# The OPEN COURT

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

FOUNDED BY EDWARD C. HEGELER

JANUARY, 1929

VOLUME XLIII NUMBER 872

Price 20 Cents

The Open Court Publishing Company

Wieboldt Hall, 339 East Chicago Avenue Chicago, Illinois

#### THE UNIVERSITY OF CHICAGO PRESS

5750 ELLIS AVE., CHICAGO

#### THE AMERICAN PHILOSOPHY OF EQUALITY

By T. V. Smith

Equality, in its present vague status, has lost much of the meaning that the founders of this country attached to it. In this book Mr. Smith has set out, in effect, to rescue from oblivion whatever truth the earlier doctrine contained.

"Professor Smith writes as a philosopher and an historian. His reasoning is sound, his information accurate and his style clear and virile. The volume is a notable contribution to our political philosophy."—The New Republic.

\$3.00, postpaid \$3.15

#### THE DEMOCRATIC WAY OF LIFE

By T. V. Smith

T. V. Smith in this book re-endows "Liberty, Equality, Fraternity,"—slogans of a goal that has never been reached—with some of the spirit of the days when they were magic words. Here is a brilliant commentary upon democracy as a way of life.

\$1.75, postpaid \$1.85

#### AESTHETICS OF THE NOVEL

By Van Meter Ames

The fact that there is a decided relationship between literature and philosophy has been singularly ignored by past writers. Mr. Ames, believing that literary criticism cannot be sound unless it is placed on a philosophical basis, in this book has successfully correlated both subjects. He has studied the novel by means of a theory of aesthetics which he has worked out from the general standpoint of pragmatism.

\$2.50, postpaid \$2.60

#### CURRENT CHRISTIAN THINKING

By Gerald B. Smith

In this book, the author takes account of the outstanding forms of religious belief, and he shows their relation to the whole progress of Current Christian thought.

"Mr. Smith presents an excellent survey of the state of religious thinking in the United States today. His sections on Fundamentalism, Modernism and the controversy over evolution are especially good."—American Mercury.

\$2.00, postpaid \$2.10

#### THE UNIVERSITY OF CHICAGO PRESS

5832 Ellis Avenue -

Chicago

### THE OPEN COURT

Volume XLIII (No. 1)

JANUARY, 1929

Number 872

#### TABLE OF CONTENTS

PAG Frontispiece. The Golden age of greece.	E
·	1
The Golden Age. WILFRID D. HAMBLY	
The Philosophic Study of Religion. FREDERICK C. GRANT1	5
Character Training in School and College. J. v. NASH	2
Cynicism as a Necessity. HARRY SOOTIN4	5
The Humorous Side of the Serious. Robert sparks walker5	5
	2

#### Published monthly by THE OPEN COURT PUBLISHING COMPANY

337 East Chicago Avenue Chicago, Illinois

Subscription rates: \$2.00 a year; 20c a copy. Remittances may be made by personal checks, drafts, post-office or express money orders, payable to the Open Court Publishing Company, Chicago.

While the publishers do not hold themselves responsible for manuscripts sent to them, they endeavor to use the greatest care in returning those not found available, if postage is sent. As a precaution against loss, mistakes, or delay, they request that the name and address of the author be placed at the head of every manuscript (and not on a separate slip) and that all manuscripts and correspondence concerning them be addressed to the Open Court Publishing Company and not to individuals.

Address all correspondence to the Open Court Publishing Company, 337 East Chicago Ave., Chicago.

Entered as Second-Class matter March 26, 1897, at the Post Office at Chicago, Illinois, under Act of March 3, 1879.

Copyright by The Open Court Publishing Company, 1928.
Printed in the United States of America.

#### KANT'S INAUGURAL DISSERTATION

and

#### EARLY WRITINGS ON SPACE

translated by
JOHN HANDYSIDE

Cloth, \$2.00

#### CONTENTS

Thoughts on the True Estimation of Living Forces (Selected Passages)

On the First Ground of the Distinction of Regions in Space

Dissertation on the Form and Principles of the Sensible and Intelligible World

The paper here printed was designed to be an introduction to Kant's early writings, particularly those which deal with space and the methods employed in mathematical science. It is a helpful introduction to the *Critique of Pure Reason* and is quite indispensable to any genuine understanding of Kant's mental history.

THE OPEN COURT PUBLISHING COMPANY

Chicago London

## JOURNAL of PHILOSOPHY

This periodical is the organ of active philosophical discussion in the United States. There is no similar journal in the field of scientific philosophy. It is issued fortnightly and permits the quick publication of short contributions, prompt reviews and timely discussions.

Edited by Professors F. J. E. Woodbridge,

W. T. Bush, and H. W. Schneider,

of Columbia University

515 WEST 116TH STREET, NEW YORK \$4 a Year, 26 Numbers 20 Cents a Copy

#### THE POINT OF VIEW

An Anthology of Religion and Philosophy Selected from

the Writings of PAUL CARUS

Just published in a most attractive volume bound in cloth with design in gilt and specially boxed for delivery.

Price \$2.50

G. E. STECHERT & COMPANY

31-33 E. Tenth Street

New York, N. Y.

## A HISTORY OF MATHEMATICAL NOTATIONS

in two volumes

\$12.00

by

#### FLORIAN CAJORI

Volume I—Elementary Mathematics
Volume II—Advanced Mathematics

Volume I is now ready

Price, Cloth, \$6.00

This study emphasizes the difficulty experienced even in ordinary arithmetic and algebra in reaching a common world-language. The only hope for rapid approach of uniformity in mathematical symbolism lies in international co-operation through representative committees.

Any phase of the growth of mathematical notation is an interesting study, but the chief educational lesson to be derived is that notation always grows too slowly. The moral which this points for twentieth-century teachers is that they should assist in hastening new improvements.

For many centuries there has been a conflict between individual judgments, on the use of mathematical symbols. On the one side are those who, in geometry for instance, would employ hardly any mathematical symbols; on the other side are those who insist on the use of ideographs and pictographs almost to the exclusion of ordinary writing. The real merits or defects of the two extreme views cannot be ascertained by *a priori* argument; they rest upon experience and must therefore be sought in the study of the history of our science.

THE OPEN COURT PUBLISHING COMPANY

Chicago London

## AMERICAN MATHEMATICAL SOCIETY

#### **COLLOQUIUM SERIES**

\*0-0-0-0-0-0

- G. C. Evans, The Logarithmic Potential. Discontinuous Dirichlet and Neumann Problems. 1927. 150 pp. \$2.00.
- E. T. Bell, Algebraic Arithmetic. 1927. 180 pp. \$2.50.
- L. P. Eisenhart, Non-Riemannian Geometry. 1927. 184 pp. \$2.50.
- G. D. Birkhoff, Dynamical Systems. 1928. 295 pp. \$3.00.

#### EARLIER ISSUES

(Circular giving full titles sent on request).

Evanston Lectures, \$1.25. Chicago Congress Papers, \$4.00. Boston Lectures, \$2.75. Madison Lectures, \$2.50. Princeton Lectures, \$2.50 Cambridge Lectures: Part I (Evans), \$2.00.

Part II (Veblen), \$2.00.

Orders may be sent to the American Mathematical Society, 501 West 116th Street, New York City, or to

#### THE OPEN COURT PUBLISHING COMPANY

337 East Chicago Avenue

Chicago, Illinois

#### PHILOSOPHY TODAY

A collection of Essays by Outstanding Philosophers of Europe and America Describing the Leading Tendencies in the Various Fields of Contemporary Philosophy.

Edited by Edward L. Schaub
Professor of Philosophy, Northwestern University.

Editor, The Monist.

An authoritative account of present trends in logic, ethics, aesthetics, legal and political thought, theory of knowledge, philosophy of religion and metaphysics, together with the philosophy aspects of psychology and sociology.

Cloth, \$3.75

THE OPEN COURT PUBLISHING COMPANY

Chicago

London

#### THE BUDDHIST ANNUAL OF CEYLON

Vol. III. No. 2  $\frac{B. E. 2472}{C. E. 1928}$ 

An Annual covering the principal activities in the Orient during the year 1927-28. An awakened interest in Buddhism is shown by the development of the study of Oriental Religions in United States and England.

Partial Contents of the Volume

A Buddhist Legend in Europe by F. L. Woodward Buddhism in England by Christmas Humphreys The Buddha's Discovery of Love by Albert J. Edmunds The Active Life of a Buddhist by the Hon. Dr. W. A. De Silva Illusions and Disillusions by Prof. A. Brodrick-Bullock Buddhism and the Modern World by the late Ananda Metteyya Realty by Prof. E. J. Mills

Notes and News

Price \$1.00

We also have a few back numbers of the Annual on hand for those who wish to complete their files.

THE OPEN COURT PUBLISHING COMPANY

Wieboldt Hall, School of Commerce

337 East Chicago Avenue

Chicago

Digitized by the Internet Archive in 2009 with funding from CARLI: Consortium of Academic and Research Libraries in Illinois

http://www.archive.org/details/opencourt438721caru



THE GOLDEN AGE OF GREECE,

Mural Painting by Kaulbach in the New Museum at Berlin.

Frontispiece to The Open Court.

## THE OPEN COURT

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea.

Copyright by The Open Court Publishing Company, 1929

Volume XLIII (No. 1) JANUARY, 1929

Number 872

#### THE GOLDEN AGE

A Study of Warfare in Relation to Survival and Progress
BY WILFRID D. HAMBLY

URING recent years there has been so much popularising of science that phrases such as "Struggle for Existence," and "Survival of the Fittest" have become current coinage for an exchange of ideas relating to civilization and progress. Nature has been generally accepted as "Red in tooth and claw," while the whole world in times ancient and modern, has been represented as a battle ground for human, plant and animal life. No doubt this is largely true, for the record of the rocks reveals many a romantic episode in the unfolding of various forms of life over unmeasured millions of years. Feeble were the beginnings in the form of microscopic plants and plant-like animals. Then followed a series of changes in which fishes, amphibians, reptiles, birds, mammals, and lastly Man appeared. Every tropical forest is today a battleground. The sand dunes around America's great lakes are a striking object lesson which illustrates the ceaseless fight between several forms of vegetation, each of which is competing for the primary necessities of sunlight, warmth, and moisture.

That Man had to play his part in this Armageddon there is no doubt; nor were his competitive efforts limited to inter-racial combat. Through slow cycles of time climatic changes brought the ice cap further from the Poles. In the northern hemisphere the presence of boulder clay, striations on the rocks, and the scattering of masses of stone called erratics, tell the tale of Nature's enmity toward Man. In intervening epochs between the glaciations he established himself, only to be ousted again when a more rigorous climate overtook him. Much has been said of the "Fall of Man," but Henry Drummond was nearer the mark when he wrote of the

"Ascent of Man." A fair-minded perusal of human history and pre-history emphasises the heroism of mankind in a struggle against adversities of nature. The Eskimo illustrate Man's ability to make a good cultural response to harsh environmental conditions. The Arunta of Central Australia have met their difficulties of existence with an ingenuity which is remarkable. Now, in the most recent phases of combat, the engineer has to solve problems of irrigation, and the construction of flexible steel dwellings which will withstand the tremors of earthquake and the blast of the tornado. Conquest of the plant and animal world is well advanced by application of the experimental results of Mendel. Great advances have been made in surgery and parasitology; though the conclusion that a prolongation of life is progress, may be fallacious.

Taking for granted that life has been, and always will be of the nature of a fight, what may be said of the competitive relationships of human beings among themselves in the past, present, and future? Was Man ever the simple harmonious child of nature, the "Noble Savage" of Rousseau, who in one phrase of his writings glorified the primitive past? Perhaps the consensus of opinion would be that man is by nature pugnacious. Furthermore it might be agreed that the incentives to combat in elementary society have been, and still are, matters of sex and food supply. These factors must have operated in early times. The primitive pugnacious streak, so much exploited in novels and moving pictures, appears to provide great delectation for readers and audience. We hear likewise of the woman who responds only to cave-man methods; for tunately she remains to most of us a figment of the imagination. Perhaps an examination of some of the most retarded peoples of today will throw new light on this question of a primitive pugnacity. At the same time there may be some assistance from reviewing the great civilizations. What has been gained and lost, for themselves and posterity, by the warlike and the passive?

In 1914-18 there stepped out, more or less spontaneously and cheerfully, millions of men and women who obeyed the herd instinct. It is well that this is the case, for with war at the door there is little else to do. A sudden attack on one's person leaves only the alternative of ignominous surrender or a fight. At such a crisis speculation on the reform of the penal code, the more skillful handling of juvenile delinquents, and removal of corruption from

the police force are of little avail. A quick choice has to be made. But, with regard to international situations, is humanity to wait complacently for the next inevitable cycle of greed, unskilled diplomacy, and nationalism, to complete itself? as it surely will. On the whole, the present generation, somewhat inarticulately and without determined cry, says "we hope that this abomination of war will not occur again." In sonorous voices and muttered responses, the prayer for freedom from war ascends in thousands of churches. Unless, however, the outlook is changed by definitely and radically altered Education, the next generation will come up smiling to take its gruel. In spite of his lapses, Man can claim some amount of intelligence and pure reason. It is the scientific spirit, applied to social problems on a broad scale, that will set up a new standard of conduct and responsibility.

There are some writers who invite us to look beyond the sordid cruelty and waste of war so that we may see a horizon of new ideals, cultures, and capacities. The strain on the evesight would indeed be great in order to discern clearly the benefits conferred by the struggle of 1914-18. There is the possibility that the condition of some of the belligerent countries might have been worse had they refused to participate. The opinions of many writers on warfare are curious in their disparity. War has been regarded as an ordeal by God for the welding and purification of nations. Hostilities have been described as an indisputable adjunct of culture, and a necessary expression of strength and vitality. Waitz, an anthropologist, says that war through waste hinders progress, but on the credit side it arouses nations from psychological indolence, and gives cohesion. L. F. Ward finds that for primitive races peace means social stagnation. Karl Pearson defended the selective value of warfare, opining that, apart from war, selection would take place through famine and disease. This idea seems to lose sight of the fact that the class A men go to the field while the class C men stay at home. Of the class A men exposed to casualty, those of the best constitution are most likely to be killed because their physique enables them to remain in the danger zone for the longest periods. The weaker of the fighting men gradually become invalided from the front, owing to the development of one disability and another under conditions of stress. Men of the most daring and initiative volunteer for the most dangerous enterprises, and the casualty list in this section is high. War selects the best manhood for slaughter. Kant saw war as an obstacle to progress and spent much philosophical thought on the means of abolishing conflict. Comte regarded theology and militarism as two main obstacles to progress and reason. This diversity of opinion arises from two main sources. The philosophical and historical method is selective and synthetic, borrowing here and there, sometimes consciously, sometimes unwittingly. Then follows interpretation according to prevailing politics, or on the contrary, there may be a complete negation of the generally accepted evaluation of warfare. In the latter case the pioneer lays himself open to the opprobrium of the mob. The word 'progress' is capable of many interpretations, not infrequently the term is used as if synonymous with complexity, speed, and physical power. In addition to these causes of disparity in views on warfare, there have to be added those which arise from Christian teaching, and at the other extreme those which result from deliberate scheming of financiers.

The historical and comparative ethnological methods of survey have their weaknesses, but these tools, like any others depend on the skill and caution with which they are used. There is nothing inherently unsound in such methodology; the danger of arriving at conflicting or unwarranted conclusions arises from the possibility of having a major premis which has resulted either from a too narrow observation, or a range of observation which has been too heterogenous, having no regard for time of occurrence, and no cognizance of physical and social setting.

