

UNIVERSITY OF THE PHILIPPINES

LIBRARY  
NOV 13 1962



Tommy Cooper, Jr.



# Panorama

Magazine of Good Reading

NOVEMBER 1961

75 Centavos

# *Tell Your Friends*

about the *Panorama*,  
the Philippines' most  
versatile, most significant  
magazine today.

## *Give them*

a year's subscription — NOW!  
they will appreciate it.

---

## SUBSCRIPTION FORM

..... 1 year for ₱8.50                      ..... 2 years for ₱16.00

..... Foreign subscription: one year \$6.00 U.S.

Name .....

Street .....

City or Town ....., Province .....

Enclosed is a check/money order for the amount specified above.

Please address all checks or money orders in favor of:

COMMUNITY PUBLISHERS, INC.  
Inverness St., Sta. Ana, Manila, Philippines

# CONTENTS

Think No More Of That Day (Poem) <i>Alfonso P. Santos</i> .....	2
The UN and International Law <i>Dr. Vicente G. Sinco</i> .....	3
Science & Technology <i>Dr. Amando Clemente</i> .....	9
How Some Firms Got Their Names <i>Lety Q. Bitanga</i> .....	21
Rehabilitation of Prisoners <i>Dr. Isidoro Panlasigui</i> .....	24
Cooperative Education <i>Paul Friggens</i> .....	34
The Insolence of Might .....	42
Tolstoy's Dilemma <i>M. M. Bhalla</i> .....	47
Encouragement of the Arts <i>Keith H. Jones</i> .....	52
Bird Migration Survey .....	64
Orchestra in the Kindergarten <i>Else Schulter</i> .....	66
'Synthetic Natural Rubber' .....	70
A City Below the City <i>Erno Bajor Nagy</i> .....	72
Dissolution of Kidney Stones <i>Walter Theimer</i> .....	74
Fauna in Subsoil Water .....	77
Philanthropy in the U. S. <i>Dana S. Creel</i> .....	80
Origins of American Man .....	90
Vital Vitamin <i>Monika Muller</i> .....	91

PANORAMA is published monthly by the Community Publishers, Inc., Inverness St., Sta. Ana, Manila, Philippines  
Editor: ARMANDO J. MALAY Art Director: RAMON ESPERAS, JR.  
Business Manager: MRS. C. A. MARAMAG  
Subscription rates: In the Philippines, one year P8.50; two years P16.00. Foreign subscription: one year \$6.00 U.S.; two years \$11.00 U.S. Single copy 75 centavos.

# *Think No More Of That Day*

**by Alfonso P. Santos**

*Think no more of that day when for always  
The April buds of youth are plucked from you:  
Nor waste your tears regretting it, for well  
You know the age of man we cannot hold  
To stay forever young as love    Each day  
Some yesterday becomes an ancient day;  
Each May some yester-flowertime becomes  
A hapless and forgotten season; and  
Each year some bygone yester-year becomes  
Another bead strung in the rosary  
Of unremembered years. So think no more  
Of that day, ever, when for always all*

*The April buds of youth are plucked from you,  
For well you know youth cannot bloom anew.*



Entered as second class mail matter at  
the Manila Post Office on Dec. 7, 1955

NOVEMBER  
1961

VOL. XIII

MANILA, PHILIPPINES

No. 11

# THE UN AND INTERNATIONAL LAW

**Dr. Vicente G. Sinco**

It would not be fair and reasonable to consider the United Nations and regional organizations as having served no useful purpose at all in the development of international law. With all the defects of that Organization and all the frustrations it has caused to many people, the United Nations has nevertheless served some very useful purpose in restraining in some measure the blind and irresponsible use of force in international relations in several instances. That it suffers from im-

perfections should well be admitted. But it is not beyond improvement.

It should also be remembered that the United Nations Charter was not designed purposely to create or develop an international legal community, a sort of global state, largely governed by rules of law. Such an aim was not contemplated even remotely by the framers of the United Nations Charter who were far from being idealists and reformers but were rather veteran politicians, thoroughly

experienced in politics and understanding it as the art of the possible; and as men of the world they were fully aware that a superstate is not yet possible today or in any foreseeable future in spite of the optimistic hopes of some of the finest people in many parts of the world.

The Charter of the United Nations is universal in scope. It is intended to serve primarily, but not exclusively, all the states which are members of the organization. To repeat, the organization is an association of states rather than a world legal community. The member states retain their sovereign status and, therefore, do not consider themselves subject to the mandates of international law in the same manner and to the same extent that an individual is subject to the mandates of the law of the state where he resides. Because of this consideration, the realization of a world rule of law in the sense in which the concept of the rule of law in a constitutional state is considered becomes a problem of extraordinary difficulty. For while the constitution of a democratic state is at once a political charter and a legal document, its legal aspect is essentially its predominant element, and the implementation

of its political provisions generally has to conform or be subordinated to legal principles and rules, either expressly provided in the constitution or impliedly drawn from its provisions as applied or interpreted by the courts or by such other agencies as may be authorized to determine the meaning of the fundamental law. It may not therefore be quite precise to speak of the state as an organization merely encouraging the development of law for it is to all intents and purposes making or laying down the law.

Conceptually, however, the Charter of the United Nations is in many respects analogous to a modern national constitution. In a way it serves as a framework of the organization and as a basis or source of rights and obligations of the member states. But unlike a democratic national constitution, it is its political rather than its legal aspect that largely determines the actual application and practical execution of most of its provisions. In the implementation of the Charter the political in most cases outweigh the legal factors. Hence, the observance of a rule of law that should be followed by states in their relations with one another and that should effectively be the

controlling force for the defense and protection of their life, liberty, and security still suffers from laxity and looseness in many ways and at various times and places. It is sometimes done in a superficial manner when it is not to the best interests of the state that feels sufficiently powerful to disregard it. On critical occasions, when a particular rule of law embraced in the Charter is precisely needed, its strict observance is at times a matter of conjecture. Its use in the adjudication of disputes could still bear more objectivity and detachment. This is not to say that in the case of a state, the rule of law is always strictly observed or is applied in all cases. But in a developed state, the rule of law has become the regular and normal standard of life. To use force in the settlement of disputes between individuals is an exceptional occurrence and is legally punishable.

But again it would be a mistake to say that the United Nations and its agencies are a complete failure in the narrow field in which they are expected to operate as legal instrumentalities. Professor Hans Kelsen refers to the Charter of the United Nations as a remarkable step to progress. Theoretically and, to a

certain extent, from a practical point of view, it is remarkable indeed. To quote Kelsen, the Charter "imposes upon the members of the Organization a strict obligation to settle their disputes by peaceful means and to refrain in their international relations not only from the use of any kind of force, including war as reprisals, but also from the threat of force." But settling a dispute by peaceful means is not necessarily settling it by the rule of law. It may be settlement through some form of political compromise which may be disadvantageous to the weaker party who perhaps may have no choice in the matter and to that extent is thus deprived of justice. Hence, the need of encouraging the adoption of the rule of law in the adjustment of international differences arises.

The attribute of sovereignty which every state claims as an inherent and indispensable element of statehood stands as a serious obstacle to a much needed operation of the rule of law in international relations.

While certain aspects of international law have been accepted for several centuries in the Western states, in the world community as a whole the rule of law is still in the

initial stages of development. And its implementation in the solution of international problems is still a matter of choice and convenience. Political expediency resting on physical force and considerations of national honor and necessity often based on myth and fiction are still used as potent arguments in international controversies. But if peoples really wish, as they do, peace and justice in their political, economic, and social relations, a world-wide adoption and observance of the rule of law is a necessity and is possible of attainment.

The Charter of the United Nations represents a decidedly encouraging step towards a widening area of recognition and observance of a world rule of law. It is well provided with agencies and instrumentalities in the form of committees, commissions, and other kinds of organizations, with authority to recommend legal rules, which in their totality could result in the establishment of a world rule of law. That it has not been able to do this to the satisfaction of strong believers in law and order is not its fault. It is more the fault of its member states for not insistently advocating in season and out of season a more speedy development of interna-

tional law and a greater use of it in the solution of all conflicts between states. Therefore, the campaign of the legal profession for the observance of law in international relations should begin right in member countries by bringing the matter to the attention of governments and peoples, by stressing to them the fact that law is the most effective instrument for peace and security. But it is not enough that legal rules are approved and adopted. To be of any use at all, they have to be enforced. Compliance with international law whether in the form of specific rules or decisions of international courts, may not always be expected unless there are readily available instruments of enforcement or sanctions. One of these is public opinion, which in spite of President Wilson's conviction in its efficacy as a sanction for the observance of the Covenant of the League of Nations, proved to be ineffective at that time. But times have changed and it is hoped public opinion may prove to be a stronger factor today. To be effective, public opinion should be formed in all or most of the countries which are members of the United Nations.

Many claim decided advan-



tages in the availability of the General Assembly for use as a public forum or a sort of sounding board for world opinion. There are some, however, who do not subscribe fully to this view. On this subject, a competent observer has expressed the following comments on the same purpose for which the Assembly of the League of Nations was intended: "The opportunity to bring their grievances before an international forum could induce states to magnify their quarrels and to provoke an international discussion of cases which otherwise might not have arisen at all or might have been settled between the parties directly concerned. In a politically divided world such a discussion could lead to the extension of isolated conflicts and to the accentuation of existing general differences between operating blocs of states." Recent events in the General Assembly seem to confirm this view.

Another sanction which the Charter recognizes is, of course, force. Its use is reserved to the Security Council and, under the "Uniting for Peace" resolution it is shared by the General Assembly under certain conditions.

Different causes expressly recognized in the Charter block the possibility of faster

progress towards the establishment and observance of a rule of law in the relations of states. Among them are the use of the veto in the Security Council, the inadequacy of the Council membership, the non-admission of some fully-qualified states, the alleged lack of firm power to make prompt inquiries into situations of friction or conflict, the frequent failure of the Organization to refer cases to the International Court on account of the reservations of some members from the compulsory jurisdiction of that Court, the insufficient utilization of the International Law Commission, the failure to refer legal questions to the Sixth Committee, the lack of sanctions for lesser disturbances of international peace and security, the failure to organize a police force, and one or two more causes. It is quite likely that if such roadblocks could be completely or partially removed it may well be reasonably expected that the purposes of the United Nations Charter may be more fully realized.

Proposals suggested for correcting the shortcomings of the Charter of the United Nations are conservative enough if they are to be approached from the point of view of men and women who are fully

conscious of the indescribable horrors of an atomic war. Those who have had the terrible experience of the painful ordeal of the last World War should be in a position to appreciate the value of sacrificing precious rights and privileges of independent statehood for the sake of preserving civilization and of saving much of mankind itself from the annihilating effect of the horrible weapons that science has invented and

discovered for another global war. But even if we should discount the possible happening of such misfortune, the adoption of a world rule of law is still a consummation devoutly to be wished and urgently desired if for no other purpose than the maintenance of an orderly world community in which peace, security, and justice may be fully enjoyed by the entire human race.

\* \* \*

### AMNESTY

*The nurse at the front regarded the wounded soldier with a puzzled frown.*

*"Your face is perfectly familiar to me," she said, musingly. "But I can't quite place you somehow."*

*"Let bygones be bygones, mum," the soldier said weakly. "Yes mum, I was a policeman."*

\* \* \*

*The distinguished actor had a large photograph of Wordsworth prominently displayed in his dressing-room. A friend regarded the picture with some surprise, and remarked:*

*"I see you are an admirer of Wordsworth."*

*"Who's Wordsworth?" demanded the actor.*

*"Why, that's his picture," was the answer, as the friend pointed. "That's Wordsworth, the poet."*

*The actor regarded the photograph with a new interest.*

*"Is that old file a poet?" he exclaimed in astonishment. "I got him for a study in wrinkles."*

# **SCIENCE AND TECHNOLOGY IN THE PHILIPPINES**

**Dr. Amando Clemente**

The Philippines today is at the threshold of a new era — the challenging era of an agro-industrial economy. There is in this era the promise of a beautiful future for us — a future full of opportunities forecasting stable economy, progressive social order, elevated cultural status for our country; and peace, prosperity and happiness for our people.

How soon can we expect the fulfillment of that promise?

As an optimist, I believe that the application of scientific and technological know-how at our command could shorten the time required in the fulfillment of that beautiful promise for the future of our country and people. There are, of course, great obstacles and intricate problems blocking the road between that promise and its fulfillment. The road blocks, however, are not insurmountable, and the fulfillment of that promise could be successfully achieved

within a reasonably short time by (1) diligent appraisal, detailed study, thorough critical analysis of the difficulties on the way, (2) sound and judicious planning, (3) careful and wise programming, and (4) prudent and skillful implementation of the plans in accordance with the program by qualified, experienced, honest and upright citizens possessed with high moral principles and have sincerely at heart the best interest not only of our people but of all the peoples on earth.

Our ability as a people to meet critical situations squarely in order to find an effective remedy that will overcome the difficulty is indeed traditional. And the root of the tradition may be traced to the historical facts that (1) we as a race are descendants of brave, enterprising and pioneering ancestors and (2) our social background and cultural heritage have trained and taught us to face adversity with courage, even to the extent of sacrificing life, for a righteous and worthy cause. Examples: Rizal, Bataana and Corregidor.

Historical records indicate that even before the arrival of Spanish colonizers, Filipinos were acquainted with scientific and technical

knowledge of the period. That they were practicing technology is evidenced by the more than two thousand years old rice terraces of Banaue in the Mountain Province. The engineering skill employed in the construction of those monumental terraces ranks them among the few wonders of the world.

Medicinal botany was among the techniques practised by our ancestors. They applied *tangan-tangan* leaves to the forehead to relieve headaches, used the raisin of *culasi* to cure stab wounds and itches, employed infusion of the ground root of *cumalibkib* to clean and cure ulcers, and the aqueous solution from the boiled root of *pandakaki* was given to improve the stomach and relieve pain caused by cold or indigestion.

When the Spaniards arrived in the Archipelago, they found that the Filipinos knew metallurgy, were making cannons and manufacturing gunpowder.

#### *Science and Technology during the Spanish regime*

Science and technology made very slow progress during the Spanish regime in the Philippines. This sluggish advance may be attributed to three main factors: (1) the development of experimental

science was then just at its initial stage. (2) The spirit of the times. It was a spiritual era during which more preference and attention was given to speculative science. And (3) communication and transportation between the western countries and the Philippines was extremely difficult especially before the Philippines was opened to world trade.

It may be mentioned in this connection that for a long time after the implantation of the Spanish regime in the Philippines by Legaspi in 1565, the efforts of the colonizers were directed almost exclusively in converting the Filipino to Catholicism for the purpose of elevating to a higher level the standard of his social, moral and spiritual life. The improvement of his material well-being was thereby neglected. And it took more than two hundred years after the implantation of its sovereignty before Spain was able to attend to the economic and social development of our people.

Charles III, considered to be the best and one among the few far-seeing, patriotic and enlightened rulers of Spain, issued on August 27, 1780 "a royal decree ordering the Governor of the Philippines to convene all the learn-

ed and competent persons in the colony in order to form an association of selected persons capable of producing useful ideas". Almost simultaneously, before receiving the royal decree, Governor Jose Basco y Vargas organized La Real Sociedad Economica de los Amigos del Pais on February 7, 1781. Its purpose was to promote and protect sciences, arts, industry and commerce. "It contained the following sections: natural history, agriculture and rural economy, factories and manufactures, internal and foreign commerce, industries and popular education." The society also promoted the cultivation of indigo, cotton, cinnamon and pepper and the silk industry.

In 1824 the society offered rewards for the most successful farmers and imported martins from China to combat locusts which destroyed crops. The society lived for more than a century, until 1890.

Earlier, in 1789, the Spanish government sent out under the command of Captain Alejandro Malaspina an expedition, the object of which was to collect botanical and zoological specimens, make other scientific observations and draw plans and maps of

coasts of Spanish America, Marianas and the Philippines.

The expedition left Cadiz, Spain, on July 30, 1789. In their scientific circumnavigation of the world, the covetted *Atrevida* and *Descubierta* called at Marianas and the Philippines in the beginning of 1792. In several places they made astronomical, meteorological, magnetic, hydrographic and gravity observations to the position of points and improve the hydrographic charts. The result of the Malaspina exploration was a general chart of the Philippine Islands published by the *Direccion Hidrographia en Madrid*, 1808, which is the first nautical chart of the Archipelago based on modern survey methods and equipments.

The foregoing historical facts show the attempts made towards organized research in science and technology during the Spanish regime.

A fair and impartial evaluation of accomplishments in science and technology during the three hundred and fifty years of Spanish government in the Philippines will have to take into account, not only the causes of sluggishness in our scientific progress previously mentioned, but also the adverse prevailing conditions of those times

for creative activities and higher intellectual endeavors. During the period, the government used its resources in conquering bandits, pursuing pirates, opposing invasion by other colonizers, the Dutch, the English and the Portuguese, settling disputes between the church and the state over control and management of domestic affairs.

Another deterrent to the advancement of culture was the more or less successful attempt on the part of the colonizers to exclude external influences from the country. Le Gentil who was commissioned by the French government in 1781 to study the transit of the planet Venus in the Philippines depreciated the antagonistic attitude of the authorities toward foreign scientific workers. An Englishman wrote anonymously in Calcutta in 1828 that foreigners were refused admittance to the Philippines and if they succeeded in securing admission for scientific or commercial objectives, they were either persecuted or treated contemptuously to make their stay very unpleasant.

Last but not least of the many obstacles to our cultural progress was "the wealth through exploitation of the natives."

In those days educational institutions, among which may be mentioned Sto. Tomas University, the several colleges established by the Jesuits and San Juan de Letran College which gave courses in mathematics, physics, chemistry and biology, helped stimulate scientific studies.

