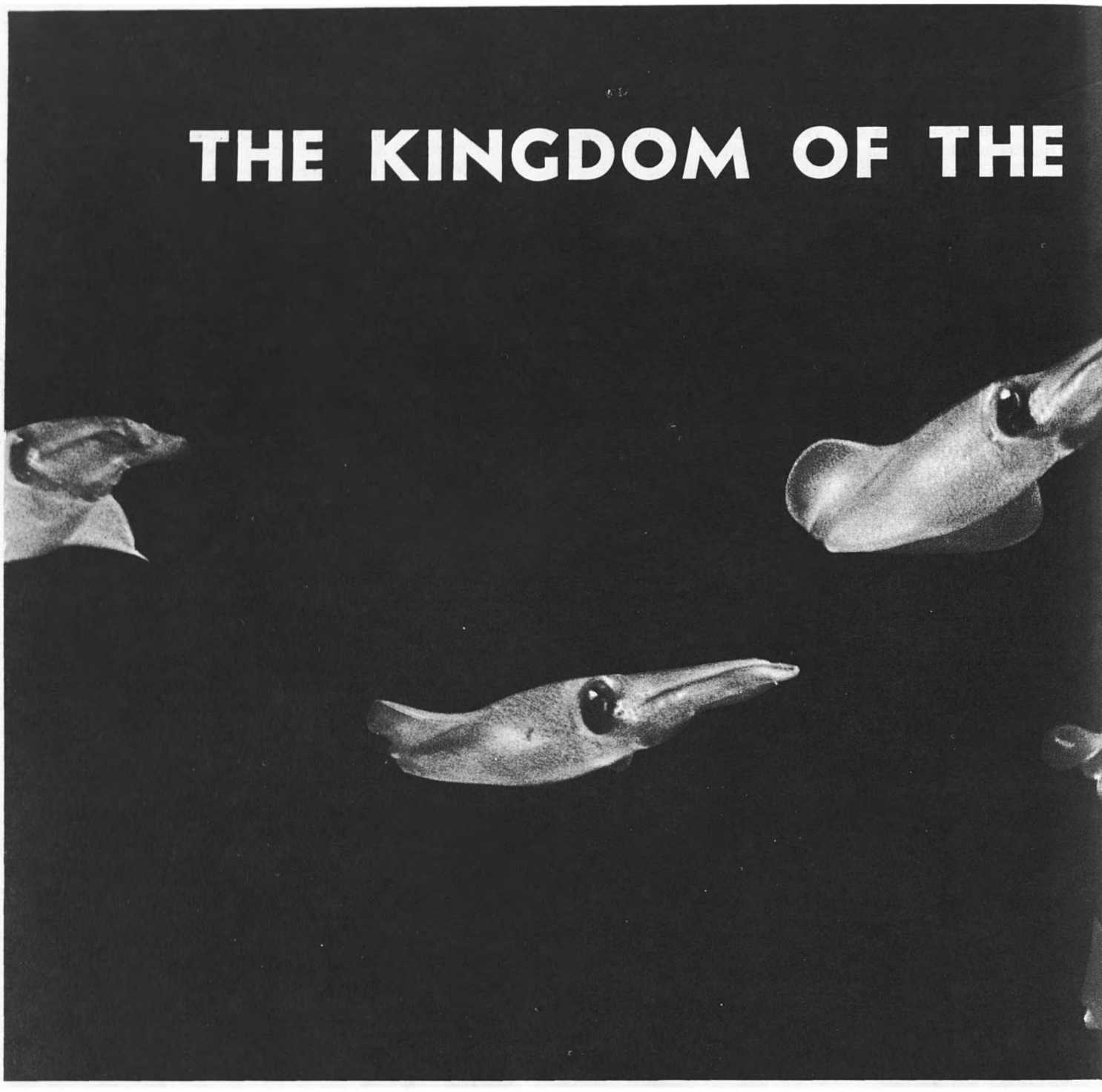
TERRACE overlooking the North Plaza is formed by bridge running over 65th Street. In the background is the façade of the Philharmonic Hall whose 2,600 seat auditorium will incorporate all the very latest acoustical and structural features.



Photos © Ezra Stoller, New York

PRIMA DONNA of the Center is $32 million air-conditioned Metropolitan Opera House at the head of a giant plaza. Behind the lobby and stage areas (there will be at least four stages) there will be a 20-storey tower housing a central air conditioning system for the entire project, office space and shops for the opera's productions such as wig and costume rooms and scenery storage.

THE KINGDOM OF THE



CALAMARI, *Poulpe, Inkfish:* most travellers have met these on menus, especially in Mediterranean lands. Yet how many know exactly what they are eating: fish, sea-mammal, crustacean or what? Actually they are members of the octopus family, which means they are molluscs, that large branch of the animal kingdom to which the snail and oyster belong.

Scientifically, octopuses and similar animals, belong to the Cephalopoda, which comes from two Greek words meaning "head-footed". The "foot" refers to the arms or tentacles which spring from the head. Cephalopods are found in all the oceans of the world, living in waters ranging from those inside the Arctic Circle to those on the edge of the Antarctic Continent. They are especially abundant in the Mediterranean.

Altogether there are some 650 known species, ranging from midgets that can perch on the end of a finger, to the giant squid which sometimes reaches 50ft. and weighs a ton or more. This is the largest invertebrate on earth.

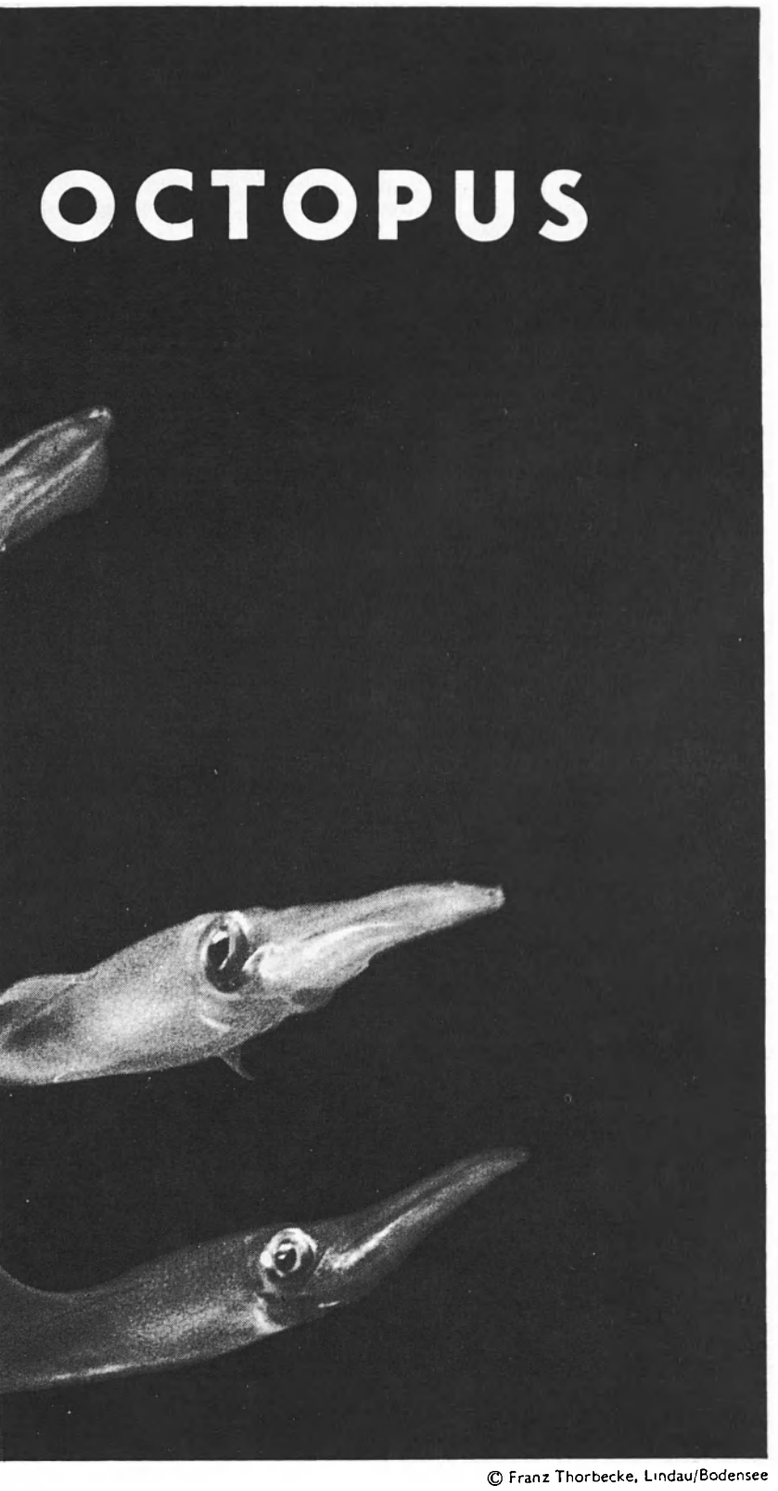
In European waters the best-known cephalopods are three in number. There is the common octopus which has eight arms and a globular body. It has a maximum span of about 10ft. Then there is the common cuttlefish which has, in addition to eight arms, two long tentacles which shoot out like a pair of living tongs to seize its prey. It has a shield-shaped body strengthened internally by a large calcareous cuttlebone. With tentacles extended a large common cuttlefish may measure three feet.

Finally, there is the common squid which also has eight arms and two tentacles. It has a torpedo-shaped body supported internally by a delicate horn-like shell. When fully grown it measures some three feet with extended tentacles, although larger specimens have been taken.

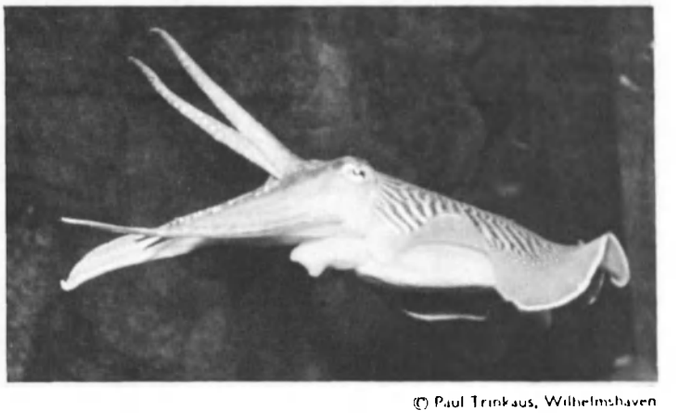
Cephalopods are among the most interesting creatures in the sea. Just look at their specification and performance. They have three hearts which pump *blue* blood through their bodies. They possess greater powers of

OCTOPUS

by Frank W. Lane



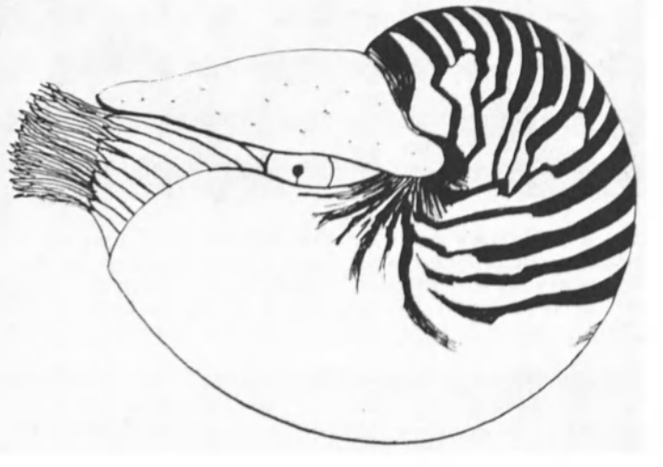
© Franz Thorbecke, Lindau/Bodensee



© Paul Trinkaus, Wilhelmshaven

LIKE JET PLANES in formation, a group of squids (left) swims leisurely across a tank in the Naples Aquarium. Squids, the Pearly Nautilus (drawing below), the cuttlefish (above) and the octopus (bottom of page) are all members of that division of molluscs called cephalopods. Many of these "head footed" creatures with writhing muscular arms set with rows of suckers, are quite small; others are tremendous monsters like the Giant Squid which can weigh over a ton.

Drawing by Patience Forman



© Laurence E. Perkins, London

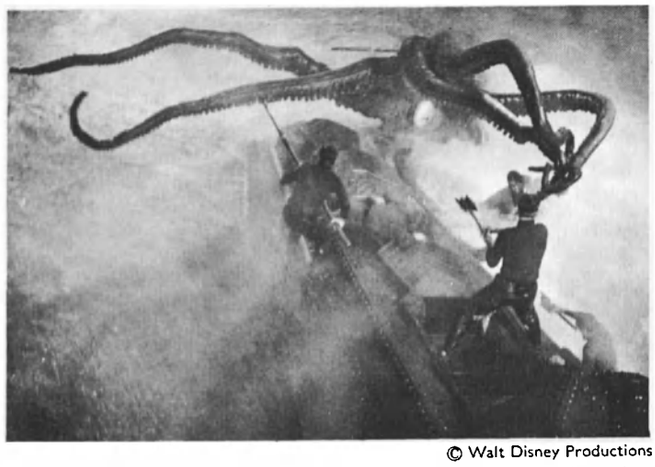
colour change than the chameleon and have luminescent displays which out-rival those of the fire-fly. They emit rockets as well. And they shoot through the sea, and sometimes sail out of it, by the most modern means of travel, jet-propulsion.

It is a humbling thought to realise that one of man's latest inventions has been ante-dated by relatives of the snail. Squids were jetting their way through primeval seas millions of years before man appeared on this planet.

The jet's propulsive force is sea-water, shot in fast-repeated pulses from a single nozzle, called the funnel, beneath the head. Water enters a cavity in the body, the inlet is then sealed, and the heavily muscled walls of the chamber contract, forcing the water out through the nozzle at high speed. By the law of action and reaction, as the jet shoots one way, the squid is driven in the opposite direction.

