

*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

APRIL, 1930

—••—  
VOLUME XLIV      NUMBER 887

*Price 20 Cents*

*The Open Court Publishing Company*

Wieboldt Hall, 339 East Chicago Avenue  
Chicago, Illinois



*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

APRIL, 1930

—••—  
VOLUME XLIV    NUMBER 887

*Price 20 Cents*

*The Open Court Publishing Company*

Wieboldt Hall, 339 East Chicago Avenue  
Chicago, Illinois

# THE PHILOSOPHICAL REVIEW

Edited by

WILLIAM A. HAMMOND, FRANK THILLY AND  
G. WATTS CUNNINGHAM

Of the Sage School of Philosophy, Cornell University

With the Co-operation of

Etienne Gilson (Paris)                      George Santayana (Rome)

Arthur Liebert (Berlin)                    A. E. Taylor (Edinburgh)

Associate Editor, HAROLD R. SMART

Of the Sage School of Philosophy, Cornell University

May, 1930

---

Mr. Keynes' Theory of Probability.....	Theodore de Laguna
Science, Philosophy, and Certainty.....	W. H. Sheldon
The Psychological Point of View.....	John Baillie
Causation and the Geometric Method in the Philosophy of Spinoza (II) .....	Richard McKeon
Reviews of Books .....	

**Maurice Pradines**, *Le problème de la sensation*: by G. S. Brett—**Edmund Husserl**, *Formale und transzendente Logik*: by William Curtis Swabey—**W. D. Ross** (ed.), *The Works of Aristotle translated into English, Vol. 1*: by Richard Robinson—**D. W. Prall**, *Aesthetic Judgment*: by C. J. Ducasse—**John H. Muirhead**, *The Use of Philosophy*: by L. P. Chambers—**Adrian Coates**, *A Sceptical Examination of Contemporary British Philosophy*: by G. Watts Cunningham—**Salvador de Madariaga**, *Englishmen, Frenchmen, Spaniards*: by T. V. Smith.

Notes .....

Christine Ladd-Franklin. Lectureship in honor of William James. Harold R. Chidsey. Ralph M. Blake. Current philosophical periodicals.

---

Published Bi-Monthly

**LONGMANS, GREEN & CO.**

Lancaster, Pa.

55 Fifth Avenue, New York

Single Numbers \$1.00 (5s.)

Per Annum \$5.00 (25s.)

# THE OPEN COURT

Volume XLIV (No. 4)

APRIL, 1930

Number 887

---

## TABLE OF CONTENTS

	PAGE
<i>Frontispiece.</i> RASMUS B. ANDERSON.	
<i>Leif Erikson of the Sagas.</i> CORNELIA STEKETEE HULST.....	193
<i>The Devil's Death.</i> MAXIMILIAN J. RUDWIN.....	208
<i>Religion and the Future of India.</i> DALJIT SINGH SADHARIA.....	214
<i>The Cosmic Teeth.</i> Part IV. LAWRENCE PARMLY BROWN.....	232
<i>Is Insanity Unsocial?</i> GEORGE YEISLEY RUSK.....	244
<i>Pluralism, Life and "Value."</i> VICTOR S. YARROS.....	252

---

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, 1930.  
Printed in the United States of America.

TWO FOREMOST BOOKS ON  
PHILOSOPHY  
EXPERIENCE AND NATURE

*By John Dewey*

Third and Revised Edition

This book is valuable for two main reasons:

*First:* it has produced a literature of its own in stimulating other men to express themselves in books, articles and reviews.

*Second:* it is the first volume of a series of lectures given by the American Philosophical Association on the Paul Carus Foundation.

\$3.00



OUR KNOWLEDGE OF THE EXTERNAL WORLD  
AS A FIELD FOR  
SCIENTIFIC METHOD IN PHILOSOPHY

*By Bertrand Russell*

New and Revised Edition

These eight lectures attempt to show, by means of examples, the nature, capacity, and limitations of the logico-analytical method in philosophy. They represent the final answers of modern science and mathematics to the soluble problems of metaphysics.

\$3.00



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

---

---

## JOHN SERGEANT

A FORGOTTEN CRITIC OF DESCARTES AND LOCKE

by

NORMAN C. BRADISH

Perhaps there are few names in the history of philosophy as little known as that of John Sergeant. His thought is well buried in that tomb marked the Seventeenth Century. It is not because of the originality of his thought that he is here resurrected, but rather with the hope that his criticism of Descartes and Locke will aid in piecing together the mosaic of philosophical thought.