During the eighteenth and the nineteenth centuries there were scientific expeditions by European as well as American explorers. The results of their work and the accounts of their travels are records of the existing conditions in the country at the time. These explorers served as the only connecting link between the Philippines and the civilized world outside of Spain and Mexico. They were most helpful in breaking through our long period of isolation and effective in promoting our cultural and material development.

The policy of carefully excluding external influences has retarded in no small measure our cultural and material development. In this connection the *Flora de Filipinas* by Father Manuel Blanco may be cited. The errors in this work committed by erection of many new species from old-established forms and assignment to the Philippines of non-Philippine species rather than facilitating retarded the

publication of a complete flora of the islands. Those errors could have been minimized, if not completely avoided, if the authors of the first and the revised volumes had contacts with contemporary European botanists and herbaria. On the other hand, the three volumes of Father Castro de Elera's work *Catalogo Sistemático de Toda la Fauna de Filipinas Conocidas hasta el Presente* (1895-1896) although not free from inaccuracies, is more authoritative due to the help which the author received from the British Museum and from American, French, German, Italian, Spanish and other zoologists.

According to Tavera (1905), "it is impossible not to recognize the humanitarian impulses, truly Christian and equitable, which guided kings and Spanish legislators in what they did for the Philippine Islands. It is also certain that the Spanish colonial legislation, influenced as it was by the opinion of persons so conservative and suspicious of all that was not Spanish and Catholic acts in nature, shut the Philippines from all contact with other civilization. . . But this result was not due to a system of politics to suit a colony, but was more in the nature of a reproduc-

tion in the Philippine Islands of the political system under which Spain was governed and known to other nations in Europe."

This policy of exclusion and self-sufficiency caused unnecessary delay in the country's opportunity to take advantage of the benefits available from scientific discoveries and inventions not originating from Spain. It took thirty-eight years after its invention by Samuel F. B. Morse before telegraph lines were established in the Philippines in 1873. Connection by cable between Spain and the Philippines was made in 1880, fourteen years after permanent establishment of telegraphic communication between America and Europe by Cyrus W. Field. The telephone became known in the Philippines in 1890, fifteen years after its invention and practical use was demonstrated by Alexander Graham Bell in Boston by talking through the wire to his assistant in Cambridge. Sixty year elapsed after the invention of the steam locomotive by the Englishman George Stephenson in 1825 before the Manila-Dagupan line was inaugurated by the then English-owned Manila Railroad Company. It took the company five years of hard work to obtain permission

from the Spanish authorities to start work on the project and eight additional years to put the right-of-way in order. Thomas A. Edison invented the incandescent lamp in 1879. Electric lighting was not enjoyed by Manilans until 1895. The first call in Manila of the English steamships "Magallanes", "Elcano" and "Reina de Castilla" took place in 1848, twenty-five years since the time steamship started cruising the oceans of the world. The climax of the anti-foreign feeling occurred in Manila in 1820, when for the first time cholera epidemic broke out. An insidious rumor that the foreigners poisoned the wells spread among the natives, infuriated them so much that they mobbed the English and French residents, killing twenty-five of them.

It will, of course, be unfair if in this discussion we fail to state that the defects and shortcomings of the Spanish rule in the Philippines could be offset by redeeming features which had profound and beneficial influence on the life of the Filipinos. Agriculture in many parts of the Philippines was favorably affected by the introduction of numerous cultivated plants, such as cacao, coffee, corn, indigo, sesamum, tobacco as well as a considerable number of trees.



According to Merrill (1926), about two hundred of the more than one thousand plant species surrounding the Manila area are of American origin. They were introduced into the Philippines from the time of its occupation in 1521 to 1815, the year when the galleon service between Manila and Acapulco was stopped. Governor-General Jose Basco y Vargas (1778-1787) granted rewards to those who were conspicuous for their success in agriculture. He obtained seeds from other countries and ordered the planting of more than 4,000 mulberry trees in Camarines Sur for feeding silkworms. He realized at the time that if agriculture is to succeed, it needed the aid of science. The introduction of horses, oxen and sheep is attributed to the Spaniards on the ground that they were not found in the country before their arrival.

Under the direction of skilled engineers and architects among the friars, public buildings, churches, highways and irrigation systems were built.

What may be considered as the most outstanding scientific contribution of the Spanish regime to the country was the foundation of the Manila Observatory. In 1865, Father Fe-

derico Algue founded it as an observatory for the Ateneo de Manila. In recognition of the importance and the value of the service it rendered to the country, the observatory was given official recognition by the government by royal decree promulgated on April 28, 1884. It was the first of its kind in the Far East to announce the approach of a typhoon and to predict its probable course and duration.

At this point, mention should be made of the fact that among the earlier Spanish executives some had progressive ideas. For instance, Antonio de Morga (1598) in his report to the king recommended the following measures to be adopted: that "Chinese ships be prohibited from loading with Philippine lumber for they fell the trees for this, and in a short time there will be lack of wood here; that Chinese and Japanese traders be not allowed to traffic in deer skins and thus, the supply of game will be exhausted; and that *salambao* fine mesh nets ought not to be employed, and the size of the mesh should be regulated so that the supply of fish will not be exhausted, for already experience has demonstrated that they are not so abundant as formerly".

The contributions of the friars in tutoring the Filipinos and helping them adopt the moral and social standards of Western civilization is incalculable. Indeed, the religious orders contributed in great measure to whatever success the Spanish rule achieved in the Philippines.

There were three important events which were of great consequence to the acceleration of our economic and cultural progress based on standards set by European nations. (1) The opening of the port of Manila to foreign commerce in 1830. It brought the Philippines in closer contact with the outside world as a result of the entry of foreign merchants who established themselves in the country, despite the continued enforcement of restrictions. The opening of the ports of Iloilo, Zamboanga and Sual in 1855, and that of Cebu in 1863 increased the prosperity of the people and enhanced their chance to broaden their cultural horizon. (2) In 1869, the Suez Canal was opened and in 1880 cable connection of the Philippines with Europe was completed. The two events brought the Philippines and Europe closer together. (3) In 1863, the school reform was decreed. It established primary education in the Archipelago,

liberalizing and raising the standard of learning to such an extent that it enabled many Filipinos to pursue advanced studies in Europe. It marked the beginning of Filipino participation in scientific work, headed by a chemist, Don Anacleto del Rosario; botanist, Dr. Leon Ma. Guerrero; leprologist, Dr. Eliodoro Mercado and beri-beri specialists, Drs. Manuel Guerrero and Jose Montes.

These Filipino scientists together with Rizal, del Pilar, Lopez Jaena and many others were the pioneers who brought back home from the European centers of learning and culture progressive ideas, ideas which found in the Philippines not only a fertile and virgin soil, but also a favorable climate for a healthy, vigorous and luxurious growth to a productive maturity.

Indeed, the three hundred and fifty years of Spanish tutelage gave the Philippines the necessary preparation, knowledge and experience to take advantage of every opportunity which may lead to success in the laborious task of building a free, enlightened and prosperous nation. Not a nation that will need foreign help for its existence, but a nation that shall give aid to help less fortunate na-

tions make a decent living. Thanks to that tutelage when Dewey's victory in Manila Bay ushered us to the benevolent era, which characterized the sovereignty of the United States over the Philippines, little difficulty, if any, was encountered in the implementation of the programs calculated to improve the general conditions of the country.

One of the important measures which the American government initiated in the Philippines was to draw all available scientific resources to the end that (1) infant mortality from beriberi and small pox might be minimized and (2) epidemics and other serious diseases of man and domestic animals could be studied and checked. Agriculture made great progress due to advantageous trade relations established between Islands and America and the adoption of improved cultivation methods, resulting from scientific experiments which increased the yield and reduced the expenses of farm operation. Modern sugar mills were erected and operated under the supervision and control of trained sugar technologists. Forestry, mineral and other natural resources were exploited on the basis of accepted modern methods.

It should be emphasized that most of the important developments in technology were the results of the activities of researchers in the various laboratories and bureaus of the government, in the medical and veterinary departments of the United States army, in the field staff of the Rockefeller Foundation, and later in the laboratories of the different colleges of the University of the Philippines in Quezon City, Manila and College, Laguna, as well as in the laboratories of some private universities and industrial firms.

It may be stated in this connection that as elsewhere the country's achievements in scientific research for the last sixty years are much greater than those accomplished during the three hundred and fifty years of Spanish regime. Not only has the tempo of all our scientific activities been accelerated but we have also extended our foreign scientific relations by (1) participating in scientific congresses, (2) acquiring membership in international scientific organizations, (3) exchanging professors and other contracted scientists and (4) sending advanced students abroad through foreign scholarships.

Actual scientific research work during the American so-

vereignty in the Philippines started when the Bureau of Government Laboratories (later the Bureau of Science, actually Research Institute of Science and Technology) was established in 1901 by Act 157 of the Philippine Commission. The establishment of this bureau which was under the directorship of Dr. Paul C. Freer marked the beginning of scientific research activities in the Islands. Another act of the Philippine Commission which contributed to the promotion of science in the Philippines was Act 854 passed on August 26, 1903. It provided for the education of Filipino students in the United States — one of the most important efforts exerted by the Philippine government in promoting science and technology.

One of the most outstanding acts of the Philippine Government calculated to encourage and promote scientific activities in the country was the creation of the National Research Council of the Philippines. The purposes of this council are:

(1) In general, to stimulate research in the mathematical, physical, and biological sciences, and in the application of these sciences to engineering, agriculture, medicine, and other useful arts, with the object of increasing knowledge,

starting studies of problems of the national defense, and of contributing in other ways to the public welfare.

(2) To survey the larger possibilities of science, to formulate comprehensive projects of research, and to develop effective means of utilizing the scientific and technical resources of the country for dealing with these projects.

(3) To promote cooperation in research, at home and abroad, in order to secure concentration of effort, minimize duplication and stimulate progress; but in all cooperative undertakings to give encouragement to individual initiative as fundamentally important to the advancement of science.

(4) To gather and collate scientific and technical information at home and abroad, in cooperation with government and other agencies and to render such information available to duly accredited persons.

The most outstanding scientists and technical men in the country are members of this organization.

No less in importance in the government efforts to give every incentive to scientific researchers was the establishment of the National Science Foundation.

Scientific and industrial research hold the key to the successful implementation of our industrial development program. Hence, we are happy to note that there is now a growing interest in science and technology on the part of the government as well as the public, especially the entrepreneurs. Our industrialists are beginning to consult and avail of the services of scientists and technologists for aid in the solution of their technical problems.

Nevertheless, there are still indications that the full value of the contribution of technology and science to the national economy is not yet fully appreciated. One of the latest acts of the government, confirming once more its recognition of the paramount importance of scientific and industrial researches, was the approval by Congress of the Science Act of 1958, creating the National Science Development Board. This board has the ability to finance and broad powers to promote scientific and industrial researches. It can thus be a very formidable factor in furnishing thorough, wise programming and adequate support of essential industrial researches, the necessary relief to the sad plight which many of our industries are actually exper-

encing. As such it is bound to be the instrumentality of our government that would clear the way to the fulfillment of that promise of a beautiful future mentioned at the beginning of this discussion. A large sector of our population possesses only a smattering knowledge of the important role which science and technology play and will have to play in our economic development.

There is, therefore, an acute need for a program of systematic dissemination of scientific and technical knowledge to our citizens, particularly to the barrio folks, in order that they may learn to appreciate the full value and the benefits which science and technology provide for their wellbeing. In fact, science should be taught gradually and progressively in our schools from the elementary grades through college to make certain that the future citizens of the Philippines may possess sufficient knowledge of at least the fundamental concepts of science. Equipped with such learning, they will be in a better position to understand that the scientific methods of thinking which produced advances in chemical technology are also applicable to social, economic or financial problems of any industry.

## STAR EMITS RADIO SIGNALS

*The first known individual star that sends out radio signals has been found and precisely located by astronomers at the California Institute of Technology's Radio Observatory in Owens Valley, California. Previous radio signals that have been detected have come more from areas of the sky rather than from individual stars.*

*The radio star, called by astronomers 3C-48, sends out radio signals that are 10,000,000 times stronger than those emitted by the sun, it is believed. The star is of 16th magnitude, and can therefore be seen only with a large telescope. It is located in the constellation Triangulum, which is close in the sky to the great spiral nebula in the constellation Andromeda.*

\* \* \*

In closing this brief discussion of science and technology in the Philippines I would like to say that any economic or industrial project may be carried out to a successful completion, provided that scientific spirit and technical methods are employed in its financing and operation.

Let us all hope for the time when through science and technology the realization of our dreams, in answer to our

prayers, will soon usher the advent of a prosperous economic era in the annals of our history. Then, verdant fields, humming factories, busy shops, cozy homes, neat wholesome rural atmosphere and happy barrio people will predominate in the Philippine landscape.

This is but the dream of a scientist. Yet, who can tell? Given the opportunity, science and technology could perform wonders.

# HOW SOME FIRMS GOT THEIR NAMES

Lety Q. Bitanga

Do you know where such unique and popular firm names as YCO, X'or, Almar's, Ramcar, Rose Vale, Tres Chic, Moremci, Rustan, Otis, Berg, and so forth, originated?

This question brought me to embark on an unusual kind of adventure. With my UP press card as my passport, I visited many business spots in Manila and Quezon City and discovered the secrets behind their extraordinary names.

Most of the time, I was mistaken for a prospective customer. But soon, the salesladies would bring me to the manager's office where I got my interviews.

And now to go on with my discovery. I observed that most firm names, like the names of some people, are taken at random, while others are taken deliberately.

"Otis does not mean anything," Antonio Que Paredes of Otis Department Store surprised me with his answer. "We just thought of it

and adopted it. Perhaps because it is short and easy to pronounce."

Regalado Montemayor of X'or Studio said that he also picked the name X'or at random. The letter X was aimed at suggesting the word excellent or the best.

YCO stands for Ynchausti (the name of a Spanish businessman) and company. The paint and oil factory now belongs to Manuel Elizalde but because of its long established prestige the name YCO was retained. Other firm names which originated from the founder's name are the following: Ramcar, the name of a local car firm (Ramon Caro); Menzi & Co., the name of a paper manufacturing company (Hans Menzi); and Berg's department store (E. Berg).

A rather sweet and poetic firm name is Rose Vale's Creations. Rose Vale, according to Lilli Valle, comes from an interesting coincidence.

"My mother's full name is Rosario Juico-Valle," she

said, "and our foreign friends call her Rose Vale for short."

The name Slim's was taken from the name of the owner, S. Lim or Mrs. Salvacion Lim-Higgins. It is interesting to note that Mrs. Higgins is gifted with a pretty, slim figure.

Mrs. Gunding Noguera of Tres Chic Fashion Shop, when asked why her shop is called thus, said, "*Tres chic* means very smart and we want our creations to be very smart and fashionable."

What could be more unique and fascinating than a firm name which has been coined from two or more family names or Christian names or just the initials of these?

D & E, a well-known restaurant, stands for the surnames of the couple who owns the business (Diaz-Enriquez). Other examples of firms which were named after the husband and wife are Floram's Studio (Flores-Ramos), Syvel's, Inc. (Syyap-Velez), and Rustan Department Store (Rustia-Tantoco). A combination of the first and last syllables of the couple's names is exemplified by Josenia Shoe Store (Jose and Apolonia Lao).

Remancel and Fourelles are two gift shops in Mabini which were named after the

family members. Remancel belongs to the Acosta family (Remedios and Angel, and their only child, Celia). Fourelles stands for the members of the Licuanan family (Col. and Mrs. Francisco Licuanan and their two children, Francisco, Jr. and Patricia).

The initials of the proprietor's five children were combined to form the name of a famous shoe store, Rempson. R stands for Ronnie, e for Emelita and Edgar, m for Marcial, and p for Pepito. The sixth child of Mr. and Mrs. Severino Samson was named Rempson.

Similarly, the name of a restaurant near UST, Wilfranor, was taken from the names of Wilfredo Samson's three children, Wilfredo, Jr. Francisco and Norma.

The P & P in Azcarraga has a double meaning. The initials P stand for the family name of the four Filipino-Chinese brothers (Po) who established the book store. It also means popular and popular or very popular. Gliv's on Mabini is a ladies' department store owned by three Nava sisters, Gloria, Ligaya, and Violeta.

"People sometimes think that our family name is Alemar because of our book store called Alemar's," Maria Co-



## NYLON 7

Nylon 7, shelved since its accidental production in the laboratory many years ago, can at last be made by a commercially feasible process from a synthetic derivative of aminoheptanoic acid, according to Dr. C. F. Horn of Union Carbide Chemicals Company of South Charleston, West Virginia.

When this derivative is boiled in water, it forms a white waxy-to-brittle substance that can be stored or spun immediately into strong fibers, thus eliminating several steps involved in the commercial production of its chemical cousins, the familiar nylon 6 and nylon 66.

Its high softening temperature, 430 degrees Fahrenheit, makes it especially suitable for tire cords where heat built up from friction is a problem. Nylon 7 does not deteriorate easily in presence of ultra violet light and produces tough, clear sheets and molded objects of good impact resistance.

\* \* \* \*

razon Sibal told me during the interview. "The fact is that my father named it after my mother's name, Alegria, and the first name of all the girls in the family, Maria."

Mrs. Pacita de Jesus of Moremci gave an interesting account of the origin of her shop's name. Moremci is a dealer and exporter of Philippine-made lamps, shades, and furniture.

"It took us no less than two weeks thinking of a unique and exotic name," she confessed. "At last, we thought of joining my daugh-

ter's nickname, Mori, and the second syllable of my name, Ci. (Mori-n-ci) But, we soon found out in the encyclopedia that there is a city in Sicily called Morinci. To be original, we changed the letter i to e and the letter n to m, forming the word Morem-ci."