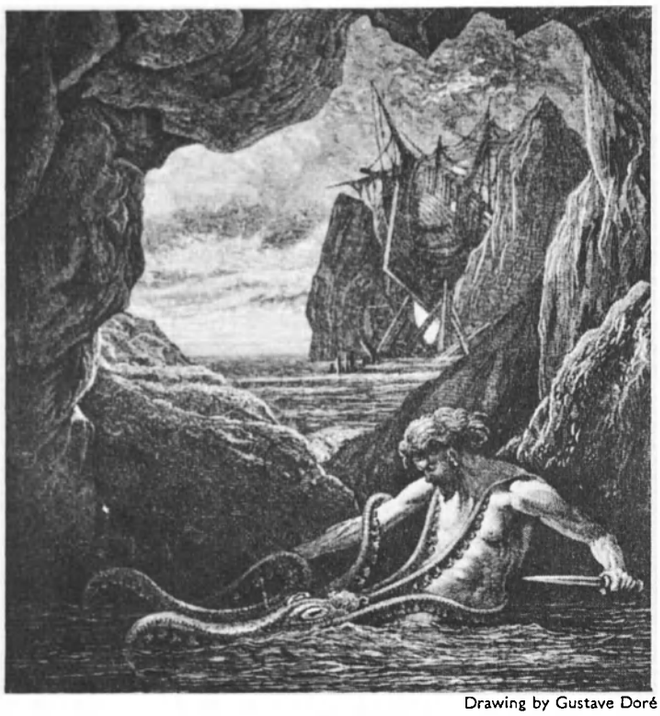
Not much is known of the speed but there is evidence

CONT'D ON NEXT PAGE



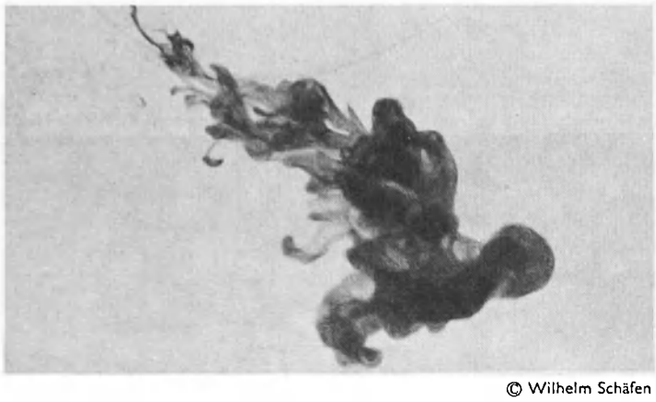
© Walt Disney Productions

BATTLE with a giant squid which has attacked the submarine "Nautilus" was filmed in the Walt Disney production of Jules Verne's "20,000 Leagues Under the Sea". Giant squids, largest Invertebrate's on earth, sometimes reach 50 feet in length.



Drawing by Gustave Doré

CAVE COMBAT between man and squid was vividly described by Victor Hugo in his novel "The Toilers of the Sea". Squids are sometimes called "devil fishes", incorrectly so for this name properly belongs to a skatelike tropical fish.



© Wilhelm Schäfen

DUMMY SQUID is formed by a blob of ink ejected from the squid's ink sac which helps to draw an enemy's attack away from the squid itself. The ink also acts against the olfactory sense of eels which are among the squid's worst enemies.

that the fastest squids may reach a speed of 20 m.p.h., although most cephalopods travel much more slowly.

While the sole means of locomotion of cuttlefish and squid is swimming, octopuses frequently ramble about the ocean floor, using their arms to move like outsize spiders. It is then that they truly live up to their scientific name and "walk on their heads".

The ability to change colour is due to tiny pigment cells, called chromatophores, which are filled with differently coloured pigments embedded in the skin. By expanding and contracting these, thus spreading or reduc- the pigment, colour changes flow over the skin. These changes sometimes occur so fast that G.H. Parker, the American authority on colour changes, says they "must involve a complexity of communications and of controls such as are present in the modern electric sign over whose surface an ever-changing design may be made to pass".

Miss Joyce Allan, an Australian zoologist, saw some small cuttlefish swimming slowly about an aquarium containing variously coloured objects. As the cuttles passed over dark, reddish-brown rock they matched its colour perfectly. A few inches away there was some dead coral, and as the cuttles passed over it they turned a light grey. Then, in turn, light brown for sand, green-brown for weeds, and back again to the reddish-brown of the rock.

Such ability to camouflage themselves is one of the defences of cephalopods against their numerous enemies : another is ink discharge. This used to be thought of as a simple smoke-screen but today it is known to be more complicated. The ink acts against the olfactory sense of eels—the worst enemies of the octupus—and, strange as it may sound, without olfactory stimulation the eels won't attack. The ink also forms shapes or dummies, which simulate the form of the cephalopod and draw an enemy's attack away from the animal itself.

D.N.F. Hall, a marine zoologist, had an interesting object-lesson in cephalopod escape tactics when he tried to catch a small squid in a wooden tub aboard a ship.

When his fingers were about nine inches away, the squid turned dark and seemed to stay still. Hall made a grab — and seized a small blob of ink. The squid was at the other end of the tub.

Hall tried again, and this time he watched exactly what happened. After turning dark, the squid ejected ink which simulated its body, simultaneously turning pale and shooting away round the perimeter of the tub.

Hall had the advantage of watching the squid and its ink discharge from above in an enclosed space; in the open sea the squid's chances of escaping would have been much greater.

Luminescence may not have the same defensive qualities as colour change but it renders some cephalopods among the most beautiful creatures in the animal kingdom. The British marine zoologist, Sir Alister Hardy, once said of the small deep-water squid *Lycoteuthis diadema:* "It is one of the most beautiful animals I have ever seen."

The luminescence is produced in several ways but the most frequent is by small organs called photophores, which become luminous by minute chemical reactions. For the technically minded, the source of the light is an enzyme-catalysed reaction, luciferase acting on luciferin.

The effect of the luminescence is well described by the German marine zoologist, Carl Chun, in the following remarks about *Lycoteuthis diadema:*

"Among all the marvels of colouration which the animals of the deep sea exhibited to us nothing can be even distantly compared with hues of these organs (photophores). One would think that the body was adorned with a diadem of brilliant gems. The middle organs of the eyes shone with an ultramarine blue, the lateral ones with a pearly sheen. Those towards the front of the lower surface of the body gave out a ruby-red light, while those behind were snow-white or pearly,

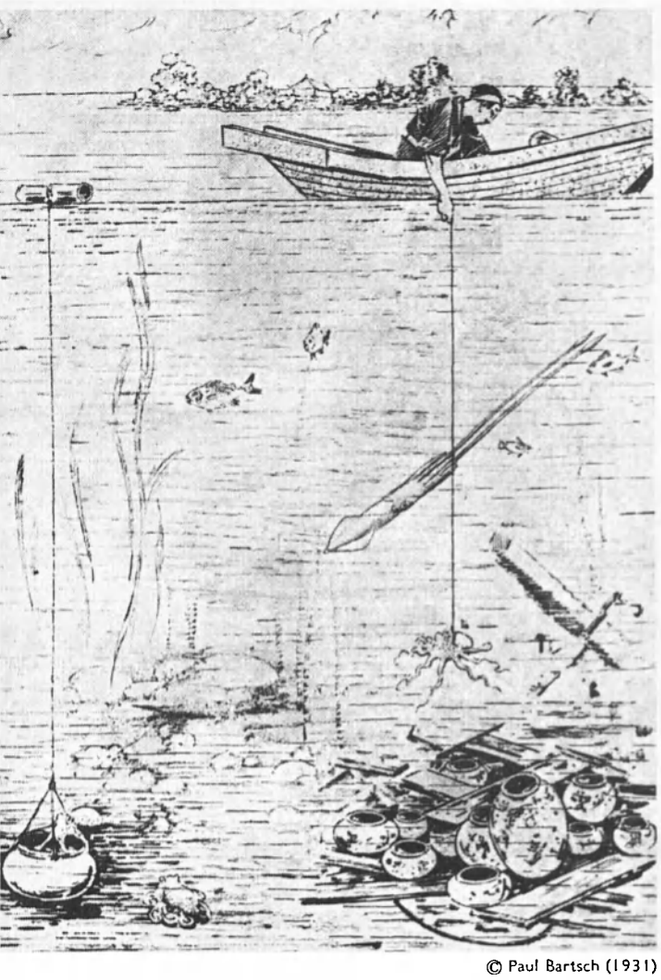
CHAMELEONS OF THE OCEAN

except the median one, which was sky-blue. It was indeed a glorious spectacle."

Think of that the next time you eat a *calamari!*

A few squids fire phosphorescent "rockets"—the best-known being *Heteroteuthis dispar*, which is about the size of a man's thumbnail. The light-giving secretion is a form of mucus, and comes from a gland near the ink-sac. When the mucus meets the oxygen in the water it glows brightly, sometimes for five minutes. The "rocket" may serve to startle a pursuer thus giving the tiny squid time to escape.

I suppose the aspect of cephalopods, especially of octopuses, which has captured popular imagination more than any other is their alleged danger to man. Let a bather —especially if she be a pretty woman—have a slight encounter with an octopus and the newspapers carry



© Paul Bartsch (1931)

LIVE OCTOPUS is being used here by a Japanese fisherman as a living grapple to recover sunken pots. In Japan, octopus flesh is an abundant and important item of diet. The octopus is caught by lowering earthenware pots to the bottom of the sea with cords. These are entered by the animals (on left of drawing) which, when once settled, are reluctant to withdraw, so the pots may be pulled up before the animals escape.

a story of a near-escape from a watery grave in the arms of a loathsome sea-monster.

What is the truth? When I was writing *Kingdom of the Octopus* (1), which is the first general popular book on cephalopods to be published in any country this century, I went into this question carefully. I read widely, I corresponded with scores of people in various countries, and I asked in the Press for people able to give authentic accounts of attacks to get in touch with me. From the results of my research, I believe that the vast majority of cephalopods which are normally encountered are harmless, but that some of these have occasionally killed people, and that there are rare outsize cephalopods (giant squids) which have sunk small boats.

I had a letter from a woman who was an eye-witness of an incident in which a bather was seized in shallow water by an octopus, and would probably have been killed had not help been at hand. The octopus spanned less than six feet and weighed only a few pounds.

And in "The Medical Journal for Australia" in 1955 there was a detailed account of the death of a young man after he had been bitten in the neck region by a small octopus. It is not generally realized that some octopuses can bite and inject poison.

CEPHALOPODS are useful to man in various ways. They are the favourite bait of many sea-fishermen; they are fed to animals and spread on the land as fertilizers; their bone sharpens the beaks of cage-birds and their ink has provided pigment for artist for thousands of years; and their brains and nervous systems provide valuable material for scientific research.

Throughout the world thousands of tons of cephalopods are eaten every year. When I was researching for my book I made numerous enquiries about cephalopod fisheries and eventually I compiled the first published table showing the world catch, country by country.

By far the largest catch in Europe is in Italy. In 1953 22,000 tons were taken. In China the annual catch is around four times this figure. But in Japan, the annual catch averages some half a million tons!

Here is a fruitful field for investigation by world food organizations. Today the annual catch of cephalopods throughout the world is probably in the region of one million tons, about one pound for every man, woman and child on earth. But what would the catch be if a really intensive effort—like that in Japan—were made by the world's fishing fleets? A thought well worth pondering in terms of the world's desperate food shortage.

What do cephalopods taste like? Opinions vary from "fishy india-rubber" and "a sort of marine tripe" to "better than oysters" and "delicious eating". I think it is fair to say that if cephalopods are not prepared and cooked properly they may well taste like "india-rubber." For anyone who intends to eat them—boiled, baked or fried—there is one invariable rule for all except the smallest specimens : pound them until the muscular tissues are beaten to a pulp.

IN Spain one delicacy is stuffed octopus with chocolate flavouring. In Portugal octopuses and cuttlefish are cooked in their own ink and canned for export. A Japanese delicacy is toasted octopus cooked in oil over a charcoal brazier.

Since the 1930s another, and potentialy most valuable, use has been found for cephalopods. Physiologists and medical research workers have been studying the action of the nervous system in animals for many years. But the work suffered from a severe handicap—the tiny nature of the material available, for in most mammals a nerve-fibre is only 1/1,000th of an inch or so in diameter. And that is the value of cephalopods for some of the nerve-fibres in, say, the common squid are about 1/20 th of an inch thick, thus increasing fifty-fold the width of the physiologists' basic material.

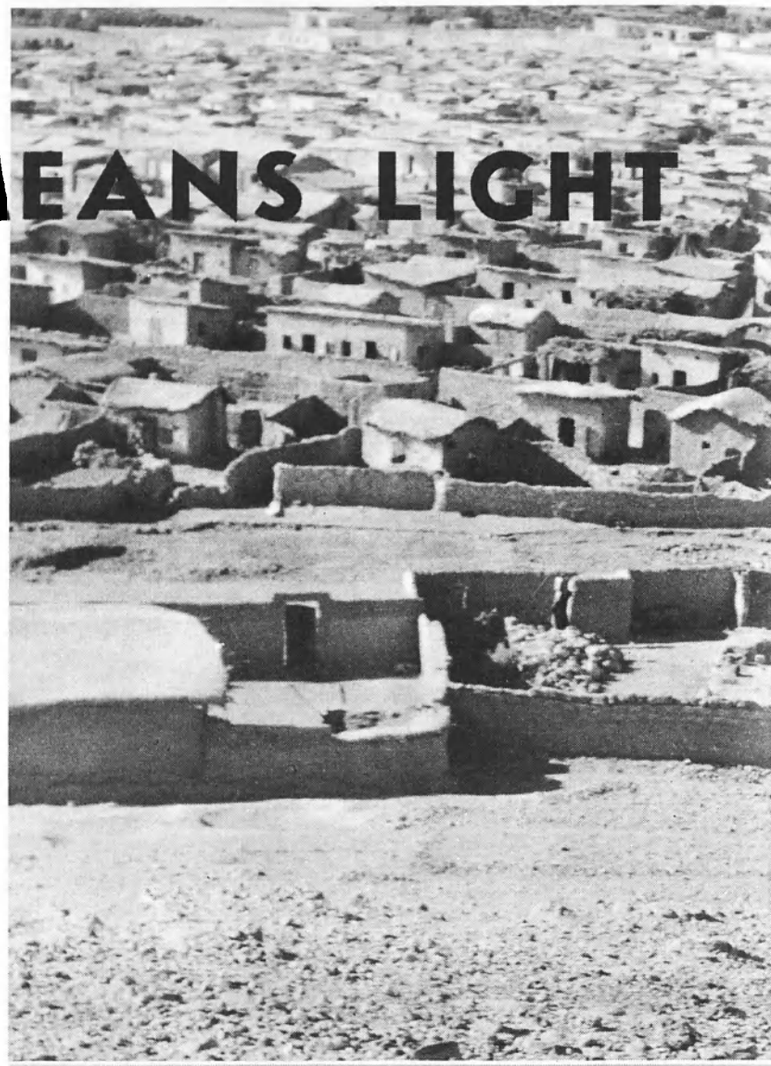
It has become possible to insert tiny electrodes into the living nerve-fibres of squids and obtain electrical measurements hitherto impossible with other animal material. This information has helped considerably in discovering how nerves work—including human nerves. And that is an essential step in learning how to care for them in sickness and in health. Who knows, maybe there are people today who owe their mental health to a squid !