*Boards, \$1.00*

THE OPEN COURT PUBLISHING COMPANY

Chicago

London

# AMERICAN MATHEMATICAL SOCIETY

## COLLOQUIUM SERIES

Published in August, 1929:

**A. B. Coble**, Algebraic Geometry and Theta Functions. About 300 pp.  
\$3.00 (Volume X of the Colloquium Series.)

### EARLIER VOLUMES

Volume I. Linear Systems of Curves on Algebraic Surfaces, by **H. S. White**; Forms of Non-Euclidean Space, by **F. S. Woods**; Selected Topics in the Theory of Divergent Series and of Continued Fractions, by **E. B. Van Vleck**. (Boston Colloquium.) New York, 1905. \$2.75.

Volume II. New Haven Colloquium, by **E. H. Moore**, **E. J. Wilczynski**, and **Max Mason**. Out of print.

Volume III. Fundamental Existence Theorems, by **G. A. Bliss**; Differential-Geometric Aspects of Dynamics, by **Edward Kasner**. (Princeton Colloquium.) New York, 1913. \$2.50.

Volume IV. On Invariants and the Theory of Numbers, by **L. E. Dickson**; Topics in the Theory of Functions of Several Complex Variables, by **W. F. Osgood**. (Madison Colloquium.) New York, 1914. \$2.50.

Volume V. Functionals and their Applications. Selected Topics including Integral Equations, by **G. C. Evans**; Analysis Situs, by **Oswald Veblen**. (Cambridge Colloquium.) New York, 1918, 1922. \$3.50.

Volume VI. The Logarithmic Potential. Discontinuous Dirichlet and Neumann Problems, by **G. C. Evans**. New York, 1927. \$2.00.

Volume VII. Algebraic Arithmetic, by **E. T. Bell**. New York, 1927. \$2.50.

Volume VIII. Non-Riemannian Geometry, by **L. P. Eisenhart**. New York, 1927. \$2.50.

Volume IX. Dynamical Systems, by **G. D. Birkhoff**. New York, 1927. \$3.00.

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

# THE HISTORY OF MATHEMATICAL NOTATIONS

By FLORIAN CAJORI

Vol. I—Notations in Elementary Mathematics

Vol. II—Notations Mainly in Higher Mathematics

Price, Cloth, \$6.00 each

"The first volume deals with the history of notations from the days of the ancients and by nations as far apart as the Babylonians and the Aztecs, Egyptians and Chinese, Arabs, Germans, Italians and English. The second volume gives a history of the symbols that have accompanied the great advance of mathematics from the days of Newton to the present times.

"Professor Cajori's book will be indispensable to the historian of mathematics."—*The Times Literary Supplement, London.*

"The amount of research that this work represents is extraordinary and the history will be of great usefulness to mathematicians."—*Journal of the American Institute of Electrical Engineers.*

THE OPEN COURT PUBLISHING CO.

Chicago

London

---

---

## SINISM

### A STUDY OF THE EVOLUTION OF THE CHINESE WORLD-VIEW

by H. G. CREEL, Ph. D.

#### Table of Contents

#### PART ONE THE BACKGROUND OF SINISM

- I. Introduction
- II. Chinese Natural Philosophy

#### PART TWO SINISM

- III. Origins of Sinism
- IV. Confucius and Confucianism
- V. Lao Tse and Laoism
- VI. Mo Tse
- VII. Popular Religion
- VIII. Conclusion

Price, \$2.00

THE OPEN COURT PUBLISHING COMPANY

Chicago

## THE AIM OF HUMAN EXISTENCE

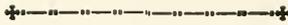
Being a System of  
Morality Based on the Harmony of Life

By Eugenio Rignano  
Editor of "Scientia"

*Reprinted from the Monist, January, 1929*

A summary of the fundamental features of a system of morals based on studies of biological and sociological synthesis.

Boards, \$1.00



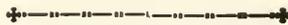
## ESSAYS IN SCIENTIFIC SYNTHESIS

By Eugenio Rignano

*Translated by J. W. Greenstreet*

Essays appearing in English for the first time, each a study complete in itself in which the author points out the immense importance of the mathematical method in working out a theory from experimental facts from biological, psychological and sociological fields.