After my adventure in businessland, my new pair of shoes were all worn out, my whole body was aching, and my purse was empty, but I felt a kind of happiness akin to that of Magellan when he discovered the Philippines.

# REHABILITATION

Dr. Isidoro Panlasigui

There are now many individuals and civic organizations like the Philippine Mental Health Association that are interested in the rehabilitation of the prisoners. This growing interest in the prisoners is due largely to the modern penology that believes that crime is not an anti-social act but a symptom of social illness on the part of society and of the individual. Therefore the criminal should not be punished but should be cured. The rehabilitation of prisoners is therefore necessarily the function both of the prison and the community, cooperating together. If "once a criminal, always a criminal" were true, it is not because of the criminal himself but because of society's negative attitude towards him.

In the following paragraphs the story of the prisoner from his arrest through his investigation and trial to his

release is briefly narrated within the structure of the changing concept of penology. A program of rehabilitation in the form of suggestions is herewith presented for consideration.

## *I. The Investigation and The Trial*

Everyone who has something to do with the suspect — the police, the witness, the lawyer, the judge, etc.— knows that a suspect who is not a criminal may be convicted, or a suspect who is a criminal may be acquitted, because of the method of investigation, the technicality of the law, the motive and cleverness of the prosecuting and defending lawyers, the witness, and the judge.

During the investigation, the police or any other investigating agency is interested more to get a confession, or at least, a statement that may be used for conviction than

# OF PRISONERS

to get the truth which may or may not convict the suspect. Everyone is familiar with the third degree technique of investigation.

The defending lawyer, because of his profession, is duty bound to defend the suspect, whether he is guilty or not of the crime of which he is accused. He does his best to get an acquittal for his client. The prosecuting lawyer, likewise, is duty bound to do his best to get the conviction of the suspect. Very often a suspect may be acquitted or convicted simply because of the technicality of the law. The opposing lawyers base their arguments, and the intent of the law are often, if not always, ignored. The more defective the law is, the more errors are committed in the name of the law. Everything that has something to do with investigation and legal litigation gravitates toward the technicality of the law.

With respect to the witness, no one knows how many innocent suspects were convict-

ed, and criminal suspects were acquitted because of his testimony! The conviction of an innocent suspect would create in him deep resentment and bitterness against those who were responsible for his conviction, in particular, and against society in general. Perhaps, he would be asking to himself the question "Where is justice?" all the rest of his life, if the wrong done to him in the name of the law would not be righted. In prison he would be a potential power for discontent and rebellion, rather than a peaceful penitent. Outside prison, he would be not a reformed man, but a vindictive scoundrel. The acquitted criminal, knowing too well that the law, the lawyer, and the judge are all for him in the name of the law, would be encouraged again and again to commit crime or crimes, and he would be enjoying a *fiesta grande* in his crimes.

Such a method of investigation and court procedure do not produce salutary ef-

fect upon the suspect whether he is a criminal or not.

## II. *The Big House and the Punishment*

Once a suspect is convicted he is sent to prison to live there for a period of time prescribed by law, or to be put to death as the case may be.

The purpose of imprisonment has undergone several changes from time to time, from punitive, retributive, preventive, reformatory to rehabilitation. Punishment has always been considered as a retribution to heal the wounded feelings of the victims, his relatives and friends and as a protection of society. In ancient times such retributive purpose has been definitely defined by the law as

... life for life, eye for eye, tooth for tooth, hand for hand, foot for foot, burning for burning, wound for wound, stripe for stripe. (Ex. 21: 23-25).

It was also believed, even to the present time, that punishment makes the prisoner penitent, and to suffer for the sake of the community, and his punishment deters himself and others from the commission of crimes. This

belief dominated the theory of penology for thousands of years up to the early part of the 19th century when penologists began to question the soundness and the validity of the nature of punishment and its supposed deterrent effect upon the criminals. In spite of this doubt, imprisonment as punishment and its deterrent effect are still believed by the people.

Changes in the theory and practices of penology began to be introduced many years ago. Punishment or penitentiary concept began to give way to reformatory or educational concept. Accordingly reformatory institutions were founded. It is of interest to note at this juncture, that this new movement was more or less arrested by the theory of Lombroso, an Italian penologist, that there are people who are born criminal and who could be identified by distinctive physical characteristics. However, studies in heredity and in psychology have shown that there is no such thing as a typical criminal. So the improvements in the treatment of prisoners in the Big House were continued to be introduced. These improvements were calculated to better the life conditions of the prison-

ers — physical, educational, social, religious, and moral. To implement such improvements the following were inaugurated — better prison buildings (but of course with the usual stone walls and armed guards), hospitals, libraries, workshops for vocational training, labor for some monetary reward, athletic games, movies, lectures, etc. The services of social workers, psychologists, psychiatrists, and religious ministers and sociologists, are used for the benefit of the prisoners. All these are now part and parcel of the prisoner's life in a large number of penal institutions. In some of the U.S. prisons there is what is called the Jeffersonian democratic self-government among the prisoners.

This modern theory in penology leads to a new attitude toward crime and the prisoner: Crime is not an act against society but it is a social illness. Therefore the criminal is not an anti-social person who needs to be punished, but one who is socially ill who needs to be cured. Hence, the ancient method of punishing the prisoner is replaced by the modern method of reforming and rehabilitating him.

### III. *The Rehabilitation*

In spite of the theories and practices of the past—punitive and retributive to deter the commission of crimes, and the modern methods of treatment given the prisoners, as described above, there seems to be no reformation on the part of the prisoners, nor the lessening in the commission of crimes. The facts are seen in the continued unrest and discontent among prisoners, the sporadic riots within the Big House, the perennial attempts of escape, and the large percentage of recidivists.

How can we explain these phenomena? Is it true that a criminal is born a criminal regardless of his environment? Is it true that "once a criminal, always a criminal"? If these were true, then what is the use of punishment, reformation and rehabilitation of prisoners? If we admitted that these were true, is it not also true that the only thing we could do is to protect society from the criminals by keeping them in prison as long as they live?

Before we answer these questions let us consider the following observations. As a starting point we raise the question—Is the recidivist a recidivist because the refor-

mation process in the Big House is a failure or because society does not want to take back the prisoner into its fold? In view of all the reformations in prison management calculated for the benefit of the prisoner, it is expected that the prisoner is reformed, perhaps not completely to satisfy everybody and ready to start a life of a peaceful citizen of a community, society still maintains its old negative attitude and refuses to have anything to do with him, much less welcome him back to the community. In other words, the prisoner may be reformed and completely prepared to live a free man, but in the estimation of society he is still a dangerous person.

After the prisoner's "graduation" from the Big House, what are his chances to earn a living in order that he may live peacefully and happily as a free citizen of his own community? Out of the Big House he feels a new life. Happily and peacefully he begins, he thinks, to live a free life. But of a sudden he sees in front of him a wall stronger than the stone walls of the Big House where he had just "graduated", a wall that permanently separates

him from society, even from his own family, relatives, and friends. That wall is the belief that "Once a criminal, always a criminal." Because of this social stigma, the "graduate" finds himself less free and more lonely than when he was inside the Big House.

This fact shows clearly that society believes neither the ancient penologist who believed that imprisonment was a punishment and retribution, nor the modern penologist who believes that imprisonment is a reformation and rehabilitation. Consequently, society continues to punish him by social and moral ostracism, a punishment more painful and more degrading than the most brutal punishment he suffered in the Big House. Inside the Big House, when he was a criminal, he had been well taken care of for all his physical needs—bed, food, clothing, medicine, etc. He was given opportunity to improve himself physically, intellectually, religiously and morally. But outside the Big House, already a free, educated and reformed man, he finds himself still a criminal minus the care and opportunities he had enjoyed in the Big House. Finding him-

self in such a predicament, what would be more natural for him to do than to go back to the Big House? The only certificate that would entitle him for re-enrollment is the commission of another crime. Hence a recidivist.

This fact strongly suggests that the rehabilitation of prisoners is necessarily a cooperative enterprise between the prison and the community including all who are responsible in sending them to prison. According to the dictionary, to rehabilitate means—

1. "To restore to a good condition, regenerate, or make over in an improved form."
2. "To re-establish in good repute or accepted respectability, as a person or the character, name, etc. after disrepute."
3. "To restore formally to a former capacity or standing, or rank, rights, or privileges lost or forfeited."

By means of the modern facilities for the treatment of prisoners the Big House can "restore" the prisoner "to good condition; regenerate, or make over in an improved form," but it cannot "re-establish" him "in good repute or accepted respectability, as

a person or the character, name, etc. after disrepute" nor can it "restore" him "formally to a former capacity or standing, or to rank, rights, or privileges lost or forfeited" because these are the duty and responsibility of the community or society. It is in society where the "graduate" is to be "re-established in good repute or accepted respectability".

#### IV. *Suggested Reforms for Rehabilitation*

The observations above lead us to make the following suggestions for an effective program of the rehabilitation of prisoners. They are presented for consideration—

1. The police and other investigating agencies should try to gather evidence not only for the conviction, but also for the acquittal of the suspect. They should be interested not only in his conviction but also in his acquittal. This would minimize the number of innocent suspects who are convicted and the number of criminal suspects who are acquitted.

2. The prosecuting and the defending lawyers should base their arguments, and the judge his decision, not only on the technicality of the law, the evidence adduced from objects such as hair,

piece of cloth, dust, cigaret stub, empty tooth-paste tube, etc. and the testimonies of witnesses, but also upon the intent and the spirit of the law and upon the psychological and moral factors that have some connection with the case. This may minimize the tendency of a judge to make his decision purely on the technicality of the law regardless of his own moral conviction.

A punishment which is imposed by the judge purely on the technicality of the law fits the crime and satisfies the law but it does not fit nor satisfy the convicted whether he is innocent or not. A crime as defined by law may be committed by several individuals having different personalities, different motives, and in different precipitating circumstances. This psychological fact (not a legal fact) shows clearly the wisdom and the necessity of the next suggestion.

3. Services of an expert psychologist, psychiatrist, sociologist, and social worker should be used during the period of investigation and trial in order that the objects introduced as evidence, the testimonies of the witness, the character of the suspect, etc. could be properly inter-

preted not only on the technicality of the law but also on their psychological, sociological and moral significance. Take for example the nature of the testimony. It has been proven in psychological laboratories that two witnesses of a given event do not give similar reports. Two reports of the same witness, one given immediately after the event and the other several days later, differ from each other. This is due to individual differences in power of observation, memory, attention, the acuity of the sense organs, etc.

Modern penology emphasizes the following lines of investigation wherein the services of the psychologist, the psychiatrist, sociologist, and social worker are needed.

- a. His exact identity
- b. The salient facts concerning his family
- c. His environment
- d. His criminal record
- e. His mental and physiological conditions
- f. His attitude toward society
- g. Any circumstances which call for leniency or severity in his case

When the above facts are ascertained the offenders may be classified and the classifi-



cation should be carefully studied—

- a. His physical and mental status
- b. His physical and mental age
- c. His character and conduct
- d. The nature and cause of his delinquency
- e. The training he requires to fit him for his return to society

4. It is perhaps safe to say that if criminal laws are stated clearly to show their intent and spirit, and to eliminate dubious meanings, so that they cannot be abused in their technicality, the chances are great that the conviction of an innocent suspect and the acquittal of the criminal suspect are minimized.

5. Some of the reforms that were introduced in prison have already been presented. However, the traditional method of concentrating a large number of prisoners in one prison called *the national prison* should be discontinued, because it is unpsychological. A Big House can never be big enough to contain comfortably a big crowd of prisoners. The bigger the crowd, the greater is the congestion; congestion begets irritation; irritation begets discontent and discontent leads to riots

and rebellions. Therefore, the big crowd of prisoners which is concentrated in the Big House should be distributed into smaller groups to be placed in municipal or provincial prisons. This plan may have the following advantages—

a. It lessens the irritating congestion.

b. The financial burden of penal institutions is distributed among the municipalities and the provinces.

c. It may lead to a revision of the existing general relationships between the provincial governments, on the one hand, and the national government on the other, which may eventually lead to a greater governmental autonomy of the provinces.

d. It may develop better prison administration and more effective method of reformation due to lessened congestion and to the human tendency to competition which may be generated by the distributive leadership and responsibility.

6. The duties of the Board of Pardon and Parole prescribed by law should be amended so as to include not only the power to recommend pardon and to parole, but also the duty of placement of all released prison-

ers in some employments. If the board cannot do this, the government should create a body for the purpose.

7. There should be a dynamic and strong campaign to change the attitude of society toward the prisoners and their rehabilitation. The attitude of society toward the prisoners, an attitude which blocks the rehabilitation of the prisoners is difficult, if not impossible, to change, because of the deeply rooted belief that "once a criminal, always a criminal." Figuratively speaking, we may say that the stone walls of the Big House are much easier to destroy than the social wall that society has built around itself in order that "graduates" from the Big House may not enter therein.

8. In this campaign the Christian churches and schools, public and private, should take an active part because these two institutions are especially committed to religious and moral development. The churches should remember how Jesus looked at the criminal in the person of the woman who was caught in the act of adultery (John 8:3-11) and of the Prodigal Son (Luke 15:11-32). The churches should remem-

ber the prisoners and their rehabilitation as often as possible in their sermons and Sunday schools. The schools could do the same thing. They should incorporate in their social studies something about the rehabilitation of the prisoners in order that the school population may know the facts about the prisoners and their rehabilitation which is a means of salvaging wreckage among human beings.

9. Everybody who speaks of work for the rehabilitation of prisoners always centers his attention on, and interest in the prisoners, and the Big House, as if these two are the only ones in the blueprint of the rehabilitation of prisoners. Mention has already been made that the rehabilitation of prisoners is the function of both the prison and the community or society. Any program of rehabilitation is doomed to fail if society is not in the picture and is not willing to cooperate. Society must be made to see its duty and responsibility and it should be made to realize that the reformation of the prisoners depends largely, not on the reformation of the Big House but upon its own reformation.

To achieve the objectives as presented in the form of suggestions for the rehabilitation of prisoners our campaign should be carried out intensively and extensively in all the areas and agencies in our social life, or in our community life. The different organizations—family, religious, educational, professional, scientific, civic, economic, political, industrial, in-

cluding the law enforcement agencies, should be solicited to join in the campaign. The program of rehabilitation should be presented to the public by means of the daily papers, the radios, the TVs, lectures, open forums, conferences and seminars. These different organizations should not remain listeners but doers until the objectives would have been achieved.

\* \* \*

### BETROTHAL

*The cook, Nora, had announced her engagement to a frequenter at the kitchen, named Mike. But a year passed and nothing was heard of the nuptials. So, one day, the mistress inquired:*

*"When are you to be married, Nora?"*

*"Indade, an' it's niver at all, I'll be thinkin', mum," the cook answered sadly.*

*"Really? Why, what is the trouble?"*

*The reply was explicit:*

*"'Tis this, mum. I won't marry Mike when he's drunk, an' he won't marry me when he's sober."*

\* \* \*

*The delinquent laggard swain had been telling of his ability as a presiding officer. The girl questioned him:*

*"What is the parliamentary phrase when you wish to call for a vote?"*

*The answer was given with proud certainty:*

*"Are you ready for the question?"*

*"Yes, dearest," the girl confessed shyly. "Go ahead."*

# COOPERATIVE

Paul Friggens

LATELY, I'VE BEEN meeting an impressive kind of college student: with exceptional maturity, earnings in bank, and with two or three years' on-the-job experience that practically guarantee him a headstart on his career after graduation.

Sharp, confident, 21-year-old Glenn Cooper of Dayton, Ohio, is typical. Glenn wanted to attend college, but lacked the means. Then he learned of the unique work-study program—"cooperative education," they call it—at several colleges of the University of Cincinnati. There, students alternate two to four months of campus study with a like period of employment in business, industry, government or the professions, and earn as they learn. Glenn enrolled, and when I visited him, he had averaged \$1900 annual earnings during three years of college.

But of vastly greater benefit, he had already gotten his feet on the ground in the business world. As a college requirement, the youth had progressed through a variety of jobs: mail boy with a Dayton manufacturer ("Where I had a chance to meet everybody up to the company president"); factory-hand sweating out an eight-hour shift on a clanging gang-drill ("They taught me to respect manual labor and to keep my mouth shut!"); and purchasing clerk and market researcher ("Where I learned some of the facts of life about operating a modern business"). No doubt with these fundamentals, the able young man is ensured a solid future.

I found enthusiastic Corinne Capano at Northeastern University, Boston, another inspiring "co-op" student and Corinne confided: "Al-

# EDUCATION

ready, I feel as if I'm moving up the teaching ladder." As a sophomore, she took a \$40-a-week office job in the Braintree, Mass., elementary schools. The "intern" progressed to teacher aide, doing both remedial reading and arithmetic; regular substitute; and as prescribed by law, elementary practice teacher. By graduation time, she will have acquired 80 weeks of well-rounded school experience, to say nothing of her \$1000 yearly earnings. Says Braintree superintendent of schools, Ralph W. Proctor: "I believe that interns like Corinne have acquired a more functional background of training and experience than any other young teachers we have ever hired." These trainees help meet the teacher shortage, too, and Northeastern can't fill the demand.

At Antioch College, in Yellow Springs, Ohio, I visited Jerry Fagerlund just back from a scientist's "dream" cruise to the Caribbean and the North Atlantic. While he earned \$225 a month and his

keep operating an echosounder, Jerry reaped the benefits of study with a distinguished "field faculty." Earlier, he had worked as a chemical research technician; fire control aide in Crater Lake National Park, and had gained invaluable experience mapping with the U.S. Geological Survey. "I figure I have a two-year head start in my career," the geology major told me.