A consideration of an ethnological map shows that there are certain peripheral peoples, ostracised, and living on the margin of subsistence. They represent so many races, and sub-races, Mongoloid, Australoid, and Negro, that a theory of racial inferiority will hardly serve to account for their position in the scale of civilization. If civilization is rightly said to be that which is over and above what is necessary for existence, in a biological sense, these marginal people are low in the scale, for life is at the best precarious. There are no margins through saving the proceeds of agriculture. This science is either impossible owing to adverse geographical situations, or for a complexity of reasons it has not been developed, although conditions are not prohibitive. To call such people unprogressive is, in a sense, question begging, because progress may be

regarded as the attainment of peace with extreme simplicity. So argues Gandhi, who would oust western civilization and place the spinning wheel in every Indian home.

The chief of these peripheral peoples are the Eskimo, Tierra del Fuegians, Pygmy groups of Africa and the Malay Peninsula, Bushmen, Veddas, Todas, Andamanese, Punans of Borneo, Australian aborigines, and the now extinct Tasmanians. All these groups are static or decadent in numbers, all have come to occupy unfavourable situations, and none have any contribution to leave to posterity at large. What are the causes of isolation and stagnation?

Aborigines of Australia are still to be found unaffected by European contacts. This is especially so in the center, the north west, and a region to the south of the gulf of Carpentaria. Habits of life connected with hunting and collecting are simple, neither is there any knowledge of agriculture. Vessels of bark and bags of fibre are made, but pottery is unknown. Stone is well flaked into the form of spearheads having fine serrations round the edge. Though the material culture is so elementary the social organization is complex, especially in relation to totemism, exogamy, and magical ceremonies.

The weapons are stone-tipped spears, simple wooden clubs, boomerangs, shields of wood, and spear throwers. There are also stone axe heads fitted into cloven sticks. Warfare is not a serious affair, conflict is of the nature of a stealthy blood-feud and sly retribution. After much time has been spent in painting the fighters with stripes of red, white, and black, and after women have shouted themselves hoarse, and men have danced to the point of exhaustion, the contending parties meet. A few on each side may be injured, then all the old men retire to some secluded spot where peace terms are discussed. Warfare is infrequent, without elaborate organization, and not of a devastating nature. Social functions are largely directed to securing food. In fact the struggle against drought. and the constant effort to follow game demand all available energy. With the exception of the region adjacent to New Guinea there is no culture contact or hostility from outside. So far as is known the only intrusive enemy has been the White man.

That the Tasmanians were allowed to become extinct without any well directed attempt to study them, will always be a slur on

British administration. There was no organized suppression beyond the gathering of the natives and their transfer to an island in Bass Strait. In 1876 there died the last survivor of this early stone age people, who could have taught us what we desire to know of the life of prehistoric man. The culture of the Tasmanians was even more simple than that of the Australian aborigines. Agriculture and the arts of pottery making were unknown. Stone implements were more simple than those of Australia. The only weapon was a wooden spear sharpened to a point by burning and scraping. Of clothing, with the exception of an opossum skin rug, the Tasmanian had no knowledge. His home was a break-wind shelter of bark, open to the weather except on the windward side. The only forms of personal ornament were scarification and daubing with red ochre. The climate of Tasmania is cold in the highlands, but may be generally described as warm temperate. There was no organized warfare, though there was occasional rivalry between roaming bands. Toward the Europeans the Tasmanian was, after provocation, sly and treacherous. There do not appear to have been any laws, chiefs, or systems of government. The only musical instrument was an opossum skin rug stretched across the knees and beaten with a stick. Fire was made by friction, and to save trouble glowing embers were carried in clay receptacles. The quest for food occupied most of the day. While women and children were collecting shell fish and berries, the men were in pursuit of the wallaby and opossum. Every form of animal life was edible, frogs, lizards and snails were a welcome diet. There were dances resembling those of Australia in a general way, but elaborate ceremonies of a magical kind were absent. The Tasmanians were an isolated people without culture contacts or the necessity of preparing a defensive program. They made a poor response to a good environment.

The continent of Africa shows at least two examples of an ostracised people. The Ituri forest pygmies and other scattered groups of racial affinity have a simple culture based on hunting and collecting. They occupy dense forest glades, and so far as they are known, there is no evidence of any culture except that of a very elementary kind. The Bushmen of the Kalahari desert are thought by some anthropologists to be closely allied in a racial sense to the Pygmy groups. The differences are said to have arisen through

disparity of environment. The Bushmen were driven from areas of north east Africa by Hamites, Hottentots, and Bantu. Finally Dutch and British settlers forced these primitive hunters into the least desirable parts of the Kalahari. The Bushmen are skilled raiders of cattle, and in a sly and treacherous way can take care of themselves with their poisoned arrows. They were when first in contact with Europeans a stone age people unable to stand against their enemies, all of whom made use of iron.

Negritos of the Malay Peninsula, and Andamanese, have been regarded as isolated fragments of an anciently dispersed negroid race, whose other representatives are the African groups mentioned, also the pygmy tribes of New Guinea. Physically and culturally the Semang of the Malay Peninsula show variation according to the extent of contact with Malays. Typically these Negritos are a shy retiring people who are difficult to find. They are skillful hunters of the jungle who spend their time making traps and weapons. The latter are poisoned with an extract from the Upas tree. Men assist the women in jungle forays in quest of edible roots and berries. Bark-cloth is made from fibre, while the Perak Semang have learned to beat a piece of iron into shape. The Yandis of southern India are a people of backward culture living the simplest of lives. Of the Todas of southern India Rivers said (1906) "It can not be said that the Todas use any weapons though they retain in ceremonies, weapons such as the bow and arrow." The Andamanese have no combat as a stand-up fight, but they indulge in surprise attacks and petty feuds. If they meet with any resistance or lose a man, all retire. Attacks last only a few minutes. Peace negotiations are conducted by women. Females are generallly responsible for keeping the feuds alive. Veddas of Cevlon have been influenced by racial contact and intermarriage with Sinhalese, but the small tribes of the forest are in a state of sylvian simplicity. These Veddas, armed with bows and arrows, live by pursuit of small game, collecting honey, and digging up wild vegetable produce. One observer says that in habits they are little removed from the animals on which they subsist, being timid, unapproachable, and off like the wind at the slightest intimation of danger. Communities are made up of one to five families. These share rights of hunting and food gathering over a prescribed area. A family consists of parents, unmarried children and married daughters with their husbands. The conditions are of the primitive matrilocal type. Every Vedda helps his community and shares his goods so readily that it is difficult to determine who has a claim on any other member of the group. On further observavation a scheme of sharing in order of precedence is observable. Medicine men have a special training before they are allowed to make offerings to the Yaku, or spirits. Many groups have no houses other than cave shelters. The Punans are jungle tribes in the interior of Borneo. Here indeed is the simple life. There are no houses, no crops, and no margins over and above what is caught and collected day by day. Physically and mentally the Punans are well endowed. They are no puny cowards, but on the contrary are rather feared for the stealth and certainty of their revenge. They are not aggressive. They are retiring, hospitable, friendly and brave. Commodities obtained by collecting and hunting with the blow pipe are regarded as group assets, and sharing with the group is the order of the day. The Yahgan and Ona are two simple decadent tribes in Tierra del Fuego, near the inhospitable shores of Cape Horn. The Yahgan have no organized warfare in which any combatant of one group will kill any combatant of the other force. There is, however a system of blood revenge. The Ona will fight over women, hunting rights, and to reduce the strength of a possible opponent. In seventy five years it is estimated that the Ona have been reduced from a strength of 3,600 to 70, while the numbers of the Yahgan have fallen from 3,000 to 50. The Fugieans have for long been isolated from the main streams of cultural development. They are a typical marginal group, wanting in houses, tools, clothing, domestic animals, and agriculture. The climate is harsh, but observers agree that the conditions are not so adverse as to justify the low cultural status. Here is an example of a poor response to environment.

In spite of Stefansson's description of a "Friendly Arctic," there can be little doubt that the Eskimo of the Northwest, Baffin Land, and Greenland have had a stern fight with environmental conditions. The fight has been a winning one, for ethnologists agree that the cultural response has been excellent, more colloquially, the Eskimo have made the best of a bad job. Carefully they preserve a margin of animal food, wrung from land and sea with great toil and danger. Agriculture is impossible. Timber is obtain-

able only from drift wood. There has been in some localities a development of high artistic skill in the engraving of ivory, and great ingenuity in the manufacture of weapons of the chase. Dogs are used for transport. Houses are ingeniously made. In all ways the Eskimo has utilized every factor which could contribute to his preservation and comfort. The Eskimo have had the sternest of all fights, namely that against harsh environmental conditions. They have their blood feuds, but warfare has been nothing more than a seires of skirmishes with hostile Indian tribes. It is generally assumed that the Eskimo came into North America at Bering Strait, whence they spread eastward. There is a theory that they represent men of the late European stone age who followed the reindeer northward as the ice cap retreated, but precise reasons for the migrations and settlements are unknown.

At the present day the Ainu of northern Japan offer an example of a people who have peace but alas no prosperty. Theirs is the peace of decadence resulting from complete subjection to a conquering race. Japanese legends say that in early days the Ainu were their fiercest opponents. There is some evidence too that the Ainu carried on inter-tribal warfares on a considerable scale. They have been bowed in the dust both in fact and metaphor. The Ainu are an ethnological puzzle. They have wavy hair and features which are not Mongolian. Apparently they represent the terminus of a very ancient migration which settled in Japan with comfort until the arrival of the Japanese.

The factors which arrest attention in these groups are: 1. Isolation. 2. Harsh environmental conditions in several instances. 3. Either inability or failure to indulge in agriculture. This means that there is no margin on which to build up the arts, luxuries, and defence. Just the biological needs of the present claim full time and energy. 4. With the exception of the Todas, who have herds of buffalo, these margnal peoples have no domestic animals which can serve as food. The inference appears to be, that hunters and collectors who have not been swept into the vortex of civilization, are doomed to extinction without leaving anything to posterity. Apparently retirement, absence of culture contacts, failure to build up margins of supply, and lack of weapons in addition to a want of combative organization, spell extinction without addition to the knowledge of the human race.

Warlike Indians of the plains of North America were able to put up a stout resistance to foreign intrusion over a period of three centuries. The Maories of New Zealand were endowed with intelligence and the fighting spirit, so made an heroic attempt to drive the British intruders from their shores. Despite what some geographers have said with regard to the unsuitability of the tropics for culture building, Africa has produced several empires and great military organizations. Among these were Benin, a warlike kingdom, and at the same time foremost in the arts of ivory carving and bronze casting. This kingdom was not reduced until 1897. Other organizations, depending on margins of agricultural produce and cattle, were able to resist inroads of Portuguese, British, Dutch, and Germans. In West Africa the most notable kingdoms were Dahomev, and the Songhai Empire. The fighting Herero resisted the Germans by force of arms for a decade. The Zulu were not reduced until 1875, while the Masai, whose fighting machine was a remarkable organization, gave an excellent account of themselves. Defeat was inevitable, but margins gave arts and a tolerably efficient defence, except against peoples of overwhelmingly superior culture.

In striking contrast to the peoples mentioned are those which built up great empires, partly through agriculture and trade which gave margins, and an increased population. A more important factor in their progress was the utilization of these margins of supply and population for conducting both offensive and defensive warfare. In the New World the Peruvian, Columbian, Mexican, and Mayan, civilizations grew from the surrounding mediocre levels of culture. At any rate such is the opinion of those most competent to judge. Elliot-Smith has however a theory of the introduction of culture from the Old World. Fundamentally there was a building up of a surplus through agriculture, and though the details of growth are not known, it may be said that these people maintained themselves by hostilities until the Spaniards arrived. Then the empires of the New World fell before treachery, internal dissention, gunpowder, and steel. The history of Egypt is that of a struggle against Assyria, Persia, Greece and Rome. Phoenicians paid heavy tribute rather than engaging in war with Philistines and others. But the end of Phoenicia was absorption by Rome. Carthage held out valiantly, chiefly for the possession of Sicily, but

was eventually annihilated by the Roman empire. Arabian civilization advanced into Africa and India by the sword, used under the impetus of a pugnacious religious creed. The causes of the rise and fall of the Khmer civilization of Cambodia are, in the absence of extensive archaeological work, unknown. The Moghul Empire rose and was maintained through forces of arms. Greece fell before Rome, and in its turn Rome bowed before the Vandals. In Europe during the past three centuries there has been every kind of combination in an effort to preserve the 'Balance of Power,' neither is the ingenuity of politicians in that directon vet exhausted. America gained her independence by war,—there was no other way. There has been a never-ending procession of peoples rising and maintaining themselves by the sword, which ultimately destroyed them. These nations are without doubt the ones which have contributed to laws, literature, art; in general terms they have made bequests to posterity. This is as might be expected. In primitive society war is bound up with formation of age groups, councils, and rules regulating absorption of new cultures. Sometimes only the women of the defeated enemy are preserved, these bring with them new ideas relating to religion, magic, weaving, pottery, or some other aspects of culture. Warfare has had a profound effect in stimulating growth of language and culture.

It is such views as these that have led to the glorification of war by men who were supposedly taking a rationalistic point of view. The masses do not go to war because they have some logical theory that war is an indispensable adjunct of progress. Men enlist on a large scale, and rightly so, when they have a choice between fighting and extinction, or at the best, extreme humiliation. To suppose, that because complex civilization and cultural progress are usually associated with war, the two phenonema are inseparable effect and cause, is fallacious. If the two factors of war, and preservation with progress, are not necessarily connected as cause and effect, by what means can the false testimony of historical philosophy be negatived?

Fortunately the pliability of public opinion can be demonstrated in a variety of ways. Within the subject of warfare itself there have been evidences of humanizing influences. It is a tragedy of course that scientific research has been misapplied to refining methods of slaughter, but this does not alter the fact that there have been modifications of procedure in the direction of treatment of prisoners and the country conquered. From the custom of eating the heart of the prisoner after he had been tortured to death, opinion has advanced to an indignant denial of the underfeeding or overworking of prisoners. Outside warfare there have been still more emphatic changes of social sanction. Little more than a century ago in England, it was thought a right and proper thing for children of six or eight years of age to work in factories for hours which were quite undetermined. Poaching a salmon was sufficient cause for life-long transportation. At certain times and places the man who refused to uphold his opinion by a duel would have been ostracised as a coward. Now-a-days the successful duellist would be indicted for murder. Sports such as dog-fighting. cock-fighting, and bear baiting were in their time quite normal recreations. Brutal floggings in the army, navy, prisons, and lunatic asylums were once regarded as inevitable accompaniments of discipline. Sometimes the reform has been a peaceful and very gradual penetration of a higher standard of thought, through improvement of general education and the efforts of self-constituted leaders of reform. In the instance of Divine Rights of Kings in England, and the abolition of slavery in the United States, the reform came through civil war. Sometimes self-constituted leaders are howled down by the mob. A few years later the reforms previously decried are accepted as an integral part of the social system. Custom and social habit, it is true, are often backed by law. But apart from legal sanction there can be a growth of consolidated opinion founded on reason and the scientific spirit.

The chief agencies in forming attitudes are the press, religion, education, and family life. The press too frequently has inflammatory letters relating to imperial expansion and racial animosities. The church is usually to be found on the side of current politics and policies. When a crisis is at hand the church has little choice of opinion. Usually, and notably in the Great War, the denominations of each belligerent country endeavored to show that their particular people were on the side of God, fighting for liberty, freedom, and self determination. Education in primary schools always includes historical teaching. This is largely an emphasis of the conquests of the sword. Far too little is made of the conquests of the inquiring spirit in literature, the arts, science, and exploration.

The mighty heroes are those of the battle field. Whole newspaper syndicates are controlled by the personal politics and financial interests of a few men who not infrequently misuse their power in the direction of creating suspicion and ill-will.

