

GENERAL SCIENCE

Peace Through Science

UNESCO is trying to build international knowledge in science to overcome the war-breeding fear caused by ignorance. This is its fight for peace.

By WATSON DAVIS

This survey of UNESCO's science activities was written from Paris.

► IN a world that seems dangerously at odds, there is one field in which almost all people agree. That is the field of science.

In Paris there is mankind's most valiant effort to unify the world in education, science and culture. It is called UNESCO. This synthetic name is made up of the initials of the United Nations Educational, Scientific and Cultural Organization.

These initials have become almost a magic symbol of the hope that the world can be kept at peace in the future. In the parts of the world where there is free flow of information and where people learn what is going on, there may be found some idealistic yearning that this approach will bring results even where the general political set-up of the United Nations is blocked.

When I arrived in Paris and took a taxi to the UNESCO House in Avenue Kleber, I saw that the taxicab driver raised his eyebrows and shrugged his shoulders disdainfully as he said "Hotel Majestic". I understood his feelings when I learned that this grand old hotel had been the headquarters of the Nazi Army High Command during the occupation of Paris. Its subsequent use by the U. S. Army and UNESCO has not yet erased this stain.

There is something significant in the fact that the world's greatest intellectual hope of international cooperation is housed where Nazis trampled liberty-loving Frenchmen.

Science at Core

The hard core of UNESCO is science, although the "E" and "C" are active and important. This not just because the first director general of UNESCO was Dr. Julian Huxley, brilliant British biologist, who has just been succeeded by Dr. Jaime Torres Bodet, former minister and education secretary of Mexico. Science permeates the international structure of the world's future that, in addition to a vigorous science department, it bulks large in UNESCO's education, information and reconstruction efforts as well as the exchanges of knowledge and experts that it promotes.

Never before in the history of the world has there been a focal point of science on the scale and scope of UNESCO's Natural Science Department. Its activities extend into the tropical forests of the Amazon, where 13 countries have been aided in forming an institute to explore and make use-

ful the vast area of the greatest river in the world. UNESCO's science reaches into the highest mountains where man can live. An inquiry into high altitude and conditions of living a mile to three miles above sea level is being undertaken this year. To keep the deserts from encroaching on the food-producing lands of the world, another institute is being discussed. This arid zone inquiry is of great interest to the Near East and the scientific studies may make the deserts bloom and provide more resources for the world.

Another UNESCO plan is to provide "mechanical brains" for the use of scientists of all nations where intricate computations can be done. High speed computations will help us in the future to forecast the weather, chart the trend of population, capture more accurately the motions

of the heavenly bodies and predict famine or over-production of food.

In past centuries learned men and scientists set up their own international networks of knowledge through personal correspondence. The scientific world is too large for this to be the only way today of international interchange. UNESCO has given encouragement and support to the international unions in science which provide regular congresses and conferences in astronomy, chemistry, biology, genetics and many other fields.

Scientific Branch Offices

To serve four major areas of the world, UNESCO has set up scientific branch offices in China, India, Egypt and Uruguay. These are "task forces," to learn what is going on in those areas and to serve the people and the scientists there with knowledge from the rest of the world.

The complex problem of getting the world's knowledge into use both by scientists and by the public is being solved. Scientific journals are being aided in their



UNESCO'S LEADERS—Key figures in the work of UNESCO, shown here preparing for a CBS broadcast from Paris, are right to left: Dr. Jaime Torres Bodet, director-general of UNESCO; David Schoenbrun, CBS correspondent in Paris; Dr. Pierre Auger, head of UNESCO's Natural Science Department; Dr. Frank J. Malina, deputy head of UNESCO's Department of Natural Sciences; and Watson Davis, director of Science Service. Standing (left): William E. Purnell, head of the Science Cooperation Offices of UNESCO.

work of publicizing scientific organizations and the indexing of all the world's scientific knowledge is being surveyed. Realizing that science can only be effective in making a better world if it gets to the people, another effort is to promote the popularization of science through press, radio and magazines. A flow of young scientists and expert professors from one country to another is occurring through UNESCO's support.

In universities, schools and research laboratories in war-devastated Europe and Asia, thousands of students and professors are using scientific apparatus sent them by UNESCO. Some of this apparatus is war surplus now doing a peaceful job. This is substantial aid to the training of scientists of the future. Along with the apparatus itself there have been sent machine shops and materials from which apparatus is made on the spot. This equips laboratories for teaching science and doing research.

Scientists are concerned with the way in which the world uses the knowledge they create and for that reason UNESCO is studying the social implications of technology and knowledge. The world has only a limited amount of natural resources which must be conserved and renewed as they are used. Experts in conservation, in biology, agriculture, and engineering will meet in a world conference this summer under UNESCO auspices, to consider how the world can keep its natural heritage.

Science News Letter, February 12, 1949

GENERAL SCIENCE

By-Pass Credit for Result, World Agencies Advised

➤ THERE is a good chemical word that is getting into the vocabulary of those who are trying to keep peace in the world today. The word is "catalytic."