During the present college crisis, cooperative education offers another important advantage: it may well help to alleviate the pressing expansion needs at some of our institutions — without skyrocketing costs. Antioch, for example, now on a full 12-month calendar with half of its 1450 young men and women on campus and half off, has been able to absorb a recent 20 percent boost in enrollment without increasing facilities or faculty proportionately. And Drexel Institute of Technology, Philadelphia, anticipating an 85 percent jump by 1970 (from 8500

to 14,000 students) expects to accommodate this surge with only 42 percent more floor space. Each seat will get almost double use. Indeed at Drexel, with cooperative education by day, and with evening and graduate programs, every seat serves three students.

How widespread is cooperative education? Across the country today some 66 colleges and universities now enroll some or all of their students in these programs, both optional and compulsory. Last year, for example, 3700 Northeastern University students held jobs in 900 American and Canadian companies. Northeastern is the largest cooperative plan university in the United States and has even pioneered co-op training at the graduate level. Currently, some 2500 Drexel Institute students are employed in 600 companies in 16 states. Antioch College offers on-the-job training in 30 states and 14 countries; and the Massachusetts Institute of Technology has a cooperative program in five of its 22 courses. The largest department, Electrical Engineering, recently removed grade limitations and made the program available to all students.

Says Dr. Peter Elias, head of the department, "These days we are crowding our academic program with so much theory that we need more practical experience out of the classroom. It's a necessary component of engineering education, and we think makes good sense." Probably for the same reasons, England, Germany and Russia are expanding their co-op colleges—the "sandwich plan," the British call it.

About 15 percent of all engineering students graduated each June in the United States are "co-ops." But significantly, cooperative education is catching on in other fields and with women's colleges, too. For girls who've never held a job before, it develops maturity and a sense of security. A nine-week non-resident term offered by Bennington College, Vermont, provides a wide range of experience for its women students, from office work to apprenticeships with publishers, designers and scientists.

While they learn, co-op students pile up impressive earnings: six million dollars a year at Northeastern University; four million dollars at Drexel; three million dollars at Georgia Institute of

Technology, which estimates that it would require a 75-million-dollar endowment to underwrite equivalent scholarships. A national survey shows that the typical cooperative student may earn anywhere from \$15000 to \$7300 during his college work periods, with liberal arts students earning the least and engineers the most. Some are entirely self supporting. Any way you figure it, the work-study plan is turning out a premium college product for America.

Although cooperative education offers new hope in our college crisis, interestingly it's not new. The idea was first sparked by a practical-minded University of Cincinnati professor in 1906. At the age of 15, Herman Schneider worked as a "breaker boy" in his native Pennsylvania coal mines. During preparatory school and at Lehigh University, he continued work in an architect's office where he found his practical experience gave new meaning to theory. Later, when he became Dean at Cincinnati, he "wed theory to practice" and launched his work-study experiments with 27 engineering students. "It is a good thing for a man to sweat his way toward the truth," the

educator used to remark. Dean Schneider's theory was to vastly improve the teaching of technical subjects and upgrade the quality of college graduates.

Just why hasn't cooperative education been more widely adopted?

"It's because of educational inertia and inherent conservatism," flatly declares W. Boyd Alexander, Antioch's Dean of Faculty. "There are few institutions more in the grip of tradition than our colleges. Many academic people still think of the college, especially the liberal arts college, in the gentleman's tradition. They find the idea of a work program anti-intellectual and even repugnant."

On the contrary, Antioch has discovered this "sweating your way to truth" leads to positive academic achievement. The Ohio college has high academic standing nationally, and Dean Alexander explains: "We are convinced that the co-op experience, motivating students and exposing them to the outside world, exerts a dynamic influence on the whole academic program."

Many educators, however, have difficulty reconciling the cooperative principle, which usually requires a

stepped-up five-year program with constant challenge and change. "Loose-leaf (in and out) college," it's sometimes called. (There's considerable strain on college activities, too — athletics, fraternities, partying and the like.)

"Let's face it," a department head confided, "it's an awful wrench for the conventional faculty. You teach a course to one group, then the next three months you must repeat it." But the educators' chief objection to the cooperative plan is that it is infinitely complex to administer.

"The whole college must be geared to the task," says J. Dudley Dawson, dean of students at Antioch. With the first completely cooperative liberal arts program anywhere, Antioch has had 40 years' experience. One day I sat with its 10-meter faculty coordinating committee to see just how the job is done.

The big problem, of course, is placing the individual student in a job best suited for his all-round experience and development, and coordinating the separate resident and off-campus student bodies. At Antioch, that means placing some 700 students (including freshmen) in new

coast-to-coast job locations and even in teaching, travel and factory work abroad; and shifting another 700 back the same quarter to classes.

In this last winter quarter, students were being placed in an amazing variety of jobs — as medical technicians, traffic engineers, municipal assistants, accountants, chemists, physicists, teachers, government employees, factory workers, retail clerks, secretaries, newspaper reporters, mathematicians, social workers, advertising artists, fashion designers, and even researchers and assistant museum curators. One year a student joined a South Polar expedition. Another year, a language major went to Puerto Rico with the family of entertainer Victor Borge, as a tutor for two of the children.

If there's an administrative headache, it's seeing to the welfare of Antioch's 1450 "looseleaf" students. Off campus, of course, there are no housemothers, no dormitories, and the trainees are strictly on their own. "Naturally, with a perpetual merry-go-round, we have our problems," Dean Dawson concedes, "and we must operate by remote control. It requires



a particular combination of courage and adventure on the part of students, parents and faculty. Some students aren't equal to the responsibilities involved, but very few wash out because of failure in the work program."

Customarily, the co-op college keeps in close touch with its on-job trainees and a faculty adviser endeavors to visit each student at least once a season. Occasionally, a student is put on probation by his employer, or he finds he has chosen the wrong field. Whenever this happens, the counselor takes a hand, and usually it's a turning point for the boy or girl.

"I thought I wanted to be an accountant," a Drexel senior told me, "but my first job convinced me that I didn't have the right temperament for confining desk work. Now I think I've found myself in sales." A Northeastern pre-medic confessed that his parents had persuaded him to be a doctor. "But one stretch as a laboratory technician in a hospital cured me!" And a Cincinnati senior girl related: "I found my department store job too commercial. I've decided to teach school." At least half of Antioch's students modify their majors after they've had experience

in related jobs. As they say, the co-op plan like nothing else tests the individual's genuine interests before it's too late.

As for administration of this complex program, it costs Antioch an extra \$120,000 a year. But vice president and business manager Morton Rauh maintains it pays off: "We make up for it in more efficient utilization of our faculty and facilities, and come out ahead." And at the University of Cincinnati, President Walter C. Langsam told me: "We've demonstrated that the cooperative program has three special advantages to the institution itself: First, we are able to accommodate about 30 percent more students with the same faculty and facilities; second, we are keeping our faculty and curriculum in closer touch with business and industrial needs and trends; and lastly, we think the University is more closely integrated with the community and, therefore, receives greater financial support."

Thus, the co-op colleges make a strong case for their system, and recently they won a sweeping endorsement from a committee of educators and business leaders who engaged in a nation-

wide study of cooperative education. This was financed by the Ford Fund for Advancement of Education and conducted by the Edison Foundation.

Among multiple benefits, the study committee found that cooperative education increases student motivation; and enables deserving thousands, who might otherwise drop out, to go on through college. It confirmed that enrollments could be boosted from 15 to 60 percent with relatively little increase in costs for buildings and staff. The study concluded:

"In the light of the tremendous needs in the decades ahead for a much larger number of well-educated people in science, technology, business and the professions... the program should be extended far beyond the relatively small number of colleges now using cooperative education. . . . It makes sense both for men and women . . . The values are very significant and the problems are soluble."

Already, the co-op student is in special demand by business and industry, and with our fast-breaking developments today in many fields, notably science and engineering, he has a decided advan-

tage over the non-worker. Even during the recent recession, colleges had little trouble placing these students; as one school reported, "The companies are standing in line for these self-starters."

Many companies are providing high school scholarships to encourage the co-op endeavor. Still others are taking on co-op students with a promise of advanced employment upon graduation. John L. Burns, president of the Radio Corporation of America, and once a \$16-a-week co-op student himself at Northeastern University, sums up the employers' view of cooperative education.

"I brought from the factory to the classroom many questions which could never have occurred to me had I not faced workaday situations. Cooperative employment provides one of the best possible ways to learn the aims and methods of American business."

With these hearty endorsements, how and where can we best expand this worthwhile program? Authorities give two answers:

First, it works best in a new college, or when it becomes the basic curriculum. Educators warn that coope-

rative training is more difficult to graft onto a conventional college program.

Probably the best place to expand, however, will be in small private schools or new community colleges with less rigid curricula. Antioch is such a case. Forty years ago, Antioch—with some 30 students and a budget of about \$15,000—was dying when President Arthur Morgan took the reins and boldly created a cooperative liberal arts college. Critics chorused it couldn't be done, but the Ohio school has been thriving ever since. "We must take our students out of the ivory tower and relate them

to life," the retired president told me recently. "We need more of the spirit of Antioch in American education."

And members of the nationwide study committee emphatically agree. Says George E. Probst, executive director of the Edison Foundation, "After 55 years' trial this exceptional kind of education is no longer an experiment. As a minimum goal during the next decade, the nation ought to double these opportunities."

If our inertia and conservatism can be overcome, here is one substantial means to extend and improve higher education in America.

\* \* \*

### BRUTALITY

*Two ladies in a car disputed concerning the window, and at last called the conductor as referee.*

*"If this window is opened," one declared, "I shall catch cold, and will probably die."*

*"If the window is shut," the other announced, "I shall certainly suffocate." The two glared at each other.*

*The conductor was at a loss, but he welcomed the words of a man with a red nose who sat near. These were:*

*"First, open the window, conductor. That will kill one. Next, shut it. That will kill the other. Then we can have peace."*

# *The Insolence of Might*

Rabindranath Tagore has long been recognized as the greatest of modern Indian poets. It was for his lyric poetry that in 1913 he won the Nobel Prize. But he wrote much more than poetry, and at last we have a book which brings together many of his most important writings in the field of social thought. Many of them are translated into English for the first time.

Tagore was born in 1861 in a Bengal which as yet showed little sign of emancipating itself from British rule. It was the heyday of Victorian permanence—"the glamorous aspects of British culture" were everywhere predominant. By the time he died, however, all the glamour had gone. One great war in Europe had given way to a second, each outbidding the other in barbarity. The miserable interval was full of poverty, economic crisis and fascism.

True enough the British themselves came out of it all with honour safe, but for the rest of the world it meant the collapse of European civilization and the British with it. There was no camouflage left for the old excuse that Europe should come to the rescue of those not fit to rule themselves; and to do them justice there were many Europeans among those who first declared it.

This historical process is reflected in Tagore's life work. He stood for a new relationship between Western education and Eastern philosophy based on the simplicity of life. In 1901 he established his own school near Calcutta where he was to put these principles into practice. Throughout his career he had nothing but scorn for those who blamed the British occupation for India's ills. He maintained that it was the Indian's own fault that they

had copied the British in outward life, instead of basing themselves squarely on their own traditions and taking the best and most dynamic from Western civilization. It was a highly optimistic ideal and it was only towards the very end of his life that Tagore gave way to gloom, especially regarding the British. "I look back on the stretch of past years", he said in 1941 only a few months before he died, "and see the crumbling ruins of a proud civilization lying heaped as garbage out of history. And yet I shall not commit the grievous sin of losing faith in Man, accepting his present defeat as final. I shall look forward to a turning in history after the cataclysm is over and the sky is again unburdened and passionless".

In the Tagore prose anthology "Towards Universal Man" (Asia Publishing House, London and Bombay) which appeared earlier this year to mark the centenary of his birth, these thought processes become clear. From 1892 to 1941 one feels the man getting older as one reads, gaining breadth of mind, regretfully disagreeing with Gandhi here, revering him there, losing an illusion in one essay and fighting for

a new cause in the next. Above all one is struck with his moderation and astonishing tolerance. It was of course the same with Gandhi, and although the two men differed very widely on essential matters all their lives there was no bitterness in their relationship. In 1925 when their disagreements over Gandhi's cult of the spinning-wheel seemed dangerously heated and were the despair of many Indians, Tagore wrote these words to Gandhi: "Even if you have to hit me hard in the cause of what you think is Truth, our personal relationship based on mutual respect will bear that strain". The differences were most clearly seen in Tagore's appreciation of British culture and in Gandhi's reverence for village life and conviction that in this India would find her salvation.

Tagore's family came to Calcutta in the early years of the British East India Company in the seventeenth century. One of his ancestors was the first Indian to set up business in partnership with the British. The family was anglicised in many ways long before Tagore was born. So the Anglo-Indian world was what he knew best in the

formative years of his life. He knew equally well its advantages and the degradations that Indians sometimes had to suffer from it. He became convinced that for the latter the Indians had only themselves to blame. No self-respecting nation copies another, he thought, especially not one with the immense spiritual wealth and tradition of India.

“At every turn”, he wrote in 1908, “in her laws and customs, in her religious and social institutions, India today deceives and insults herself. That is why the meeting between East and West on our soil fails to attain fulfillment. The contact yields nothing but pain. Even if we succeed in pushing out the British by one means or another, this pain will still be there; it cannot go unless an inner harmony is achieved. Then alone will East and West unite in India; country with country, race with race, knowledge with knowledge, endeavour with endeavour”.

Tagore and Gandhi held different opinions about the role of the village in Indian life, and here Tagore was on surer ground. To many of his contemporaries Gandhi's

insistent opposition to the Industrial revolution and the machine age marked a blind spot in his philosophy. How could India deny the objectivity of science while living in a world impregnated with it? The course of independent India has not taken this direction. Modern Indian development and social change is based on heavy industry. In this way Tagore's dream of the union of Hindu spirituality and Western science is being achieved today. He was always categorical about this in spite of his respect for Gandhi: “All the powers of man seek development and expansion. From the earliest times man has sought to make tools. No sooner had he discovered a new secret of Nature than he tried to capture it with the help of some machine and make it his own. It is in this way that his civilization has advanced”.

Certainly Tagore preferred the village to the town and he agreed that cities were potentially places of ill-omen. Like many other things they must not be taken to excess or they become like a tumour in which the congested blood is the enemy of the whole body on which it feeds as it swells. But village can be exaggerated too, and this is

the main vice of modern India. The villages are stagnating in a deathly sort of defeatism — "Caught between tyranny and charity the village people have been emptied of self-respect". Like Gandhi, Tagore believed implicitly that the future of India lay largely outside the town but for him it would be essentially work of cooperation between the two, for the village people were too poor and lifeless to do it themselves. His writings are full of anecdotes which illustrate lifelessness and parochial thinking. He tells of the people of Kushtia who would not look after their own roads because they would rather put up with the inconvenience than see others enjoy the fruits of their labour.

Tagore, we must remember, was a poet and a philosopher (in the classical sense), and not a politician. That is why his utterances commanded respect. As with Gandhi, no one ever seriously suspected ulterior motives. Search for Truth was philosopher's work but it did not prevent—in fact it necessitated—what is now called 'commitment'. No philosopher, no artist could ignore his own world's problems. In 1915 Tagore was made a knight by

the British, but four years later he saw himself obliged to throw the title back into their faces as a protest against a massacre of Indian demonstrators.

Most of all Tagore was down to earth in the field of education. He always loved children and students. His view of the effect of nature and the simple God-given things of life upon the growing child was similar to that of the English poet, William Wordsworth, who in his 'Ode on the Intimations of Immortality' strikes the same note:

*"The Youth who daily  
farther from the east  
Must travel, still is  
Nature's Priest  
And by the vision  
splendid  
Is on his way attend-  
ed;  
At length the Man per-  
ceives it die away  
And fade into the light  
of common day".*

Tagore believed that the "vision splendid" need not fade and die away, and that if captured in the early years of life it could be preserved forever. He insisted that Indian children should be taught in their own language and not in English. Little wonder that they were unworthy in-

## BREAKFAST

The Southern Colonel at Saratoga Springs, in the days before prohibition, directed the colored waiter at his table in the hotel:

"You-all kin bring me a Kentucky breakfast."

"An' what is that, sir?" the waiter inquired doubtfully.

The Colonel explained:

"Bring me a big steak, a bulldog and a quart of Bourbon whiskey."

"But why do you order a bulldog?" asked the puzzled waiter.

"To eat the steak, suh!" snapped the Colonel.

\* \* \*

heritors of their own tradition if they had to express it in a foreign language. Tagore's idea in education was to fuse the two cultures of East and West. But an Indian could only get the maximum benefit from both if he was firmly based in his own culture. There should be an end to cultural drift. Because he knew and loved his country's history and traditions he was never afraid to criticise his own people when they did not live up to their past. Most of his lessons have now been learnt in India, and therein lies the immense va-

lue of his achievement.

"Towards Universal Man" is an inexpressibly worthwhile book. There is no harm in the constant repetition of simple truths, and Tagore's brilliant poetic imagery must make his ideas unforgettable to every reader. Sometimes his phrases ring a message down the years to push away blindness and prejudice. Just twenty years ago he said: "*The hour is near when it will be revealed that the insolence of might is fraught with great peril*". We fancy he would say the same today.



# TOLSTOY'S DILEMMA

M. M. Bhalla

To a majority of critics and readers the pre-eminent aspect of Tolstoy's art as a novelist has been its sensuous vitality, its pagan-poetry that hovers around scenes like the meditations of Levin in the harvest field in *Anna Karenina* or Prince Andrew's listening to the two girls talking at their window in the summer moonlight in *War and Peace*; or its detailed, concrete, sharply defined image of military, social, and rural life.