At the conclusion of wars, brought to an end by exhaustion of the combatants, peace is discussed around a table. The terms give no real satisfaction to anyone, and the years of quietude enforced on an effete economic organization echo the rumblings of the past conflict and presage new outbreaks. All the pressing problems of economic conflict, so-called racial antagonism, and pressure of the population on the means of subsistence, are capable of rational solution. What is represented as inevitable racial antagonism, is largely a matter of defective education, social setting, the language barrier, and lack of travel. The ratio between population and food is rationally concerned with problems of birth control, engineering with regard to transport and irrigation, also attention to intensive agriculture.

Intelligent masses in whom reason and impartial inquiry were dominant could not be forced to war. They would demand the same international standards as those prevailing for the settlement of internal disputes. When the hounds of war are straining at the leash argument becomes futile; the lesser of the two evils is to fight.

There is evidence that the Golden Age type of simple hunters, who are unable to hold their position by fore of arms, are compelled to occupy the least desirable situations. There they linger until annihilated by a stronger culture. Without doubt warlike civilizations have preserved themselves for long periods. In doing so they have been able to contribute to architecture, law, music and the arts generally, navigation, and every other factor over and above what is necessary for mere existence.

This general truth has given rise to the belief, that because warfare and development have been so constantly associated, their union is one of inseparable cause and effect. The next stage in the evolution of societal relationships is a recognition of the fact that war has depended on mob mind injudiciously led. Man is highly educable, pliable, and responsive to moulding forces. There is hardly any part of the world today where the attitude toward children, slaves, employees, prisoners, and the sick, which was accepted a century ago, would be able to survive. In this responsiveness of

Man lies the hope that emotionalism will give place to rationalism. An attitude of impartial inquiry can solve racial and economic problems which war serves only to augment. If the educational agencies of schools, the press, religion, and the family, are rightly used, there will be set up a more rational background of thought. This will permeate the public of every country so that large scale warfare will be regarded, not merely in a sentimental way as cruel and wasteful. General opinion will refuse to employ a method which is incapable of giving any thing approaching a permanent settlement to problems which are capable of solution by rational procedure. The time for instilling intelligent inquiry and pacific methods is in the more or less tranquil intervals between conflicts.

#### BIBLIOGRAPHY

Batchelor J., Ainus of Japan. London, 1892.

Bilby J. W., Among Unknown Eskimo. London, 1923.

Boas F., "The Central Eskimo." Bureau American Ethnology. Sixth Rep. Wash: 1899.

Brown A. R., The Andaman Islanders. Cambridge, 1922.

Buttel-Reepen H. Von, *Man and His Forerunners*. London, 1913. Translation by A. G. Thacker.

Ferguson W. S., "Zulu Military System compared with the Spartan." Harvard African Studies. V. 2, p. 197.

Garstang J., The Land of the Hittites. London, 1910.

Hambly W. D., Tribal Dancing and Social Development. London, 1926. Ch: 3.
Warfare.

Hobson J. A., Imperialism. London, 1905.

Hollis A. C., The Masai. Oxford, 1912.

Harrison H. S., A Handbook to Weapons of War and the Chase. Horniman Museum, London.

Hose and McDougall, The Pagan Tribes of Borneo. London, 1912.

Johnston Sir H. H., The Opening up of Africa. Home Univ: Lib: Lon: 1911.

Koldeway R., Excavations at Babylon. London, 1914.

Ling-Roth H., Aborigines of Tasmania. Halifax, 1899.

Lothrop S. K., "Indians of Tierra del Fuego." N. Y. Mus: of Am: Ind: 1928.

Margolionth, "Mohammedanism." Home Univ: Lib: London, 1911.

Mead C. W., "Old Civilizations of Inca Land." Am: Mus: Nat: Hist: N. Y., 1924.

Montague L. A. D., Weapons and Implements of Savage Races. London, 1921.

Newberry P. E., A Short History of Ancient Egypt. 1907.

Passarge S., Die Buschmänner der Kalahari. Berlin, 1907.

Petrie Sir W. F. M., Social Life in Ancient Egypt. London, 1923.

Pitt-Rivers, A. Lane-Fox, Primitive Warfare in The Evolution of Culture and Other Essays. Oxford, 1906.

Prescott W. H., History of the Conquest of Peru. N. Y., 1847.

Rivers W. H. R., The Todas. London, 1906.

Russell B. and D., Prospects of Industrial Civilization. N. Y. and London, 1923.

Sayce A. H., Babylonian and Assyrian Life and Customs. 1900.

Sarasin P. and F., Die Veddas von Ceylon. Wiesbuden, 1893.

Seligman C. G. and B. Z., Veddas of Ceylon. Cambridge, 1911.

Shafer R., Progress and Science. Yale and Oxford, 1922.

Skeat W. and Blagden O., Pagan Races of the Malay Peninsula. London, 1906.

Skertchley J. A., Dahomey as It Is. London, 1895.

Smith S. P., "Hawaiki." (Polynesian Migrations.) Auckland, 1921.

Spencer B. and Gillen F. J., Across Australia. London, 1912.

Spinden H. J., Ancient Civilizations of Mexico and Central America. Am: Mus: Nat: Hist: N. Y., 1917.

Sumner W. G., War and Other Essays.

Thurston E., Castes and Tribes of Southern India. Madras, 1909.

Todd A. J., *Theories of Social Progress*. New York, 1926. p. 560-1 give a bibliography of books and periodicals relating to warfare and social progress.

Willoughby W. C., Race Problems in New Africa. London, 1923.

#### THE PHILOSOPHIC STUDY OF RELIGION\* BY FREDERICK C. GRANT

NE wonders, sometimes, at the magic power which resides in names—as in that of the wonderful and mysterious great-great-grandmother in George MacDonald's *Princess and Curdie*. Names are not things—though in so saying we have no wish to raise an ancient question once more!—but they nevertheless have the power to shut off, arbitrarily, the further consideration of things, or of other things than those in hand; and to open up new ranges of perception, to release new meanings, to rise to heights whence wider horizons, fresh backgrounds, new significances appear. Words have a 'power of the keys,' 'to shut, and none shall open; to open, and none shall close.'

Two such magic names are Philosophy and Religion, words whose spell reaches across long ages of time and touches, directly or indirectly, most human hearts. And when these words are combined, as in some double and compounded formula of the hidden art; when we speak of 'the Philosophy of Religion,' what meaning have the words in their new relation? Might one reverse the process of compounding, and speak of the 'Religion of Philosophy,' and get a meaning out of it—as one might reverse or transform a mathematical equation? Indeed, I feel sure a meaning would result: one thinks of holy men of old, of consecrated intellectual geniuses like Plato and Spinoza, and many another, whose philosophy was a religion as well, and for whom the life of reason and the life of religion were set in no contradiction but were fruits of the selfsame vital tree—the abandonment of the soul, the loss of self, in the pursuit of the supremely Real.

But 'Philosophy of Religion'—this is our theme; what meaning has it, what meanings does it open up, and what does it exclude?

<sup>\*</sup> A lecture delivered in Wieboldt Hall, Northwestern University, November 15, 1928.

What is its object and purpose? What are its prospects and promises of success? Is it more than a hint of what passes human knowing, like the essence of essences, like the inside view of an atom, like the 'sound' of a color or the 'color' of a sound? Or is it, on the contrary, a solid, substantial, and entirely unfanciful segment in the rounded whole of empirical, factual knowledge?

Now it has happened that 'Philosophy of Religion' has been so understood—great is the power of names and of their associations and family relationships—so that some thinkers and students have supposed religion could be reduced to formulae, and 'Philosophy of Religion' be set on the shelf beside 'Philosophy of Mechanics' or 'Philosophy of Magnetism.' Indeed, the parallel suggests at once the era when Philosophy of Religion was thus understood. Men also wrote of 'Philosophy of History,' and reached similar results: History became a great machine, with successive thrusts and counter-thrusts of great driving rods, with successive expansions and contractions pushing or produced by the mighty pistons of the active human consciousness. And 'philosophy,' in this particular cycle of meanings, became only the synonym of explanation, formulation, analytical description, or even of mathematical exposition. I do not wish to underrate all this: it was one step in the process by which Philosophy of Religion has arrived at its present state; and there is meaning still, a permanent meaning, in the term which finally supplanted it in this phase of investigation, namely, the 'Science' of Religion. But the danger was real that in such an understanding of the Philosophy of Religion, i. e., as scientific explanation, research itself should lose sight of 'the manysplendored thing' of which it was in quest. Just as Biology had to advance beyond Anatomy, and study the living, not the dead, organism; so Philosophy of Religion has had to move forward from the analysis, classification, and formulation of dead or dying religions to the study of the living religious impulse, with its varied and sometimes unpredictable manifestations, with its curious fashions, its strong undercurrents of feeling, its inexplicable and indeed ineffable elements, its mysticism and its heroism, its 'war in the members,' its instinctive urge to abolish certain instincts, its strange ancient ways and its flaming novelties, its roots in folk-way and primitive custom, its ethereal rationality and its logic-defying 'reasons' for the things religious men and women do. In a word, the history of religion has had to be supplemented by the Psychology of Religion for a thoroughly sound basis to be provided the modern Philosophy of Religion.

Finally, still another interpretation has been offered: Philosophy of Religion is the investigation of the light religion has to cast upon the major problem and question of all modern scientific and philosophic research, viz., man's place in the universe, and the meaning and purpose—if any—of his fitful parade across the briefly lighted stage of human society upon this small, aged, and lonely planet. That is, instead of explaining religion, either in terms of some mechanistic formula—a notion derived from the beginnings of the present machine age, when the idea of machinery first strongly seized upon the imaginations of men—or else in terms of science taken in the later and broader sense of modern biology and psychology; instead of explaining religion, men seek to explain the universe, and themselves in relation to it, and they call upon religion for whatever valid interpretations it has to make of the riddle of existence. One might almost say that the history of the Philosophy of Religion in the 19th century and later has run through these three stages, taken broadly—in the succession of Kant, Hegel, Schleiermacher, Pfleiderer, James, and some among our contemporaries.

But the question recurs, Is this what Philosophy of Religion means? Does any one of the suggested series of limitations really exhaust its meaning or significance? I must confess that, as for myself, though the emphasis in each seems strongly needed—especially the last two—and though strongly preferring the last of all, if a choice must be made, no one of them is exhaustive or completely satisfactory. What I propose is the choice of an objective that shall embrace all three—and still leave room for more. What I mean to say is this: 'Philosophy of Religion' is not the definition of a certain mass of subject-matter, or the anticipatory description of a set of all-embracing, all-explaining formulae; Philosophy of Religion means a method of approach, of study, of asking questions, or reaching out toward reality; in brief, 'Philosophy' of Religion means the philosophic study of Religion.

And what has such a method of approach in view, what are its prospects, what does it promise? As Professor Bridgman has said of the science of Physics,<sup>1</sup> it is one thing to ask questions—

<sup>&</sup>lt;sup>1</sup> The Logic of Modern Physics, pp. 28 ff.

anyone can do that, from the babe in arms to the hoary questioner, 'ever learning, and never able to come to the knowledge of the truth'2—but it is quite another thing to ask the right questions, either questions that admit of an answer, or that are relevant, and lead to some answer, even if not the one intended or anticipated.

Now the philosophic study of religion, as I understand it, is no resignation of the philosophic quest in general, no shedding of the pallium, but is still the ardent pursuit of truth, wherever and howsoever arrived at; it is still 'thinking in terms of the whole;' it is still the unflagging quest for that view of reality that corresponds, really corresponds, with human experience in all its length and breadth, its height and depth, in richest knowledge and ablest skill, in strictest logic and in sublimest achievement of ethical character; philosophy is still philosophy—the love of the true, the beautiful, and the good. Nor, in this definition, does religion cease to be that factor in human experience which comes nearest achieving this realization of the whole—certainly for the broad mass of men and for many of the noblest—religion, which binds men into unity, which sweeps aside the mists and bids men see larger backgrounds than are envisaged in their daily toil, which steadily urges upon men that old divine discontent with things seen and temporal and bids them search for things unseen and eternal. It is no formula we want, no mere explanation of certain historical phenomena; it is reality. We wish not merely to understand but to live

A great, pervasive, overwhelming tide of realism is sweeping the world in our generation. Shams and artifices are mere dykes of sand before this rising tide; 'time makes' even 'ancient good uncouth,' and only what really is, can endure. Whether or not ancient formulae hold, whether any formulae at all will hold, we demand to find out the best and worst that life holds, and from the bottom of our hearts we crave contact with reality. Though it slay us, we must seek it. Though Pandora's box spread endless ills, though the sphinx himself warn us against asking the fatal question, we cannot refrain, for we are made like that. Of certain things, one 'just must know,' and that is all there is to it. For my part, I find this spirit of our age exceedingly exhilarating. It may be carried to excess—in things that do not really matter in such a quest; as in asking the wrong questions, meaningless, stupid, or even idiotic ques-

<sup>&</sup>lt;sup>2</sup> II Tim. iii. 7.

tions or questions that lead nowhere, whether answered or not; or questions that have already been asked and answered ten-thousand times and more. But the essential question-asking, reality-pursuing quality in the modern mind is, at least to some of us, a mark of what may really be holy zeal, and may lead eventually to one of the profoundest and most universal religious movements the world has ever seen—all the profounder and the more widespread now that civilization is tending toward a unity the whole world around. This is itself at least a latent phenomenon of religion, and one of the latest. I could illustrate it in a dozen ways, if there were time: in the current movement toward Churchunity, one of the most obvious examples; in saner missionary efforts: in universal education; in the motives leading men in the direction of social welfare and justice, of international peace, world hygiene and sanitation, world-wide medicine and surgery, religious and political tolerance—all these illustrate the burning thirst for reality that has taken possession of men's souls. Why should we retain social shibboleths and antiquated political formulae that only dig trenches for men to die in like vermin; why uphold ancient ecclesiastical prejudices which only lead to spiritual sterility and futility, to ridiculous competition, and effectually paralvze the religious sense of men?

Reality we want, as never before, and no fine-spun systems of dreamers sitting comfortably in their studies, far from the crush and turmoil of life! That note I hear all the time, and on all hands, and in philosophy no less than in common life; and that note, I believe, is no discordant one, but the signal of an oncoming change in the motif, the arrival of what is to be the major movement in this vast symphony of the inner life of man. It is itself very close to religion, perhaps the very harbinger and prophet preparing the way for the coming of a new era in spiritual development.

Now if it be true, as many persons hold, that philosophy is not a purely timeless pursuit, and that the spirit of each age is reflected in the philosophy which it produces, we shall not be greatly surprised if the ethos of our age is reflected in its philosophy of religion. That is, the method of the philosophic study of religion will be—so far as it is possible under the circumstances—the method of the pursuit of knowledge in general and of reflection upon phenomena generally which is in vogue in other departments

of human interest. The method, in a word will be scientific, so far as that method applies in a philosophic study—of religion or anything else. And the spirit will be this spirit of inquiry after reality, of pursuit of truth wheresoever and howsoever to be found.

For the Christian Church, or churches, this will mean an entire reshaping of our old-fashioned apologetics; indeed, it may easily turn out that a thorough-going philosophy of religion will take the place of the old apologetics—and this without loss, but rather with gain, to the ends which true religion has at stake. "Ye shall know the truth; and the truth shall make you free." Religion has nothing to fear from the new method, the new freedom, so long as it is freedom in the service of truth. And for those who stand outside the immediate circle of the Church's membership, this new approach surely means clearing away the obstructions which have for too long impeded progress. There are those, alas, who can scarcely think of religion dissociated from some particular type of ecclesiasticism—the formalism of one, the fanaticism of another, or the chill and arid intellectual dogmatism of some third type. The philosophic or thought-out exposition of religion, or its dialectical defense, has too often included a defense of things really indefensible, or partial, or even partisan. 'Mint, anise, and cummin' have been tithed, while 'the weightier matters of the Law' were left out of view.4 So that Religion and Ecclesiasticism have come to be identified—whereas, no genuinely religious man or woman, however highly valuing the outward expressions of the Visible Church, would for a moment admit the justice of such an identification.