Cloth, \$2.00



## ON THE INHERITANCE OF ACQUIRED CHARACTERS

By Eugenio Rignano

The author presents a mechanical solution of the hardest problem in Biology: Can a result influence its cause?

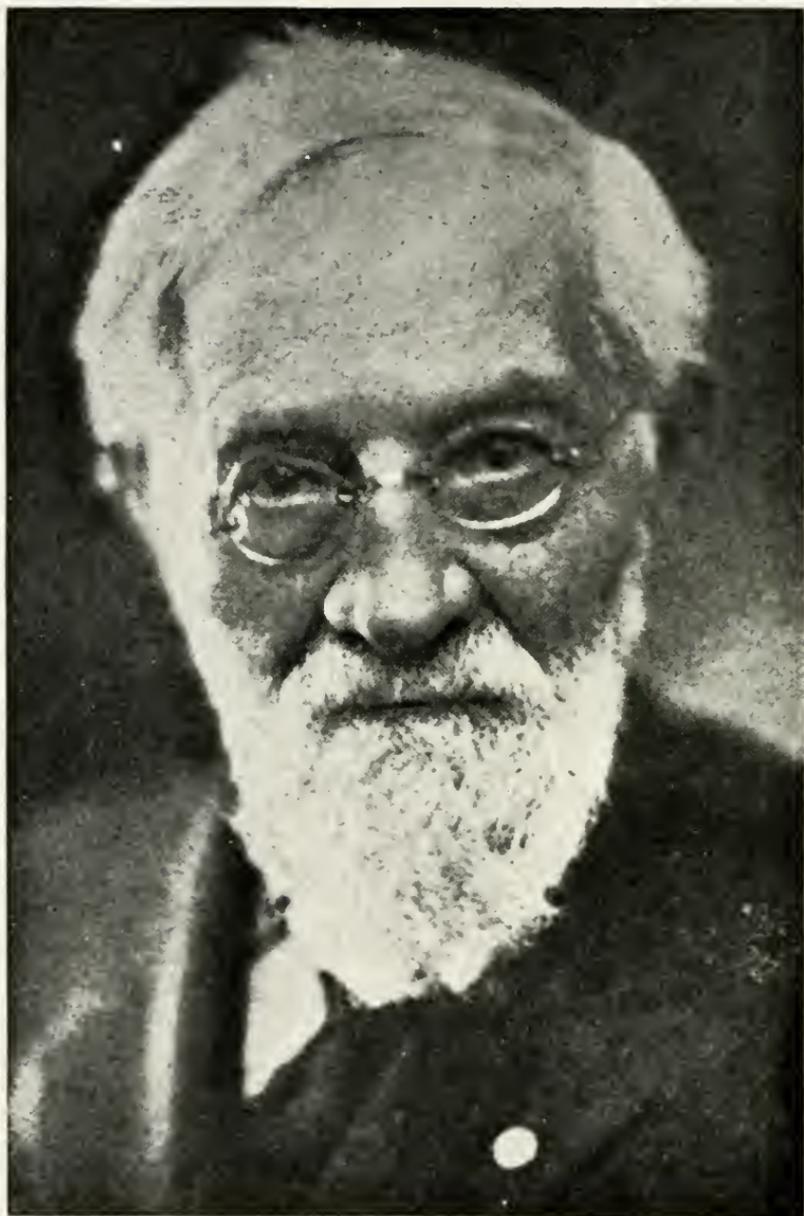
Cloth, \$2.00



THE OPEN COURT PUBLISHING COMPANY

Chicago





DR. RASMUS B. ANDERSON

*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 OPEN COURT PUBLISHING COMPANY 1930