It is true they have felt the capaciousness and humanness of the novels but they do not think that these qualities are relevant because of the moral and religious compulsions arising out of the tensions of the Russian ethos—an ethos that necessitates, above everything else, the emotional primacy of ideas for the integrity of form as well as the relevance of realising, defining, and correcting what life was. Overlooking the compulsive moral and religious myth behind the novels, or at least brushing it

aside as an irrelevant distraction from the aesthetic significance, most readers have agreed with Turgenev's pronouncement about an antipathy between Tolstoy's personality and his art.

With this assumption there seems an inexplicable conflict between what Tolstoy was and what he believed himself to be: Tolstoy the great novelist who could give us scenes like Anna Karenina's bedroom where, convinced that Anna was dying, the husband the lover experienced the emotion of forgiveness and reconciliation, and Tolstoy the philosopher of personal and social regeneration writing *The Gospel in Brief*, *What I Believe*, *On Life*, *The Christian Teaching*, and the *Journals*, notably during the period from 1895 to 1899.

Isolating the novels from the evolving pattern of his writings, we have first the creative, excessive nervous energy of a genius with the supreme gift for articulating the poetry of the facts of life, and then the Sage, perverse,

dogmatic, exaggerated but wielding a vast influence and content, in the words of Lawrence, with "repudiating the educated world and exalting the peasant." This conventional image of Tolstoy has been emphasized even by Thomas Mann whose gifts and approach came nearest to Tolstoy's, when he discovered in his novels the feel of a "mighty sensuality," the "Hellenic love of wind and light."

### *Exploratory Myths*

But is this conventional image of Tolstoy's art accurate? Does it not reduce Tolstoy's comprehensive quest to limited, exclusive perspectives?

We know that in Tolstoy's work there is a massiveness, a vastness of dimension, a magnitude, an immensity of range whose two authorities are literature and religion, images of our life and images of ultimate values, man's human condition and the infinity of stars. On one hand is the heroic grandeur, a mighty creative impulse, even a bearish strength, and on the other is the tormented soul that seeks a God or explores the possibilities of the meaning of life. In such a comprehensive quest, can the novels be merely studied as isolated works of art? Or should they

be regarded as exploratory myths in an evolving moral and religious pattern?

What I am suggesting is that beliefs in a Tolstoyan novel are important because the great theme is the discrepancy between what man is, actually, concretely, in his tissues, nerves, feelings and beliefs, and what man ought to be. And this would inevitably involve a metaphysical conception and a moral intention, an idea of being and a doctrine of correction. We cannot, therefore, apply to Tolstoy, or for that matter to most 19th century Russian novelists, the criteria that we apply to, say, Dickens or Flaubert or Hardy. A wide gulf of sharp and concrete differences separates the Russian fiction from the European. In fact, as George Steiner points out, there are more cogent parallels between the classical American novel and the Russian.

The matrix of form in the American and the Russian novel is not manners or society but abstract ideas, large and glowing with vitality, capable of articulating the subtle tensions of the experience into a symbolic design. They are substitutes for traditional patterns, and character is in relation to the ideas that give

them their relevance and value.

Actually, this was inherent in the two situations. Both these situations, the Russian and the American, were deprived of "an adequate social density", of rich traditional patterns of social behaviour and inherited manners, of a sure and strong middle class which sanctions judgment and insight in terms of durable values, and of political structure to give specific weight and dignity to the material. Naturally a new experience demanded a revolutionary approach to the novel, an approach in which the artist's own emotional and spiritual needs became the motif of art as well as the means of comprehending and analysing it.

Luckily, for the American novelist, Europe was the alternative to the thinness of his society. Moreover, Europe could give definitions to his tensions, his sense of moral isolation, and his creative originality. But in the case of the Russian novelist, Europe was a complex image which, ironically enough, could neither be completely accepted nor rejected. Obviously, then, Europe could not have given definition to the Russian novelist's search for identity.

### *Quest and Exploration*

An industrialised, urbane, sophisticated society cannot give shape and stability to the tensions of an agrarian civilization.

In such a complex situation the commitment had to be to a moral and religious awareness, to a revolutionary vision, rather than to cultural adjustment or refinement as with Hawthorne or James. It demanded something more than a mere portrayal of existing society. It had to be a quest after the salvation of humanity, the exploration of life at its roots, at the source of consciousness, in relation to the natural life of the universe, and God. The form of the novel had to be extended, not in the sense of an increase in the technical devices at the novelist's command, but in the sense of making it a species of poetry, a poetry not of concentrated lyrical intensity, but of moral and religious sensibility, the kind we have in *The Iliad*, *The Divine Comedy*, *The Prelude*. Is that why Tolstoy said of *War and Peace*, "without false modesty, it is like the Iliad"?

The sensation of immensity and seriousness, the apprehension of temporal spaciousness and heroism, the perception of serenity and narrative

directness, the awareness of compulsive values and sensuous images—these are not loose dimensions of his work but aspects of a vital design which can in no way be judged in terms of the tradition of the European novel.

### *Double Impulse*

The moral and religious myth, whose principal motifs are apparent from 1847, when Tolstoy wrote down rules of behaviour, lends a poetic expansiveness to the novels and makes them reverberate in all their dynamic complexity long after they are read. The interplay of human behaviour at the council of Drissa, the bitter inner conflicts of individuals like Pierre or Lev or Natasha, the clash of complex passions and intricate motives running almost throughout *Anna Karenina*, or the ravages of time and the dissolution of youth in *War and Peace*, are not merely marvels of executive form but images that receive their texture and colour from a moral vision. This need not imply that a Tolstoyan novel is an illustrated thesis or marginally illuminated propaganda.

I am only emphasizing the fact that it is a work of art with two impulses: the impulse for an enlarged, evalua-

tive, moral vision, and the impulse for life receiving its vitality from the former. In such a work of art, the artist, undoubtedly, creates the beautiful, yet does not *pursue* beauty. He is enraptured by the riotous splendour of the world of Things but he is not captured by them. Art becomes an instrument for something subtle and intangible, yet profound and vital, to be produced within the mind, the kind of thing that Masha, the heroine of the short story "Family Happiness" perceives a few days before her wedding, when she takes the sacrament; or Levin experiences one day, when sitting with his family in his apiary, he enters into conversation with a fine old peasant, Theodore; or we in India experience when we go, say, to Khajuraho or Konarak

I wonder if this last comparison sounds far-fetched; I believe, however, that Tolstoy's novels reveal the same approach that we have in our art and literature. The assumptions differ, the exploitation of technical devices varies, but the central motifs are the same and the practical ends are identical.

The plays of Kalidas or the figures at Khajuraho or Konarak bristle with a tension between the spiritual percep-

tions and the outer sensuous exuberance. The more violent is sensuous exuberance, the more vital would be these inward spiritual perceptions. And this had to be so, if we realize that the Indian mode of perception and the Indian relationship with the manifest world, are directly the opposite of the Western. We regard everything that is not the Absolute as an illusion. True, this illusion is created by the Absolute but it is not participated in by the Absolute. We look for the hidden essence of Things, yet in the process of discovery deliver ourselves to Things. The world is Maya, but we willingly surrender ourselves to it as if this Maya were itself involved in a sacred ritual. The deeper we go, the greater the complexity of the tensions, the profounder the spiritual vision, the more luxuriant the liberation of the senses.

In the Indian art, vision and art are coextensive. It is the same with the novels of

Tolstoy. But, whereas with us, art is a never-ending process of self-expansion and self-evolution along ceaseless births and deaths, in Tolstoy it produced a dilemma which could not be solved except by a deliberate sacrifice, and even a consequent denouncement, of his art. The Kingdom of God must be found *here and now*. Is it not written in the Gospel according to John that the work of God "consists in believing in the life He has given you"? Let us render *this* as sane and as perfect as is possible.

Prince Andrew, Pierre, and Levin must listen to Theodore's remarks: "Oh well, you see, people differ. One man lives only for his needs: take Mityuka, who only stuffs his belly, but Platon is an upright old man. He lives for his soul and remembers God." In this dilemma of either/or, a dilemma which fortunately does not exist for Indian artists, Tolstoy had to make a choice. And he chose living for the Soul and for God.

\* \* \*

# ENCOURAGEMENT STATE AND PRIVA

Keith H. Jones

I should like to start with two definitions. By the 'State' I mean in this context the group of individuals, sometimes called 'public servants', who are responsible to a particular national community for taking the necessary administrative and executive action, using 'public funds', so as to make it possible for all to satisfy their basic needs. Under democratic systems they are of course dismissible by the voters, through the voters' representatives, if they are proved to have diverted much public monies to private ends, which will in fact prevent or needlessly postpone the satisfaction of those basic needs: e.g. of the people's need to be adequately fed, housed, protected as far as possible from disease and from other natural or human enemies, and educated. When we get as far as education, we are moving out of the sphere of what one basically needs

in order to live at all, into the wider sphere of what does one need to make the most of life. This applies still more to the satisfaction of one's artistic and aesthetic needs. If therefore State expenditure is regulated by priorities which put the need for citizens to live to all, ahead of the need for them to make the most of life, then the State will probably relegate 'the Arts' to a second or third place in the queue for a share of public funds.

When speaking of 'the Arts' I should like to distinguish two different, though often complementary, aspects. Firstly there is,

I. creative self-expression by an individual personality, externalising its deepest feelings and needs in original and/or interpretative creation which may or may not be witnessed by other individuals.

# OF THE ARTS BY THE INSTITUTIONS

Secondly there are

II. essentially cooperative endeavours which usually derive their inspiration from I, but normally involve the acceptance by groups of individuals of certain basic conventions, forms, idioms, etc., which serve as a pattern for these cooperative endeavours. A very simple example might be the joining of several people in a systematic *dance* not witnessed by anyone else; a more complex one, the interpretation by one individual or group of individuals of a creative piece of work by another individual for the benefit of a third group of individuals often called the audience.

By means of II, the creative self-expression of individuals can be transmitted in such a form as provide some means of self-expression even for individuals who are incapable of creative originality them-

selves. Also by means of II, creative self-expression can be discipline, and, if need be, dovetailed into certain ulterior *functional* aims, i.e. so as to produce artifacts which will serve some 'useful' purpose beyond expressing the feelings of the creator e.g. building to shelter other people.

Rich individuals (like Caius Cilnius Maecenas of Rome), rich governments, and rich private institutions can, of course, all do a great deal to help encourage the arts. Neither of them can normally *create* I—i.e. creative self-expression by other individuals—(unless they indulge in some very well-planned eugenics); but they can all help to provide the conditions under which I—and hence II—can blossom. In some countries—particularly those where individuals and private institutions are taxed heavily and progressively (i.e. so that the more they take out of the public pool in income and profits the more they have to put back in)—

it is likely that the State itself will be one of the *relatively* few sources of money which could be relied upon to provide, over the generations, continuous, constant and widespread encouragement of the arts in the sense just mentioned. Among the ways in which it may be asked to join in giving encouragement are the following:—

- (a) providing (for everyone not otherwise provided for) facilities for the education of their appreciative and creative faculties;
- (b) preventing the stifling, through lack of openings, of the creative capacities of such gifted artistic individuals as may be found during this educational process;
- (c) providing facilities for finished and promising art-forms to be witnessed widely by the citizens as a whole (if they so wish):
- (d) preventing the complete neglect of aesthetic criteria in undertakings whose products (like buildings or road hoardings) are in any case going to be witnessed widely.

The more the State, or private institutions, commit

themselves to encouraging the arts by providing funds in these or other ways, the more they acquire the power to influence the form taken by the artifacts. In most countries the States will actually use this power in certain stages who advocated that the State should use this power even more extensively so as to convert it into effective control of artistic activity as a whole. Plato recommended that the forms and even the subject-matter of music, poetry and painting should be regulated—poetry written in the past should be carefully revised, the only new poems permitted should be hymns in honour of defunct but distinguished citizens of the officially approved type (Laws 799-802)—and that poets who wanted to write about anything they pleased and in any style they chose should be “anointed with myrrh, garlanded with wool, and sent away to another city” (Republic 398). There was an interesting echo of its precept recently in a communique put out by the Soviet Government news agency, Tass, on November 2, about Mr. Boris Pasternak—a communique which included the following broad hint: “In the event of Pasternak’s expres-



sing a wish to leave the Soviet Union work forever, the State and people whom he slandered in his anti-Soviet work Doctor Zhivago, and the State bodies concerned, will not raise any obstacles." The Governments of the Soviet Union, and of certain East European and Far Eastern countries have in fact put into practice in recent years a system of control of the arts which — though periodically relaxed — has at time gone beyond even that of the ancient Egyptians who Plato took as his model in this respect. (Law 656 d). I well remember, when serving 9 years ago in a capital behind the Iron Curtain, going to my first general art exhibition. The paintings were in the style known as 'Socialist Realism'; and there seemed to be only two themes — the glorification of high economic production and of the lives of V. Lenin and J.V. Stalin. If a painting of an open meadow occasionally hove into sight amid the throngs of enthusiastic operatives and painstakingly delineated tractors, it was inevitably explained away in some such title as "Very Temporary Resting-Place for Stakhanovites momentarily exhausted by Record Output"; if a young woman were

depicted as arousing admiration, it was always made clear that what had bowled over the young men were her vast arm and leg muscles, tense with the effort of wringing milk from a patriotically productive cow. Now of course there is nothing wrong with using art-forms to encourage hard work: far from it. But what seemed strange to my foreign eyes was the restriction of the entire output of artists to his minimal choice of themes, partly because the leaders of the State considered production and patriotism to be of paramount importance, and partly, one could not help feeling, because they did not feel that it was safe, from their own angle, to allow the unrestricted exploration of themes which might directly or indirectly criticise, and threaten the continuance, of, their own policies and their own leadership.

The reason why I felt it strange was that I came from a country which for some hundreds of years had enjoyed sufficient internal security firstly for the leaders to feel that it was safe for the State, for its part, to leave artists a relatively unrestricted choice of themes for their self-expression; secondly for the citizens as a whole, to

have come to accept fairly good-humouredly that there must be some checks, embodied in law or convention; thirdly for the citizens to have evolved and retained the vigilance *and* the powers to see that these checks did not go further than was necessary to prevent the liberty of all from suffering from the excessive licence of a few. If repression did begin to go too far, the leaders could be kicked out. Now what is the position as regards encouragement of the arts in a relatively free society of this kind? First of all let us deal with the minimal degrees of control and *discouragement* which may be thought necessary. The State may perhaps feel obliged to try and prevent, not the creation, but the wide dissemination — particularly among young people—of art-forms which, wittingly or unwittingly, glorify violence for violence's sake (as distinct from violence used in self-defence of a worthy cause). This is only one example of a theme which may be considered dangerous to the well being of the citizens as a whole. But to prevent the number of such officially 'dangerous' themes from growing unnecessarily large, the State may accept

certain safeguards. Firstly it may accept the thesis that the better all its young citizens are educated, *not* only in the techniques of coping with things but in the techniques of living with other people, the more likely it is that such citizens can be exposed without danger to almost any theme, and will form their own sensible judgments thereon, making official censorship increasingly unnecessary. Secondly it may accept the thesis that its own censorship boards (and its advisory boards on e.g. the design of public buildings) should not be composed entirely of public servants specializing merely in efficient administration, but should contain a high proportion of private citizens, including some concerned primarily with the vigorous arrival of the Arts themselves.

Even under these circumstances, there will of course remain checks which are imposed, not legally, but by mere social or artistic convention; and there are not wanting people who criticise the 'tyranny of conventions', maintained by the establishment who often compose advisory committees, as being as potentially restrictive to artistic themes and techniques as state-control itself.

But the safe-guard against this in a free society is that its educational system should encourage original, creative thinking by the youth, as to maximise the chance of throwing up a number of specially gifted individuals who will have the skill and the courage to break through those layers of convention which have ceased to fulfill a living need, thus showing other people the way to new conventions which may in their turn be questioned by those who come after.

This need to encourage the especially gifted raises a number of problems. There have been people in history who have taken the standpoint that if one finds a budding Shakespeare or Goethe one should encourage him at all costs even if it means that ten other less gifted children will have to starve. As against this extremist view, most free societies recognize that priority must be given, if possible, to keeping all eleven individuals alive: who knows, for example, whether one of the others might not be a 'late developer' with even greater gifts? Nevertheless, having kept them all alive, there is undoubtedly a case for giving special facilities to the specially gifted. In the

arts as in every other activity it is true that without an elite there will be little progress; and to ensure a continuous elite special training and facilities are essential. Here the State — as well as rich individuals and private institutions — can help with scholarships to institutions of higher training, and with grant to help those institutions keep functioning. But again a word of caution. To give a promising young artist too much financial security too early is to increase the danger that he will become a 'spoilt genius', living on the capital of his early skill, neglecting further training, and never developing beyond the mediocre. Likewise, to set up 'ivory tower' institutions where artists can live free from any of the cares of everyday life is to increase the danger that all one's art-form will become empty abstractions, providing a refuge from, but no assistance in coping with, the problems, vices and virtues of the ordinary world — instead of having a nice balance between the two types.

Said Solon in ancient Greece — "beautiful things are difficult"; and there is much to be said for extending this to mean not only that hard work and training

are necessary for artistry, but also that unless an artist has suffered some genuine hardship, suffering and privation he is unlikely to be able to produce a really great work of art.

However, I have spoken enough in generalities: and it may be appropriate to end by describing briefly and concretely what the authorities in my own State — Her Majesty's Government in the United Kingdom — do, at the present stage of our development, to encourage the arts. I hasten to add that I do this not in an effort to try and 'sell' our way of doing things to you. Every country has its own needs and problems depending on its national characteristics and the stage of development through which it is currently going. All that we may say is that the *more* different systems we know about, the more likely we are to be able to choose, *from each other's*, features which may seem worth transplanting into our own soil.