Now it so happens that this brings us face to face with the first problem of the philosophic study of religion, and indeed of any philosophy of religion, viz., What is religion? What is the extent, and what are the limitations, of this particular field of philosophical inquiry? We might halt at this point for the rest of the evening, discussing various definitions of religion, and finding value, no doubt, in every one of them. But I doubt if, in the end, everyone present would be satisfied with the chosen definition; and so I venture to face that danger at once, rather than later, and offer—if not a definition—at least a general statement: Religion is the awareness of God, and the consequences thereof. Those

<sup>&</sup>lt;sup>3</sup> John viii, 32.

<sup>4</sup> Matt. xxiii. 23.

consequences may be enormous, and far-reaching: in laws, standards, customs (as seen in the history of religions), in private and public worship, in priesthoods and sacrifices, in rituals and in sacred writings, in ascetical abnegation and inspired rhapsody and mystic transport—all depending upon the social outlook and the 'psychology' of the individuals involved. Hence religion has many and diverse vestures and embodiments. The revelation comes 'in many parts and after divers manners.' But the heart of it is one, and really continuous—even when viewed as a purely human historical phenomenon. At heart, it is the awareness of God; and for religion—i, e, for religious men and women—this means, in one form or another, revelation: God chooses that man shall become aware of Him; the Universal touches the particular; the Infinite Spirit breaks through the bonds of finitude; the Absolute embraces the individual. Put it in whatever language you prefer, philosophical, poetical, or prosaic, religion is apparently unable to do without the conception—if religious men think at all—of the Divine coming in contact with the human. So that 'awareness of God' may be only the inebriate dance of frenzied nature-worshippers; or it may rise to the heights of the Prologue of St. John and the Catholic faith in the Incarnation, or to mystic ecstasy; yet all along, in the simple language of religion, God is 'making Himself known to men'

But of what value is this experience, someone will ask. Cannot we do without it in this modern age of independence of ancient forms of thinking and inherited patterns of feeling and behavior? I must answer this by another question: What would life be worth if the values which religion has enshrined in the past, and still enshrines, were blotted out? What would life be worth if the ethical values were obliterated? And where, as a matter of history, have ethical values obtained dominance in human society, and maintained this dominance, save in alliance with some form of the awareness of God? It is useless to point to religions that have no God; for in such religions the mass of their followers have, as a matter of fact, worshipped a God, or gods; while, for the elect, some universal principle or law has taken the place of God and functions in His stead, as the object of 'awareness' or the principle from which flow the 'consequences' which make up the concrete manifestations of the 'religion.' Nor is it wholly relevant to point to the discordance and antagonism between one ethical system and

another, or even between the ethical principles of one religion and another. The systems clash—but that is often because they are systems; in less systematic form, in less articulate, individual expression, they more readily flow into one another, accommodate themselves to one another, and unite in safeguarding those basic values which give worth to human life. Nor, finally, is it conclusive to point to the lowly origin of our sense of ethical values, or to distinguish this sharply from the religious sense. Granted that the ethical values originated in even sub-human social orders, in the ethics of the herd, the pack, the lowly colony or group of animals pitting its strength against a difficult or dangerous environment, and unconsciously but inevitably demanding patience, honor, self-sacrifice, from its members—or what in human behavior goes by these names: granted all this, it is still significant that with the emergence of religion the group-consciousness found therein its most powerful ally and support. If ethical origins may be traced back to subhuman biological stages, so also, one would almost venture to guess, may religious origins: that is, the motives that religion cherishes, in chief the consciousness of the 'Superhuman,' the 'Awe-ful,' the 'Wholly Other'—to use Professor Rudolf Otto's terminology these motives and this consciousness are so deeply laid in human nature that one would not be surprised if they sprang from a biological origin. Which is by no means to say that that is the end of them. Does a sub-human origin of speech, in the rude sounds of the lower animals, disqualify the orator or the singer? Does it keep presidential candidates from making speeches, or millions of citizens from listening to them, by radio or otherwise? And it is surely significant that on their upward march, religion and ethics have become more and more closely allied: the sense of ought, and along with it the sense of someone, something, outside, above, objective to and set over against the human consciousness. The identification of the voice of duty with the voice of God underlies the history of the higher religions.

But if we thus grant the value of religion, a still further question arises as to its validity. The experience may be valuable—we hold that it is—but is it true? Or if partly true and partly untrue, how are we to distinguish the true from the false? It is here that philosophy of religion must lean most strongly upon its philosophic training and inheritance. What is the criterion of truth in any department of knowledge or of thought? At once we shall be

told by some that it is demonstrable correspondence with fact; by others that it is logical consistency, that it must 'hang together,' and demonstrably meet the requirements of thought. (These two answers, by the way, almost completely divide the world of philosophy, past and present—if taken in a broad sense.) But it may be asking too much to require religious experience to demonstrate its correspondence with external fact. It may do so, up to a certain point; but it may not be able to exhaust the whole range of potential fact. Do we ask of aesthetic judgments that they shall correspond with facts? Yes, we do; taken in the large sense, and recognizing certain qualities in 'facts' not given in immediate senseperception or in scientific analysis. A dozen strokes of the violinbow may mean only so much energy at work, so many vibrations produced, so much sound; or they may mean, in their real essence, something nearer akin to the flight of a swallow or the charge of a brigade or the death of a child. If the essential quality of human life is, perchance, spiritual and not material, then the 'facts' to which religious experience may be required to correspond will be of a higher and vaster order than those of physical sensation. No one here, I suppose, will contradict this statement. If not, then we proceed to the next consideration, namely, that the 'facts' to which religious experience must correspond may be themselves indemonstrable and vet real. I am quite free to grant that the arguments for the existence of God may one and all succeed no futher than in setting up 'the noblest hypothesis' to explain human life, the ordered universe, the moral sense, or the all but endless recessive series of causation. With Professor Webb I agree that the theistic arguments are reasons men have given for a faith, springing out of experience, which they could not help but hold.<sup>5</sup> But the same is true of other existences. How prove your own existence, as a conscious, self-directing, super-physical being? Cogito, ergo sum may be a logical inference for the man himself: for all others it is an act of faith—or 'the noblest hypothesis,' under the circumstances. For there are not wanting those who would reduce human cogitation, and with it the existence of a free, self-directing, individual personality, to the behavior of atoms in an inherited pattern which has been moulded by the long, slow process of biological adaptation and evolution. I do not think such scepticism is necessary, or even warranted; in philosophy, as in

<sup>5</sup> Problems in the Relations of God and Man, pp. 154 ff.

human thought and life generally, there are some things one must take for granted; for apart from such assumptions the whole process refuses to work, to go, to make even the initial start. And the idea of God—or rather, the real, objective existence of God is the initial assumption presupposed in most religious experience. I feel that we are often in danger of too much abstractness in studying religion. We treat it as an idea; we deal with religion as if it were dissociable from experience; we propose such questions as, 'Can religion function without God?" and forget that religion is nothing if it is not experience, that the intellectual element is secondary and derivative, and that we cannot know religion unless we get really inside the experience which gives it meaning and makes it religious. There is no reason, so far as I can gather. why a philosopher of religion or a student of philosophy should not say his prayers, attend and share in public worship, examine his conscience and live a religious life in simple earnestness and humble piety. Only so can the language of religion acquire its full meaning, and the student find out for himself what religious men are talking about when they use words that really have a sense and connotation hidden from the casual hearer or superficial investigator. It is in experience—not hectic, over-wrought emotionalism, but normal, daily, pedestrian religious experience—that the student will begin to grasp the finer shades of meaning in the language of saints and seers, inspired prophets and religious philosophers.

Something of the same dissatisfaction attends the second proposed criterion of validity, viz., the test of 'rational coherence,' 'demonstrable correspondence with the requirements of thought,' For your judgment of rational coherence may not be mine, or any one's else. Your social background and that of a Hindu or a Bantu or a Turk may be quite distinctly different; and the 'requirements of thought' may correspondingly vary. One may require a hierarchy of emanations interposing between the Absolute and the individual, the Infinite and the finite; another may require a God seen in every action and event; another a transcendent God who, nevertheless, stands in closest contact with the visible world of phenomena, working His purpose out through events, ordinary or extraordinary, 'natural' or miraculous. A solution might be to cast up 'the world's best thought' on the subject, and then validate this with the imprimatur of authority. But this will not do, imposing as such an authority might be made, and valuable as it

would be for some purposes. For philosophy must be free and entitled to testify, like St. Athanasius, if necessary, contra mundum. The basis I propose is one broader still: not rational coherence, merely, but truth to life. For there are situations in human life where rationality has little to offer; where we can think and ponder without rest and be no nearer a solution; where not thought. primarily, but action is required—action guided by thought, perhaps, but by thought more heavily loaded than usual with emotion; by thought, but thought too deep for reasons or for words. In such hours the habits of a lifetime come to the fore and the man's real self, deeper than his intellectual nature, stands out clear in the open. For there is a self—a mind, perhaps, at any rate an activity of some sort—deeper than consciousness and deeper than rationality. It may be only the crude biological vital center of the individual life; or it may be the channel uniting him with the universal life; or perhaps it is that divine seed or spark implanted by the creative hand of God (and men have called it one or another of all three); whatever it is, the real self, or an important part of it, lodges there. And religion means man's attunement with his whole environment in the very center of his being, at one with the universe, at peace with God, in a coherence deeper than thought and with a rationality deeper than logic. Herein lies the real validation of religious experience. It satisfies requirements larger and more mandatory than those of rational thought; and it satisfies rational thought, as a rule (certainly for the normal religious individual), because it satisfies requirements which thought itself must satisfy. In a word, the world is much bigger than we think it is, with these intellects of ours, born to guide us through certain ranges of phenomena just as eves were born to use light, and feet for locomotion, and hands for manipulating small, loose objects. And in this bigger world, religion, or the religious consciousness, and with it the moral sense, represents an adaptation just as real and just as valid as the physical senses or the biological instincts or the rational intellect. It is possible to be adjusted to God, and adapted to the spiritual qualities or factors in the universe, quite as much as it is possible to be adapted to a space-time environment and to the competition for survival or for ready access to a stable food-supply.

But how are we to explain the varieties and contrarities of religious experience, on such a theory? The answer is the old one of the mystics: the light is not various, but one; variety is the work

of the prism through which it passes. In essence, all religion is one, and truth or falsehood in religion is a matter of gradations, not of absolute contradictions. The pious Buddhist, the saintly Mohammedan, the godly Christian and the pious Jew are not, in truth, worshipping different Gods—that *cannot* be, for God is one. They approach by different routes; their progress is measured not so much by relation to each other—that would be a difficult problem in calculus—as by relation to the common center and goal of all their striving. They are all *en route* to God, 'who is their home.'

If I may be allowed to summarize this argument in a few words it will be as follows:

First, the Philosophy of Religion, like other branches of Philosophy, must go back once more and set out afresh from first-hand experience, leaving aside, at least at the outset, the metaphysical or other intellectual constructions of the past, and facing religious experience itself in its widest reaches and meanings. This, as I believe, cannot be accomplished unless the philosopher of religion has himself a rich and various inner religious life, is himself aware of God, and is willing to carry out the consequences of such awareness in his own life and in the life of his own particular corner of the world.

Second, the affirmations of religious men in all ages and climes must be taken fully into account, from the crudest and humblest to the loftiest and most complex. No science is developed in isolation, in these days; nor is any full-orbed philosophy likely to grow out of purely private speculation. The 'realistic' and the 'social' notes in modern thinking are more than accidental features; they are vital and inescapable factors in all modern thought, philosophic or any other, which can claim wide satisfaction or offer permanent solution of our problems.

Third, this very quality of tolerance, catholicity, comprehensiveness, must be acquired as soon as possible by our teachers and students alike. The philosopher of religion who should leave out of reckoning the non-Christian types of religious experience would prove himself incompetent from the outset for his task. But the same ought to be true of anyone who proposed to leave out of consideration the Protestant or the Catholic types of Christian experience, the orthodox and dogmatic or the evangelical or the mystic. There are values here—rich veins for exploration and exposition—underlying every one of these terms. Every one of them represents

some pathway to reality, more or less direct. And the older forms of piety, e. g. Calvinism or Puritanism, ought to be studied with all the historical sympathy and understanding we can muster. Perhaps I ought to choose Catholicism for my example. For it has often happened that philosophers of religion have neglected Catholicism—either on account of the inheritance of strong Protestant prejudices or because of the difficulty, unfamiliarity, or inaccessibility of the subject. This does not mean that our philosopher of religion should adopt an attitude for which all 'forms' of religion are indifferent, and 'one as good as another.' That is to pre-judge the situation, and effectually to close the mind against the discovery of fresh values, and to anticipate a conclusion, ex hypothesi, which renders all further research futile and meaningless.

Fourth, he must emulate the example of one of our most eminent metaphysicians and 'accept' the data of religious experience 'in simple piety.' There is time for criticism, plenty of time; but first let us get the facts clearly before us, or what are assumed to be the facts, or are claimed as such by those who assert them. The witness must be given 'the benefit of the doubt,' when doubt exists, and must be presumed to be telling the truth unless obviously he is lying, or has a clear motive for fabricating his testimony, or contradicts himself. To me it is an impressive fact that all men everywhere or almost everywhere, agree in the broad fundamental asseverations of the religious consciousness—in the reality of the unseen, in the existence of a Power or Wisdom outside of and superior to man, in the 'categorical imperative' of righteousness and self-sacrifice to higher ends understood as obedience to His will, or harmony with the universe, or submission to 'the reason of things' generally. Mystics, for example, in India and in America, in ancient Greece and mediaeval Germany and modern Chicago, tell us something about the inner life and the possibilities of union with the Supreme. I cannot find that their testimony was agreed upon beforehand: and instead of conflicting it seems to be mutually confirmatory to a large degree. Catholics pray, and so do Quakers; and despite their conflicting theologies and discrepant patterns of experience, they do find peace and strength and joy and illumination. There is reality in it, and I cannot help but conclude that prayer is at least one mode of access to the highest Wisdom and supreme Love in the universe. It does not seem possible that they can all be wrong, and the truth be either that there is no God or that He is inaccessible and unknowable. The presumption is that they speak the truth, and that 'God is, and is the rewarder of them that diligently seek Him.'6 I do not mean that the truth of religion stands or falls with unanimity or universality of testimony; there are ranges of truth in every sphere of human interest that cannot be so established. But the existence of such evidence certainly creates an impression favorable to its truth, and deserving to be reckoned with by the philosopher of religion as among his most primary data.

I sometimes wish we could really go back and start over again with some of our problems, setting out as Plato and Aristotle set out in a territory not too well known, mapped out in advance, and covered with sign-posts and other memorials of great names in the past or of theories fallen into decay. Such a wish is of course preposterous—there was a tradition even in Plato's day, and even in Homer's, and probably there has been, in science, philosophy, and religion ever since men began to observe, to think, and to pray. At the very least, however, our philosopher can study the theories of the past sufficiently to think through some of them, and emerge on the other side. Whereupon he himself is confronted with the primary situation, as it faced earlier students and thinkers, with the question, What is the ultimate truth of all this? Such study of the past is bracing, not unnerving, and the student is a student of philosophy, or of religion, and not merely of its history.