---

Volume XLIV (No. 4)    APRIL, 1930

Number 887

---

## I. LEIF ERIKSON OF THE SAGAS

BY CORNELIA STEKETEE HULST

NOTE: The main points in this study of Leif Erikson are as dictated by The Honorable Rasmus B. Anderson, L.L.D., and he has approved whatever additions have been made to his material, so this may stand as his final word on the subject. But for his eighty-three years and his many other activities he might even have undertaken the writing. His unified view of this subject and its ramifications makes his contribution of great value for future historians working in this field as well as for the general reader, as, also, does his great sum of knowledge, accumulated during the many years during which he has followed the subject closely. In the Sixties and early Seventies of the past Century he was lecturing on Leif Erikson and was able to enlist such men as Ole Bull and Longfellow for him, so giving the Norse Discoverer much of the strong emotional appeal that he has in America. From those days, when Dr. Anderson visited Norway twice with Ole Bull and as his guest, through the twenty-five years of his service as Professor of Scandinavian Language and Literature in the University of Wisconsin and the four years of his service of the United States as Minister to Denmark, he has known, often personally, the Scandinavian scholars who have written on Leif Erikson whose theories appear in this paper.

C. S. H.

WHEN Leif Erikson sailed his viking ship into the West and landed in America, in the year 1000, he regarded his discovery of this new land as an incident, for he was on a journey to Greenland to visit his father and his brothers and to execute a commission, or, to be exact, a Mission, entrusted to him by King Olaf Trigvason of Norway, the same King Olaf whom Longfellow's Saga shows building the Long Serpent and converting his Berserks to Christianity by a masterful threat with his sword:

Then King Olaf raised the hilt  
Of iron, cross-shaped and gilt,  
And said, "Do not refuse;  
Count well the gain and the loss,  
Thor's hammer or Christ's Cross:  
Choose!"

The important Mission which Leif Erikson was executing for King Olaf in the year 1000 was nothing less than the conversion of the people in Greenland to Christianity, and, like King Olaf, he had become a very ardent Christian; in fact, these two were united by bonds closer than those of blood, for Leif Erikson was King Olaf's son in the new faith—it was the King who had converted him and led him to the font where he received baptism.

And no person could have appreciated better than King Olaf the value that this young convert of his might be to the Christian cause, for Leif Erikson was an Icelander and sailed with his own company of shipmates in his own ship. He was, moreover, the son of that super-Icelander, Erik the Red, who had planted the successful colony in Greenland in 984 and was still living there in Brattelid, the homestead he had built. At that time, Iceland and Greenland were both republics, politically, peopled by those independent families who had been too high in spirit to submit to the kings when they established their rule in Norway. They had emigrated instead. That was in 874. And now King Olaf was doubtless hoping that they could be won back, religiously, to a brotherhood within the Christian fold.

It is easily seen that when Leif Erikson accepted King Olaf's Mission he was placing himself in a very delicate and difficult position, doubly difficult because the people he undertook to convert were politically at variance with Norway and harbored an old resentment against her, and again doubly difficult because among those to be converted were his own father and his own brothers, his brothers named both in honor of Thor, Thorvald and Thorstein, and his father a devoted worshipper of Thor as his choice of those names for his sons proclaims.

If this bold and independent Erik the Red had been one of the King's guests at his Yuletide Festival when he forced his Berserks to that choice between the hammer and the cross, it is more than likely that Erik would not have chosen the cross at the end of the King's sword, but its biting blade, instead. . . but it is likely, too, that if this bold and independant Erik had been among the guests at his board King Olaf would not have adopted so drastic a policy to convert him as the threat with the sword. He was wisely politic now in entrusting this Mission to the old hero's son, for the son would not use threats with his father, but would approach the old

hero in affection and reverence, and with a rich and most acceptable gift in his hand.

What gift? and why so acceptable? The gift of information on the important question which had remained unanswered since 986, when Bjarne Herjulfson, one of Erik's friends, had been driven far out of his course toward the south and west and had sighted a heavily wooded coast, but did not land. Greenland produced no timber, and in that land in the West might be a source of supply as well as an advantageous site for a new colony, warmer in climate, too. We shall see that after Leif Erikson discovered Vinland, his two brothers, in succession, both tried to go there.

Since Leif Erikson's purpose in this voyage to Greenland and Vinland was not merely adventure, discovery, and colonization, admirable as that would have been, but the fulfillment of a Christian Mission, he must be given rank among the great missionaries and the missionary saints of the early Church who carried their faith into foreign lands, as well as among the foremost navigators and discoverers.