(1) *Published by Jarrolds, London; price* 30/-

In Arab Lands

LEARNING MEANS LIGHT

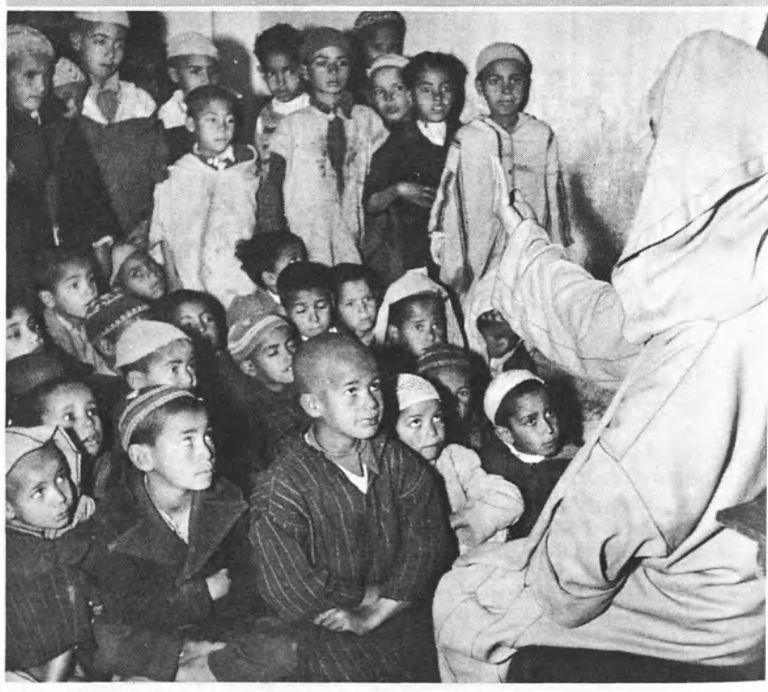
by Georges Fradier



UNRWA

In the Arabic speaking countries there are now nearly 5,000,000 children in primary schools—double the number of a decade ago. But a wide gap will have to be closed before there are enough schools and teachers for all the 15 million children of school age, like the Arab boy (above) on a hillside overlooking his native village. Often the only kind of education available is in the traditional Koranic schools (below).

© Paul Almasy, Paris



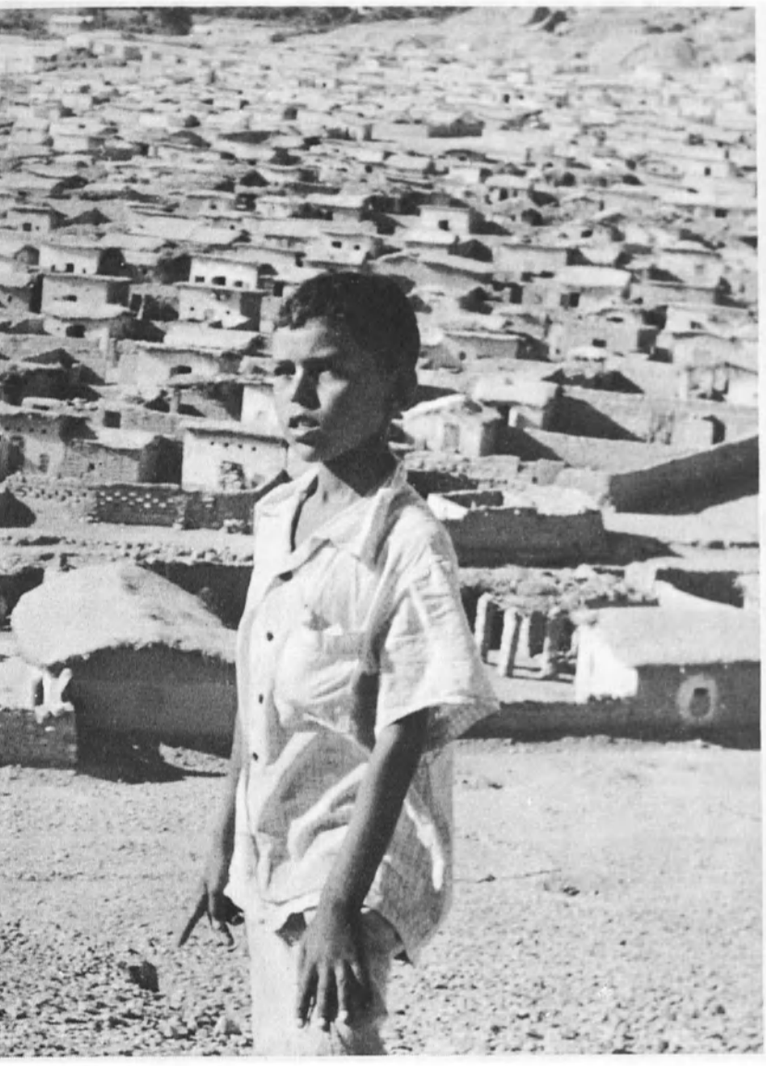
This is the second of three articles on the educational situation of Asia, the Middle East and Africa by our special correspondent, Georges Fradier. The first, on Asia, appeared in our November issue. Georges Fradier now describes the problem in countries of the Arab world from Iraq to Morocco.

In the third century of the Hegira, around the year 840, a genial moralist with a taste for writing on every imaginable subject included in his *Book of Exposition and Demonstration* the portraits of various teachers in Baghdad, Kufa and Basra. He carefully differentiated between the eminent lecturers in law and theology whose discourses enthralled distinguished gatherings and the mass of enthusiastic and half-starved schoolteachers who grappled with hordes of children.

In the days of Abu Utman al-Djahiz there was indeed no lack of schoolteachers in Islam. Long before the conquests and conversions there were undoubtedly many more teachers in the Middle East than there were in Europe, teaching in Greek at one place, in Syriac at another, in Hebrew, Persian or Arabic. By propagating "the world's most read book", the new faith had stimulated the spirit of study and research. Every mosque had its school where the Koranic adage was inculcated: "He unto whom wisdom is given, he truly hath received abundant good" or that injunction of the Prophet's to "Seek knowledge even if it be in China, since the seeking of knowledge is obligatory upon every Moslem, man or woman."

Until the fifteenth century, elementary education—the teaching of reading, writing and arithmetic which was virtually general in the towns—advanced side-by-side with the vast expansion of Arab science and culture. The latter, even when they had declined in the Iraqi and Syrian towns from which they emerged, continued to grow stronger and to proliferate in Central Asia, in Sicily and above all in Europe and North Africa.

But at the end of this period, the great historian Ibn



Khaldoun ended a chapter on the "philosophic sciences" with the statement, "We are told that in the country of the Franks and in the land of Rome and the neighbouring regions of the northern coasts (of the Mediterranean) the philosophic sciences are greatly in favour, their principles have been revived, there are many groups to teach them and there is an increasing number eager to study them..." Thus, the European Renaissance was proclaimed in Tunis at the very moment when Arab culture and education were about to enter a long period of stagnation and even decline. Economic depression, loss of independence, cities sunk in apathy...

During four centuries, the cultivated population was barely able to do more than maintain the tongue of the masters of the Golden Age. Their doctrines and their works together with their universities became lifeless. Elementary education itself became rarer and rarer and less and less valued. The small schools survived, generally kept going by religious foundations: under the direction of ignorant teachers, themselves a vestige of the Middle Ages persisting into the nineteenth century, the children—the male children—were given an education consisting of learning verses from the Koran by heart.

Nevertheless, the Arab revival had begun in the nineteenth century. Among the Christians of Lebanon and the Moslems of Egypt, thinkers, statesmen and poets shook the dust from the old books. Reformers introduced the disciplines and sometimes the methods of "modern" education into the ancient universities of Al Azhar, of Cairo and of Zaitouna in Tunisia. Thenceforward the movement developed with astonishing speed. Under the influence of the new universities in Cairo, Alexandria and Beirut, education at all levels has recovered the vigour and prestige which had been lost for so long. Taking the Arab countries as a whole, it might seem the solution of fundamental educational problems was already in sight.

Unfortunately, the Arab world is enormous and progress has been made at a very different rate in the various countries. Some Arab countries lag a good many years behind others. In more than one country, hampering tensions arise from the co-existence, and some times rivalry, of the traditional schools which are almost wholly religious in nature and the undenominational schools modelled on the Western pattern. By way of compensation, in other countries State education—which, incidentally, provides for regular religious instruction—has been able to develop unhindered. But in all Arab countries alike, from the derricks of Kuwait to the pasture lands of the Atlas region, from the banks of the Orontes to the banks of the Upper Nile, the longing for education merges with the will to play a part in the Arab renaissance.

THERE are grounds for believing that this longing will be fulfilled. Indeed, taking all Arab countries together, one finds that the annual rate of increase in the number of children at school is about 10 per cent, whereas the annual rate of increase in the number of children of school age is only about 3 or 4 per cent. Plainly, the race between population increase and the schools is going to be won by the schools if this trend persists.

In those Arab States which are the best-equipped and the best situated in the field of education there are still thousands of children for whom there is no accommodation in the schools or whose villages still have no school worthy of the name. In yet other countries which were only recently able to begin their educational programme, the majority of the children must still be left to one side or temporarily forgotten about.

Sometimes it is necessary to consider emergency measures, the mobilization of available resources in order to speed up education; sometimes the authorities are above all preoccupied with reforming the content and the tools of teaching where these are thought inadequate to the needs of the young and of the community as a whole. Almost invariably they are forced back to the same great problem: how to train the masters who are now needed and who will be needed even more tomorrow?

AN enquiry recently carried out by Unesco in 10 Arab countries (1) reveals that the most urgent problem today is the "shortage of qualified teachers."

In the Lebanon, for example, authorities describe the present situation as "particularly disturbing." In the whole country there is only one primary teacher-training school and one secondary teacher-training school which graduated 97 student-teachers in 1958. But the number of posts which must be filled yearly is approximately two hundred in respect of primary education and seventy in respect of secondary education. In these circumstances, it is hardly surprising that a number of classes are conducted by teachers whose qualifications are more than a little vague. "About half the teachers in the primary schools have had a training inferior to a complete secondary course."

The situation is perhaps most serious in Libya where, in order to press ahead as rapidly as possible, it was found necessary to employ a number of primary school teachers who themselves had received little more than primary education. In Morocco where at least 2,000 new

(1) *Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Saudi Arabia, Sudan, Tunisia, United Arab Republic.*

CONTINUED ON PAGE 20

BOXING LESSON

A box with six compartments is teaching young Tunisians all about the sort of foods they should eat. As they open it in the classroom, they find inside models of six typical foods which they need for growth, good health and energy. The hexagonal box is one of the audio-visual teaching aids—filmstrips, posters, flannelgraphs—which are being used in a special nutrition education drive that the Tunisian Government is making in collaboration with UNESCO, UNICEF (The United Nations Children's Fund) and FAO (U.N. Food and Agriculture Organization). Photos show: (1) Tunisian artists preparing posters. Those on walls show the "right diet" box. (2/3) Children answer questions after a "good food means good health" lesson. Each has been given a "diet box". (4) Pupil cuts out drawings of different food items similar to those shown on the blackboard. (5) Youngsters are served "right diet" meal in canteen decorated with nutrition posters.

Photos Unesco-Paul Almasy

Photos Unesco-Paul Almasy

TEN MILLION CHILDREN IN SEARCH OF TEACHERS

teachers a year will be needed, the number of student-teachers supplied by the teacher-training schools in 1959 was only 500. In the Sudan, the qualifications required of a teacher consist of the diploma granted after the first secondary stage plus two years' professional training; but the eight institutions which offer this training are far from able to meet current needs since in 1959 they were only able to supply the country's 2,000 schools with 632 men teachers and 177 women teachers.

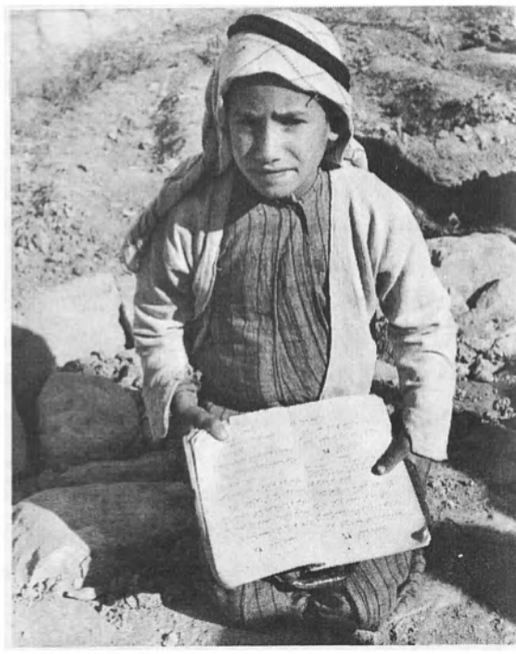
In this regard, one of the great difficulties confronting Ministers of Education is to find teachers for provinces located far from the capital and, for that matter, for villages which are close to the capital but which are still only villages. The young teachers, accustomed to the comfort of their colleges and the luxury of the big cities, find living conditions in the villages intolerable. Attempts have occasionally been made to solve this problem by providing the teacher with living quarters in accordance with his needs and tastes; but the cost of building such quarters, even the least luxurious models, is far beyond the financial means of almost all the Arab countries.

Payment of indemnities provides no solution since the teacher, however modest his requirements, is often unable to find a reasonable house in the area to which he has been appointed. The solution generally envisaged in these countries today is one which has been repeatedly suggested in other regions: namely, that the ministers concerned should recruit more young student-teachers in these less attractive areas in the hope that, once their training has been completed, they will want to return there to teach.

It is, however, in the secondary and vocational schools and in the trade training centres that the shortage of teachers seems especially critical. In some countries the full gravity of the situation is not yet apparent because many of these institutions were founded and are still maintained by private groups, religious missions and even foreign countries which provide a large proportion of the staff and equipment. But with few exceptions, this aid does not go far to meet the development which the economic progress of these countries requires.

At the present time, 16 in a hundred pupils go to secondary schools and the proportion in secondary vocational schools is 2 per cent. Thus, without noticeably increasing these proportions, it is estimated that secondary institutions in Iraq in 1965 will have 235,000 pupils, necessitating the training of 850 teachers per year. As things stand, however, the total number of those graduating from Iraq's teacher-training colleges barely exceeds 300.

In Libya, a number of secondary schoolteachers come from neighbouring countries. In the Syrian province of the United Arab Republic there is small hope of meeting the needs of secondary institutions for several years to come, even though private education at this level copes with a large proportion of pupils. Egypt, in fact, would seem to be the only country at present able to meet the growing needs of secondary education.



Pause for reading as a Saudi Arabian boy kneels on the rocky ground to peruse his textbook of short stories.

© Paul Almasy, Paris

Arab refugee boy is among thousands learning trades in UNRWA-UNESCO school workshops.

UNRWA

Even Egypt is short of qualified teachers for certain subjects, especially mathematics, science and modern languages. Other countries make the same complaint and generally with still more cause. It may be possible to find first rate students in literature, history or even law, philosophy or social sciences who, despite their hopes for a different career, nevertheless become satisfactory teachers of grammar, literature or the social sciences. Their friends who have specialized in science, in English or French, are not likely to accept to become teachers. Unless they have a positive vocation for teaching, they are more likely to take one of the infinitely more attractive jobs offered by industry or commerce or the civil service.