But supposing we could attack the problems afresh and at first-hand, as the founders of the tradition themselves attacked them, would not one of our first observations be the following?—Here is a mass of various but not wholly discordant testimony, a mass of testimony springing out of inner experience, experience that we ourselves may share in some degree. The all but unanimous witness is that this experience is not fallacious, and that God, the spiritual world, the inner core of life and the meaning of human destiny may really be apprehended and truly, not falsely, known—though not, perhaps, exhaustively. Then we should proceed to what Plato and his successors called Theology.7 the rational knowledge of God or the gods, and the consistent elaboration of whatever hypothesis or 'myth' best accounted for the facts and 'saved the appearances,' as the Stoics said. So much of our time is taken up with the examination and criticism of theories that men grow bewildered and wonder

<sup>&</sup>lt;sup>6</sup> Heb. xi. 6.

<sup>&</sup>lt;sup>7</sup> Rep. 379A.

if anything exists to correspond with the subjects or relations under debate. That was the western world's criticism of Scholasticism—but it is a danger by no means limited to one period or school of thought. And though my hope may be a forlorn one, I still believe there is something to be said at least for such an emphasis in the philosophic study of religion. Puzzled as we are often times by the many minor and secondary questions, let us not lose sight of the primary and ultimate ones. There have in fact been philosophers who resembled the man in *Robinson Crusoe's Further Adventures*, who sawed off a limb to dislodge a bear but was himself on the outer end of the limb.

My fifth observation is that religion is to be studied, by the philosophic student, in its actual practice, not only in books, in liturgies and sermons, in sacred scriptures, in the records of the past. And the very heart of it comes nearest being unveiled in the act of worship. Here the Numinous is actually felt by most religious men; and without worship, religions tend to decline. When the warm, pulsing, vibrant life-stream of religious worship fails, the religion is doomed—unless, as often happens, that doom is averted by a religious revival. As William James put it a generation ago, religion functions through 'prayer, guidance, and all that sort of thing immediately and privately felt,' rather than through 'high and noble general views of our destiny and the world's meaning.' Moreover, somewhat in contrast to James' later treatment, this sort of immediate apprehension of the divine is to be studied and known in its normal rather than its abnormal phases. The saints, the converts, the twice-born have something to tell us; but so have the pious everyday folk who love justice and mercy and walk humbly with their God. And it is not impossible that their testimony, less dramatic but wider in extent, may prove of even greater importance in the construction of an outlook upon reality in the light of religious experience. If this is so, it has a good deal of significance for the present-day student, when towering genius in religion seems to be growing rare, and at least the first half of Browning's prayer to be fulfilled:

> 'Make no more giants, God, But elevate the race.'8

'Pedestrian' religion, if it be centred in God and really in contact

8 Paracelsus.

with the supernatural, is good enough for our purposes; indeed, it has some qualities that recommend a preferential consideration—for example, it does not so readily disappear in the alembic of the abnormal psychologist.

Finally, let me offer a parting affirmation of my belief that this new method has all the future before it. The range of possible experience in the external, space-time universe is by no means vet exhausted: far from it! Some of us have still to take our first aeroplane ride! Nor are the mysteries of nature by any means exhaustively explored and catalogued by our scientific investigators. Nor has philosophy vet written its final chapter—we study its past in large measure in order to prepare for its future developments, as the diver goes back and runs toward the springboard for his plunge. Nor have we made much more than a beginning in the philosophic study of religion. Here lie rich veins for the patient miner, vast ranges of data for the ardent collector of facts, for the classifier and tabulator of phenomena. But above all, religion itself, true spiritual religion, is still in its infancy, as an adaptation of life—and of thought, following life, but guiding it as it follows—as an adaptation of human life to a wider sphere of reality than ordinarily enters our ken. As a Christian, I believe profoundly that 'the best is vet to be' and that untold riches of light, of guidance, of knowledge and illumination, of nobler ethical achievement, of further spiritual discovery, lie on before us in the uncharted future. And as a Christian I may say that, for me, it is Christ Himself who leads in that direction.

# CHARACTER TRAINING IN SCHOOL AND COLLEGE BY J. V. NASH

EVER since the close of the World War the problem of character training in our schools and colleges has been one of increasing concern. At the Minneapolis Convention of the National Education Association, in the summer of 1928, it was a leading topic of discussion among the educators gathered from all parts of the country. "Emphasis must be placed," declared one speaker, "on honesty rather than on accuracy. Academic subject matter may be the means to an end, but never the end itself." Press dispatches from Chautauqua, N. Y., July 22, reported Ernest C. Hartwell, superintendent of schools at Buffalo, as urging, in an address before the Chautauqua Summer Schools, the vital necessity of an educational system "which would stress the development of character and high ideals rather than merely retail facts."

Professor A. A. Stagg, the veteran Director of Physical Education at the University of Chicago, in a recent talk pointed out the seriousness of this problem. Speaking of the destructive effects on home life caused by the war, he said:

"There seems to be a little less loyalty to the home ties on the part of fathers and mothers than there was before the war. The children naturally have suffered. The fact is that many children—thousands of children—now are getting very little home direction. Luxury and pleasure have been exalted, and the fathers and mothers to a certain extent have run away from their duties and responsibilities. The children have become free to an extent that they never were before. They have a freedom which is away beyond any of us ever dreamed we might have. . . . . It is no wonder that the standards have been changed. No one should blame the children. We are to blame—we fathers and mothers—for the situation."

<sup>&</sup>lt;sup>1</sup> Address on "The Training of Men," Chicago, June 26, 1927.

The problem of character training has been put squarely up to our educational institutions; and if the schools and colleges do not solve it, we shall have growing up a generation sadly lacking in moral responsibility and social usefulness.

Let us take, first, our high schools. How shall we approach the problem of character training in the high school? In the beginning, we must understand what is meant by moral or ethical instruction. John Dewey distinguishes between "moral ideas" and "ideas about morality." Moral ideas he defines as "ideas of any sort whatsoever which take effect in conduct and improve it, make it better than it otherwise would be." Ideas about morality, on the other hand, "may be morally indifferent or immoral or moral. There is nothing in the nature of ideas about morality, of information about honesty or charity or kindness which automatically transmutes such ideas into good character or good conduct." This distinction he believes is a fundamental one in the discussion of moral education.

Hence, according to Dewey, "The business of the educator is to see to it that the greatest possible number of ideas acquired by children and youth are acquired in such a vital way that they become moving ideas, motive-forces in the guidance of conduct." In other words, the end in view is pragmatic, not mere edification. The moral purpose should be dominant in all instruction, regardless of the subject, "because the ultimate purpose of all education is character forming."

Naturally, the attention of student and teacher must be centered much of the time upon purely intellectual matters, but Dewey is convinced that it is possible to have the methods of learning, of acquiring intellectual power, and of assimilating the material, so organized that they will have a constructive and invigorating effect upon behavior. And in order that real character training may result from instruction, it is necessary that the methods should not be confined to successful absorption on the part of the student. If the larger part of the learning process consists simply in a group of forty children reading the same books and reciting the same lessons, there is no social division of labor, no opportunity for each student to work out something of his own which will call forth his interest and desire to achieve. Through such a technique the social spirit

<sup>&</sup>lt;sup>2</sup> John Dewey, Moral Principles in Education, p. 1.

<sup>3</sup> Ibid., p. 2.

is not cultivated, and the cultivation of the social spirit should be the basis of character training. The youth has an innate desire to create, to do things, and to serve. This instinct must be given an opportunity for expression; otherwise it will decay and in its place selfish individualistic motives will be given free play. As Dewey expresses it: "Separation between instruction and character continues in our schools (in spite of the efforts of individual teachers) as a result of the divorce between learning and doing."

It is therefore important that the various subjects in the curriculum should be presented, as far as possible, from a social angle. For instance, in history there should not be a mere mechanical learning of names and dates in the past. "The ethical value of history teaching," Dewey maintains, "will be measured by the extent to which past events are made the means of understanding the present—affording insight into what makes up the structure and working of society to-day." In the same way, in the study of mathematics the science of numbers should not be taught as an end in itself; the student should get a consciousness of the use and purpose of number in our social organization. So we may go through all the subjects in the curriculum. "Ultimate moral motives and forces are nothing more or less than social intelligence—the power of observing and comprehending social situations—and social power —trained capacities of control—at work in the service of social interest and aims. There is no fact which throws light upon the constitution of society, there is no power whose training adds to social resourcefulness, that is not moral."6

It seems to be quite generally conceded that the direct teaching of ethics, and still more, of religion in any form, would be not only useless but harmful in high schools, although it is agreed that in colleges and universities there should be courses in ethics. Professor Palmer points out why such instruction should be avoided. He shows the danger in making a boy or a girl morally self-conscious. His remarks are so much to the point as to be worth quoting at some length. He says:

"That self questioning spirit springs up which impels its tortured possessor to be continually fingering his motives in unwhole-

<sup>4</sup> Ibid., p. 27.

<sup>&</sup>lt;sup>5</sup> Ibid., p. 36.

<sup>6</sup> Ibid., p. 43.

some pre-occupation with himself. Instead of entering heartily into outward interests, the watchful little moralist is 'questioning about himself whether he has been as good as he should have been, and whether a better man would not have acted otherwise.' No part of us is more susceptible of morbidness than the moral sense; none demoralizes more thoroughly when morbid. The trouble, too, affects chiefly those of finer fibre. The majority of healthy children harden themselves against theoretic talk, and it passes over them like the wind. Here and there a sensitive soul absorbs the poison and sets itself seriously to work instilling duty as the mainspring of its life. We all know the unwholesome result: the person from whom spontaneity is gone, who criticizes everything he does, who has lost his sense of proportion, who teases himself endlessly and teases his friends—so far as they remain his friends—about the right and wrong of each petty act. It is a disease, a moral disease, and takes the place in the spiritual life of that which doctors are fond of calling 'nervous prostration' in the physical. . . . The wise teacher will extirpate the first sproutings of the weed; for a weed more difficult to extirpate when grown there is not. We run a serious risk of implanting it in our children when we undertake class instruction in ethics."7

In the psychological aspects of character training, it should be remembered that, as Dewey says, "all conduct springs ultimately and radically out of native instinct and impulses." Therefore, the teacher should understand these instincts and impulses in order to know what to appeal to and build upon. Although individuals differ, each has a primary equipment of impulse—an urge to do. This is a fundamental factor in character training, because character implies the ability to participate constructively in the actual conflicts of life. "The problem of education on this side," Dewey believes, "is that of discovering what this native fund of power is, and then of utilizing it in such a way (affording conditions which both stmulate and control) as to organize it into definite conserved modes of action—habits."

Other factors which must be considered are, on the intellectual side, judgment or good sense—the capacity to judge of values; and

<sup>&</sup>lt;sup>7</sup> Geo. H. Palmer, Ethical and Moral Instruction in Schools, pp. 17-18.

<sup>&</sup>lt;sup>8</sup> Dewey, op. cit., p. 47.

<sup>&</sup>lt;sup>9</sup> *Ibid.*, p. 50.

on the emotional side, a personal responsiveness, a sensitiveness to conditions, a regard for the ends and interests of other people. The aim of the school should be to afford an opportunity for the development of all these factors in character training.

Professor Coe emphasizes the importance of cultivating the student's variability in a constructive way. "Education, then, is to aim at variability in the student, a cultivated variability. The youth brings to high school and college the precious treasurers of youth, a feeling that the world is not finished and done, but in the making, and that he himself is not finished and done, but in the making. He is hospitable to changes in the world and in himself. Right here, in the natural variability of youth, the possibility of a progressive civilization chiefly lies. In the human species, and in it alone, is there provision for voluntary variation, for foresighted progress; for evolution by the economical process of analysis, discrimination, and agreement, as against the wasteful processes of chance and of strife. And youth, itself changing from the relative irresponsibility of childhood to the self-guidance of maturity, is the ever-renewed organ of this part of the creative process. What does education do with this infinitely precious gift of God? What ought education to do with it? Answer for yourself. Do our high schools and colleges tend, on the whole, to keep alive the youth's readiness for variation? Do they cultivate his variability, or leave it impulsive, immature, narrow? Do they, perchance, rob him of his variability and make of him a piece of conventional furniture?"10

A novel experiment is being conducted at the University of Wisconsin in the experimental college recently inaugurated under the direction of Professor Meiklejohn, former president of Amherst. Under this plan, as I heard him explain it, two hundred youths are engaged in a species of co-operative study. The students do not register for an assortment of "elective" courses; on the contrary, they take a whole field of human culture, in some historical period, and ascertain how men and women adapted themselves to their environment in that period, applying to present-day problems the lessons they have learned. During the first year of the experiment, said Dr. Meiklejohn, the cultural epoch selected was Ancient Greece; next year it may be the Middle Ages.

This brings us to a vital way in which character development <sup>10</sup> Geo. A. Coe, What Ails Our Youth? p. 46.

may be fostered: through student co-operation; i. e., giving the members of a class practical problems to work out in groups. Various forms of student self-government offer further opportunities for developing responsibility and initiative. There is also a rich field for character training through activites such as membership in orchestras or glee clubs, participation in publishing the school or college paper, managing a school bank, making flower-boxes and apparatus for the laboratory, and so on. These activities inculcate unselfishness, loyalty, co-operation, and the spirit of service. "Nor should it be overlooked," says Neumann, "that services of this kind draw the pupils more closely to their school. It is a matter of familiar observation that people are apt to become more firmly attached to an institution by reason of what they themselves do for it than by virtue of what it does for them. Young people who have helped to build a school playground or prepare a school garden are much more likely to keep the grounds in good shape than are those who come into a place where everything has been made ready for them beforehand. Like adults they cherish that to which they have given themselves."11

A striking illustration of the constructive results of this sort of student activity is given by a case wherein the members of a civics class at a certain high school arranged for a series of public meetings with addresses by experts, to arouse interest in community improvement. As a result of these meetings, they helped to secure the establishment of a system of garbage collection, the appointment of a municipal nurse, the laying out of a park, and the provision of a bathing beach with bath-houses for the people of the community. Here was a fine example of training for citizenship through voluntary co-operation in work for social ends.

Recently the country has been shocked by the large number of college students who have committed suicide. During a period of about six months it was said that more than twenty-five such cases had occurred. The epidemic—for such it may almost be called—has not been confined to any one institution, nor to any one section of the country. Cases have been reported from widely scattered States, and the students have been enrolled at all sorts of colleges and universities, from aristocratic endowed institutions in the East

<sup>11</sup> Henry Neumann, Education for Moral Growth, p. 207.

to corn-belt State universities in the West, and at large schools and small ones alike. Most of the suicides were young men, but there were several girls in the list. Even the high schools have not been exempt from such tragedies.

Surely there must be something radically wrong when in a day and age such as ours, with unrivaled educational opportunities for youth and all the inventions of modern science which make our lives so much more comfortable than those of our ancestors, young men and women in the full bloom of adolesence should lose interest in life, see no object or advantage in going on living, and even find existence so unbearable that they resort to self-destruction.

All sorts of alleged reasons for these cases of *felo de se* have been advanced in the press, such as disappointment in love, discouragement over failure in studies, reading of occult literature, financial troubles, ill-health, and so on. It would appear that none of these reasons, except perhaps ill-health in some instances, really had much to do with the fundamental causes of the tragedies. Furthermore, since the cases of ill-health reported seem to have been largely mental, we have to go back farther to find the real cause of the trouble.

Careful analysis reveals that the problem is essentially one of lack of adjustment, a sense of bewilderment in the midst of a complex situation, resulting in brooding, worry, and mental aberration.