It was a highly dramatic moment when at last Leif Erikson stood facing his father, Erik the Red, among the men of the Greenland Colony, a moment fraught with great consequence and historic significance. When he had accepted the new faith in Norway, his shipmates had all accepted it, too, and now he was to be almost completely successful among the men of Greenland. The *Heimskringla* Saga tells only the detail that he had with him a priest and other teachers, and the occasion must have been very much like that which is told of in England, when the missionaries from Rome arrived there carrying the Cross to the Northumbrian king. When the Christian story had been told to them, a Northumbrian chieftain pled for the acceptance of the new faith before the King:

"You remember, it may be, O King, that which happens sometimes in winter when you are seated at table with your earls and thanes. Your fire is lighted and your hall is warmed, and without is rain and snow and storm. Then comes a swallow flying across the hall; he enters by one door and leaves by another. The brief moment when he is within is pleasant to him; he feels not rain nor cheerless winter weather; but the moment is brief—the bird flies away in the twinkling of an eye, and he passes from winter to winter. Such, methinks, is the life of man on earth, compared with the uncertain time beyond. It appears for

awhile, but what is the time which comes after? . . . the time which was before? We know not. If, then, this new doctrine may teach us somewhat of greater certainty, it were well we should regard it."

The Northumbrian King and his followers accepted the new faith, and perhaps Erik the Red himself was almost persuaded to be a Christian; perhaps he even advanced to the font to receive baptism, as a Frisian king had done, but asked as he stood there, as the Frisian king had asked, where, according to this new doctrine, his own forefathers would be in that other world. Perhaps he decided then, as that Frisian king had decided, to continue to live his life to the end so that he might be with them, for he told the men of Greenland finally that he would not forsake Odin and Thor now that he was old, because they had been his gods since he was a child and had been good to him. A very loyal old man, and an epic hero worthy of epic sons, such as his sons were. Apart from Erik, all accepted the Christian faith, and clad in white robes they received baptism at the hands of the priest who had come to Greenland with Leif.

By sailing to the south and west of Greenland, Leif Erikson, the Lucky, as he was called, came to that richly wooded shore which he expected to find because Bjarne Herjulfson had sighted it, and he named it Vinland because he found many wild grapes growing there. It was too late in the season for him to reach Greenland again before the winter set in, and he wanted to take timber back with him, so he built a house large enough to shelter his party of thirty-six men and remained there through the winter. In the spring they set sail with that rich and acceptable gift of Vinland in their hands, a far richer gift than they could have had any conception of. On the way, some people who had been shipwrecked were found afloat in their small boat, and Leif Erikson rescued them and took them with him to Brattelid. The man, Thorer, who had been in command of the wrecked ship, and his wife, Gudrid, thereafter lived at Brattelid, while their ship-companions lived apart with Leif's men.

"Now Leif was very well off, both as to riches and honor," says the Flatey Bok, which tells his story—the timber he brought from Vinland must have been rated at a high price, as well as the wine from the grapes. And facts and incidents are told in the saga which show that Leif was a man and a hero after the world's own heart:

“Leif was a very tall man, and vigorous, a wise man, and a very moderate man in every regard.”

He had had the power of making friends, and friends in high places; King Olaf had thought a great deal of him; and had cordially entertained him a whole winter, with all of his men:

“Was Leif with the King all the winter well treated.” His men thought highly of him, too, and followed him in the new faith as across the unknown seas:

“Was he then christened and all his shipmates, too.” His father loved him, for he was a very kind son:

“Leif begged his father, Erik, if he would a leader be in the expedition. Erik excused himself, said he was too old in age and said he could not endure the troubles of the sea as before. Leif said he might yet with best luck rule them, the kinsmen, and then Erik yielded to Leif and rode from home, when they were ready and there was not far to go to the ship. The horse stumbled which Erik rode, and fell he off from its back and hurt his foot. Then quoth Erik: not for me is fated to find more lands than this where now we dwell, we now no longer may follow together. Went Erik home to Brattelid, and Leif went to the ship, three tens and a half men.”

It had been Leif's plan, then, to remove his father and his brothers to the wooded lands farther south and to build a new colony and homestead there, with them all still under his father's rule. An affectionate and dutiful son, and so persuasive that his father actually made the attempt.

Another incident shows Leif Erikson equally kind and affectionate to his old foster-father, a ridiculous Thersites in appearance, with a large forehead and restless eyes, small freckles on his face, a low stature, unseemly, and in the habit of making wry faces, but dear to Leif in spite of all this,

“because Tyrker had been long with his father and himself and loved much Leif in his childhood.”