In the current financial year (1958-59) the British Government is spending nearly £7 million (39 million pesos) of central government funds specifically on the arts — excluding sums spent by local government authorities

from Central Government grants. To put this in perspective, one must remember that our total Central Government expenditure for the year will be \$5075 million— i.e. expenditure on the arts is only a little over 1% of the total. If you are tempted to quote back at me Napoleon's dictum that we are "a nation of shopkeepers" more devoted to commerce than aesthetics, please remember that we are an island nation with a small land-area and big overseas responsibilities which must not only export or die, but also fulfill its commitments for the common defence: so that we have re-regulated our spending by careful priorities. Even so the \$7 million mentioned is not the total of State encouragement of the arts. We have to add a proportion of the total spent — to go back to our original 4 categories — on

- (a) providing general educational facilities, in schools, including stimuli to aesthetic appreciation.
- The next two categories:—
- (b) helping to prevent gifted artists' capacities from being stifled; and
- (c) helping to provide facilities for people as a whole to be able to see finished art-forms — we may take in reverse order. Over £3 million

(17 million pesos) of our governmental expenditure this year will be devoted to preserving and adding to the national art collections, ranging from the British Museum (founded in 1753) through the National Gallery (founded in 1824), the Victoria and Albert Museum (founded in 1852), the Tate Gallery and the Wallace Collection (both founded in 1897) and several others, to the National Library of Scotland (founded in 1925). Many of these owe their inception to private generosity, but most have become increasingly dependent on State support. With three exceptions, the national museums and galleries in England, Scotland and Wales are not directly administered by Ministers of the Crown, but by Boards of Trustees whose unpaid members are men and women of distinction, usually chosen by the Prime Minister or the Secretary of State for Scotland. Those which are maintained by the State are staffed by civil servants, who are however responsible to the administering Trustees. H. M. Treasury controls matters of finance and establishment, but does not, repeat not, interfere in artistic policy. Several of the Boards of Trustees do in fact dispose of separate non-governmental

funds which they alone administer. These national collections have statutory powers to lend works of art to provincial collections. A Standing Committee on Museums and Galleries advises on administration, loans and other matters. Finally, works of arts are purchased by the Ministry of Works for British Embassies abroad and Government buildings at home; by the British Council for overseas exhibitions, and by the Arts Council for traveling exhibitions in the United Kingdom.

This last-named body — the Arts Council — is the one we must consider next. With a public grant of over £1 million (6 million pesos) this year, it is the main source of State aid in the fields of opera, ballet, music, drama and poetry. It consists of not more than 26 persons appointed by the Government as having a particular knowledge of, or concern for, one or more of the fine arts. The Council's general objectives were defined in a Royal Charter of 1946 as the development of "a greater knowledge, understanding and practice of the fine arts exclusively, and in particular to increase the accessibility of the fine arts to the public

throughout Our Realm, to improve the standard of execution of the fine arts, and to advice and cooperate with Our Government Departments, local authorities and other bodies on any matters concerned directly or indirectly with those objects." This Council allocated large sums between 1950 and 1952 to the Festival of Britain. Its general aim is not so much to provide the arts directly as to assist existing artistic effort — e.g. by financing performances and tours by opera, ballet and theatrical companies (e.g. the Covent Garden, Sadlers Wells and Old Vic companies), and symphony orchestras, (e.g. the London Philharmonic and Halle orchestras) and by assisting local festivals of the era.

We do not therefore have a National Opera-house, a National Ballet-company and National Orchestra etc., but we do have established opera and ballet companies and orchestras who receive a substantial subsidy from the State. H.M. Treasury are however empowered, under the National Theatre Act of 1949, to support the scheme for a *national theatre* by contributing £1 million (nearly 6 million pesos) to the cost of building and equipping a

theatre in London which would operate under public auspices. There are some who say that when it comes to plays and the written word, as distinct from music and dancing, one has to be treated with especial care in order to avoid an excessive degree of State interference. But those who do not feel that this risk would be very great in practice are able to cite the very pertinent examples of the radio and television services of the British Broadcasting Corporation (which — thank goodness — include a high proportion of adult drama, poetry and music so that we can legitimately include them the heading of *the Arts*.) This Corporation is in fact a public corporation, ultimately under State control, but retaining complete independence in regard to the daily administration and presentation of programmes. And while its television programmes have to compete with those of the newly created Independent Television Authority, it does still have a monopoly of ordinary sound-broadcasting, with the Postmaster-General retaining the ultimate power to prohibit the broadcasting of any particular matter. If this seems out of tune with our general policy, it may not

be inapt to bear in mind the enormous extra responsibility which rests with media which, instead of having to attract people out of their homes, can and do penetrate right into the house of the ordinary man (15 million houses in Great Britain have licenses for receiving sets) and can influence not only the adults but also—perhaps even more so—the children, who usually spend a long time at home. By and large, the history of the B.B.C. shows, given a vigilant public, a free press, and a Parliament which reflects public opinion, the risk of a State broadcasting monopoly is one which can be taken — certainly without risking the integrity of the Arts — and it is a risk which may well be less than the risks of exposing the minds of children in their homes exclusively to the influence of private commercial companies who are only too often ultimately concerned more with their own products and profits and with envolving programmes which will appeal to the lowest-common-denominator mind, than with the genuine welfare or uplift of the listeners.

The same would apply *a fortiori* to the possible risks

involved in having a National Theatre.

A number of other private bodies (other than those already mentioned) receive direct votes of public money: e.g. the British Academy (which exercises the same function in relation to humane studies as the Royal Society in relation to the sciences, and which assists British archaeological schools abroad, the Central Libraries for England, Wales and Scotland (which act as clearing-houses for interchange of non-fiction books) and the British Film Institute, set up in 1933 to develop "the film as a means of entertainment and instruction". Grants are also paid to four Royal Colleges of Music, to the Royal Academy of Dramatic Art, and to the Royal Geographical Societies. In the case of all these bodies, artistic policy is a matter for the governing body concerned, and the State does not intervene in it. The Government has a slightly more direct interest however in the Royal College of Art, whose object is to provide advanced teaching and to conduct research in the Fine Arts and in the principles of art and design in relation to industrial and commercial processes. In such ways as these the State

helps gifted artists to secure training and an outlet for their talents.

There are also governmental responsibilities for the historic buildings, ancient monuments, and so-called 'national land'. Certain uninhabited houses, or churches no longer in use, can be put under the protection of the Minister of Works, after which three months' notice has to be given to him of any neighbouring work which may affect the monument. His Ministry maintains such monuments as the Tower of London and Dover Castle — for long, Crown property — and various private historic houses purchased or bequeathed. Experienced architects and archaeologists are employed to preserve and treat them. Land and houses may also be accepted by the Government in lieu of estate duty, and transferred to non-profit-making bodies such as the National Trust or the Youth Hostels Association whose aim is to provide or preserve amenities to be enjoyed by the public. The Minister of Works can also acquire the contents of historic houses, and even make grants to owners thereof to help them keep the houses in good condition in trust for the nation. Finally, the Royal Fine Art

Commissions concern themselves with the aesthetic aspect of new building development and the Council of Industrial Design, set up in 1944, seeks to promote improved design among the products of British industry: both important features of category (d) — the prevention of public ugliness, as it were.

We also have a number of special provisions whereby voluntary organizations concerned with the arts may be exempted from income tax, whereby works of art, buildings and land of historic interest can be exempted from estate duty if given or left to public bodies, universities, national collections, to the National Trust, as appropriate. Finally, since 1952, we have had a Reviewing Committee on the Export of Works of Art, which can recommend the withholding of export licences for important works of art, provided that some British museum or gallery will offer for them, within a fixed period, a "fair price" as determined by the Committee.

So much for State encouragement of the Arts in Britain, which, as you will see, parallels in some ways the practice in the Philippines. As regards private institu-



tions, I have mentioned a number which receive more or less substantial financial aid from the State, while retaining freedom of artistic policy. There are many other *entirely* independent institutions devoted to encouraging the arts—e.g. the Contemporary Art Society, the various Royal Societies and Institutes of painters or architects, the 1st regional colleges of art, the Slade School of Fine Arts in London, the National Book League, the Poetry Society, the British Drama League, the various choral societies, and so on *ad infinitum*. Apart from these, many large British commercial companies do a great deal to encourage the arts by offering bursaries and prizes, by arranging exhibitions etc., It may seem invidious to single one name out of many: but a name which may be especially familiar to you in the Philippines is that of the Shell group of companies. The member companies of this group in the United Kingdom have sponsored a special competition for young, unrecognized painters under the heading "An Artist's View of an Industry" (in which the artist may choose any industry as his subject):

they have also contributed a great deal to the development of artistic advertising, and to the techniques of artistic photography and of the documentary film (by financing their own film unit, one of whose products — "The Rival World" won a prize in the First Manila Film Festival in 1956). Much of this, I understand, is paralleled by the Philippine company, with prizes, for Filipino students, and arranging scholarships in art-teaching for Filipino art-teachers. It is perhaps apt for a foreign speaker to end with these examples of contact and mutual aid between the artists of different countries (an objective which is encouraged, within the limits imposed by finance, by the British Council, the semi-official body which seeks to develop closer cultural relations between the United Kingdom and other countries). The 5th Century B. C. Greek philosopher Demokritos opined that "the home of a great soul is the *whole world*" and we may well apply this to the great artists, writers, sculptors, musicians and so forth for all our countries, whose language is international — or rather *supra national*.

\* \* \*

# BIRD MIGRATION SURVEY

**P**RELIMINARY surveys on migratory birds will be started soon by Japan employing the "bird banding method". A total of about 4,000 birds will be tagged with bands bearing the inscription "Japan No...". The species of birds to be released include swallows, Japanese blue fly-catchers, Japanese solitary snipes, plovers and scores of others.

This is the first time in 20 years that Japan will undertake such a survey and a great deal is being expected of the project. The birds with markings are expected to migrate to the south to spend the winter months and fly to countries in the northern hemisphere to breed.

Persons who catch birds with markings on their legs are requested to remove the bands and send them to the nearest Japanese embassy, legation, consulate-general or consulate, together with pertinent information concerning the date and place where the birds were found as well as the names and addresses of the persons who discovered the birds. A token of appreciation will be presented to those submitting such information.

During the 12th International Bird Preservation Conference held in Tokyo last year and attended by delegates representing 58 countries in the world, a resolution was adopted calling for the establishment of a center in Tokyo to carry out surveys and researches on migratory birds. The resolution also proposed the conclusion of an agreement among the various nations to expedite such surveys in the Pan-Pacific areas and to take measures for the preservation of migratory birds in the future.

## *Japan Ideally Situated*

Among the countries of Asia, Japan is placed in an ideal geographical position for migratory birds. Birds which breed in Siberia and Kamchatka spend the winter months in Japan while those spending the winter in Southeast Asian countries migrate to Japan from spring through summer in order to breed. Japan thus is one of the most suitable countries in Asia to study the habits of migratory birds, which were previously estimated at about 100 million but have diminished by one-tenth today.

## U.S. UNIVERSITY AIDS OTHER COUNTRIES IN PEACEFUL USES OF ATOMIC ENERGY

*Engineers and scientists affiliated with the University of Michigan for the fifth year will travel overseas to help other nations develop their own programs for peaceful uses of atomic energy. During the past four years, under the University's Phoenix Project, a privately supported program to explore the peaceful uses and implications of atomic energy, consultants both from the university and elsewhere have gone abroad to help 16 countries set up nuclear reactors and atomic energy research programs. The countries aided thus far are Colombia, Ecuador, Greece, Indonesia, Iran, Iraq, Israel, Korea, Lebanon, Pakistan, the Philippines, Taiwan, Thailand, Tunisia, Turkey and Yugoslavia.*

\* \* \* \*

It was in 1924 that Japan first initiated surveys on migratory birds by the banding method. The project was undertaken by the then Forestry Agency's Banding Center. Its findings revealed that a young female swallow which had lost its mate always returns with a young male companion. This is said to be the origin of "Wakai Tsubame" which became a popular expression of a young male lover of an old woman.

Before the Pacific War, when Japan used to release

numerous birds with markings on their feet, many letters were received from the Soviet Union, China, the Philippines, Indonesia and other countries reporting the recovery of the birds.

In recent years, many countries bordering the Pacific Ocean such as the Soviet Union, New Zealand, Australia, and the United States, have apparently released birds attached with bandings, because such birds have been recovered occasionally in Japan.

# Orchestra in the Kindergarten

EIse Schuiter

WHEN WE entered the kindergarten, a small house situated in a large garden, we at first thought that the tunes we heard came from a wireless set, for they partly sounded like chimes, partly like rythms of some jazz-band. Not until we found ourselves amidst a crowd of small children, who were enthusiastically playing on peculiar and unusual instruments, did we realize that the music we had heard was obviously being made by beginners. The smallest among the children were playing with these instruments rather than playing on them, deeply engaged in worming tunes out of them and without paying any attention to the teacher. They seemed to enjoy their music as much as the other enjoyed theirs.

We were visiting the Duisburg kindergarten which during the past few weeks has risen into public notice as a musical kindergarten. Prac-

tising music in the kindergartens generally means nothing else but singing with the little ones, with a nurse, accompanying them on the piano at the most. And it is not until the children attend a day-nursery that they learn how to play an instrument themselves. There are of course always a few among them who can read or will easily learn how to read music, and with whom therefore one can make a good start. But what about the four to six-year olds? "The start cannot be made early enough", says many a music-teacher, and so did the manufacturers of music-instruments, especially the piano-builders, whose union chairmen decided to make an interesting experiment: they presented to one of the many Duisburg kindergartens instruments worth several thousand marks, among them a piano particularly suitable for children. However, since

they were fully aware of the fact that for the greater part of the children of that age even a low piano would still be "too high", they, above all also provided Orffian instruments which are suitable not only in size but are appropriate to the abilities and sentience of the children.

### *The Orffian instruments*

What are Orffian instruments? In Germany this question can actually be asked only by someone belonging to the older generation. In the schools for more than twenty years they have been so popular and so much in use that the younger people very often simply use the word "to orff" when speaking of the playing on these instruments. They are instruments which were introduced by Carl Orff and form the basis of his five-volume "School-Work", a work which is believed by many experts to be the most significant pedagogic work of our century. The successful composer of so well-known works as "Carmina burana", "Carmina Catuli", and "The Wise" is fully convinced that musical education in the schools is one of the most important tasks of the teacher of today, and according to this conviction Orff is mainly con-

cerned with the pedagogic side of this task, i.e. with the development and promotion of the musical talents buried in most of the children for their own benefit and poise of mind, and not in the first place for the sake of the artists who are anxious about their future audience. Orff therefore thinks it not only promising but also absolutely necessary that children not only learn to hear music but also to play it themselves, that they are instructed about the basic ideas of melodic and rhythmic principles. Orff did not write his work, which begins with initial instruction for the six-year-old, "by the by", but intended it as his main work, created in collaboration with musical pedagogues who in the meantime have acquired reputation. In so doing he went back to the sources of occidental music, not only to the romanticists, who some 150 years ago compiled an anthology of folk-songs for the first time, but further back to the pentatonic, the sacred and oriental musics; for every child, according to Orff, goes through the musical development of mankind all over again. And he supports his statement by means of children's songs and by the into-

nation of their calls and talking, which even rank before the songs. According to his method of musical teaching he starts off with asking the children to call their names, ascertaining the pitch and length of the tonality, and then almost imperceptibly, the instruction begins. This first step is then followed by clapping hands and hand dances, illustrating the feeling for and the experience of rhythm, and after that the instruction is continued with various instruments: rattles and castanets, triangles and timbrels, cymbals and bells, drums and kettle-drums of some twenty different kinds. As far as melodic instruments are concerned, the chimes and well-sounding metallophones and xylophones are used at the beginning, to be followed by different kinds of flutes and fiddles and a number of other wind-instruments and stringed instruments. They can be arranged as one likes, they are most suitable for improvisations and therefore an ideal help for the formation of a school-orchestra.

*The children are enthusiastic*

All those who have once had the opportunity of listening and watching when children "orff" — on the German

television one can see this quite often — will undoubtedly be carried along by the enthusiasm of the children. Above all, however, he will be envious of the children because of what they are learning in such a playful way. Naturally, the quality as well as the quantity of what the children have learned to a large extent depends upon the qualifications and aptitudes of the individual teacher, and even when using Orffian instruments and following his method of teaching, the results achieved are by far not always up to the mark that could have been achieved.

In Duisburg, in the course of the years to come, one will perhaps be able to find out if and to what extent it is useful for the children to begin with these things already in the kindergarten. Up to now at least one thing appears to be certain, namely, that the children are enjoying this method very much and quite obviously would like practice music every day. But the musical kindergarten is only one of so many others, and neither the children nor the teachers have specially been selected. But what is more, also here the shortage of personnel brings along with it that

## BRIBERY

A thriving baseball club is one of the features of a boy's organization connected with a prominent church. The team was recently challenged by a rival club. The pastor gave a special contribution of five dollars to the captain, with the direction that the money should be used to buy bats, balls, gloves, or anything else that might help to win the game. On the day of the game, the pastor was somewhat surprised to observe nothing new in the club's paraphernalia. He called the captain to him.

"I don't see any new bats, or balls, or gloves," he said.

"We haven't anything like that," the captain admitted.

"But I gave you five dollars to buy them," the pastor exclaimed.

"Well, you see," came the explanation, "you told us to spend it for bats, or balls, or gloves, or anything that we thought might help to win the game, so we gave it to the umpire."

\* \* \*

there is no time for taking care of the children intensively and individually. From home, most of the children have never come across any of these instruments, for their parents belong to a generation which was brought during the war and post-war years and has an extremely realistic outlook on life, but

now gradually becomes interested in the advantages of the "musical kindergarten", though perhaps only through reports in the press, radio and television. Among the young nurses there is already a great interest for this kind of kindergarten, not only in Germany but also in Austria and Switzerland.