Nor is the genesis of the maladjustment far to seek. When a youth comes to college he is thrown into a novel environment, where he has to meet many difficult problems of conduct and to fit himself into the scheme of things. But he does not know how to "find" himself; or, as it is sometimes expressed, he is unable to "orient" himself to the new milieu in which he is placed.

In this connection, Professor Coe remarks: "The so-called 'orientation courses' for freshmen are a recognition of certain of these needs, particularly the need for thinking the different college subjects in relation to one another. The results appear to be good, as far as they go. They are signs of a new intellectual seriousness in some of the colleges. Much more, however, is necessary; namely, a critique of modern life, not only at the beginning of the college

course, but throughout it, and related to every part of the instruc-

Take, for instance, the average boy from a small town, or even from an ordinary home in a fairly large city. What has he really learned about life? He has probably had a good bringing-up by his parents. He has gone through the grade school and the high school, where he has acquired a smattering of knowledge. His parents probably had little schooling themselves; they have believed in the efficacy of simple, old-fashioned rules which satisfied them because they did not have to grapple with the problems of this postwar and jazz age.

No doubt the boy was sent to Sunday school, where he was taught the old orthodox religious beliefs, and supposed that the Bible contains the scientific truth about the creation of the world and the origin of man. He read about Adam and Eve, about the Flood and Noah's Ark, about the Tower of Babel, and other Old Testament stories. He was taught, in addition, the creeds of his own particular denomination. But he learned little, if anything, about other churches and their different points of view, and of course nothing at all about the history of religion or modern Biblical criticism.

In science, at high school, his education was probably confined to a smattering of zoölogy, chemistry, and physics. He learned nothing of the revolutionary discoveries in astronomy, biology, and dynamics, from electrons and protoplasm to galaxies of suns a million light-years distant, and from protoplasm to man.

When the boy enters college he takes courses in geology and suddenly learns that the earth was evolved millions of years ago, instead of the six thousand of traditional Biblical chronology. He studies fossils of early forms of life, and he finds that life has been a slow and painful evolution through many aeons of time. He discovers that millions of years ago the highest form of life was the fish, followed by the amphibians, and then the age of reptiles. He sees in the museum the skeletons of great dinosaurs that roamed the earth in those far-off days. Then he learns how the mammals and the birds evolved out of the reptiles, and how all the different families of mammals—the horse, the dog, the elephant, the cat, the monkey—became specialized for different environments and

<sup>12</sup> Coe, op. cit., p. 27.

habits of life. He learns, also, how the continents rose and fell, how the ice advanced and retreated, and how the great coal beds were laid down by decaying vegetable matter accumulated during untold thousands of years in the immense semi-tropical swamps. It is a strange and very bewildering new world to which our youth is being introduced.

Then, perhaps he takes courses in biology and anthropology, and discovers that man first appeared on the earth a million instead of only six thousand years ago. He sees reconstructions of Pithecanthropus, of Neanderthal man, the Piltdown man, the Heidelberg man, and various other specimens of early humanity. He learns, to his surprise, that man, instead of having popped up like Jonah's gourd in a night, slowly evolved through hundreds of thousands of years, from a creature that was half animal into homo sapiens.

All this naturally proves a severe jolt to his belief in the Bible as a whole. In a brief time he is wondering whether there is "anything in" the religion he was taught in childhood. In nine cases out of ten he quickly becomes a half-baked agnostic or atheist, for he has not the materials with which to work out a constructive religious attitude or philosophy of life to take the place of the discredited inherited faith.

Meanwhile, he begins to learn about sex. He probably reads many modern works dealing with sex problems, and finds therein facts about sex that upset all the old-fashioned ideas he brought with him from home. Indeed, the chances are that his parents taught him nothing about sex and allowed him to grow up in ignorance of this vital subject, until the sex-crisis of adolescence is upon him.

Such a young man usually is sound at heart; he wants to do what is right and honorable, but his old standards have been uprooted, and he cannot without intelligent and sympathetic aid construct new standards which will appeal to his intelligence.

What are we going to do about it? We must find some practical means to fit the student into his new world. Coe offers an excellent suggestion when he says: "What would happen if the whole of the high school and college curriculum were to be organized around such questions as these: What shall I need to do, and therefore to know, as a voter, a taxpayer, a married person, a

parent, a member of a church, a member of the community; especially, what are the unsolved problems of life and society, and what decisions may I be called upon to make? What are my resources for rational and lasting happiness? Why is there so much unhappiness? Why don't we get rid of ancient, recognized evils? What is valid, if anything, in Oriental judgments upon Western civilization? What is the relation of my present practices and habits to my future occupation, and to the well-being of society? Some such forward look toward the vocation of living is the thing that is needed to bring health to our colleges. Some colleges have taken steps in this direction, and the results seem to be promising."<sup>13</sup>

I have already spoken of the "orientation" courses. Probably this, for many colleges and universities, may prove to be the best means of attacking the problem. Such courses will give the student a broad, general survey of the new world in which he is living and show him its significance. He will be encouraged to read thought-provoking books of the day, and to pass intelligent criticism upon them, in the spirit of Bacon's counsel:

"Read, not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."

Thus will he be assisted to "orient" himself to his environment, and to hook the new knowledge up with his own experience. And he will learn something about many things of which he had never thought before.

If he takes a number of such courses, he will be led to a new synthesis of knowledge. Although he may have to abandon many of the beliefs which he formerly held, he will find worthy realities to take their place. He will see his relation to his fellows in a constructive way, and will have the material wherewith to build a personal philosophy that will give a meaning and a purpose to life—at least for him. He will have a sense of the significance and value of human effort that will tend to make this a better world, not only for the present generation but for those that are to come after. In short, such a training will develop personality and character for the oncoming duties and responsibilities of life.

I have reserved for the last a discussion of the place of athletics <sup>13</sup> *Ibid.*, p. 26.

in character training. "The purpose of education to-day, "says Hicks, joining the general chorus of educators, "is in a great measure directed to the making of good citizens. Athletics, when pursued with moderation, to a great degree solves the problem of physical development. It also becomes the laboratory where many of the good and bad traits of character are acquired—therefore its office in the moral training of the student. . . . The athletic field is the great common ground where every man proves his merit or worthlessness. It is the final analysis of character, and he succeeds or fails because of what he really is." 14

But character cannot be developed by restraint, repression, or prohibition; it requires the atmosphere of freedom for its healthy growth. "The character of the boy," declares Ehler, "is determined most largely by the habits and ideals that are prevalent among those with whom he associates, the environment of his real life. Here is where he goes wrong or works out his own salvation. It is in the activities of this free life of play and through the associations and relationships that are here formed that the fundamental virtues or vices get their grip upon mind and heart." <sup>15</sup>

Since the influence of athletics and sport in general may be markedly for good or ill, the function of the athletic instructor is to give to those in his charge the right kind of leadership. A well-known athletic coach cites many instances in his experience on the athletic field in which, through personal contact with young men, undesirable character traits were eliminated and the right ones developed.

At high school and college age, competitive play is a dominant interest of the youth. Rightly directed athletics, therefore, offer unusual opportunities for character training. "This form of activity," continues Ehler, "presents daily innumerable opportunities for the practice of the precepts and maxims that home and school have taught. If the environment is favorable, the reactions tend to the establishment of right habits of thought and action. If the environment is unfavorable, anti-social, unethical and immoral habits will result. The environment is determined by the character of the

<sup>&</sup>lt;sup>14</sup> C. S. Hicks, "The Influence of Faculty Supervision on the Moral Effects of Athletics in High Schools and Colleges," *Journal of Proceedings*, N. E. A., 1912, p. 1147.

<sup>&</sup>lt;sup>15</sup> Geo. W. Ehler, "Athletics an Essential Moral Factor," in *Journal of Proceedings*, N. E. A., 1912, p. 1151.

leadership supplied." Given the right leadership, lessons of right and wrong can be driven home at the psychological moment, when they will make the deepest impression. "Athletics provide for an expression of youthful instinct and interest that is vital to the development of character. It is an essential factor in any scheme of moral education." <sup>16</sup>

The great value of athletics is in the development of the physique, on the one hand, and on the other in the building up of such qualities as courage and self-confidence and the teaching of the spirit of fair-play, unselfishness, give and take, team-work, quick thinking, loyalty to the group—csprit du corps. The art of "playing the game" is a schooling in social ethics. "What does a member of the football team care for battered shins or earth-scraped hands? His side has won, and his own gains and losses are forgotten. Soon his team goes forth against an outside team, and now the honor of the whole school is in his keeping. What pride is his! As he puts on his uniform, he strips off his isolated personality and stands forth as the trusted champion of an institution."

Physical education, because of its unique value in character building, should be accessible in some form to every student, whether boy or girl. Good health is the necessary foundation for lasting success and happiness in life, and "a sound mind in a healthy body" should be the ideal for all. No less an authority than the late President Eliot, in an address to the incoming students at Harvard, said quite frankly:

"So far as I have seen, there is one indispensable foundation for the satisfactions of life—health. A young man ought to be a clean, wholesome, vigorous animal. That is the foundation for everything else, and I hope you will all be that, if you are nothing more. We have to build everything in the world of domestic joy and professional success, everything of a useful, honorable career, on bodily wholesomeness and vitality." <sup>18</sup>

The mental and spiritual fruits of good health are so obvious as hardly to need elaboration. "Other things being equal, boys and girls will bring to their tasks minds more alert, spirits more cheerful, and wills more energetic if their bodies are sound. Particularly in adolescence many are apt to entertain morbid fears which better

<sup>&</sup>lt;sup>16</sup> *Ibid.*, p. 1151.

<sup>17</sup> Palmer, op. cit., pp. 39-40.

<sup>18</sup> Charles W. Eliot, The Durable Satisfactions of Life, p. 3.

health can do far more to banish than continued exhortations to cheer up and be brave. The same may be said of other nervous disorders. Frequently they require most of all a proper physical regimen."<sup>19</sup>

All of the various factors that I have tried to summarize herein have their place in character training. The problem in every case will be to adjust one to the other so that each will be given its proper emphasis, thereby insuring a well-rounded development for every boy and girl.

<sup>19</sup> Neumann, op. cit., p. 295.

### CYNICISM AS A NECESSITY

#### BY HARRY SOOTIN

THERE are times both in the life-history of man and in the life-history of a civilization when cynicism acquires an excellent reason for existence. And when this stage is reached, its poking force is very much more in order than any beautifully expressed belief in man, or any everlasting faith in his progress. To show that we have reached this point in our economic and social evolution is the purpose of what follows.

Cynicism, as has often been pointed out, is nothing more than a thwarted, inverted idealism. And to seek reasons for this doubting, skeptical slant on life, we have only to refer to that concentrated mirror of our time—the newspaper. Individuals to whom the newspapersal habit has not become a brain deadening drug usually find in the fat, advertising-filled journals an unfailing cause of profound depression. The insane proceedings of leagues and committees, the platitudinous statements of eminent public figures, the sordid interest in petty crimes, the stories of graft-infested cities, and the generally stupid utterances of powerful officials,—these certainly are not conducive to any soul-stirring optimism.

Considering the conditions which prevail in large urban centers, where millions of people live on a few square miles of the earth's surface without any stabilizing attachment to the soil or to an art, it will be seen that the attitude of cynicism is the only one that will assert the individual. Surrounded at every hand by influences which never cease to stress his smallness and unimportance, he must, if he wishes to exist as a human being and not as a member of a mob, assume a belligerent attitude—the only one that will enable him to maintain his precious consciousness of self.

Therefore he commences to look about critically; he begins to

resist the omnipresent influence of the skyscrapers and huge buildings which tend to depress his ego. If he lets himself be permeated with the feeling that he is a weak creature living in the shadow of things that are strong, powerful, eternal—then he automatically surrenders his spiritual freedom. It follows of necessity that he will regard whatever he finds established very uncritically. For how can he, a solitary helpless mortal, dare to look askance at what is ever so much stronger than he is?

Thus we have in our complicated transit systems, in our large industrial enterprises, in our towering apartment houses, and in our endless city crowds, forces that tend to destroy the independence of the individual and to make of him nothing more than a spiritless type. If men with the gifts of a Dante or a Goethe were to grow up in this chilly environment, in all probability they would have to protect their personalities with the armor of cyncism in order to avoid being crushed. The chances are that their work would contain the satirical thrusting element to a great degree. For they would at all costs have succumbed to the necessity of escaping this feeling of comparative smallness which the city surroundings are so apt to induce.

It is indeed true that the creators of the city's glories were men like ourselves; that they did their work well; and that they derived the greatest pleasure from their successes. But it is also true that the succeeding generations find the atmosphere of things done into which they are born intensely stifling. Ease and comfort are there, to be sure; but as far as the utilization of the creative energies of youth goes, opportunities are sadly lacking. We cannot escape the fact that human beings must fill the thousands of small jobs which the industrial pioneers succeeded in developing; and that human beings must fit into the ponderous institutions which men of great foresight and abilities had brought into existence.

This, in short, is the situation which to an ever increasing extent exists in our great cities today. Anyone who has had the uncomfortable experence of looking for a job will recognize the truth of the psychological effects noted above. The best of the young men, the type who might have been pioneers themselves, given the proper conditions, actively resent the predicament into which their late arrival has forced them. If they should rebelliously attempt to strike out for themselves, it is quite possible that they may succeed

in attaining an independent economic foothold; but in most cases, because of the competition from large organizations, the odds are definitely against them.

In most cases these rebels learn to restrain their feelings, especially after their lack of restraint is quickly followed by a sharp awareness that one must live and eat. So they jump into small jobs, work hard, and optimistically hope that promotion will soon follow to soothe their hamstring ambitions. As for the rest—the great majority of young men, they easily fall into line, happy to secure a safe berth and destined to remain forever oblivious of the fact that their abilities have had no outlet.

It is in the bottled energies of the former more restless class, however, that a society finds a destructive cleansing force. The resentment and the hatred that the suppression engenders soon manifests itself in a desire to pull down, to destroy—and then to build anew. After all, this tendency is a healthy one, for it puts to test the different parts of the inherited economic and social organisms. And if these products of the labor of old men and dead men cannot change to meet conditions, or cannot survive the rigors of a stocktaking, then it is best that they be replaced by those that can.

Man has never looked kindly at the dynamic element in life. Where the human body was concerned he could do nothing but submit to old age and death; but where the achievements of his own brain and skill entered, he strained every nerve and muscle to win permanence. He built for the next generation, he planned for years to come, he created institutions which he hoped would exist forever.

What happened, however, was that the generations which succeeded these inspired builders forgot that what met their eyes was only the work of human beings like themselves. The newcomers looked, were impressed, and then prostrated themselves. They did not perceive that the objects of worship had a far from miraculous origin; and that the great structures were the products of human efforts and human errors. This point of view was impossible, for men were quickly impressed with the strength of the existing creations; they could only feel how utterly preposterous it would be for people like themselves even to think of improving or reconstructing.

But youth does not like this humbling of spirit: the more sensi-

tive and capable the individual, the more resentful he is. For the growing spring-like qualities of a civilization are always stirring in the strong-minded youth, and the consciousness of this makes him distrustful of anything that threatens to rob him of the air and light that he needs so much. He refuses to worship, he refuses to be grateful for the safety that is forced upon him; and when he takes these steps toward affirming his "self," when he takes the offensive as far as his spirit and intelligence is concerned, he falls right into the cynical mind-set. Which brings us to the question of what cynicism means.