In countries, in the process of development which still lack top-level men for the most important sectors of the national economy, it is useless to count on university students turning to teaching as a last resort. The teacher-training colleges must provide a full training for teachers specializing in the different disciplines where neither incompetents nor enthusiastic amateurs can be accepted. Additionally, the State—and public opinion—must treat teaching with the seriousness it deserves. A bad bookkeeper is dismissed; but too often an incompetent teacher, whose shortcomings may have serious consequences, is allowed to retain his position. From another point of view it would be wholly unreasonable to argue that teaching is such a noble profession that anyone who abandons it for a better paid job is blameworthy.

"Material advantages" cannot anywhere be neglected for long. And in every one of the Arab States, the Minister of Education realizes regretfully that teachers

are inadequately paid. The salary scales may be the same, by and large, as those for other civil servants with comparable qualifications and seniority; but authorities recognize that the teacher's modest pay is no longer proportionate to the amount of work and the professional qualities which are required of him. His salary is a hangover from the days when it was thought fitting that the schoolmaster should be as poor as he was respectable.

Some governments openly deplore the fact that the salaries paid to young teachers are "slightly lower" than those paid to other civil servants. Nobody in these States denies that the remuneration received by teachers is inadequate; on the contrary, there is a real desire to improve their living conditions; but so far the burdens involved in expanding education have made it impossible for most of the States to change things.

Over recent years, the educational authorities in almost all the Arab countries have outlined their aims in documents which have been as carefully thought over and drawn up as the constitution of a new republic. Despite significant variations in regard to one or another aspect of the various tasks of education, all agree as to the basic objective: to equip the child to play a full part in the political and economic life of his country.

Most of these lands regard themselves as new countries, in spite of the antiquity of their traditions. They know that they are in the midst of an evolutionary process. The citizens of tomorrow are expected to make their country stronger, more prosperous, better qualified to play a useful role in international life.

It may be asked whether the education provided in primary and secondary schools is linked with and, indeed, actually assists the achievement of this ambition.

No educator on earth can be completely sure that the programmes which he recommends or is called on to follow are in every way ideally adapted to pupils' needs, especially to their future needs as citizens and followers of a career. To take an example from among the countries with which we are dealing it is likely that there is some doubt in the United Arab Republic as to the desirability of sharply divided "streams" which result in half of all secondary pupils completing two out of three years without learning anything at all of mathematics, physics, chemistry or natural sciences. On the other hand, their fellow-students in the scientific stream have nothing to do with history or geography. The programmes in Libya, which have been drawn up on another basis, devote 20 hours a week during the last year (classical option) of a five-year secondary course to the teaching of languages, and not one hour to mathematics and science.

A graver defect which Arab educators have pointed out in various educational institutions is the abstract, bookish, not to say boring, nature of the teaching. The teaching methods used in these schools, which vary in number and size from country to country, rely overmuch on learning by heart in order to pass examinations. Such methods, inherited perhaps from the old Mosque teachers who concentrated on memorization, no longer suffice: they run the risk of developing memory at the cost of logical thinking, critical sense, the spirit of research and individual initiative. There are signs that the new generation of teachers is being trained in the modern teacher-training colleges and universities to use very different methods.

Unfortunately, this defect is reflected in the textbooks which are still used by young schoolmasters both for their own studies and in teaching their pupils. The books provided—or forced on—the pupils are all too often sketchy and dogmatic, dry or ponderous and badly illustrated: it is rare indeed that they introduce readers to the "joy of reading" and the excitement of discovering things for themselves. They supply a set of bleak absolutes which must be humbly imbibed in order to give satisfaction and achieve success.

Additionally, in almost all the Arab States, secondary education—and even vocational and technical education—has long been synonomous with "Western" education, wholly taught in English or French. This is still the case in a number of countries where the increased use of Arabic in education is the order of the day. This is not aimed at the abandonment of the European languages currently used nor even at the systematic substitution of Arabic as the teaching language at every level and for every subject; but the curricula cannot much longer remain based solely on those which emerged from another culture, another history, a whole series of different factors, in another country.

In certain cases, the subject-matter itself should be radically modified—geography and history, for example. In other cases, the relative importance given to different subjects is in need of revision: the ancient and modern literature of a given region or nation cannot be left in the background. Finally, there is no doubt that, irrespective of the subjects studied and the final aim of schooling, the study of Arabic should be made general and deeper.

Study in concentration as two Jordanian schoolgirls share a bench in the sun at the Hawara Education Centre.

Hawara Fundamental Education Centre

Dressed up and painted for dancing and miming, two smiling Moroccan girls entertain classmates.

© Gerda Bohm, Rabat

CONT'D ON NEXT PAGE

AN ANCIENT LANGUAGE GETS A MODERN DRESS

Some countries go further and envisage educational reforms which are not only concerned with the national language in relation to foreign languages. Education is sometimes hindered, to a greater or lesser extent depending on the region, by the differences between classical or "literary" Arabic and the popular language spoken by pupils and masters.

Between a language spoken by very different peoples scattered over great areas and the classical form of that language fixed 1,300 years ago in sacred writings, there is an inevitable gulf but it does not seem to hamper literary studies in any way. Moreover, the durability of the classical language has undoubtedly helped prevent the growth of great differences between the various dialects and thus helped ensure the cohesion of the Arab world.

One proof is the use made after some adaptation, of this form of the language by press and radio. None of this applies, however, when the language is used to teach and study scientific subjects, using that term in its widest sense, which have only emerged during the last two centuries and which may even date from as recently as yesterday. Possibly because there are still not enough original works on physics, biology, chemistry, sociology or political economy in Arabic, the Arab student is often puzzled by the vocabulary and style used in these sciences.

A number of groups or institutions have therefore taken on the daunting task of adapting to the needs of modern education the language which the old masters restricted to poetry, prayer and law yet which nevertheless once excited the greatest admiration when used in the fields of logic, history, astronomy and algebra. The Moroccan Minister of Education recently announced the setting-up of an institute for the development of Arabic which, in co-operation with experts from various countries, would work for the modernization and unification of the different forms of spoken Arabic so as to provide a single working language for both students and researchers, for laboratories and schools, for newspapers and scientific journals.

The educational void which must be filled most urgently in most Arab countries is to be found in technical and, generally speaking, vocational training. The proportion of secondary pupils to primary pupils throughout the whole region is 16 per cent. This is, relatively, a high proportion, even if the secondary education sometimes seems unduly rapid. But the proportion of pupils enrolled in institutions for training technicians in industry, agriculture and commerce amounts to only 2 per cent of all school enrolments.

All States which have laid down development plans to ensure that their educational system is geared to their economy envisage a very substantial increase in technical education at both the post-primary and secondary levels. Morocco, for instance, expects that 44,000 primary school pupils will go on to this type of education in October 1964: eight times as many as in 1959.

Several years ago the Arab States underlined the necessity of basing the future of their educational systems on rational planning to meet their educational, social and economic requirements. Some have already taken the necessary steps; others still lack qualified staff.

The representatives of nine countries who studied these problems at the UNESCO Beirut Conference in February 1960, devoted themselves in particular to educational planning and the relationship between such planning and over-all economic and social planning. This conference recommended the setting-up, with UNESCO assistance, of a Centre for the Advanced Training of Senior Personnel in the preparation, execution and continual adaptation of educational plans, within the framework of overall planning.

Unesco-Paul Almasy

ON A SHADY TERRACE, secondary school girls at Omdurman, Sudan, receive an out-of-doors lesson in home economics. A Unesco specialist is an adviser at this school.

This is one of many projects which will unquestionably help the Arab States, and especially the poorer ones, to overcome the obstacles still hampering the carrying out of basic reforms. Certain types of limited, temporary assistance are decisive if provided at the right time and in carefully selected sectors. This would apply to the training centre ; it also applies to the technical assistance missions which the United Nations, the Specialized Agencies and particularly UNESCO continue to send to most of these countries; another example is the Fundamental Education Centre at Sirs-el-Layyan in the Egyptian delta which has been in operation for seven years under the joint patronage of the United Arab Republic and UNESCO.

Mention should also be made of the work carried out by UNRWA in the refugee camps of Jordan, Lebanon, Syria and Gaza: the 382 UNRWA-UNESCO schools which have gradually been developed in recent years have more than 100,000 pupils. Finally, the aid provided by the U.N. Special Fund to secondary technical education and higher technical education will have far-reaching effects.

Whether for planning and statistics, school building or teacher training, trade training centres or engineering institutions, most of these States need assistance if they are to overcome the barriers. It would be wrong to exaggerate the seriousness of all these difficulties (temporary shortage of staff and financial problems) but they do prevent advances at the very moment when the impulse towards progress is at its height.

Freed of these initial concerns, the Arab States themselves will do the rest—and the rest, as they well know, is gigantic. They will have to rid themselves of the thousand and one difficulties which long years of isolation, poverty and sometimes dependence have placed on the road leading to the economic, cultural and intellectual revival which they are determined to achieve.

Leo Tolstoy Museum, Ysanaya-Polyana

A NEW MODE OF LIFE began for Tolstoy after he renounced his worldly belongings and made them over to his wife. He did much manual work, learned bootmaking, adopted a vegetarian diet and dressed like a peasant—as he is seen here, wearing blouse and boots walking in the grounds of his home.

50,000 letters attest the idealism of LEO TOLSTOY

Fifty years ago, Leo Tolstoy, the greatest novelist the world has known, passed away. The author of *War and Peace* had friends and admirers in every country and was a tireless letter writer—50,000 letters from all nations preserved in the Tolstoy archives testify to his popularity as do the 95 million copies of his books printed in 82 languages. Below, A. Shifman tells of one of the lesser-known aspects of the great humanist's life—his passionate interest in the people of the Orient and their destiny.

by A. Shifman
of the Léo Tolstoy Museum

A FEW months before his death in December 1910 Leo Tolstoy was looking through the great number of letters he had received that day from all parts of the world. He turned to a young friend who was sitting with him—A. Goldenveiser, the pianist—and remarked with a smile:

"I am ashamed to say so, but I do enjoy the authority that attaches to the name of Tolstoy. It radiates to all the corners of the earth and links me with the most distant countries—the Far East, India, America, Australia..."

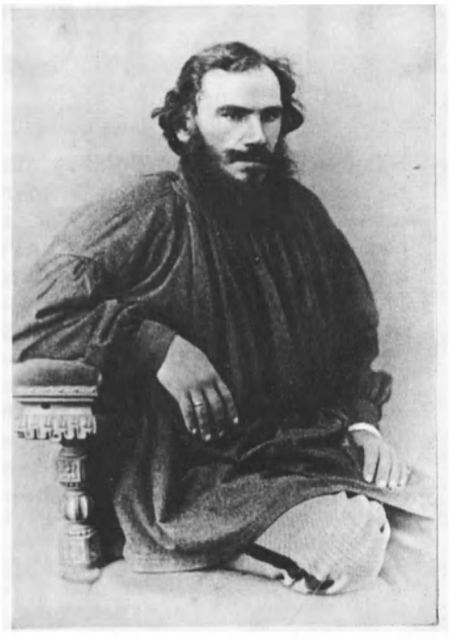
And on the same day he said to the circle of close friends around him:

"I know I don't deserve it, but here am I at Yasnaya Polyana getting expressions of sympathy with my opinions from all sides, and that gives me great happiness."

And, in fact, there was no country in the world—in Europe, Asia, America, in distant Africa and in Australia, in which the great Russian writer did not have friends and admirers. Messages of affection and of approval for his work reached him from all sides, and he sent a kindly reply to every one of them. The 50,000 letters

CONT'D THE NEXT PAGE

'A day will come when force will no longer be the sole factor in freedom'



IN 1868, Tolstoy (left), now 40 years old, was engaged on his masterpiece "War and Peace". Ten years earlier he had visited Switzerland, Germany and France after which he settled at Yasanya Polyana where he started a school for peasant children and published a journal devoted to the advancement of his pedagogical ideas. He spent the rest of his life at Yasanya Polyana where the photo of him skating (right) was taken in 1898.

bearing the stamps of all nations, which are preserved in the Tolstoy archives bear eloqent witness to his world-wide contacts.

Tolstoy set great store by his correspondence with people from all countries and continents. He appreciated the opportunity it gave him to learn the truth about the lives of far-off peoples, which was not always to be found in newspapers of the time.

In his letters, and in his conversations with the visitors who came to Yasnaya Polyana from so many countries, he was able to express himself even more freely than in his articles and books—to expound ideas and views he regarded as the only true ones, and of which he felt mankind to be in sore need. That was why he replied with such alacrity to every one of his many correspondents, regardless of station in life, be he a Russian peasant, an Indian philosopher, a Turkish poet, or a student in far-away Australia.

Among these world-wide contacts, Tolstoy paid great attention to the countries of the East. His interest in them grew particularly strong after 1880 when, after passing through a profound spiritual crisis he embarked resolutely upon a reassessment of the spiritual values of mankind.

Thereafter he turned more and more to the East, to the peoples of Asia and Africa. "It seems to me," he wrote, "that it is the mission of the eastern nations—China, Persia, Turkey, India, Russia and perhaps Japan to show other countries... the real road to freedom". Real freedom meant, for him, a life untouched by tyranny or violence, with no exploitation of man by man, no war or conquest—a life of peace, friendship and international brotherhood.

Tolstoy's oriental correspondents differed widely in their opinions, beliefs and religion and in their social background. Indian philosophers, Chinese scholars, Japanese writers and publishers, Iranian poets and journalists, Turkish lawyers, Arab peasants, teachers and students, all regarded the Russian writer as a faithful friend of their own peoples and were ready to confide their most private thoughts to him.

What drew them to Tolstoy, apart from his merits as a great writer, was the breadth of his humanitarian ideals, his sympathy for the oppressed and downtrodden, his hatred of colonialism and his faith in the victory of the righteous cause.

They told him of their intellectual quests, their doubts, their joys and sorrows, and of their people's dreams of freedom and happiness. Some of them described the ordeals undergone by their people and begged him to champion them against foreign or native oppressors.

The first distinguished Eastern intellectual to get in touch with Tolstoy was Matsutaro Konisi, the Japanese philosopher and writer. While in Moscow early in the 1890's, he was introduced to Tolstoy by N. Gret, the Russian philosopher, and soon became his assistant in the study and popularization of oriental philosophy. With Konisi's help, Tolstoy published in Russia several books on outstanding Asian thinkers. On his return to Japan, Konisi translated *The Kreutzer Sonata*, *Master and Man*, and other works by Tolstoy.

In 1896 another well-known Japanese visited Yasnaya Polyana; this was the publisher Ijiro Tokutomi, who

Photos Leo Tolstoy Museum.

used the pseudonym "Soho". He received a warm welcome from Tolstoy and the two had many conversations, enthusiastically reported in Tokutomi's paper, "The People's Gazette" and his review "The People's Friend". Translations of literary works and articles of Tolstoy's also appeared in these publications.