All the United Nations efforts, all the Marshall Plan activities are in their essence catalytic—if they are to be most effective with the least cost of time, money and effort.

The trick is to get someone else to do what you want done without doing it yourself. "Catalytic" is just a way of saying that in one word with a scientific flavor.

The world itself must do the job of keeping itself out of war and building for the future—in education, science and culture as in UNESCO and in industry and production as in the ECA. These agencies—beehives of people, paper and plans—are most effective as the persuaders, the instigators or the catalyzers.

In this catalytic business of rebuilding and creating, the goods are best that go out unlabeled. The smartest pilots of the international alphabetical agencies are philosophical about the inadvisability of labeling the end products as UNESCO, ECA, or even UN and USA. This is a tough although realistic conclusion, for the money to carry on the work must come from Congress

or the equivalent international public bodies, persuaded by public pressure and publicity. Always the administrator is tempted to wave his own banner and inject his name or his organization's name into the things being done. And the people, being human, like names and personalities which they identify with institutions and ideas for good or bad.

The shopkeeper, farmer or industrialist in France would rather put himself and his corner of the world back on its feet without foreign help—that is, without bowing continually before the Marshall Plan. To be sure, he needs and wants the aid. The essential fact is that he must feel that because of his participation in the world's progress—not just France's progress—he has as much right to the aid as the American people have the right to proffer it. It is

GENERAL SCIENCE

UNESCO Tries to Create Better Understanding

By DR. PIERRE AUGER

Head of UNESCO's Natural Science Department, speaking over CBS from Paris Jan. 22, on "Adventures in Science".

➤ THERE are two aspects of science that concern UNESCO: Science is a creative activity of the human brain. On the other hand, it makes profound changes in man's way of life. All of UNESCO's efforts are directed towards creating better understanding between men and, consequently, towards a lasting peace.

Scientific activity by its very nature has a universal character. That is why for many centuries, scientists of all nations have been able to correspond actively on their work and form a kind of brotherhood which has never known any frontiers. At the time of the Renaissance these ties were established in the form of exchange of letters. At the present time, powerful scientific unions have been formed through whose intermediary all scientific discoveries circulate in international circles. One of UNESCO's jobs is to maintain these contacts and help create new ones.

But science during the last two centuries has invaded all spheres of human activity. It has transformed industry and economy, daily life, and philosophical ideas. We must therefore bear in mind not only a rather restricted group of men who have a direct responsibility in the advancement of science, but all those who are more or less directly affected by the results of this progress. UNESCO must make known to the greatest possible number of people, not only the scientific achievements and their applications, but the trend of scientific progress. The public must be constantly informed of living science, that is of science under construction. The public must expect new and important scientific progress in the future. It must not lose its head over new developments to come.

Science News Letter, February 12, 1949

a mutuality and not an economic conquest.

So it is with the United Nations Educational, Scientific and Cultural Organization headquartered in Paris. Never before have different professions, nationalities, spirits and viewpoints gathered so effectively under one great physical and intellectual roof. But again it is not UNESCO that is the desired end result. People and organizations at the grassroots of your and my own home town must do the job for the most part and get the credit. Problems of the tropical forests can be solved actually in the Amazon and not in Paris. Go to the deserts to apply the torrents of knowledge needed to make the arid zones fruitful. Education is sterile without people learning.

This push for peace may be successful if we take the results and let the credit go.

Science News Letter, February 12, 1949

GENERAL SCIENCE

Scientists Are Example of International Cooperation

By DR. JAIME TORRES BODET

Director-General of UNESCO, speaking over CBS from Paris, Jan. 22, on "Adventures in Science".

➤ SCIENCE is dedicated to truth. I think everyone will agree to that. We have a conviction that peace can be achieved by truth. Truth, science and UNESCO are essentially a single enterprise. Scientists themselves have for hundreds of years demonstrated the possibility of international cooperation—Indian, French, Egyptian, Swedish and scientists of practically all other nations are working together because they know that one nation cannot be without the other. All nations are interdependent in seeking for scientific knowledge as they are in political and economic fields.

While UNESCO works with scientists of all nations, the results are for the benefit of all the people.

Scientists pool their efforts within UNESCO, but what we call the world center of scientific liaison is not just for the benefit of the few professionals. It is an effort to make scientific knowledge more accessible to everyone. We are encouraging the popularization of science as has been done so effectively in America. The great objective of UNESCO's intellectual cooperation is to improve the living conditions of the great associations of human beings.

Science News Letter, February 12, 1949

The *castor bean*, from which castor oil is obtained, is not a true bean and not even remotely related to leguminous beans; the plant on which it grows is a first cousin to the Para rubber tree.

Much new information was obtained last year concerning the coral reefs and both animal and vegetable life deep under the water off the Bermuda Islands by scientists equipped with *diving helmets* covering the head only.