Perhaps the best way to understand cynicism is to show how it differs from the sophistication with which it is so often confused. The cynical mind is honest: it is free of the pretence, the affected smartness, and the inane laughter of the sophisticated one. The cynical mind weighs what it sees, without allowing itself to be bluffed by any superficial appearance of solidity, piousness, or rectitude. It laughs and questions and doubts: it tears away the coating of half-truths and lies which make difficult any true evaluation of the character of an institution or an individual. Cynicism has absolutely nothing in common with sophistication, which is a product of social decay and of spiritual senescence. The smile of the sophisticate is little more than an egoistical assertion of a weak self for the purpose of experiencing the pallid thrill of being "different." The smile of the cynic is active, it is belligerent, it requires intellectual stamina. Alongside of it the laughter of sophistication seems like bloodless sneering.

In the last analysis, the essential difference between cynicism and sophistication, or even between cynicism and the meek, receptive attitude of the great mass of people, is that the former is a rejuvenating, humanizing force, while the others are not. If man is to escape the domination of the things which clutter up his horizon, if he is to be anything besides a large piece of short-lived protoplasm, then he must rise above the brick-mortar-and-steel deities that loom up and oppress him with their invisible strength. And to do this he must learn to rely on purifying, invigorating laughter . . . . the laughter that will make him superior to things . . . . laughter that will make him free.

With this in mind, let us proceed to examine several widespread distortions present in the popular mind to an amazing degree.

Then we shall try to show how a dash of cynicism would quickly bring the needed clear-mindedness into the situation.

First we have the phenomenon of personification, by which the vast resources of large corporations are identified with the individuals who have become wealthy through their control. It is this, perhaps, more than anything else, that is at the bottom of the vast respect and reverence rendered our millionaires. Since personal contact between the subway riders and the limousine owners is impossible because of social differences, a flowery myth has grown up around the latter. They are regarded as an extraordinary people, gifted with almost superhuman powers and energies. And aided by amiable newspapers, the public reads of every activity of great wealth cliques with wonder and admiration,—whether it be fox-hunting, the purchase of million dollar paintings, or hotel horse-shows.

Now there may be no harm in the accumulation of money through commercial astuteness, or in spending it as the same astute temperament pleases. But there is something wrong when certain men possessing certain faculties which lead to great pecuniary successes, are held up as ideals for the youth, and as authorities on all questions—even educational and religious.

One important point generally overlooked is that merchant princes and small shop-keepers are fundamentally alike both in the trading nature of their occupation, and in the characteristics that their business requires. The difference between the two is chiefly one of degree of evolution, the owner of a news-stand being a potential department store owner. It is strange, therefore, to find ourselves regarding the small struggling store-keeper with commiseration and very often contempt, and at the same time looking up to his wealthier cousin with incredible awe.

Another example of loose thinking, and one more often noticed, is the elastic morality of gambling. Horse-racing, lotteries, roullette wheels, dice, pitching pennies—are all taboo as far as self-respecting and law-abiding citizens are concerned. But when it comes to gambling with the nation's industries by way of Wall Street stocks, or to speculating with apartment houses which contain the homes of hundreds of thousands of human beings, there seems to be little restraint, either from conscience or from public opinion. Or to consider the ever-increasing practice of playing

with the laws of probability, we have the large-scale gambling in the form of insurance against death, against rain, and against almost any undesirable event. Here again we see out-and-out inconsistancies, and again these are due more to surface judgments than to any recognized standard. For instance, would a man who made a fortune by rolling dice, have as secure a social position as one who made an equal amount on the stock market?

Then there is that very definite line we draw between bankers and persons who lend money on a small scale. The pawn-broker, for instance, advances comparatively small sums: he does this on proper security and he charges interest. But to the romantic public he is a figure for ridicule, and novelists and scenario writers have done little to correct this prejudice. What we cannot seem to discern is that the small money-lender is in exactly the same business as his more prosperous banker colleague, who does his work in mahogany and marble surroundings. Perhaps if men grasped this fact, the concept that the successful banker is the embodiment of all that is desirable in human beings would begin to fade.

In connection with this we should not fail to mention the awe that fills us on being introduced to an heir to a vast fortune, or to one who has already inherited great properties. Certainly if anyone is to be given credit for possessing the awesome millions, it is the man who amassed them. Regardless of the social position of his children, they certainly had nothing to do with being born to the family for the purpose of becoming the heirs. Hence any profound respect for the inheritors, or any speechlessness resulting from a meeting with the same people, is absolutely senseless.

Here again the inability to distinguish the points involved, the inability to resist being overpowered by the tremendous power implied in the feeling of wealth, is an indication of servility. And to conquer this feeling, the individual exposed to its strength must not only be aware of its unfoundedness, but he must also find it ridiculous. After a little intelligent consideration he must be able to laugh at it. For with the arrival of real understanding comes the doubt and the smile. Then he has asserted his "self"—he has asserted his right to evaluate. In other words, he has become free.

Passing from men and things to ideas, we find a bondage to the products of the printing press which is comparable to that rendered to teen-storied buildings and well known names of social standing. It seems that men must always worship: and in the absence of a gripping religious force they fall back on the vicarious thrill derived from the use of mouth-to-mouth expressions like "service," "constructive criticism," and "cooperation." These words, representing ideas that originally were probably praise-worthy and well-founded, have swept across the country and are now being applied to innumerable situations, regardless of whether or not they fit. The strangest interpretations are made; but since these slogans are supported by the very highest authorities, it is impossible for most of us even to suspect that anything could be wrong in their indiscriminate application.

For instance, "constructive criticism" which has become so common a term in every branch of life, was probably invented to discourage petty fault-findings by carping individuals. But in its popularization, the term "destructive critic" has, as often as not, become a weapon against important and highly necessary criticism. It is being used to discourage efforts to change habits, to introduce new ideas, or to effect improvements. The average person finds his morale badly damaged when accused of criticizing things out of pure cussedness. For this reason it is often sufficient to throw the words "destructive criticism" and all that goes with it, into the face of anyone who should disagree with us, in order to put a halt to that person's annoying activities.

If we analyze the thought behind the word "cooperation" it will be quickly seen that the idea is altogether different from the one implied in its current use. It signifies willingness, a voluntary desire to help towards some end. But how do we find it being used by thousands of imitative intelligences?—Just as another way of commanding, an indirect way of getting people to follow a certain line of action without any regard for their preferences.

Of course there is still a large number of cases where it is used properly; but the point is that in countless instances the word has been perverted into a clever way for forcing people to do as they are told,—with a minimum amount of friction. Men are told that they "must cooperate" . . . . What a ludicrous statement! But even more ludicrous is the fact that so few are able to perceive the humor of this inconsistency. The respect for the expression is so great, and the consciousness of its good standing among successful

men so frightening, that any sort of calm consideration of it is impossible.

As for "service," the third of this remarkable trio, it especially, has been worked almost to death in the strenuous efforts made by large organizations to create "good will." Royalty once monopolized the idea of "serving;" then statesmen got hold of it. But today it has become the precious inheritance of great industrial enterprises who hold it up as an ideal, and who try hard to instill the conviction that they are to all intents and purposes philanthropic institutions. Instead of candidly admitting that they existed for the purpose of paying dividends, and then showing that in doing so they were developing the natural resources of the nation and giving employment to thousands of citizens, they unnaturally attempt to cloak the entire business with an attitude of benevolence. The whole procedure smacks of a certain disagreeable falseness that somehow is not noticed in the general gulping down.

What it all sums up to, is that the city-bred man of today is intellectually servile and dispirited. He gives credence to ideas like those described above because he sees them in print, because they seem backed by authority. Not having been trained to sift ideas, and separated as he is from the hard sense and stabilizing strength of the soil, he soon loses his healthy and almost instinctive preference for simple reasoning. Thus in a short time he becomes as foot-loose intellectually, as the city environment forces him to become physically.

As would be expected, we find him falling easy prey to innumerable scientific charlatans. He accepts whole-heartedly, for instance, baseless generalizations concerning racial supremacy; he is absolutely convinced by scientific "experiments" which prove conclusively that the blonde flapper is more intelligent than the brunette or vice versa. He is deeply impressed by complicated equations which show the rate at which Chinese children learn spelling; he has complete faith in studies which prove that alcoholic beverages are poisonous or beneficial—depending on the newspaper.

Should he come across statements contrary to what he has considered to be true, he very meekly changes his mind. For who is he to set his hit-and-miss brain against the bulls-eye intellects of the experts? And how can he be so bold as to doubt, when his

scientific background and abilities are as nothing compared with those of the well trained specialists?

What is so much needed here is the touch of the cynic, the magic touch that would quickly strengthen the city man's intellectual backbone. For expert or no expert, he has the right to ask questions, and to demand clarification as to the general methods which led to the conclusions. Whether or not the ordinary mind is capable of understanding all the details of an experiment or of a scholarly study does not matter. What the non-technical mind can understand, is the pattern of the evidence which led to the final conclusions; for these patterns are usually of a simple logical nature, comprehensible to most, regardles of special training.

Fundamentally, we have here a situation similar to the one gone into earlier in this article. In other words, the edifice representing the accumulated learning of the times has assumed such awe-inspiring proportions that it is inducing a squelching effect of the same nature as that induced by the gigantic physical creations. Psychologically there is very little difference between the two. It is easy therefore, for unscrupulous people to take advantage of the blind reverence for whatever goes under the name of "science," and then proceed to bully the newspaper-fed public into a firm belief in unsupported assertions. When the men who laid the foundations of the sciences did their work, it was not difficult for the laymen to understand what it was all about, and how it affected them. But now, the intricacies of scientific research is so great that men are afraid to ask questions, they have even lost the basic knowledge they once had.

It is perhaps these facts, more than those generally included under the headings "Education" and "Background," that make the prevalence of the stereotyped mind easier to understand. We are all affected by physical and psychological forces that surround us: we are all affected by the symbols of authority, great power, and of permanence with which our environment is filled. Nourished and raised in this unescapable atmosphere of "things done," men cannot help but acquire a certain sameness of thought and feeling.

To sum up the points made above: If youth is to retain its freshness of spirit, its freedom of thought, and its desire to create—it must thrust aside the heavy restraining "Established" which is constantly weighing down and humbling it. If the present stage

of civilization is not the forerunner of a sickly old-age period, then its activities must be quickened with the energetic blood of youth. And to do this rejuvenating, the cynical turn of mind must be developed. The chances are that it will, whether we like it or not. To repeat, it is the doubt, the question, and the smile, which can shield the free spirit, and which puts to rout the subtle enslaving influences. We need laughter to purify man, to clear his eyes, and to bring back to him the strength and the courage that are part of his natural life.

## THE HUMOROUS SIDE OF THE SERIOUS

BY ROBERT SPARKS WALKER

A S serious as she appears to be, Nature is sometimes very humorous. From the high flying eagle to the humble doodle-bug in the dry sheltered soil, and to the lowly ant that sneaks into the pantry, there is a touch of humor as rare and as rich as the amusing product found in the human family.

And, it is not always the animal life that monopolizes the humorous actions that cause the observer to see the amusing side. For example, an opening flower will sometimes get itself into a very ridiculous situation, and the person who has a trained eye for observing the amusing sight will see in the face of the helpless flower bud an expression that is certain to beget laughter. Almost every week during the months of July and August, I find an unfortunate bud of the wild sweet-potato which has gotten itself into a rather amusing situation.

The flower-bud of a wild sweet-potato vine measures about two inches long, is cream colored, and reminds one of a small cigar. Hungry beetles and voracious caterpillars eat holes in this vine's foliage. The wind sometimes blows one of the perforated leaves over the flower-bud. The wild sweet-potato usually opens its floral bud early in the morning before daylight. When one of its flower-buds gets its head through a hole in a leaf, it cannot open, and there it sits and grunts and groans, securely shackled throughout the day, and while its brother blossoms are spread wide open and are entertaining insect beaux, it seemingly begs for assistance. As soon as the leaf is slipped off, the bud gets a hump on itself and spreads like a person opens a parasol, provided the handicap is removed before midday.

A few years ago, I went to Wildwood, Georgia to assist in

making a motion picture of the Periodical Cicada, or Seventeen-year locust as it emerged from the ground, ascended a tree and slipped off the old skin jacket, which it had been wearing for seventeen long years without laundering or starching. A person who knows anything at all about this insect, knows that it has the habit of emerging from the ground during the night. On the evening that was set for it to come forth at Wildwood, a heavy downpour of rain that afternoon had brought Lookout Creek out of its banks. The torrents went on a wild spree and the overflow had filled the thousands of holes which had previously been dug by the cicadas. The water held them to the ground in their earthen chambers.

By morning the flood had receded. During the forenoon that wooded land was the busiest place I have visited in many years. The locusts were coming forth from the ground by tens of thousands, climbing the trees and splitting their old skins. Slowly but surely each one crawled out, leaving the old husk firmly anchored to the rough bark of the tree. It presented as humorous a spectacle as one might find at some summer resort where the outdoor crowd has been soaked in a heavy downpour of rain. It was amusing as the presentation by expert actors of Shakespeare's Twelfth Night.

In the year 1925 some parts of the South experienced one of the severest drouths ever recorded. I happened to be living in the drouth-stricken area. One Sunday, the middle of June, before the drouth reached its worst state, I visited a farmer living on the Chicamauga Creek, seven miles east of Chattanooga. We were walking through his meadow when I observed tens of thousands of weed pests known as bracted plantain which had gone to seed. There were also other weeds like wild asters, flea-banes, trumpet creeper, and swamp loosestrife, all green. I suggested that if the drouth persisted two weeks longer that he might touch a match to the meadow and destroy the bracted plantain with its hundreds of millions of seeds before they fully matured.

As we walked along, he unconsciously acted on my suggestion, removed a match from his vest pocket, struck it and dropped it into the weeds. The blaze that followed startled us completely. As green as the vegetation seemed to be, it quickly ignited. The flames spread speedily over an acre of ground, and burned rapidly in two directions. Bracted plantain and other weed pests fell as gracefully before the flames as if they were being cut with a mowing machine.

There were tens of thousands of grasshoppers feasting in that field, all ages, all sizes. When the flames disturbed their peace, they leaped into the air and struggled frantically to escape. So numerous were they that the air was almost darkened by their flight ahead of the long fire line. There was a wild stampede for a few feet in front where they took wing and fled. Up they flew by the thousands, some like old grey bearded men grasshoppers, wobbly from age, hobbling with canes! Young men grasshoppers with hats and canes in hands! Boy grasshoppers fleeing bare-footed! Flapper grasshoppers scurrying wildly in advance of the crackling fire!

Onward the population thus moved. The flames steamed and sizzled and crackled, but void of other sounds save the clattering of grasshopper wing cases. The host of tenants moved steadily onward. However, with all the wild excitement, no grasshopper citizen stirred until the blaze had advanced near enough that it could feel the heat.

By standing in direct line of the stampede, I sensed ten thousand grasshopper feet that roughened my cheek and neck as they flew wildly through the air, careless of what they were running up against. I wrinkled the skin on my nose and face a thousand times under the tickling sensation of rough unshod grasshopper feet. Like a traffic officer handling a mob of human pedestrians, I kept my arms in constant motion forcing the wild creatures away from my face. Without a single traffic policeman of their own tribe to manage the large crowd, if there were one boy or girl, or man or woman grasshopper burned, I did not learn about the tragedy. A dozen times or more, I investigated the fire-line, but no grasshopper was stupid enough to let the flames reach his body, and none was so terribly confused that it fled towards the blaze instead of away from it!

What would an equal number of human beings have done under a similar catastrophe, with a raging fire in their midst as large as this one? Of the many experiences that I have had with insect life, this is one of the most amusing that I have witnessed in many years.

In the meanwhile, this farmer's rat-terrier had treed a box turtle in a nearby pea patch. When we reached the house, we saw the dog was carrying the boxed up pedestrian in his mouth. The turtle's hard shell was slobber-soaked. Whatever the dog thought the animal was, I do not profess to know, unless he believed it to

be an animated bone of some sort, for when he reached the house, he carried it into the garden and buried it!