Hearing that Tolstoy was so kindly and approachable, other cultured Japanese were encouraged to get into touch with him. The number of his Japanese correspondents and visitors increased year by year, and so did his popularity in Japan.

His novel *War and Peace*, *Anna Karenina* and *Resurrection*, and his polemical writings, particularly *My Confession* and *Bethink Yourselves*, became favourites with the Japanese public, while his philosophy was adopted by a considerable number of Japanese intellectuals.

Tolstoy's interest in Japanese culture found striking expression in his friendship with the eminent essayist and novelist Tokutomi Roka, who spent five unforgettable days at Yasnaya Polyana in 1906, returned to Japan as an enthusiastic convert to the humanitarian views of the great Russian, and upheld those views for the remainder of his long and noble life.

Tolstoy's influence dominates the entire literature of Japan in the early Twentieth century. Tolstoy's ideas, according to the critic Naosi Kato, penetrated into every corner of the Japanese mind and, like gunpowder concealed in the crannies of rocks, exploded with such force as to shake all existing theories and principles to their foundations. It was almost a revolution.

Tolstoy remained in touch with leading figures in Japanese culture until the end of his life.

His bonds of friendship with India were even stronger. The Japanese, he felt, had been in too much of a hurry to assimilate certain bad features of Western civilization, and their inner world was something of a mystery to him; but he felt complete sympathy for the Indians, with their lofty conception of man's spiritual mission, their zeal for moral progress and their tradition of non-violence. He closely studied the life of the Indian people, and it was a joy to him to be in touch with its representatives.

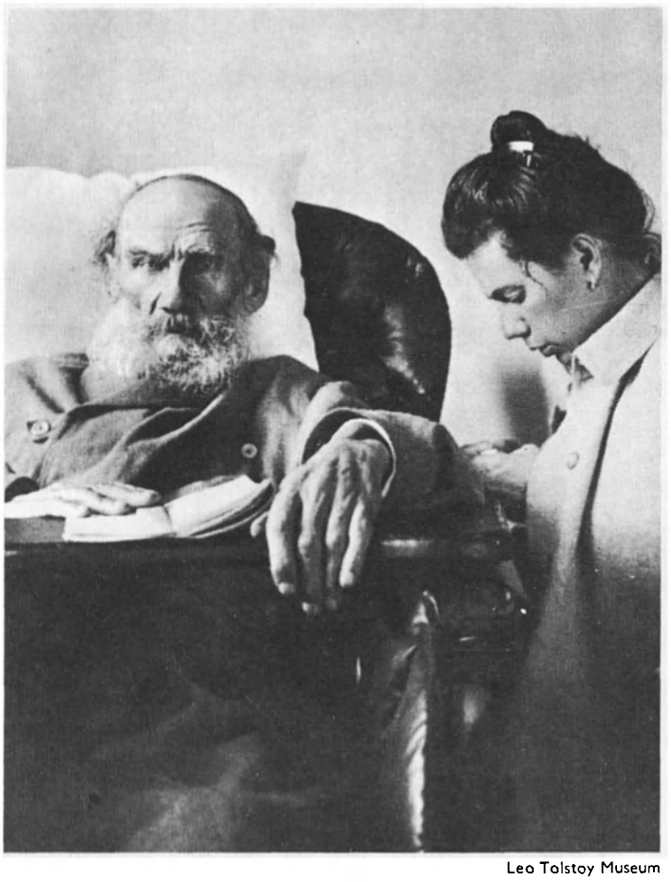
In 1901, A. Ramaseshan, editor of "The Arya", a review published in Madras, wrote a series of eloquent letters to Tolstoy about life in his country. Referring to India's struggle against British Westernization, he wrote: "We are confident that a day will come when force will no longer be the sole factor in political freedom, and when, after long, peaceful progress, the Indian nation will live in peace and harmony with the European nations."

Tolstoy replied to Ramaseshan in a long, sympathetic letter giving his views on the future of India. "I entirely agree with you", he wrote. "Your country cannot adopt the solution of the social problem proposed to it by Europe—which is, after all, no solution at all." Tolstoy considered that India's future depended on steadfast resistance to oppression and on a social structure based on respect for man and the rejection of oppression and violence.

He expanded these ideas in 1908 in his famous "Letter

CONT'D ON NEXT PAGE

Leo Tolstoy: a great link between Orient and Occident



Leo Tolstoy Museum

HOLLOW-CHEEKED and with a piercing, haunted look in his deep-set eyes, Tolstoy is seen here with his daughter, Tatiana, towards the end of his life, when he was deeply troubled by family differences. In November 1910 he left home secretly at night and died a few days later. His influence was already immense and in the last 15 to 20 years of his life he was probably the most venerated man in the world. His fame reached into China and India as well as Europe and America. Visitors from all ends of the world turned Yasanya Polyana into a centre of pilgrimage.

to an Indian"—a burning appeal written in reply to a letter from another distinguished Indian, Taraknath Das, editor of a review, "The Free Hindustan"

Tolstoy considered that evil arose in India from the fact that, however reluctantly, the Indians were submitting to foreign rule. He said that if the Indian people, obeying the precepts of their ancient sages, had refused to submit, no earthly force could have enslaved them. Tolstoy was an advocate of passive resistance, urging that evil should not be met by violence.

The profound inspiration and warm, benevolent tone of Tolstoy's answers to his Indian correspondents caused a spate of letters to pour into Yasnaya Polyana for the rest of his life. Despite his advanced years and the important work on which he was engaged, Tolstoy replied regularly to these correspondents, invariably emphasizing his respect for their country and its ancient civilization. It was in pursuit of his widespread friendly contacts with many representatives of India that Tolstoy began in 1909 his correspondence with Gandhi, who played so important a part in the public life of the Eastern peoples.

Tolstoy's ideological and artistic influence left a deep impression on Indian intellectuals. It did a great deal to develop *avant-garde* writing in India. There is an affinity between Tolstoy and the work of Rabindranath Tagore, Pram Chand and other eminent Indian writers. Pram Chand translated and edited 21 folk-tales by Tolstoy, whose works are among those most widely read in India.

Tolstoy did not correspond as frequently with representatives of Chinese culture as with their Indian and Japanese counterparts, but he was keenly interested in China, and stressed in his letters that mankind's salvation lay in the refusal to resort to violence between States, the renunciation of the oppression and enslavement of dependent nations, and in the establishment of peace and friendship among all peoples of the earth.

TOLSTOY'S unflagging interest in the East was also displayed in his continual study of the philosophy and literature of the Asian and African peoples, including their epic poetry and folklore.

His attention was first drawn to the philosophical and moral doctrines of the Orient in the early 1880's when, having renounced the world of the rich, he was engaged in laying the foundations of his new conception of the world. With passionate enthusiasm he studied Confucius, Buddha and Lao-tse, with passionate application he read the Vedas and the Upanishads, and the works of Chinese, Persian and Arab thinkers.

What particularly impressed Tolstoy in the immense storehouse of oriental thought was its humanitarian ethic, its concept of the lofty mission of man. Man is depicted as the culmination of nature. Happiness is not to be found in wealth, nor in the exercise of authority by one man over others, but in working for the general good. Peace, labour and virtue are the supreme moral values of mankind.

Discovering in the ancient doctrines of the East ideas and principles which harmonized with his own, Tolstoy set himself to propagating them in Russia. This led to the publication of his anthologies, *The Cycle of Reading, Thoughts from wise men for every day,* and *The Pathway of Life,* which assemble the maxims of leading Eastern and Western thinkers, together with oriental proverbs, saws and legends arranged by Tolstoy himself.

Earlier, in the 1870's, wishing to make the treasures of world folk literature accessible to Russian children, Tolstoy had collected and edited with equal care a number of Asian tales and fables and included them in his celebrated *Alphabet* and his *Russian readers.* Those remarkable anthologies contain many examples of Indian, Turkish, Japanese, Chinese and Arab folklore, presented in polished literary form. The collections of oriental tales, legends, proverbs and sayings compiled and published by Tolstoy are among the largest and most interesting to have appeared in Europe.

Not content with this, Tolstoy translated and published works of oriental philosophy. A series of books on Chinese, Indian and Arab philosophy was published in Russia under his supervision, including his own translation of selected maxims of Lao-tse, taken from the celebrated *Tao Te King* (Book of the Path and of Virtue).

Tolstoy's work in this field won high acclaim from experts all over the world. "Tolstoy", wrote Romain Rolland, "was the first, wide spiritual path linking all the members of the ancient continent, from West to East."

Tolstoy was a great humanist who defended the interests and aspirations of the masses and gave tongue to the peoples' protest against war and subjection with a vigour and passion never before encountered in literature. In him the nations of Asia and Africa had a trusty friend and champion.

I asked the person in charge:

"Why have you arrested that man?"

"Because he was begging, and it's forbidden," was the reply.

"He is begging because he is hungry. Give him work and he won't need to beg."

"Work?" said the official, "that's quite impossible...

...He is a leper'

29 JANUARY

WORLD LEPROSY DAY

by Raoul Follereau

LEPROSY is the oldest disease in the world. It appears to be as old, as man himself, and can be traced back to the remotest ages.

In India it was known as early as 600 B.C., under the name of *Kustha*. About the same time, in Persia, it was called *Pisaga*. Herodotus tells us that no one with leprosy might enter a town or have any dealings with other people, for his disease proved that he had sinned against the sun. Besides these taboos, he was forbidden to own... white pigeons !

Moses, who had been an Egyptian priest, enforced the most stringent measures against those with leprosy. They were obliged to live apart, to veil their faces, and to warn anyone of their presence by crying out "Unclean, unclean!"

Even at that time, leprosy meant neglect and social ostracism for its victim. It would be consoling to find that the lot of the leprosy victim had improved with the passage of the centuries. But even now, leprosy remains one of the greatest scourges of mankind.

The statistics we have are incomplete and mostly underestimate the real situation. The number of people with leprosy in the world today may be reckoned at between 12 and 15 million. This means that there is one to every 200 inhabitants, and one to every two T.B. patients.

The highest incidence of the disease is in Asia, in every country of which leprosy claims its victims. Africa, has between two-and-a-half and three million victims, while in the South Pacific region all the islands, with the exception of New Zealand, are contaminated. America, too, has its sufferers—mainly in the West Indies, the Guianas, Mexico and South America.

From time immemorial leprosy has been regarded as a terrifying and accursed affliction, thus causing those with it to be segregated from their fellows. At times they have been driven from their homes and villages. I have seen them thrown together with mental patients or else held in what are nothing less than concentration camps, behind barbed wire, their guards armed with machine-guns. I have even found lepers shut up in a cemetery! Some tribes have also been known to make them commit suicide.

WHY this ostracism and cruelty? Because, until recent years, leprosy was regarded as contagious and incurable. It was a "danger" against which protective measures had to be taken. The man with leprosy was a "hopeless" case, a total loss for the tribe and the city. Hence this "social excommunication" which made him an outlaw and set a curse on him. Nowadays, leprologists are unanimous in their opinion that leprosy is only slightly contagious and can be effectively cured.

In many cases and in many countries, leprosy is not—or has ceased to be—contagious. In others, it can be contracted only through close, and oft repeated contact. The children of parents with leprosy are not born with the disease. In fact, according to WHO, "the risks of contracting leprosy by association with a leper are far fewer than in the case of tuberculosis." There is therefore no reason for condemning the leprosy patient indiscriminately to isolation, and still less for driving him out of society.

The 1958 WHO Conference at Belo Horizonte and that of 1959 at Brazzaville, solemnly condemned *segregation* once and for all, for the following reasons:

- If the diseased person fears that he will be forced to go to hospital, he will conceal his disease;
- Isolation leads to a break-up of the family;
- Isolation gives rise to serious difficulties in controlling contacts;
- Isolation stigmatizes the patient by delaying his reintegration into society;
- Isolation is too costly a health measure, in that it absorbs the funds needed for the development of up-to-date methods of combating leprosy;
- Isolation helps to keep popular prejudices alive; and, above all, it is *utterly inhuman.*

ACCORDINGLY treatment for leprosy victims should generally be provided in the same way as for any other kind of sick person: as an out-patient in mild cases; and in special centres or "sanatoria," if this is required by the form or virulence of the disease—exactly as for tuberculosis.

This liberal, humane system of treatment which has at times been criticized as incautious, but which recent scientific discoveries have proved to be sound, has been applied in recent years in the former territories of the French Union. Two sets of figures are enough to illustrate its scope and success. In what was formerly French Equatorial Africa, at the end of 1951, the known number of people with leprosy was 37,508, and the number of patients treated was 2,268 or approximately 6%; at the end of 1956, the known number of sufferers was 140,000, the number of patients treated was 120,000 or 85%.

These figures reflect action going beyond the experimental stage and are more than encouraging.