# 'SYNTHETIC NATURAL RUBBER'

**B**UNA HAS become a household word all over the world: it means synthetic rubber of a particular type. This German invention of the thirties is about to get a serious competitor in "synthetic natural rubber". This product with the contradictory name is synthesized on the same basic principle, with Ziegler's catalysts added. Professor Ziegler is the head of the Institute of Coal Research at Mulheim in the Ruhr area and the originator of a group of chemical catalysts which have rapidly achieved world-wide industrial importance.

## *The Pre-History of Synthetic Rubber*

Synthetic rubber was first manufactured on an industrial scale in Germany during World War I when natural rubber was scarce. Only 2500 tons were made, a ridiculous quantity by present-day standard, but then the number of motor-cars was

similarly ridiculous in those days, and few types were needed. Chemists had long known that natural rubber is built from a basic unit called isoprene, also known as methyl butadiene. (Pron. diene). The fundamental substance, butadiene, is readily made, but the problem was to link the molecules of the substance so that a rubber-like material would result. Such chemical compounds built from identical molecules are known as polymers, while the single basic molecule is called a monomer. The process is called polymerization and requires a catalyst, meaning a substance mediating the reaction but coming out unchanged in the end. Catalysts are added in small amounts only. Isoprene, the unit of natural rubber, was until recently regarded as unsuitable for polymerization, and chemists concentrated on butadiene. This is now about to change.



The first polymer of butadiene, known as methyl rubber, was no real revolution. True, automobile tyres could be made from it, but they rarely survived 200 miles. A tire of today must live many times this performance. Rubber planters had no need to fear this synthetic product. They got the jitters, however, when "Buna" emerged. The word is short for butadiene-natrium, and natrium is German for the metal sodium, which is used as a catalyst in the synthesis. It converts the gas, butadiene, into a rubber-like mass as by magic. Buna was pretty good indeed, and in some respects better than natural rubber. It was beaten by its own offspring, Buna S, a copolymer of butadiene and styrene. The latter substance is known to everybody, though few non-chemists will know the name: it is a component of town-gas to which it gives the characteristic smell. Buna S bears the second syllable of its name improperly, for sodium is no longer used in its making; chemists have learned to apply different catalysts. Yet the old name, already famous, was retained for its goodwill.

Buna S yields more durable tires than natural rubber does; co-polymers of butadiene with various chemical molecules used in plastic manufacture were also made, one of them being neoprene. One drawback of Buna S and other synthetic rubbers is the warm method of making them. The synthesis requires 45 deg. centigrade. This hot rubber is poorly workable, and must be subjected to further thermic treatment before the processing industries can use it. But recently chemists have succeeded in making "cold rubber", with iron as catalyst. The reaction proceeds three times faster at a low temperature, the product is much better for processing and shows improved properties. Of America's 760,000 tons of synthetic rubber annually, about one-third is now cold rubber. In Germany the Buna-Werke of Huls in the Ruhr area make 45,000 tons of cold rubber a year.

#### *The Call for Synthetic Natural Rubber*

The Chemische Werke Huls Ltd. now prepares for constructing a factory for synthetic natural rubber. The various types of synthetic rubbers are no longer substitutes for natural rubber, but made

to measure for their specific uses. Yet the call for "real" artificial rubber with the structure and properties of the natural product has never ceased. It comes primarily from the ranks of users of natural rubber who are made uncomfortable by the frequent fluctuations of the price of natural rubber.

#### *Other Rubbers Will Stay*

Industrial production of the new synthetic natural rubber is likely to start in Germany at the same time as in the United States. Dr. Dietrich Braun, a lecturer of Darmstadt's Technology University and a scientist of the German Institute of Plastics, states that the new product comes very close to the natural materials as regards tensility and elasticity. Tyres made of the new synthetic rubber have, under the same

conditions, 85 to 95 per cent of the life-time of natural rubber. True, this is not quite 100 per cent, and indeed the chemical structure of the new product differs somewhat from that of natural rubber; there is some more of the 3, 4-structure. Still, chemists have never before got so close to natural rubber as they have in this case. Ziegler's catalysts have gone all the way from coal to plastics and rubber.

From a business point of view, synthetic natural rubber still has a snag. Isoprene, its basic unit, is comparatively expensive to make. Chemists are busy looking for a cheaper process of making it. Dr. Braun believes that the other types of rubber, both natural and synthetic, will not die out in the near future.

\* \* \*

### CHICKEN-STEALING

*The Southern planter heard a commotion in his poultry house late at night. With shot gun in hand, he made his way to the door, flung it open and curty ordered:*

*"Come out of there, you ornery thief!"*

*There was silence for few seconds, except for the startled clucking of the fowls. Then a heavy bass voice boomed out of the darkness:*

*"Please, Colonel, dey ain't nobody here 'cept jes' us chickens!"*

# *A City Below The City*

**Erno Bajor Nagy**

About a hundred years ago, the town council of Budapest decided that it was no longer necessary to maintain pastureland within the city since the capital's population of goats had dwindled considerably. The council recommended that the pastures be put to the plough.

But the goats' grazing grounds were not sown with corn or wheat; for as soon as the ploughmen went to work, they brought up a number of tools, and statues in marble, bronze and clay. These objects, and further research, convinced archeologists that they had discovered the ruins of Aquincum, one of the provincial capitals of the Roman empire. Subsequent excavations yielded finds of great archeological value. A city had been discovered below a city.

Since then, Aquincum has become a huge open-air museum. Specialists soon observed that the ruins brought to light represented only one third of the Roman city which had been divided into three parts — a military camp, a military town and a civilian city. This last section had

been inhabited by settlers, former soldiers, and a native population of Illyrian and Celtic stock who had become Romanized.

In this part of Aquincum, homes, shops and sanctuaries were found. The Roman city must have had a population close to 50,000 and it had a number of public buildings. Not far from Aquincum, an arena seating 16,000 people has been discovered; while in another, smaller arena, with 6,000 seats, you can still see the cells which used to house the wild beasts and condemned prisoners.

The public baths of Aquincum, used for more pleasant purposes, are amazingly well-preserved. This was the first building in the city to be excavated. Its portico overlooked the main street. Bathers left their clothes in small cubicles, just as they do to-day. And when they entered the baths, they were given a bone plate on which was engraved a drawing and a number. This was their check which they had to turn in when they left. Today, visitors to Aquincum can still see the cloak-room and the cold, tepid and steam baths.

# DISSOLUTION OF KIDNEY STONES

Walter Theimer

Kidney-stones are mineral deposits in the kidneys. They are usually calcium salts of oxalic, carbonic, or phosphoric acid, and may consist of uric acid. They can be mixtures of all these compounds. The conventional way of removing these painful and by no means harmless deposits has been a surgical operation. Physicians have long been looking for a way of dissolving the stones chemically inside the kidney, but there have been only occasional successes. The stones are not water-soluble; in fact this is the reason for their being deposited from the aqueous body fluid. They are in part soluble in acids, but this is scarcely feasible within the body with the familiar strong acids. Oxalate stones are most difficult to dissolve, and this type is the most frequent one.

## *Rinsing the Kidney with a Mild Solvent*

A team of scientific workers at Hamburg, directed by Professor R. von Sengbusch, has now succeeded in finding a mild solvent dissolving the stones on their spots in the kidney without any surgical intervention. The new method is likely to revolutionize the treatment of kidney-stones. Physicians, chemists, and engineers cooperated in the team. The solvent is not taken by mouth, but pumped into the kidney with a rinsing device, and pumped out again. This rinsing is a lengthy affair; it must be continued for anything between 50 and 200 hours, and occasionally more. A catheter is pushed up the urinary tract as far as the kidney. It is designed for conveying the rinsing fluid both in and out. This two-way catheter is connected to a pump alternating

between pressure and suction. The pump is specially designed so as to avoid any irritation of the organs and to work without any shock. The catheter must be highly elastic. A group of technicians designed an ingenious device having all these properties, and indeed some more.

The chemists of the Hamburg team searched for a solvent mild enough not to attack the organs. Modern chemical theory suggested dissolution by complex-formation, a method much softer than dissolution in an aggressive solvent. It is too much to say that kidney-stones are entirely insoluble in water. Tiny amounts are in fact dissolved, and can be estimated by quantitative analysis. Unfortunately the stones cannot be dissolved away inside the body like this, since an equilibrium is formed between the minute quantity in solution and the undissolved bulk. Just as many atoms or atom groups as pass into solution will return to the stone, per unit time, and in fact the amount returning is larger than the one going away, because a supply of stone-forming salts keeps arriving from metabolism and makes the stones grow.

### *The Complex Trick*

Now there are substances able to form chemical complexes with the calcium always present in the kidney-stones. The few calcium ions swimming among the water molecules of the kidney fluid owing to the small degree of solubility just mentioned are caught by these substances and absorbed into a complex, even if the substances are chemically saturated by ordinary standards. The complex holds the calcium strongly, and the captive ions cannot escape again, except for a few which do so until another equilibrium forms between those going out and coming in per unit time. It is obvious that few or no calcium ions can return to the stones. This upsets the equilibrium of the stones decisively, since returns cannot make up for losses, and as a result the stone is slowly dissolved. Now if the complex-forming solvent is continuously pumped out again and replaced by fresh solvent, the calcium-complexes are washed out of the kidney for good. This dissolving process is extremely mild and does not injure any tissues.

## *Difficult Names of Efficient Solvents*

The efficient solvents concocted at Hamburg have difficult names but this need not bother the sufferer who is offered bloodless relief. One solvent is the tetralitium salt of ethylene diamine tetra-acetic acid, somewhat hard to pronounce, and called ADTA for short, while the whole salt is briefly called P30. The trinatruim salt of ADTA is known as P40. The former is particularly suited for urate stones, while P40 is most effective for phosphate deposits. Both solvents are adjusted to pH 8.6 and 8.5 respectively, which is on the alkaline side, the buffer being one per cent of triethanol amine. This substance also takes an active part in the dissolving process.

### *The Technique of Kidney-Washing*

After the solvents had been developed and the time for dissolving the stones had been established by test-tube

experiments, a whole new technique of kidney-rinsing had to be evolved. The mild dissolving-process is a slow one, and the kidney must be rinsed continuously for the long periods mentioned earlier. Clinical tests showed that a suitable catheter can be left safely in the urinary tract for weeks. The catheter is introduced in a stretched position, and its opening is brought quite close to the stone, the location being checked by X-rays. Professor von Sengbusch says that the procedure involves a minimum of discomfort to the patient who will definitely prefer it to a surgical operation.

Even the most insoluble kidney-stones yield to the Hamburg method, except one particularly vicious type filling the whole kidney. But the Sengbusch team is just about to develop the method so as to cover even this type. The solvents are described by patients as "friendly to the body".

\* \* \*

# Fauna in Subsoil Water

Subsoil water is the principal source of drinking-water. As ensuring a sufficient supply of drinking-water becomes more difficult in all countries, scientific investigation of subsoil water is intensified. One of the results is that underground water is inhabited by numerous small organisms many of which have become specially adapted to living in these deep waters. It has been found that this particular fauna is of great importance to the quality and processing of water meant for drinking.

## *Three Types of Animalcules*

Dr. Siegfried Husmann, hydrobiologist to the Hydrobiological Laboratory of the Max Planck Society at Schlitz in Hesse, has made a study of the connection between subsoil water fauna and drinkwater supply. There are many more subsoil waters streaming through sands and gravel many feet below the surface than is generally thought, and often enormous numbers of tiny subterranean

animals populate them. According to Dr. Husmann there is a genuine subsoil water fauna living exclusively in ground water, while other types of animalcules live in surface water also.

Dr. Husmann calls the genuine subsoil water fauna "eucaval". Its members are closely associated with this extreme biotope. "Tychocaval" subsoil water animalcules form a second group; this is Dr. Husmann's term for types occurring numerously in surface waters too, finding favourable conditions in subsoil water as well. A third group is represented by "xenocaval" subsoil water animals; these are foreigners having strayed into the underworld, chance visitors unable to survive long in the subsoil. The subterranean populations are very large. Many can be seen with the naked eye. All are metazoans (many-cell animals). Dr. Husmann found no fewer than 111 eucaval species in Central Europe, including 28 copepods, 26 water-fleas, 19

ostracodes, and in addition to these crustaceans, 15 species of mites, several bristle-worms (polychaetae and oligochaetae), tube-making worms (turbellaria), nematodes (threadlike worms), and even a snail (bathynella, the "snail of the depth"). No, these animals do not usually enter drinking-water. True they live in filtering installations also, and have a useful part to play there, but they do not normally travel along with the water destined for drinking. Moreover any travellers would be filtered off during processing, and certainly killed by chlorination. As for turbellaria, for instance, they lead sedentary lives in self-built tubes in the sand, and are not carried away by the subsoil water pumped to the surface. Drinking-water is of course regularly tested for any micro-organism present.

Subsoil water populated by this fauna exists in cavity systems of all sizes. The tiny cracks and hollow spaces of sand and gravel are most important to the animalcules. There are larger subsoil water systems in underground broken stone and small ponds of ground water in subterranean caves, all of which are inhabited by this fauna.

Wells and water-pipes for drawing this water are artificial extensions of the subterranean biotope.

#### *Indicators of Water Quality*

According to Dr. Husmann the subsoil water animalcules are excellent indicators of the quality and origin of subsoil water. If subsoil water is populated solely by eucaval organisms, it can readily be used as drinking-water. Eucaval water-fleas do not pollute drinking-water; they are indeed a sort of natural hallmark for quality and purity. This type of fauna testifies that eucaval subsoil water has no connection to the upper world. This means it undergoes all basic purifying processes inside the soil without any interference from above, and good drinkable water is produced without any impure water being added to it.

The situation deteriorates as xenocaval organisms appear. They can have arrived only through some channels connecting subsoil water with the surface. So some impure water must have had access without having passed the complex filtering and purifying processes of nature in the subsoil. The same is true of the tychocaval animals living in, and making the best



of, both worlds. Now a xenocaval waterflea does not necessarily spoil the whole show. The hydrobiologist will first look for the place whence the stranger has made his entrance into the lower world. Sometimes the place can be found. If surface water is unobjectionable at this spot, subsoil water can be used for drinking purposes without hesitation. Yet if the upper water is impure, the subsoil water must be rejected. In case of doubt it is better to be wary. Communication with polluted rivers etc. renders subsoil water unsuitable for drinking, except for the circumstantial purifying methods necessary for obtaining drinking-water from rivers.

The number of the non-caval animalcules is important. An odd visitor strayed from the upper world, having wandered along some tiny crack, need not cause any alarm. If the strangers are numerous, however, the quality of the water becomes dubious. A biological examination of a water sample ac-

ording to Dr. Husmann will yield reliable information, and the method is likely to become routine in the quest for drinking-water.

#### *Sand Filter Animals Too*

Plant for preparing drinkable water includes large sand filters through which the water passes slowly. A numerous and specific fauna has settled here. These sand-gap animalcules live in the tiny spaces between the grains. Dr. Husmann has shown that this specific fauna is useful. Its job is to mineralize organic substances which would otherwise pollute the water. This process has been in part attributed to bacteria and fungi, but the share of animalcules is far greater and more essential. Slow sand filtration would not yield its well-known good results without the collaboration of this microscopic fauna, closely related to, and largely identical with, the subsoil water fauna. So these small organisms take a hand in ensuring a supply of good drinking-water to humanity.

\* \* \*

# Philanthropy In The U. S.

**Dana S. Creel**

*Director, Rockefeller Brothers Fund*

Philanthropy started with the beginning of civilized men when it was realized that in any form of community life, man had to have a concern for his fellowman.

To go back very briefly into ancient history, it is interesting to see how the concept of philanthropy took shape in early times. Possibly the earliest time this concept appeared in written form was about 2000 B. C. when it was embodied in the Hammurabic Code which counseled the Babylonians that—"Justice be done to widows, orphans, and the poor."

Another big step was in 1300 B. C. when Moses originated a technique of philanthropy—the tithe—the giving of 1/10 of income for the support of religion and care of the poor. In late 450 B. C. Gautama Buddha established a religion based on self-restraint and charity for the poor. Alexander the Great in the 14th century B. C. founded

Alexandria University in North Egypt.

The Jewish and Christian religions introduced a basic teaching of responsibility for one's fellowman—"Love thy neighbor as thyself." From this organized charity began to take a definite shape in hospitals, orphanages and shelters for the poor. In 321 A. D., Constantine gave license to bequeath money to the church, and from that time on large endowments began to accumulate around Christian charitable institutions.

From these beginnings, two of our most important modern institutions evolved—the hospital and the university. It is significant that the earliest universities were not created by kings or rulers or by even necessarily the rich. The same applies to hospitals. They were by and large started and maintained by those who had a concern for mankind and at the same time had a practical concern for themselves.

Going forward, Dr. W. T. Jordan has recently published a study of philanthropy in England from 1480-1660, in which he traces developments in England and describes the unprecedented generosity of merchants and bankers in that period. Their giving was first directed to poverty, but when it was realized that alms alone could not cure the causes of poverty and disease and that it was necessary to go into the roots of this evil, then their philanthropy was directed to basic needs, education, the establishment of numerous schools and colleges. It was, I believe, at this time that philanthropy was first given real recognition in the legal structure of a society, in the Elizabethan Statute of Charitable Uses. Dr. Jordan summed up his study by saying these benefactions in the 17th century —“formed the shape of the modern world.”

Turning to the United States, the early colonists, being for the most part rugged individualists, brought with them these trends and in the creation of a new life gave a substantial part of their time and resources for the establishment of schools, churches, colleges, hospitals, libraries, and welfare organizations.

Benjamin Franklin, famous in American story in so many

ways, was one of the most outstanding early philanthropists in the United States. He raised funds to found a college — the University of Pennsylvania, a hospital, America's first free library, a Presbyterian church, a voluntary fire company, and so the list goes. In addition, he established a philanthropic foundation which still exists today.