Back to the turtle-field the dog hurried, and succeeded in finding and in bringing in four other box turtles all of which he interred in his turtle-burying ground. It was no punishment for the box turtles, for they had simply been cast into a turtle's heaven! As soon as the dog was off guard, the turtle opened his front window, clawed out of the prison and was soon tramping lightly back home! But when the slow traveler was passing the house, the terrier lifted his ears in surprise, ran out, grabbed the hard-shelled trophy up, carried it back and re-interred it in his turtle-graveyard. This put the dog on guard, and thereafter he tried to keep a keener vigil on his burial grounds. However, despite his watchfulness, his victims were shrewd enough to slip out of the ground and make their escape.

Many animals possess human traits. Even the detested housefly and other flies are somewhat human-like in their manners. In my city, the superintendent of the construction work for a gas company, tells me that in sending men out to seek gas leaks, that he cautions them to be on the lookout for green flies, for these green complectioned aviators disclose the gas leaks by gathering about them in great numbers.

Like the human being who seeks his fill of moonshine liquor, and who sometimes gets poisoned on a swallow of wood alcohol, these green flies seek the gas leaks, and there they sit and absorb the ill smelling stuff until their bodies turn greener and greener, and sooner or later, one by one they topple over dead!

To my peach and persimmon trees there come every evening just at dusk in summertime, thousands of hard-shelled May beetles which alight on the green foliage and devour it. Just as it grows dark I can see them buzzing about in swarms between me and the sky, and when I turn on the flashlight under the branches, the light reveals here and there a beetle sitting astride the leaf-edge taking in food to last it until the following evening. When I touch one of these beetles, it turns loose and makes no attempt to fly, but drops into the grass at my feet, hiding in the herbage. Thus it preserves its life.

I sometimes wonder who first taught those beetles about the habits of the insectivorous birds,—those that are fond of snapping

up just such beetles in daytime! How do these beetles know that birds which are fond of beetles come to the peach and persimmon trees while the sun is shining? How do they know that if they themselves should also go there in daytime to feast that instead of feasting they would be feasted on, and that their race would be threatened with extinction? At any rate, it is a humorous sight to witness these beetles emerging at evening from the grass in which they have been concealed. And then they go boldly to their green dinner tables at a time they are sure that the birds have gone to roost!

It is a hot day in August that I am writing these observations and notes, and as the perspiration flows from my forehead and cheeks, and while my stomach fusses for a cool refreshment of some kind, a fidgety brown wren intensifies my thirst by alighting in front of my open window, and bobbing his stubby tail up and down, screams loudly into my ears in pure English, "Sherbet! sherbet! sherbet!"

### A FALSE NEWSPAPER REPORT

It is not an easy matter to feel that it is just as natural for a man to perish as it is for a clump of grass to wither. Love of friends and family, love of pleasure, and a desire to accumulate property, and best of all the craving to achieve something worth while, are some of the things that make a person struggle to live.

It is a fact that we seldom heed the sad event which we call death until it concerns our immediate family. Every being, no matter how deeply he is engrossed in his personal affairs, and those of the world, at intervals, must seriously meditate on this event which is surely coming to him.

But, really, to hear that you are dead, and then to read the fact, not only in the daily newspapers, but to see the glaring tale proclaimed in a special newspaper bulletin, brings one face to face with a subject that he would rather not discuss, and it so arouses his thoughts that he must put to test some act that will prove the report false or true.

When the astounding report of my death came to me, it was during the World War when Germany was sinking every craft of the Allies that she could approach. At five o'clock in the afternoon, I was waiting for a street car one block away from the daily

newspaper office, where special bulletins were being written and displayed almost hourly.

The street car finally came, much belated, and, as usual at that hour not only every seat was occupied, but there was scarcely standing room in the aisle and on the platforms. Just as I squeezed through the crowd into the aisle, I heard a man say, "Yes, he's dead," and then I was startled to hear my name mentioned. "I was acquainted with him," declared another, and I know it is he, since he is the only man by that name who ever lived in this city," and then my name was repeated over and over.

I halted and breathed with some difficulty, as I stood there listening to the conversations and the opinions regarding my character, as is customary when a citizen has passed away. The crowd was so sure of my death that I did not dare dispute the fact at first, and since I was entirely ignorant of the source of their information, the news came as a serious shock to me, though ridiculous. I could not, however, repress a feeling that in all probability the report might be true!

Like a flash, for the moment, I really thought that which I had been listening to probably might be true, but of one thing I was certain: my ability to observe physical bodies was still undestroyed! The bring some physical test on which I might rely, I looked over the crowd, peeped out of the window, grasped hold of the leather strap over my head, examined my hands thoroughly, vanked on each of my ears, and I found I still was not robbed of the sense of touch. I took out my watch, and while everything about me seemed natural, yet there was that sensation that I was dreaming. The conversations concerning my demise continued uninterruptedly, and I was quite anxious to learn the details, but dared not make inquiry. When I had traveled a mile, I was confident that I was not literally dead, and I gave a man a weighty slap on his shoulder and said, "Here I am!" He and his companion looked me in the face through excited eyes, and one face paled. The other man was speechless. Finally, one of them said, "A special bulletin posted at the daily newspaper office declares that you lost your life with the sinking of the President Lincoln."

"Ah, that solves the mystery," I told him, "but I believe the report is untrue!" I hurried on through the crowd to the front platform. At intervals, while traveling the rest of the way home,

I had the privilege of listening to further conversations concerning my death by a number of passengers, the most of whom were rank strangers to me. But even after I had convinced myself that there was a mistake somewhere, during the next few minutes, as I listened to the grave discussions of my death, doubts came to my mind that I was really alive and in the flesh!

When I reached home, I was feeling trembly over the reports, and I immediately broke the news to my family. A half hour later, I learned from my neighbors that friends had been calling on them to ascertain if there were any truth in the report. The pastor of the church of which I was a member, had been asked concerning my welfare, and the newpaper reporters had directed their inquiries to my near relatives to avoid agitating grief or uneasiness among the immediate members of my small family.

That evening while en route to the Red Cross headquarters to help in some work, I was driven to the daily newspaper office, and was permitted to behold with my own eyes the large bulletin proclaiming my death! It was an unusual experience, and when I read the display announcement written in heavy script, there I stood shivering in my tracks like some old fool!

That was all there was to it, except for a month afterwards, I was frequently hailed on the streets by friends and acquaintances, who thoughtlessly, though quite naturally, asked many questions, some of which might have been classed as being foolish.

"Was that you who went down with the sinking of the President Lincoln?"

"Didn't you die a few weeks ago?"

"Was that a false report?"

Finding that I was not quite gone from this sphere, a few days later the newspapers reproduced the photograph of a young man who owned my full name, and who lived in a nearby suburb. It was declared that he was the person who lost his life in the sinking of the boat. However, a few weeks later, this young man escaped the briny depths as safely as I, for when the final report was made, the man who bore my full name who really lost his life was a resident of the State of New York, almost a thousand mlies away! This verified report brought me back to normalcy again!

## \*AL FURQUAN BY LLOYD MORRIS

We were looking down at a dead elephant from which the ivory had been hewn. Two natives lay near: one, with a broad bladed spear driven through his back between the shoulder blades, was lying face downwards; his head slightly twisted and mouth filled with particles of earth ground up between his teeth, the other lay staring up to the sky, one leg stiffly extended and one knee drawn upwards; the outflung hands clenched round uptorn reeds whose serrated edges had lacerated the fingers as he had plucked in his convulsive act of death. The haft of a knife, with a slight shewing of its double edged blade, projected from his breast a little

The hunters had been hunted and the same hands had robbed them at once of their booty and their life.

below and to the left of the breast bone.

The tawny vegetation for a little space was trampled flat. The air shimmered in the heat and silence of the tropic noon; and high, very high directly overhead, a speck poised patient and changelessly in the fierce blue African sky.

"Surely it is ordained that the slayer shall be slain, likewise he that slays; and that all things shall prey on each other."

He gazed athwart the savage sunlight as he spoke; his dark face expressionless, his burnous thrown back, and one delicate hand resting lightly on the haft of the knife in his broad sash; the thin fingers of the other combing down the small beard curling darkly at the point of his chin.

"Does not the creeping weed climb up the stem and strangle

\* Al Furquan—— Arabic: derived by Muhammad through the Jews from the Syriac and the Aethopic; where its meaning is Deliverance. In Koranic exegesis it is applied to express Insight, i. e. Deliverance through Insight.

the flower of the forest; is not the voice of my lord the lion heard in the night calling unto Allah for meat; and from afar do the jackal and the vulture journey to the kill . . . these things be known. And the hawk strikes down the dove; and the monkey-people chatter foolishly as they pluck and eat the young corn . . . and women, do they not prev on men. Surely they are as a madness to men. . . . And this thing is true as my lord knowest; for to Lokimi who was as moonlight in the darkness of my heart. I brought death with my hand because of her lover . . . my friend, whom also I slew. And men because they are the greatest of all things they prev on all and on each other . . . this, also, knows my lord; who is my brother, also, since our blood mingled as we slew together, and together lay under the shadow of Azrael at the killing in the land beyond this country of low black people. And above men are devils and afreets which are a torment unto mankind, decoving them into solitary places there to slay them. And above the devils are there not the gods of the unbelievers: the devil gods of the black people, and the god-spirits of El Weslei and Katoliki and Petero the great cutter of ears all fighting together. . . . Nav, lord, why should we give burial to these dogs? Allah will provide their burial; for it is written, "unto all it is given to be hungry and seek meat." Shall we rob the jackal and the vulture? Moreover it were a great foolishness to toil with the matter of digging when the sun looks down so fiercely. Nevertheless, I will take the knife from the dead one: seeing it is surely a good blade. . . . Bismillah!"

In the country of the low black people Abid died long ago; betrayed by a woman to the spears of his enemies. His words remain. They came often to me in the wet, blood bespattered trenches of Flanders and on Eastern Fronts; as I participated in a killing great beyond his dreams, or any his fierce soul ever imagined. They come to me above the voice of the cities as I walk among men in their ways of peace.

Along cold blasted ways within the Arctic circle where the northern lights go wavering over the snow; by fever stricken swamp and tangled jungle within the tropics; storm tossed on icy and desperate seas off the once dreaded Horn; over heat smitten wastes of desert sand where the Simoon lurks behind the mirage—where these roads go down, in offices of duty I passed in earlier years with the heart of high adventure. And when despite eager

youth and its proud physical exultancy, some fateful and tragic happening struck me to sobriety and thoughts on the cruelty of men and things—yet would I bring comfort to myself with the thought that it was only in waste places of earth as yet untamed by civilization that men and things were cruel; and that beyond the wild in the cities and towns wherein man had fenced himself off from raw nature, there was a comity and security wherein something splendid in man labored upwards from the brute.

Now, after the *abbatoir* of Europe with its volume production of organized human butchery; and the *abbatoir* of Peace with its killing by *chicane* and jobbed politics; I look again wistfully back to the trails that I trod in youth, as to a sweet and easy pleasuring. And I take with me and hold fast to the sure knowledge that amid all the tumult of civilization there is a splendid striving after fineness; but knowing also, that whether in the brooding wild, or the capitals of the western world, the saying made to me by Abid in the country of the low black people is a thing of record and of substance; in that the slayer is slain, and likewise he that slays; and that all things prey on each other, since it is given unto all things to be hungry and seek meat—*Bismillah!* 

But there is a killing that transcends the mere slaying of the body which rises in the morning and at evening is not.

## THE PHILOSOPHICAL REVIEW

## Edited by

## WILLIAM A. HAMMOND AND FRANK THILLY

Of the Sage School of Philosophy, Cornell University September, 1928

Clarke's Ethical Philosophy (II)	Ernest Albee
Objective Uncertainty and Human FaithDay	vid F. Swenson
Peirce's Place in American Philosophy	J. H. Muirhead
The Philosophy of Plotinus	John Watson
Review of Books	

Ralph Barton Perry, General Theory of Value: by Albert L. Hammond-Joseph Alexander Leighton, The Individual and the Social Order: by William Ernest Hocking-Herbert Wildon Carr, Changing Backgrounds in Religion and Ethics: by Edgar Sheffield Brightman-Carl F. Taeusch, Professional and Business Ethics; by by Philip G. Fox.

Notes

John Dewey. E. B. McGilvary. Union Académique Internationale. D. Luther Evans.

Published Bi-Monthly

## LONGMANS, GREEN & CO.

Lancaster, Pa.

55 Fifth Avenue, New York

Single Numbers \$1.00 (5s.) Per Annum \$5.00 (25s.)

Publishers: DAVID NUTT, London—G. E. STECHERT CO., New York—FELIX ALCAN, Paris—Akad, Verlagsgesellschaft, Leipzig—NICOLA ZANICHELLI, Bologna—RUIZ HERMANOS, Madrid—RENASCENCA PORTUGUSA, Porto—THE MARUZEN COMPANY, Tokyo.

## "SCIENTIA"

#### INTERNATIONAL REVIEW OF SCIENTIFIC SYNTHESIS

Published every month (each number containing 100 to 120 pages)

### Editor: EUGENIO RIGNANO

IS THE ONLY REVIEW the contributors to which are really international.

IS THE ONLY REVIEW that has a really world-wide circulation.

- IS THE ONLY REVIEW of scientific synthesis and unification that deals with the fundamental questions of all sciences: the history of the sciences, mathematics, astronomy, geology, physics, chemistry, biology, psychology and sociology.
- IS THE ONLY REVIEW that by means of enquiries among the most eminent scientists and authors of all countries (On the philosophical principles of the various sciences; On the most fundamental astronomical and physical questions of current interest, and in particular on relativity; On the contribution that the different countries have given to the development of various branches of knowledge; On the more important biological questions, and in particular on vitalism; On the social question; On the great international questions raised by the World War), studies all the main problems discussed in intellectual circles all over the world, and represents at the same time the first attempt at an international organization of philosophical and scientific progress.
- IS THE ONLY REVIEW that among its contributors can boast of the most illustrious men of science in the whole world. A list of more than 350 of these is given in each number.
- The articles are published in the language of their authors, and every number has a supplement containing the French translation of all the articles that are not French. The review is thus completely accessible to those who know only French. (Write for a free copy to the General Secretary of "Scientia," Milan, sending 12 cents in stamps of your country, merely to cover packing and postage.)

SUBSCRIPTION: \$10.00, Post free

Office: Via A. De Togni 12, Milan (116)

General Secretary: DR. PAOLO BONETTI.

## SCIENCE PROGRESS

A QUARTERLY REVIEW OF SCIENTIFIC THOUGHT, WORK, AND AFFAIRS

Edited by Lieut.-Col. Sir RONALD ROSS K.C.B., K.C.M.G., F.R.S., N.L., D.Sc., LL.D., M.D., F.R.C.S.

Published at the beginning of JANUARY, APRIL, JULY, OCTOBER

Each number consists of about 192 pages, contributed by authorities in their respective subjects. Illustrated. 6s net. Annual Subscription, including postage, 25s, 6d.

SCIENCE PROGRESS owes its origin to an endeavor to found a scientific journal containing original papers and summaries of the present state of knowledge in all branches of science. The necessity for such a journal is to be found in the fact that with the specialization which necessarily accompanies the modern development of scientific thought and work, it is increasingly difficult for even the professional man of science to keep in touch with the trend of thought and the progress achieved in subjects other than those in which his immediate interests lie. This difficulty is felt by teachers and students in colleges and schools, and by the general educated public interested in scientific questions. SCIENCE PROGRESS claims to have filled this want.

JOHN MURRAY

Albemarle Street

London, W-1