Regarding the children of leprous parents the Brazzaville Conference stated that:

■ In countries which have set up "preventoria" for the children of leprous parents, these establishments will be converted as far as possible into crèches;

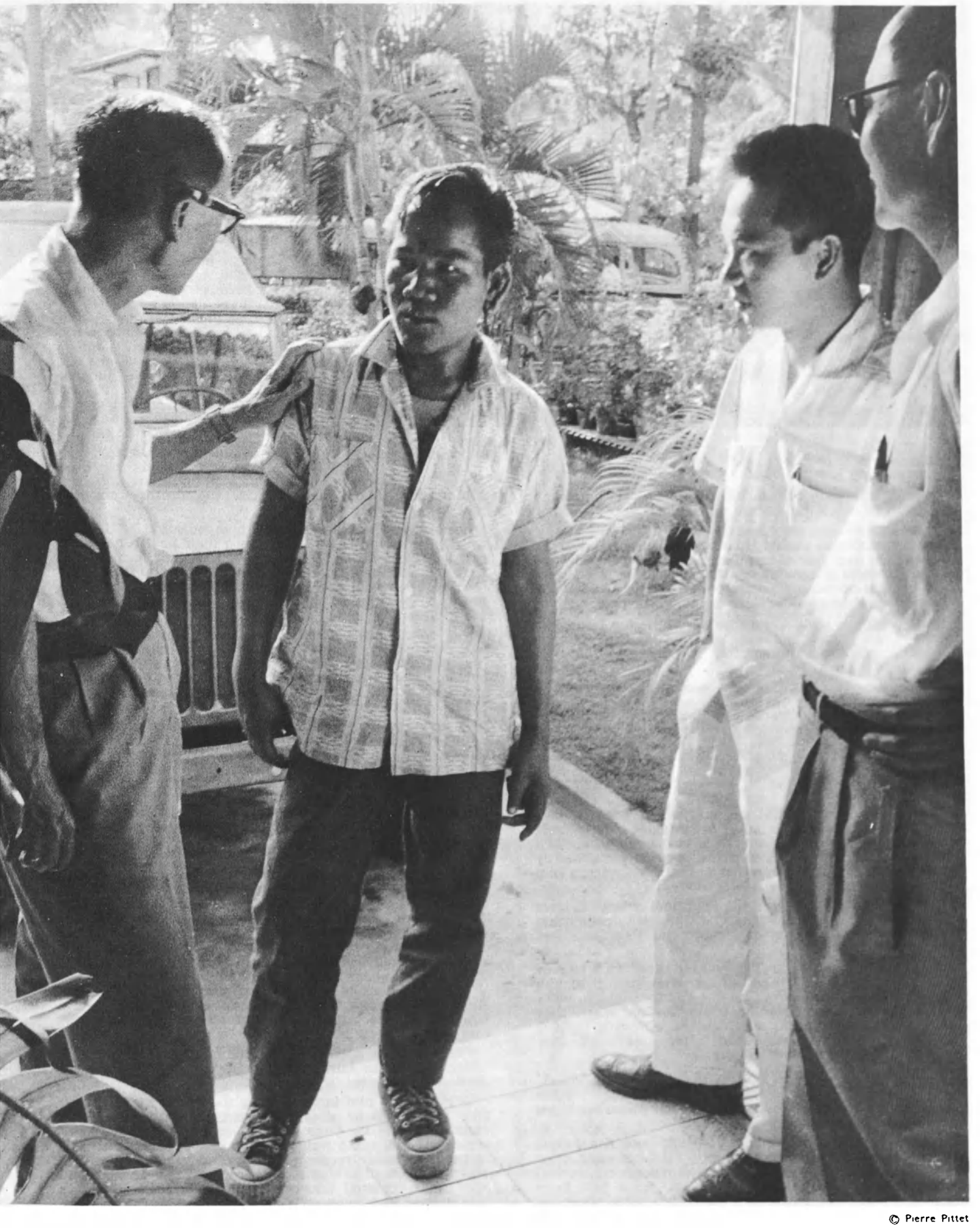
■ It is considered dangerous to take children away from a leprous mother from the day of their birth and to place them in institutions. When this has been done the result has been a high infant mortality rate and disastrous psychological effects among those children who survive;

■ It is essential not to deprive these babies of their mothers' milk.

The Conference further stated that day pupils *might continue to attend their schools,* provided they were given regular treatment; health education should then be given to their fellow-pupils and their families.

Lastly, congresses and conferences have formally concluded that leprosy is a disease which can be *completely cured* by sulphones, which are inexpensive and easy to apply. The VIIth International Congress of Leprology (Tokyo 1958) recommended that the widest possible publicity should be given to the fact that leprosy was a curable disease and that the existence of a few perma-

CONT'D ON PAGE 30



'YOU HAVE LEPROSY', a World Health Organization doctor tells this youth from Luzon in the Philippines. But as the doctor gives the bad news he drops a kindly hand on the youth's shoulder and tells him that a course of treatment with sulphone tablets will cure him. Today, treatment for leprosy victims is being provided more and more in the same way as for any other sick person—as an outpatient in mild cases ; in special centres only in cases where this is required by the form or virulence of the disease.

© Pierre Pittet

NO LONGER CUT OFF from other people simply because of their illness these leprosy patients in the Philippines are able to farm and do other work. Attitudes towards leprosy are beginning to change. Those who have suffered from the disease but who are no longer contagious are now being given the chance to return to society.

nent after-effects in certain former victims did not mean that in these cases the disease was contagious or had not been cured.

Leprosy sufferers should thus be treated without being subjected to any special regulations, and, in the view of modern medical science, most of them will be freed from what today is no more than an ordinary disease which has foolishly been exaggerated into a spectre of horror.

But can those with leprosy be saved merely by curing them? From time immemorial, the victim of the *Bacillus leprae* has suffered from two afflictions: he has leprosy, and he is a "leper."

He has leprosy. But this can be cured by present-day science. Yet what is the use if, once healed, he still bears the stigma of the "leper," and still remains an outcast?

We must see to it that, as soon as the doctors have pronounced him to be non-contagious, he should immediately regain his place and employment in society. There must be no question of punishing him permanently for some inexpiable crime, of continuing to condemn him to "perpetual leprosy."

This is the purpose of the petition which I have addressed to the United Nations, with a view to securing the preparation of a Charter for adoption by all civilized countries.

It can be summed up in two points: those with leprosy are human beings like the rest of mankind, subject to, and protected by, the same laws; no one has the right to place any restriction whatsoever on their freedom when they suffer from a non-contagious form of leprosy or hold a medical certificate stating that, after treatment, they present no further risk of contagion.

These proposals were approved by a unanimous vote of the French National Assembly on 25 May 1954.

A distinction must be made between the following three categories of patients:

Those who are contagious. In their case the fullest possible isolation will be necessary. If this cannot be arranged at home, they will have to be placed in a special centre for treatment. Such a centre need not be a hospital for leprosy patients; it can be a sanatorium, or simply a special ward of an established city hospital.

These people are ordinary patients, who should be placed on the same footing as any other patients temporarily suffering from a contagious disease. And, like other patients, they must be fully assured that their isolation will not last a day longer than the doctor considers necessary.

Society itself owes them fair compensation. To begin with, they should be sure that once their health has been restored they will be able to go back to their former jobs. It is for the State to set an example by granting long-term sick leave to any of its officials suffering from leprosy, without letting this be any handicap to them in their careers.

Non-contagious patients who have so far been isolated indiscriminately. They should be free to go where they like, but this does not mean that they should be removed by force from where they are at present. They must be given both the means and desire to return to society. But they should not be forced to do so.

To give them a chance to readapt themselves, it is both right and necessary for them to receive a financial allowance for a period of, for example, two or three years. The amount might be the same as what would have been spent on them had they remained in the sanatorium. This would mean no extra expenditure; nor should any "economies" be made on patients who, leaving of their own volition, will accordingly feel less apprehensive about starting life afresh.

The *crippled and maimed.* Those whose faces, for example, will permanently bear the mark of the disease, need special homes set up in the form of small villages where they will live together, with every measure being taken to ease their lot and help them forget the past. Though the damage done to them can never be repaired, they remain none the less human beings; and society which came too late to their aid, owes them its respect and a friendly helping hand.

This Charter should be proclaimed by all countries which believe in human values and pay more than lip service to the ideal of freedom.

This was my aim in instituting the world-wide Leprosy Day, which will be celebrated for the eighth time on 29 January 1961. Its purpose is to ensure that lepers are treated in the same way as other sick persons, with full respect for their freedom and dignity as human beings; and to "cure the sound in body" of the absurd and sometimes criminal fear which they show in regard to this disease and those stricken with it.

Last year, 88 countries were associated in World Leprosy Day. Let us make no mistake. The emancipation of the victim of leprosy, who has been held in terror for 2,000 years, will go down in history as a victory comparable to the emancipation of the slaves.

CHRISTIANITY & ANTI-SEMITISM

by Father Yves Congar

Convent of the Dominicans, Strasbourg, France

As author of *The Catholic Church and the Race Question*, one of the booklets in the UNESCO series, *The Race Question and Modern Thought*, permit me to comment on a number of points in the racism issue of THE UNESCO COURIER.

In his most interesting article "A Look at Modern Anti-Semitism," Léon Poliakov has, in effect, once more taken up the thesis of P. Jules Isaac, a man whose name I have known since childhood, for it was from his textbooks that I learned my history. His thesis is that a relationship exists between modern anti-Semitism and theological anti-Semitism which "dates back to early Christian times."

As a historian myself, convinced that History is a great mistress of truth, of human culture and of objectivity, and hence of peaceful understanding, I think there is an undeniable element of truth in this thesis. In this respect, I would attach particular importance not so much to the *theological* arguments of the Fathers of the Church and leading theologians, but to certain popular predications such as those delivered on the occasion of the Crusades or auto-da-fés. A work on the auto-da-fés in Portugal at the end of the 15th century, which I recently examined, comes to my mind. Such predications helped to spread a picture of "The Jew" on which the irrational sentiments of the broad masses thrived.

But the exact nature of our relations with "others" depends above all on a critical examination of such general images through which it is so easy to build up a grotesque and even vile picture of certain groups of people, especially if their life apart makes them seem foreign or mysterious. Anti-clericalism and criticism of monks also thrived in this fashion.

In point of fact, even when one has not been subjected to the influence of such images there is always a need to reinforce the truth of one's beliefs. Here I might use my own experience as an example. Thank heaven I have never been an anti-Semite and, as far as I know, have never injured a Jewish person in any way. As a child I had Jewish friends who were the children of my parents' friends. And a generation later I see that my own nephews have as their friend a child who escaped the massacre, but whose parents—my own childhood comrades—never returned from the death camps.

Yet even so, from 1938 to 1943 I was mentally in agreement with discriminatory measures like the *numerus clausus*, as it was applied in Hungary, whose unjust and dangerous nature I failed to understand at the time. I have since realized that this was inadmissible. From talks I had with fellow prisoners of war who were Jewish, and after the frightful events of Auschwitz and Bergen-Belsen, I came to see, after 1943, that any discrimination whatever based on ethnic or racial considerations opened the way to the negation of justice and love, to the denial of human fraternity and, eventually, step by step to actions of the worst kind.

I should like now to make five points concerning the thesis of Léon Poliakov (and of Jules Isaac).

1. It is easy to make a collection of texts (and of facts) concerning Christian anti-Semitism. But facts and texts should be considered and understood in their proper contexts. Originally a polemical atmosphere prevailed. The first persecutions of the Christians sometimes stemmed from Jewish denunciations, in a world in which Judaism was still proselytic and influential. In his *Verus Israel* Marcel Simon has clearly demonstrated the responsibilities on both sides for this struggle between Jews and Christians during the first four centuries of the Christian era. The "doctrinal anti-Semitism" of the Fathers of the Church had as its counterpart an anti-Christianity of the Talmud.

2. This "doctrinal anti-Semitism" is truly doctrinal and hence religious. It is not *racist*. It may have had practical consequences similar to those produced by pagan anti-Semitism. But in itself it is quite different, it seems to me. And to come to an objective conclusion concerning the theological, religious —and non-racist—character of Christian anti-Semitism in past centuries, I would recall the excellent Protestant book, *Antisémitisme et Mystères d'Israël*, written in 1955 by F. Lovsky, which neither Léon Poliakov nor Jules Isaac have taken sufficiently into account.

3. Léon Poliakov is too experienced a historian to believe that there was once a Jewish people ready to mingle with the pagan peoples, and later with Christian populations, and that the tragedy of the situation which led to the Ghettos can be laid entirely at the door of Christianity. Besides the fact that pagan anti-Semitism existed before any Christian anti-Semitism, Israel was inclined by its own internal laws—that is, by its most noble and profound traditions —to live apart. Its uncompromising particularism could hardly help but raise a kind of "Jewish question."

There has also been and still is a Moslem anti-Semitism as well as a Soviet anti-Semitism which have no connexion whatever with the doctrinal anti-Semitism of Christians. What Dubnov has said in his *Histoire Juive* on the situation of the Jews in the Orient, shows that in another way, but all the same in one form or another, the Jewish people are the subject of discrimination in that part of the world.

4. The "doctrinal anti-Semitism" of the Christians was not drawn up specifically and exclusively for the Jews. It rests on an ensemble of theological theses which concern "the Others," the non-Christians, the "heterodox," those belonging to other religious groups and even the pagans. Christian thought of other centuries had drawn up on this subject a coherent and logical collection of theological findings which amounted to a kind of jurisprudence. These arguments were drawn from an entirely objectivist realm of thought, inspired by the conviction that Truth exists and that it alone has proper, defined rights.

Today we still believe in the rights of Truth but have a different way of meeting its demands.

We have nowadays reached the point where we can take into consideration the individual viewpoint or that of conscience. But it should not be forgotten that the ancient theology often laid claim to texts of the Old Testament. The very idea of "divine punishment", which has led Léon Poliakov to detect an odour of crypto-Christianity in *Le Dernier des Justes*, because the author, J. Schwartz-Bart, had given space to it, is not specifically Christian, but Biblical.

What I have just said was even more accentuated under a Christianity in which religion and politics existed in tight association; in which the Kingdom of God took on the status of a form of government, in which, unhappily, religious or dogmatic reproval was translated into social or judicial measures.

5. Finally, the thesis of Jules Isaac and Léon Poliakov runs the risk of showing only the tragic and unpleasant side of the co-existence between Christians and Jews which has so often been a sorrowful one for the latter. There is, however, all the positive side, often brought out

CONT'D ON NEXT PAGE

in historical studies which I could quote. This is manifested in attitudes, often merciful and conciliatory, made possible by a legal status, the overall result of which was beneficient. Chrysostom, Augustine, Gregory the Great, Bernard and the Popes Pius XI and XII took up the defence of the Jews. The texts and the acts of these last two popes are not sufficiently well known. In 1953 I included a short list in my booklet and one could draw up another from one of Mr. Poliakov's own works, *Les Juifs et le IIIe Reich*. Exact history should include all this in its balance sheet of facts and in its appreciation of realities.

This, of course, does not mean that there is nothing more to be done. Unhappily there is much to do... But Christians are ready to learn and are willing and able to revise their ideas and actions. We are in full agreement with Mr. Poliakov and with UNESCO to continue the effort which is already well under way, but still not equal to the need.

A FEW COMMENTS

by Léon Poliakov

It was with emotion that I read the letter of Father Congar. I should like to say at once that with the exception of some slight shades of meaning I agree with the first three points of his letter. On the fourth point I feel obliged to disagree.

1. The situation of the Jews, as heterodoxes or *the others* in the mediaeval world, was very special and infinitely vulnerable. It was considered at that time that the Jews had condemned themselves by their own offence to perpetual punishment and servitude (this offence was firstly "deicide" and secondly "impenitence," that is, their refusal to become Christians).

2. I agree with Father Congar when he recalls that in all centuries there have been Christians who have defended the Jews (although among the great names he quotes one could make distinctions) and I would add that during every age there have been reassuring examples of friendship and understanding between Christians and Jews; and even between theologians and rabbis. Nor should we forget the great Abelard, the only theologian of his day who absolved the Jews of all responsibility for the Crucifixion.

To recall such facts can only serve the cause of Judaeo-Christian friendship; it would be false and harmful to pretend that Jewish history has been nothing but a Vale of Tears. It is important to recognize that even at a time when ideas were very different from those we have today and when laws imposed a rigorous segregation between the followers of the two religions, understanding and mutual esteem were fully possible. Such contacts no doubt enabled each side to perceive the elements that made up (or were missing from) the metaphysical nature of the other. Thus life, in its manifold and mysterious fullness, transcended the doctrines and the laws.

THE RACISM ISSUE

Sir,

I am cancelling my subscription to your magazine, being a firm disbeliever in "brotherhood" between peoples. Your idealism is no doubt noble, but unfortunately unattainable. In my view you are cherishing dangerous illusions at a time when force is the only valid political argument.