I have cited these few specifics of early philanthropy to emphasize that philanthropy, though it may not be always recognized as such, is deeply embedded in Western civilization and has been a vital moving force in the development of the Western world; also to emphasize that the United States did not invent it or have any monopoly on it. It is a common heritage of the democratic system. I do believe, however, that the United States has taken the lead in extending and in expanding the concept of philanthropy to a greater degree than any other country and that philanthropy has, in the United States, become a key factor in its development in the protection of the democratic process.

In the early days, practically all of the schools, colleges, hospitals, in fact all general community services, were private institutions supported by

gifts of local residents. As the country developed and the needs increased, the government at the national, state and local levels augmented these activities, so that there has been a pattern of a supplementary or dual community service, governmental and private. It is impossible to say now just what proportion of general community services are financed by government and what proportion are financed by private giving, and this proportion varies from community to community. It is clear, however, that the private institutions are pace setting or standard setting institutions. Free from political control, they are able to go in their own way in research, experimentation, and adaptation to changing circumstances in a much more flexible way than government-financed and government-operated institutions. By and large, it is these private organizations, particularly the universities, that have done basic research in a number of fields when the value of this research is not too clear, certainly not clear to the point that governmental funds would have been available. As for specifics, the type of basic research I have in mind is that leading to atomic energy and the early beginnings

of space exploration — now subjects of vital importance to the nation. The same holds true in research in the medical field. The same holds true in the field of general education. I do not mean to say that there are not excellent or superb state universities, but I believe that when one thinks of the highest standards of education in the United States, one thinks of Harvard, Yale, Princeton, Columbia, Chicago — all private institutions supported by contributions from individuals, foundations, and corporation. It is important to maintain such institutions regardless of the rapid growth in the number and size of governmental supported colleges and universities.

In considering the role of philanthropy in the United States, I have long maintained that the private institutions of a country really set the pattern for what happens in that country. These private institutions, universities, hospitals, museums, cultural and civic organizations are the pace-setters or enervators in our society. Now this is an exciting thing. This means that the private individual, quite aside from what the government may be doing, can, through his support of these institutions, have a voice and a part in shaping and in-

fluencing what goes on in the country. In other words, in the United States one does not have to work exclusively through the government in seeking to serve himself and his fellowmen. He has another channel of influencing his environment and that is through private philanthropic agencies and organizations. This is why I said earlier that philanthropy is a vital tool in the developing and maintaining of a democratic process in the United States.

The role of philanthropy in the United States is so well established that it is definitely encouraged as a matter of public policy. As a means of support to charitable, reli-

gious, educational and health agencies, the law provides that 30% of a person's income can be given free of all income tax and that the receiving agency is not required to pay any tax on such gifts or the income which it may derive from endowment. In this way, the government recognizes the value of these private agencies and encourages individuals to take the lead in correcting or improving conditions and to do for themselves what the government would have to do and probably would do less well if they did not exist.

A few years back, I attempted to find some measure of the role of philanthropy in the United States. To my amaze-

\* \* \*

## CATERPILLARS

*The small boy sat at the foot of a telegraph pole, with a tin can in his hands. The curious old gentleman gazed first at the lad and then at the can, much perplexed.*

*"Caterpillars!" he ejaculated. "What are you doing with them?"*

*"They climb trees and eat the leaves," the boy explained.*

*"Yes?"*

*"And so," the boy continued proudly, "I'm foolin' this bunch by lettin' 'em climb the telegraph pole."*

ment, I found that philanthropic expenditure was a major industry in the country. If I recall correctly, including the giving to all private philanthropic organizations, colleges, schools, museums, etc., the total amount of dollars given each year, considering a general industry, was the 4th or 5th largest industry in the country. Even though I have been active in the field of philanthropy for many years, this came as a surprise, but it is even more a surprise to see that the figures keep increasing each year. In 1959 a total of approximately \$7,800,000,000 was given in the United States to religious, educational, health, social service, character building, and cultural agencies. This is big business and by its size you can see why I say it is a key factor in what America is and what it will be in future years.

I personally would be worried about the role of philanthropy in the United States if it were a static concept. Fortunately, I think it is, as I mentioned before, one of the most flexible instruments in the country and the means through which an individual can express a sense of citizenship responsibility to the immediate community in which he lives, then to a larger national problem. And more re-

cently there is, I think, in the United States a general appreciation and understanding that this citizenship responsibility or concern for his fellowman is an international responsibility and that ultimately he must be concerned with what happens throughout the world—in Africa, Asia, or anywhere else. The world is becoming a very small place.

This growing concern and recognition of philanthropy as a tool has an interesting development in the United States and that is the creation of foundations through which individuals, either separately or in cooperation with others, can direct giving in an organized, scientific, and systematic manner. England pioneered in the creation of foundations but to a limited extent. In the United States three generations ago, there were very few foundations. The first really large one under a federal charter was the Rockefeller Foundation which pioneered in many ways, primarily in the field of scientific and medical research. Now there are numerous foundations and the number is growing by leaps and bounds. According to the last count, there are some 12,000. The majority of these is very small, but the number is important because

## CHRISTIANITY

*A shipwrecked traveler was washed up on a small island. He was terrified at the thought of cannibals, and explored with utmost stealth. Discovering a thin wisp of smoke above the scrub, he crawled toward it fearfully, in apprehension that it might be from the campfire of savages. But as he came close, a voice rang out sharply:*

*"Why in hell did you play that card?" The castaway, already on his knees, raised his hands in devout thanksgiving.*

*"Thank God!" he exclaimed brokenly. "They are Christians!"*

\* \* \*

it shows the extent to which individuals think of organized philanthropy as a means of doing something about the problems of his country and society in general. Philanthropic activity has become a means of gaining stature and recognition as a good citizen. Of these 12,000 foundations, the Ford Foundation is, of course, the giant with an asset of some \$648,000,000 and going down to the list to the 8th place there is the Rockefeller Brothers Fund which, I should naturally mention, has an asset of some \$130,000,000. I am naturally interested in these two particular foundations, but I am not qualified to speak for the Rockefeller

Foundation; for that is a separate corporation founded by Mr. Rockefeller, Sr. with its Board of Directors chaired by Mr. John D. Rockefeller, III. As one of the oldest foundations, its program is well established with worldwide interest centering on scientific research but touching many fields of need throughout the world. By directing its resources and its trained talents and efforts to large general problems, it seeks solutions to fundamental problems. The International Rice Research Institute, now taking shape only a few miles from here, is an excellent example of its activity.

The Rockefeller Brothers Fund was created by the children of Mr. Rockefeller, Jr. to consolidate and administer more effectively their philanthropic activities. I think it is distinguishable from the Rockefeller Foundation primarily on the basis that the members of the family serve on its Board and they take very direct and personal interest in what the foundation does and, in many cases, give personal leadership to its various activities. I think, and here again I am prejudiced, that the Rockefeller Brothers Fund is apart from practically any other foundations, because it is not money alone but the personal interest and leadership of the Rockefeller family which gives a special quality to its program. The Fund's activities are characterized by those which would come under the heading of aggressive citizenship. Just a few examples, in New York City, the Fund, together with the Ford Foundation, initiated and financed a study of Greater New York to determine those factors, such as land use, transportation, population trends which influence its growth and development to date. This study was an attempt to develop a working body of knowledge which would be helpful to

anyone—government, business, or individuals working on the problems of Greater New York. Another activity is the establishment of an African program to aid economic development of newly independent countries in West Africa faced with an imperative need in new industries and general economic growth. Another interest is the conservation of natural resources in the United States needed for recreation and outdoor educational programs. Another recent activity was a special study project, in which the Fund brought together a panel of eminent citizens to identify major problems of the United States of the next ten to fifteen years and recommend appropriate action. This study resulted in reports on education, national defense, economic growth, and a number of other subjects, which hopefully over the years will prove helpful to the public and to those concerned with national policies.

These are just a few illustrations but I think they do serve to give meaning to my repeated statements before that philanthropy is a part of the democratic process which can and does play a significant part in shaping foundations.



I have gone into a little history and to a somewhat theoretical discussion of philanthropy. In terms of individual and foundation giving which in the final analysis, as I see it, is really citizenship giving concerned with one's fellow-man, it is this that brings me to the real point.

I think business corporations are citizens and as such they have a responsibility to help the community in which they exist and in which they do business, and with the world becoming smaller and smaller, this takes in a considerable territory. By starting on a local level as a citizen, there is a responsibility to exercise a good influence

in the community in which the business is conducted. This can mean the giving of money and the giving of leadership by business leaders to see that there are good schools, good hospitals, good recreational facilities, good cultural programs which make for a sound, healthy community in which its employees can live. The reverse side of this is that a business can, undoubtedly, sell more automobiles, more soft drinks, more furniture in a healthy and prosperous community. Extending this a bit further, if there is a depressed area in a community, state, region, or even country where the people, because of disease or poverty, are not able to live

\* \* \*

## CALMNESS

*In Bret Harte's Mary Gillup, there is a notable description of calmness in most trying circumstances.*

*"I have the honor of addressing the celebrated rebel spy, Miss McGillup?" asked the vandal officer.*

*"In a moment I was perfectly calm. With the exception of slightly expectorating twice in the face of the minion I did not betray my agitation."*

a full life, there is reason for business as well as government to be concerned with the eradication of the causes of this depression. It means more markets, it means also a more stable government. Business has a concern with education because this, too, has a very direct bearing on the type of employees who will be available to it in future years and the type of leadership which will generally be influential in the community in which it exists. In the educational field, business has a particular concern with scientific research, basic as well as applied, because it is from this research that new products and new markets can be developed.

This reminds of a rather painful experience of some twelve years ago. When I was asked by some of the officers of a large financial institution in the United States to prepare a memorandum suggesting what it might do in the philanthropic field, I did this with considerable hesitancy, because the idea of corporate giving at that time was not too well developed. I very cautiously recommended that this institution as a citizen of its community should give to local institutions which had some bearing on the welfare of its employees. So in the

first category of agencies which I suggested were listed hospitals and welfare agencies in its immediate vicinity and also a general community fund for the city. Then as a second and lower priority, I listed some of the educational institutions in the city and several of the cultural organizations. As a third and even lower category, because I felt it is more difficult, was listed the support of special research project relating to monetary policies and banking problems, which could be started in particular universities with the thought that such studies will not only help the universities but would also have a very direct relationship to the corporation involved. I must confess that at the time when that report was reviewed, it was laughed out of the Board Room and I was termed a fuzzy head and a visionary. I take pride in the fact that now after twelve years, that same corporation has now developed a philanthropic program which takes in not only category 1 but also category 2 and category 3 that I suggested, and has also gone much further in the support of general community activities, the extension of scholarships and even general budget support to selected colleges and uni-

versities throughout the country.

Corporations in the United States are presently a greater reservoir of relatively untapped support to private educational health, and welfare organizations. Someday, I am firmly convinced, that corporations will be a major factor in the support of philanthropical institutions in the United States. The trend is developing. Last year corporations gave roughly \$400,000,000 to private educational, health and charitable organizations.

This is just the beginning. I cannot say that this giving by business is wholly spiritual and stems exclusively from a love of mankind. Some people argue that there is no such thing as philanthropy and that everything anyone does has a self-serving motive. I can argue on both sides of this question. All I would say is that regardless of what one's motive is in giving, if he gives intelligently, I am sure it is good citizenship and good business.

\* \* \*

### ADVERTISING

*The editor of the local paper was unable to secure advertising from one of the business men of the town, who asserted stoutly that he himself never read ads, and didn't believe anyone else did.*

*"Will you advertise if I can convince you that folks read the ads?" the editor asked.*

*"If you can show me!" was the sarcastic answer. "But you can't."*

*In the next issue of the paper, the editor ran a line of small type in an obscure corner. It read:*

*"What is Jenkins going to do about it?"*

*The business man, Jenkins, hastened to seek out the editor next day. He admitted that he was being pestered out of his wits by the curious. He agreed to stand by the editor's explanation in the forthcoming issue, and this was:*

*"Jenkins is going to advertise, of course."*

*Having once advertised, Jenkins advertises still.*

# Origins of American Man

One of the great remaining enigmas of science is the origin of American man.

This question provided the theme of the second Intellectual Encounters of Sao Paulo where, from August 21-27, 1961, archaeologists, ethnologists, geneticists and linguists reviewed the current state of scientific knowledge about the human past of the Western Hemisphere. While drawing attention to the uncertainty which still reigns as to how man spread out through the New World, the scientists at Sao Paulo did not question the Asian origin of the Indians or the very remote date of their arrival in America — about 30,000 years ago, when that continent was connected to Asia by Alaska. Some important communications on the discovery of very ancient tools belonging to prehistoric Indians were made to the conference. These testify to man's presence in South America in the 10th millenium B.C., and associate it with the presence of certain extinct animal species.

The Intellectual Encounters of Sao Paulo highlighted the serious danger which threatens the last living evidences of South American prehistory.

The Indian tribes of Brazil and neighboring regions are disappearing without any serious effort being made to preserve a record of their traditions, arts and languages. With them, our last chance to solve the enigmas of the distant past is vanishing. Governments and scientific institutes have been asked to push investigations before it is too late.

An example of a valuable effort is provided by the curious case of the Sheta Indians who were discovered in the forests of the state of Parana (Brazil) when the area was opened up for coffee cultivation. Although surrounded by modern civilization, these Indians are still living in the Stone Age. In 1962, thanks to Unesco support to the International Union of Anthropological and Ethnological Sciences, scientists are going to study their neolithic civilization.

Another grave source of concern to scientists is vandalism on archaeological sites. The conference recommended that other states follow the Brazilian example and vote protective legislation. (UNESCO)

# VITAL VITAMIN

Monika Muller

The bizarre design of rods and spheres, almost of the look and shape of a fashionable modern-art "mobile" or non-objective sculpture, which was the symbolic centrepiece of a several-day international congress, was but a one-millionfold enlargement of a model of the structure of the vital vitamin B 12. For this congress which was recently held in the university clinic of Hamburg under the chairmanship of the Hamburg physiologist, Professor Joachim Kuhnau, more than 150 well-known researchers and scientists from all the world, what was called the large "Family of Vitamin Researchers", had come to the North-German two-million city of Hamburg, which is a federal state of itself in the Federal Republic of Germany. The aim of this conference was to exchange views on the recent discovery of some of the secrets of vitamin B 12, and to listen to new ideas relating to the effects of this important vitamin.

This marvelous vitamin is a substance contained in liver, meat, the yolk of eggs, and cheese. The greatest importance must be ascribed to this vitamin, because it is indispensable for the normal formation of blood; its lack will cause a dangerous blood disease, pernicious anaemia. This disturbance caused by a lack of vitamins inhibits the maturing process of the red blood corpuscles in the bone marrow, and for a long time this vicious disease was held to be incurable by medical science.

Only after the liver-substance therapy had been developed and introduced, and vitamin B 12 could be isolated from the tissue as an efficient "anti-pernicious anaemia" substance, physicians and researchers were able to save patients suffering from this otherwise lethal disease. Today patients suffering from pernicious anaemia are treated with special liver prepa-

rations containing the prepared "anti-perniciosa" substance as well as fresh liver and vitamins B 12, whereby it has been possible to medicine to subject this dangerous disease to a very high degree of control.

When the vitamin researchers had met last in Hamburg, five years ago, the structure of vitamin B 12 had just been found, and the opportunities of using its effects to the benefit of patients had hardly been looked into, let alone examined and further developed. Now this very field was the focus of the topical discussions in the university clinic, in which also the discoverer of this vitamin, Dr. Lester Smith of the Research Station at Greenford, England, United Kingdom, participated. These scientists all are convinced that a thorough research into this vitamin would clarify further important biological problems and be of decisive importance for practical medicine. For the layman, however, it is very difficult, indeed, to follow the researchers even into the "lower" regions of their "scientific altitude flight" as one reporter described these highly technical discussions of this complicated special field of medicine.

The joint research into the nature and properties of vitamin B 12 by scientists from twenty-five countries of the earth is another example-setting model of the great scope of opportunities of international cooperation in scientific fields to the benefit of mankind. It was in this spirit that the Hamburg Senator Dr. Biermann-Ratjen, on the occasion of a reception given by the Hamburg City and State Government in honour of the members of the congress, said that "also for the layman the history of the vitamin B 12 is dramatic and exciting, and convinces us all that a close network of fine international cooperation in science is the right road for human knowledge gaining ever more ground to the benefit of mankind, to watch the scientific world in its patient, untiring and cooperative struggle must deeply impress us all."

\* \* \*

# Attention: All organization heads and members!

Help your club raise funds painlessly . . .

Join the *Panorama* "Fund-Raising by Subscriptions"  
plan today!

THE PANORAMA FUND-RAISING BY SUBSCRIPTIONS PLAN will get you, your friends, and your relatives a year's subscription to *Panorama*.

The *Panorama* is easy to sell. It practically sells itself, which means more money for your organization.

The terms of the PANORAMA FUND-RAISING BY SUBSCRIPTIONS PLAN are as follows:

- (1) Any accredited organization in the Philippines can take advantage of the PLAN.
- (2) The organization will use its facilities to sell subscriptions to *Panorama*.
- (3) For every subscription sold the organization will get ₱1.00. The more subscriptions the organization sells, the more money it gets.

**"The heart of the Philippines  
is in the country,  
and the heart of the country  
is in the land"**



**READ THE**

*Philippine*  
**COUNTRY LIFE**  
*Magazine*

A FORTNIGHTLY MAGAZINE FOR PROGRESSIVE  
RURAL COMMUNITIES  
INVERNES ST., STA. ANA, MANILA, TEL. 5-41-96  
SUBSCRIPTION RATE: ₱6.00 A YEAR