J. Morin
Lillebonne, France

Sir,

Would you please send me a copy of the Racism issue of THE UNESCO COURIER in French. (We already have an entire class subscribing to the English edition.) I consider this problem of such importance that I would like to deal with it in two languages with my young girl pupils.

Sister Maria Domenigo
Cloppenburg, Oldenberg
German Federal Republic

Sir,

I would like to express my appreciation of the excellent issue of THE UNESCO COURIER on racism. No doubt the extremely interesting analyses and articles will help to combat race prejudice. I sincerely hope that a translation of the whole issue will soon appear in the German edition which is now also being published. Many German people still have a lot to learn in this field, not only as regards anti-Semitism—which is, at least in public, generally condemned—but also in their attitude towards Africans. I could imagine that a special drive for this particular number, when it appears, would allow the edition to be far above the normal, if local Ministries and education authorities could be induced to get this issue for teachers, students at teachers' training colleges, adult education organizations, etc.

Nora Walter
Frankfort-am-Main
German Federal Republic

Ed. note. This issue has now been published in our new German edition.

Sir,

May I congratulate all who were responsible for the issue dealing with the problem of racism. It was a most impressive treatment of a gnawing problem, and cannot help but make a positive impact on all who are exposed to it. I believe it will help dispel some of the discrimination and prejudices, even among those of us who call ourselves liberals.

May I be permitted, however, to comment briefly on two items in the otherwise excellent article entitled "Race Prejudice and Education" by Cyril Bibby.

Mr. Bibby is absolutely correct in rejecting the notion of a "Jewish Race," and suggesting that we speak of "The Jewish Religion." However, by using the phrase "The Jewish People" he gives credence to the Zionist philosophy that there is an international unity of Jews beyond their religious beliefs. Israeli leaders constantly make reference to "The Jewish Peoples" in their efforts to win acceptance of the view that Israel is the representative and spokesman of World Jewry. The long history of Zionism—a minority movement among Jews—is replete with efforts to give the world the impression of *all* Jews as a "public body". The much used phrase for this purpose is "the Jewish people." (Though some Jews through the years have used it for strictly religious purposes, it now is a sloganized term for Zionism.)

Further, there is an unfortunate use of the stereotype wherein the author refers to characteristically "Jewish gestures," "Jewish pattern in family life," "Jewish occupations and cultural interest." I feel sure you will agree when we say that there are no "Jewish occupations;" there are only occupations to which Jews may have been drawn, because of discrimination in other occupations. As for the concept of a "Jewish culture," we maintain that except for the obviously liturgical music and religious art and literature, the culture of Jews is a blend of the culture of the lands or lands in which they live or have settled. For example, there is no "Jewish culture" for American Jews separate and apart from what we term our American culture.

Bill Gotlieb
The American Council for Judaism
New York, U.S.A.

Sir,

I shall not be renewing my subscription to your magazine. Your revue is not uninteresting, but your action is biased and artfully "camouflaged." Your issue on Racism, in particular, disgusted me. One would think that your "brotherhood" was only intended for Negroes and Jews. You will end up by making people detest them. You publish photos taken from films, yet there is no shortage of *real* ones taken at places like Oued Zom, in China, in the Congo and other places. Reading sanctimonious and hypocritical sentiments "à la Tartuffe" has always irritated me.

Antoinette Mirande
Le Bex-d'Ytrac, France

Sir,

I have just received your issue devoted to Racism in the world and though I wholeheartedly approve of the condemnation of these harmful theories, I cannot help deploring the fact that they are almost entirely presented as a creation of the "white" race. When we consider this problem we should not lose sight of the racial intolerance shown by coloured peoples, which white people are likely to encounter more and more frequently in the future.

Jean-Pierre Bolzée
Liège, Belgium

Sir,

Full honours to THE UNESCO COURIER for its focus on racism. This is a vital problem which we must solve if this ever shrinking world is to live peacefully. Racism is practised by many member states of the U.N. even though they openly deny

Letters to the Editor

it. In an official document the Australian Government states that: "Australia does not approve of racial discrimination policies and no such policy exists in Australia."

But the main cause for Asian distrust for Australia is the controversial "White Australia Policy." This is racism and colour prejudice. To expand as she wishes Australia must have migrants to boost her natural increase of population, but the migrants are chosen people. At the moment thirty one different nationalities live throughout this vast continent but they are all from European countries. All the sincerity of Australia's efforts through the Colombo Plan and other policies to further the advancement of less fortunate countries in Asia is lost by this definite taint of racism.

This policy of racism has been criticized by many visiting Asian leaders; it has been regretted by many Asian students coming to Australia under the Colombo Plan. The greatest thing Australia could do to raise her prestige in Asia would be the abolition of the "White Australia Policy." At the moment it is the greatest threat to her economic well being and future standing in Asian eyes.

R. Robertson
Launceston, Tasmania, Australia

Sir,

My heartiest congratulations on the very fine special issue devoted to the question of racism.

Bernard Lacache
Chairman, International League Against Racism and anti-Semitism
Paris, France

Sir,

I read each of your issues, with the greatest interest. I should particularly like to congratulate you on the magnificent issue devoted to Racism.

Jacques Lazaras
Congres Juif Mondial
Algiers

Sir,

I always read THE UNESCO COURIER attentively and appreciatively. But I do not always agree with the form of its themes for I notice that it carefully glosses over anything that could go against the ultra-nationalism of colour; it does not hesitate, following the example of the United Nations, to accuse the white peoples, the same people that the newly independent nations nevertheless accept as a source of funds.

Why do you ignore the black Racism which in the Congo provoked the hunting of white people and horrors recalling the time of Hitler and of Budapest?

Why dismiss (in a few lines) the Arab-Israel conflict as being of political origin when in fact the Jews have been for centuries past the detested pariahs of the Arab nations?

Why pass over in silence the Racism of the Arabs of Maghreb who refuse the Europeans of Algeria—Algerians for more than a century past on lands that Arab laziness had transformed into desert—the right to live in freedom?

Or again why say nothing about the positive anti-racist achievements of the white peoples, called colonizers, who for half a century have striven to create links between Negroes and white men, bonds of friendship which begin on the benches of the same school or in the tent of the bush doctor.

We should not forget that while it was only last year that the Americans decided to suppress this stupid racial discrimination, in France Negroes have never been relegated to special schools of forced to use "Negroes only" restaurants and buses.

L. Boyer
Saint-Etienne, France

Sir,

It is a sad commentary on our times—the so-called era of great civilization—that mankind still suffers from an abscess caused by the blind obstinacy of those who wish to relegate others to the status of an inferior race, even though they are endowed with equal faculties. It would be both naive and unjust to complacently continue to perpetuate this myth principally on the basis of race and the colour of a person's skin. This attitude entirely without foundation because it is ignores any question of human values, plumbs the very depths of human stupidity, revealing not a state of superiority at all, but one of moral deficiency. None of the reasons invoked by the supporters of this harmful ideology can justify their action, which in any case can only lead to the humiliation of others.

M. Bensahli
Algeria

Sir,

Congratulations on the Racism issue. It is objective, magnificent and of burning topical interest. We were all the more appreciative of this number because we have always tried to bring our pupils into contact with children of all nations, within the limits of our regretfully small resources. We also welcomed this issue because following publication of the article about Bouba and Jacques (See THE UNESCO COURIER, September 1960 —an exchange of letters between the children of Costes-Gozon in France and those of Pitoa in the Cameroons) we received an anonymous letter from someone who showed scant enthusiam for our activities. This was perhaps the best proof that we have not worked in vain.

P. Cabanes
Costes-Gozon, France

Sir,

As a Frenchman from Morocco I should like to tell you what I think of your issue on Racism. On page 5 you publish a photo (Massacre at Sharpeville) showing about 15 corpses on the ground. However, having gone through the 1918-14 war, I am not upset by a few drops of blood and so I can judge things objectively. The Afrikaaners and their racism certainly bear some responsibility for these corpses. But you are lacking in objectivity. Alongside you should have published several photos of the former Belgian Congo.

In support of your thesis you evoke the terrible fate of the Jews during the Second World War. But the Jews were not the only victims of the Nazis. This terrible persecution was chiefly a racial one, but the truth is certainly less clearly apparent. Collective massacres are one of the outcomes of war. In the 17th Century the Germanic populations were decimated by the Thirty Years War, the Palatinate razed by the army of Turenne; in the 19th Century, there was the brutal behaviour of the Napoleonic armies, the British prison ships, the fate of Dupont's troops in the Balearic Isles. That is war, and it is war that must be destroyed.

The Jews are an admirable people. For over 2,000 years they have remained Jewish and will do so for many years to come. But they are an impossible people to assimilate. It is quite normal for Jewish people, refugees in France, to remain Jewish. But in that case they should not concern themselves with the affairs of the country that has harboured them. This is the chief grievance against them.

Colonialism can claim to have done many positive things. You must already have gathered that I am a colonialist—I have been one for the past 30 years. Having been a teacher for 31 years, I have had coloured children in my class. I have liked them and I have done what I could for them.

M. Malhomme
Marrakech, Morocco

Sir,

Certain areas like those of the industrial north of France are ripe for the introduction of segregation. The victim: the North African. The reason: his own fault. The solution: his conversion from the Islamic to the Catholic faith.

Let me explain. In 1940 I was horrified by Racism. Like all French people I was well disposed towards coloured people and was a free thinker besides. However through my experiences with Arab or Kabyle workers and shopkeepers, I have decided that it is best to keep clear of them, to lock one's door against them, to keep one's dealings with them on a polite but restricted basis and to avoid either hiring them or working with them.

What have we found out through observing and living with these people whom we should have liked to treat as fellow countrymen and brothers? They are conceited people, vain, unstable, inefficient, lazy, syphilitic, tubercular, argumentative, dishonest, weak and vindictive. Not all of them are as I have described and they do not all suffer from a combination of these faults, but each of them carries within him at least one of these vices, always ready to spring to the surface.

M. Bourdon
Comines, France

From the Unesco Newsroom

SPECIAL UNESCO STAMPS TO BE ISSUED IN FRANCE

Three postage stamps valid only on mail sent from Unesco House are being issued by the French Post Office on January 21 in denominations of NF 0.20, NF 0.25 and NF 0.50. On January 21 and 22 a temporary post office will be opened in Unesco House to frank letters and first day covers which are being brought out in connexion with the issue of these special stamps. The design of the stamp (above) with its two antique heads illustrates Unesco's Major Project on Mutual Appreciation of Oriental and Occidental Cultural Values. The occasion will also be marked by a philatelic exhibition in Unesco House. All these philatelic items can be purchased from Unesco's Philatelic Service which also stocks all United Nations stamps currently on sale. Information on items available, their price and mode of payment can be obtained by writing to the Philatelic Service, Place de Fontenoy, Paris-7e.

CALLING THE FISH ROLL: Every kind and shape of fish found in Mediterranean waters, from the tasty sole to the sea horse, are listed in a catalogue recently issued by the U.N. Food and Agriculture Organization (FAO). The aim is to standardize the names of fish so that the 12 countries in the FAO's General Fisheries Council of the Mediterranean can compare fishery statistics. The book lists 18 kinds of rays from "guitar fish" to "devil fish" and 28 types of shark, from "Darkie Charlie" to the six-gilled shark.

■ **BLIND ESPERANTISTS:** *An international Esperantists meeting of an unusual kind was held recently in Brussels: the 75 participants..teachers, students, musicians, masseurs and others—were all blind. They came from Finland, France, Germany, Italy, Spain, Norway, the United Kingdom and Yugoslavia.*

FROST-PROOF SEEDS: Scientists at the Timiriaziev Agricultural Academy in the Soviet Union have discovered how to make seeds "frost-proof". They treat them with a solution of mineral and organic fertilizer which solidifies and forms a porous "envelope" around each grain. With this protection, which allows air and water to penetrate, the seeds can be sown in autumn instead of in spring, and during the first warm days they start to germinate and grow very quickly. Crops of cabbages, onions and other vegetables grown from seeds treated in this way showed 30 to 50 per cent increases.

■ **WMO'S 10TH BIRTHDAY:** *The World Meteorological Organization (WMO), which last year celebrated the 10th anniversary of its establishment as an agency of the United Nations, has increased its membership during that time from 30 to 100 countries. Its tradition of international collaboration in the field of meteorology, however, dates back to 1878 when the International Meteorological Organization was set up as a non-governmental body.*

GERMANY'S SCHOOL FORESTS: Hundreds of "school forests" have been created in the Federal Republic of Germany to teach children how trees grow and how they should be cared for. About 350 such forests now exist in the Rhineland and Northern Westphalia, many of them being planted by schoolchildren under the guidance of teachers or forest wardens, and often with seedlings grown in school nurseries. Sites chosen for tree-planting are bare slopes badly in need of protection from erosion. In other regions of Germany, sections of existing forests are maintained by schoolchildren.

■ **ORIENT ON THE SCREEN:** *New countries and old civilizations—whole new regions of thought, feeling and action—are today being revealed to the rest of the world by the cinema which explores these new worlds and publishes its findings in vivid pictures and sounds. To act as a guide to Asia through the cinema screen, a survey of films produced in the countries of the Orient has been made by the British Film Institute at the request of* UNESCO *as a contribution to its Major Project on the Mutual Appreciation of Eastern and Western Cultural Values. Entitled "Orient: A Survey of Films Produced in Countries of Arab and Asian Culture", it deals both with feature and documentary and short films.*

A NEW "TALKING BOOK" machine for blind people which gives 20 hours playing time has been developed. A tape recorder of simple design, it uses half-inch tape carrying 18 tracks on it. Each track takes 70 minutes to play and when it has finished instructions are given to the listener telling him how to move on to the next track. Because of its operational simplicity, the machine will be particularly valuable to elderly blind people who usually find the gadgets of the average tape recorder too intricate.

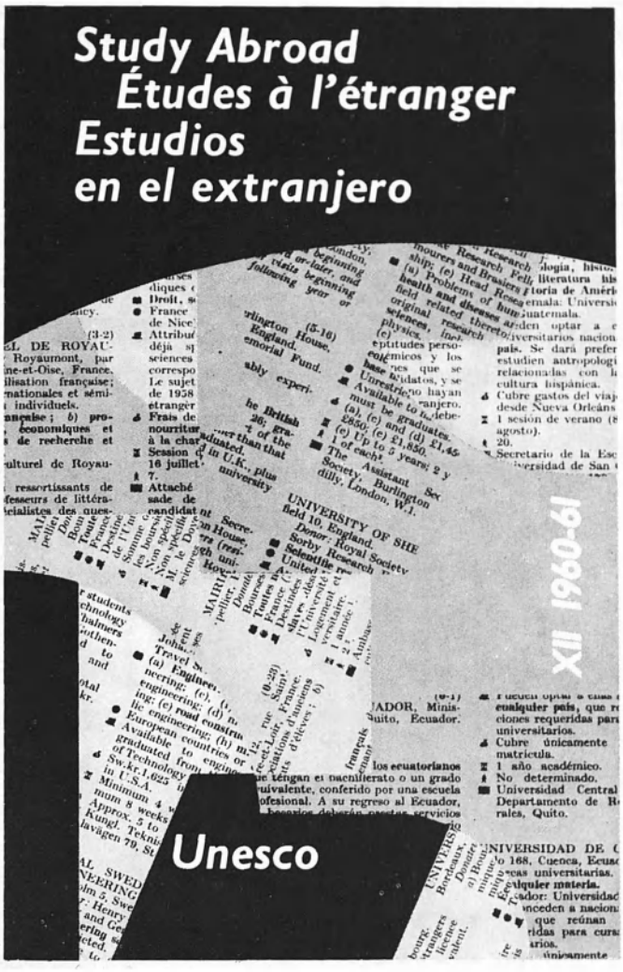
■ **SCIENCE AND THE HUMAN BRAIN:** *Today scientists are beginning to build up a coherent picture of brain function in terms of the physical and chemical processes that underly the co-operative actions of the ten thousand million nerve-cells in the human brain. They are using information from animal experiments, clinical problems and dramatic developments in physics, chemistry and mathematics. But the fantastic complexity of these problems calls for action by a flexible, world-wide network of scientific intercommunication and co-operation. To meet this need an International Brain Research organization, whose aim is to co-ordinate results from scientific studies of the brain and to facilitate training and research, was recently formed in Paris at a meeting convened on behalf of* UNESCO *by the Council of International Organizations of the Medical Sciences.*

WATCHDOG WEATHER SHIPS: Nine people were rescued from the sea during 1959 by weather ships stationed in the North Atlantic, according to a recent report of the International Civil Aviation Organization (ICAO), an agency of the United Nations. The ships also responded to 47 appeals for medical assistance, received 10 distress signals from aircraft and 574 from ships at sea.

ALEXANDRE LEVENTIS

THE UNESCO COURIER regrets to announce the death, at 56, of Mr Alexandre Leventis, Assistant Editor. Born in France in 1904, Mr Leventis came to UNESCO in 1951 after many years of experience in magazine editing and production in France. For eight years he was Associate Editor, in charge of the French edition of THE UNESCO COURIER. He was named Assistant Editor for all language editions in 1959. His death represents a deep loss to the magazine and to UNESCO itself.

Imp. GEORGES LANG, Paris. IMPRIMÉ EN FRANCE



Just issued:

Vol. XII, 1961

Last year some 200,000 students enrolled for higher education in countries other than their own. This fact alone shows the usefulness of this most popular Unesco handbook. Volume XII, just published, brings you the latest information on 100,000 fellowships offered by governments, universities, foundations and other institutions in over 100 countries and territories. A perfected system of classification will help you to find rapidly all the details: who is entitled to a scholarship, course of study, amount of award, and where to apply. An invaluable manual for anyone contemplating study in a foreign country. An indispensable reference book for all libraries, universities and information centres. A useful instrument in promoting educational contacts throughout the world.

$3.00 15/- (stg.) 10,50 NF

Where to obtain Unesco publications

Order from any bookseller, or write direct to the National Distributor in your country. (See list below; names of distributors in countries not listed will be supplied on request.) Payment is made in the national currency; rates quoted are for an annual subscription to THE UNESCO COURIER in any one language.

AFGHANISTAN. — Panuzaï, Press Department, Royal Afghan Ministry of Education, Kabul.

AUSTRALIA. — Melbourne University Press, 369 Lonsdale Street, Melbourne, C. 1, Victoria. (A. 15/-).

AUSTRIA. — Verlag Georg Fromme & Co., Spengergasse 39, Vienna V (Sch. 50.-)

BELGIUM. — For The Unesco Courier: Louis de Lannoy, 22, Place De Brouckère, Brussels, C.C.P. 338.000. (fr. b. 100.) Other publications: Office de Publicité, 16, rue Marcq, Bruxelles, C.C.P. 285.98; N.V. Standaard-Boekhandel, Belgielei 151, Antwerp.

CANADA. — Queen's Printer, Ottawa Ont. ($ 3.00).

CEYLON. — The Associated Newspapers of Ceylon Ltd, Lake House Bookshop, 100 Parsons Road, P.O. Box 244, Colombo, 2. (Rs. 9).

CHINA. — World Book Co, Ltd., 99 Chungking South Rd., Section 1, Taipeh, Taiwan (Formosa).

CUBA. — Libreria Economica, Pte Zayas 505-7 ,Apartado 113, Havana.

CZECHOSLOVAKIA. — Artia Ltd., 30 Ve Smeckách, Prague 2.

DENMARK. — Ejnar Munksgaard Ltd., 6 Nörregade, Copenhagen K. (D.kr. 12).

ETHIOPIA. — International Press Agency, P.O. Box 120, Addis Ababa.

FINLAND. — Akateeminen Kirjakauppa, 2 Keskuskatu, Helsinki. (F.mk. 540).

FRANCE. — Unesco Bookshop, Place de Fontenoy, Paris, 7e. C.C.P. 12598-48 (7 NF.).

GERMANY. — R. Oldenbourg K.G., Unesco-Vertrieb für Deutschland, Rosenheimerstrasse 145, Munich 8. (DM. 8).

GREAT BRITAIN. — See United Kingdom.

GREECE. — Librairie H. Kauffmann, 28, rue du Stade, Athens.

HONG-KONG. — Swindon Book Co., 25, Nathan Road, Kowloon.

HUNGARY. — Kultura, P.O. Box 149. Budapest, 62.

INDIA. — Orient Longmans Private Ltd. Indian Mercantile Chamber, Nicol Road, Bombay 1; 17 Chittaranjan Avenue, Calcutta 13; Gunfoundry Road, Hyderabad, 1; 36a, Mount Road, Madras 2; Kanson House, 24/1 Asaf Ali Road, P.O. Box 386, New Delhi, 1; Sub-Depots: Oxford Book & Stationery Co., 17 Park Street Calcutta 16, Scindia House, New Delhi; Rajkamal Prakashan Private Ltd., Himalaya House, Hornby Road, Bombay 1. (Rs. 6.70).

INDONESIA. — Bappit Pusat "Permata", Djalan Nusantara 22, Djakarta

IRAQ. — Mackenzie's Bookshop, Baghdad.

IRELAND. — The National Press, 2, Wellington Road, Ballsbridge, Dublin. (10/-)

ISRAEL. — Blumstein's Bookstores Ltd., 35, Allenby Road and 48, Nahlat Benjamin Street, Tel-Aviv (1£ 4.-)

JAMAICA. — Sangster's Book Room, 91 Harbour Street, Kingston. Knox Educational Services, Spaldings.(10/-)

JAPAN. — Maruzen Co. Ltd., 6 Tori-Nichome, Nihonbashi, P.O. Box 605 Tokyo Central, Tokyo. (Yen 500).

JORDAN. — Joseph L. Bahous & Co., Dar ul-Kutub, Salt Road, P.O.B. 66, Amman.

KOREA. — Korean National Commission for Unesco, P.O. Box Central 64, Seoul.

LIBERIA. — J. Momolu Kamara, 69, Front and Gurley Streets, Monrovia.

LUXEMBOURG. — Librairie Paul Bruck, 33, Grand-Rue, Luxembourg.

MALAYAN FEDERATION AND SINGAPORE. — Federal Publications Ltd., Times House, River Valley Rd., Singapore.

MALTA. — Sapienza's Library, 26 Kingsway, Valetta. (10/-)

MAURITIUS. — Nalanda Company Ltd. 30, Bourbon Street, Port-Louis.

MONACO. — British Library, 30 Bld des Moulins, Monte-Carlo. (7 NF.)

NETHERLANDS. — N.V. Martinus Nijhoff, Lange Voorhout, 9, The Hague. (fl 6)

NETHERLANDS WEST INDIES. — G.C.T. Van Dorp & Cº (Ned Ant.) N.V. Willemstad, Curacao.

NEW ZEALAND. — Unesco Publications Centre, 100 Hackthorne Road, Christchurch. (10/-).

NIGERIA. — C.M.S. Bookshop, P.O. Box 174, Lagos. (10/-)

NORWAY. — A.S. Bokhjornet, Lille Grensen, 7, Oslo. (N. kr. 10)

PAKISTAN. — The West-Pak Publishing Co, Ltd., Unesco Publications House, P.O. Box 374, 56-N Gulberg Industrial Colony, Lahore.

PANAMA. — Cultural Panamena, Avenida 7a, No. 11-49, Apartado de Correos 2018, Panama, D.F.

PHILIPPINES. — Philippine Education Co. Inc., 1104 Castillejos, Quiapo, P.O. Box 620, Manila.

POLAND. — "RUCH" ul. Wiloza Nr. 46, Warsaw. 10 (Zl. 50.)

PORTUGAL. — Dias & Andrada Lda, Livraria Portugal, Rua do Carmo 70, Lisbon.

SOUTH AFRICA. — Van Schaik's Bookstore, Libri Building, Church Street, P.O. Box 724, Pretoria. (10/-)

SWEDEN. For The Unesco Courier: Svenska Unescorådet, Vasagatan 15-17, Stockholm, C (Kr. 7.50); other publications A/B C.E. Fritzes, Kungl. Hovbokhandel, Fredsgatan 2, Stockholm.

SWITZERLAND. — Europa Verlag, 5 Rämistrasse, Zurich.
Payot, 40, rue du Marché, Geneva. C.C.P. 1-236.

"Courier" only: Georges Losmaz, 1, rue des Vieux-Grenadiers, Geneva. C.C.P. 1-4811. (Fr. S. 8).

THAILAND. — Suksapan Panit, Mansion 9, Rajdamnern Avenue, Bangkok.

TURKEY. — Librairie Hachette, 469 Istiklal Caddesi, Beyoglu, Istanbul.

UNION OF SOUTH AFRICA. — Van Schaik's Bookstore, Libri Building, Church Street, Pretoria (10/-).

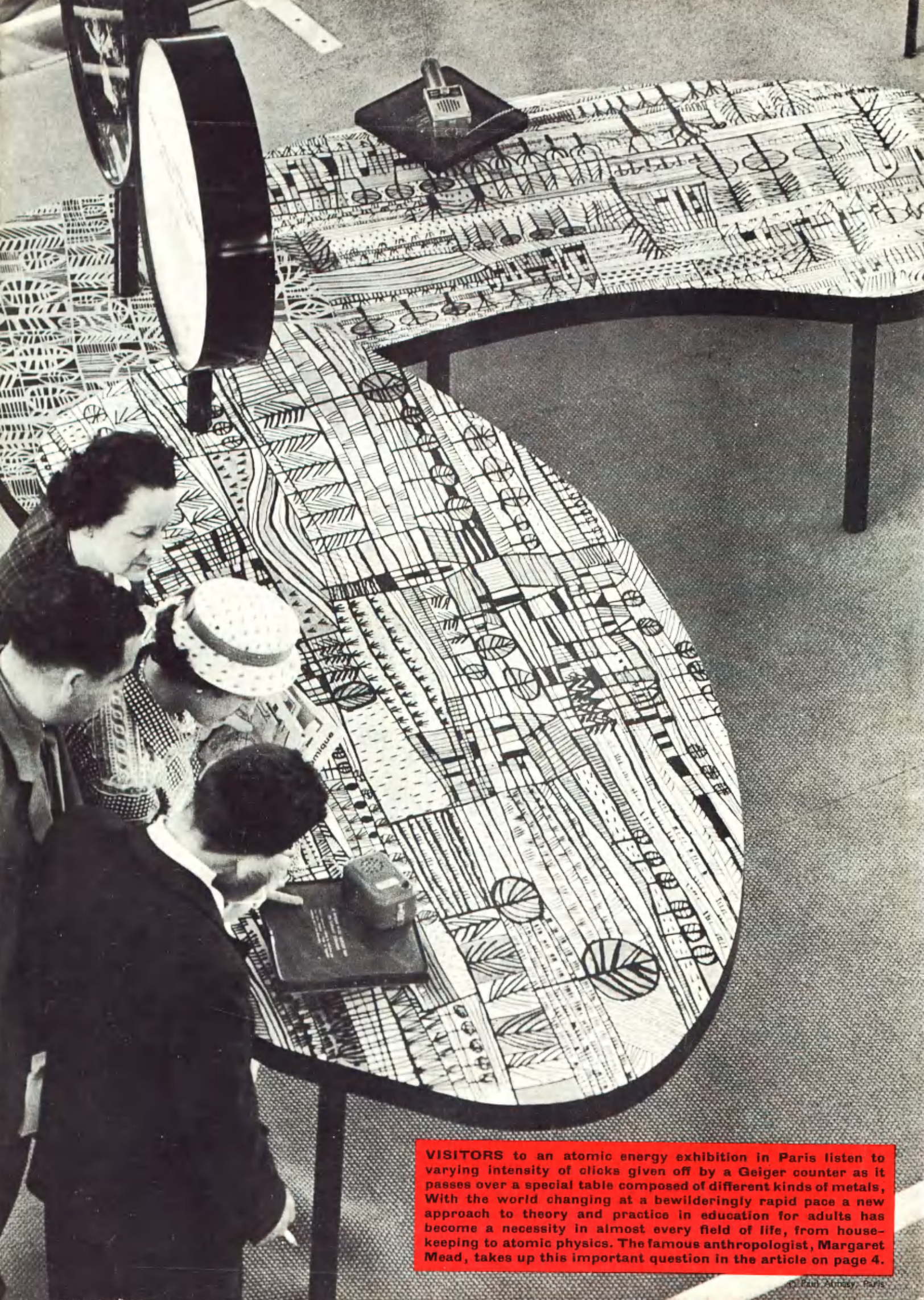
UNITED ARAB REPUBLIC (EGYPT). — La Renaissance d'Egypte, 9 Sh. Adly-Pasha, Cairo.

UNITED KINGDOM. — H.M. Stationery Office, P.O. Box 569, London, S.E.I.(10/-).

UNITED STATES. — Unesco Publications Center, 801 Third Avenue, New York, 22, N.Y. ($ 3.00.) and (except periodicals): Columbia University Press, 2960 Broadway, New York, 27, N.Y.

U.S.S.R. — Mezhdunarodnaja Kniga, Moscow. G-200.

YUGOSLAVIA. — Jugoslovenska Knjiga, Terazije 27/11. Belgrade.



VISITORS to an atomic energy exhibition in Paris listen to varying intensity of clicks given off by a Geiger counter as it passes over a special table composed of different kinds of metals, With the world changing at a bewilderingly rapid pace a new approach to theory and practice in education for adults has become a necessity in almost every field of life, from housekeeping to atomic physics. The famous anthropologist, Margaret Mead, takes up this important question in the article on page 4.