When this old fosterfather strayed away from the rest of Leif's party and was lost in the woods in Vinland, Leif was very much troubled and blamed his men severely for letting it happen. At once he set out with twelve of his men to hunt for Tyrker, and when Tyrker they found Leif did not rebuke him but received him well

and said to him kindly, "Where wert thou so late, fosterfather mine?"

Epic adventure ran in the veins of Leif Erikson's brothers as in his father's and his own, and Thorvald Erikson now, in the spring of 1002, took up the plan of exploring Vinland, while Leif Erikson remained in Greenland. Thorvald reached Vinland and lived there in Leif's house, but the natives became hostile and he was wounded to the death by an arrow from their bows. He directed his men to make his grave on a headland and to place crosses at his head and his feet to mark the spot, and this they did, returning afterward to Greenland. So far as is known, Thorvald Erikson is the first Christian man whose ashes were mingled with the American soil. That winter, Erik the Red had died, and Leif Erikson was now the head of the family. That winter, also, Thorer, died, and his wife, Gudrid, was now a widow in Brattelid.

In the year 1004, Thorstein, the third of Erik's sons, set sail for Vinland in the same good ship that Leif and Thorvald had used, but he did not reach his goal. He was obliged to turn back and died before he reached Brattelid. Again, a tragic death in this family of heroes, and deepened in its pathos by the fact that Gudrid, the widow of Thorer, whom Thorstein had taken as his wife, had undertaken this voyage with Thorstein, a very brave and gifted woman of whom much more will be heard later.

Then, in the year 1006, Thorfinn Karlsefne came to Greenland and visited Brattelid, a man of great wealth who sailed his own ship from Norway. "Soon he fell in love with Gudrid, and wooed her," says the Saga, and at Yuletide Gudrid and Thorfinn Karlsefne were married. Both Gudrid and all others now urged upon Karlsefne that he plant the colony in Vinland, and Leif Erikson lent him the use of his houses there. With three ships, one hundred and sixty-one men, and five women, they set sail in the spring of 1007, taking all sorts of chattels, including cattle; and they landed safely. They lived there for three years, and lived well, for

"they profitted by all the products of the land, that there were, both of grapes and deer and fish and all good things. . ." "a whale was driven up there, both large and good. . ." "were then not short of food."

Thorfinn Karlsefne felled trees and hewed them for a ship after he had dried the wood on the rocks. They gave the natives a con-

temptuous name, Skralings, meaning *chips*, because they were not so tall as the Norsemen; and they began to trade with them. The natives offered all kinds of skins, including grey fur and sable, and they wanted to exchange these for weapons, but Karlsefne was afraid to trust them with weapons and offered them milk instead, which they liked so well that thereafter they wanted milk and nothing else. Later the natives became hostile, and after three years the settlers had to abandon the colony, setting sail for Norway. Such a handful of men as they were could not hope to stand successfully against so many, with only such weapons as they had. If they had had firearms they could have done so.

It may be that their strongest reason for leaving Vinland was that a baby had arrived in their camp, a boy, born the year after Thorfinn and Gudrid landed, and far too precious a person to be risked amid tomahawks and arrows. So they sailed away with their little son, when they had named Snorre, the first white child born on this continent, so far as is known. And if they had not done so, it is very likely that one of the world's greatest artists would never have been known, the sculptor Bertel Thorwaldson, for this great man traced his ancestry to Snorre Thorfinnson, born in Vinland, the son of Thorfinn Karlsefne and Gudrid, as has been shown.

In 1010 Thorfinn Karlsefne and Gudrid sailed to Norway, where, the Flatey Bok tells, "they enjoyed good friendship, both Thorfinn and his wife, from the most distinguished men in Norway." The Flatey Bok tells that from abroad a stranger came to visit them, "a southerner, a native of Bremen in Saxonland," who arrived the year after they left Vinland, in 1011. This man was so much interested in Thorfinn Karlsefne's ship that he offered to buy the beakhead of it. Thorfinn did not want to sell it, but he finally sold it when the man from Bremen offered him half a Mark of gold for it. "Karlsefne knew not what wood it was, but it was Mazur, come from Vinland," says the Saga, and of course this "*mazur*" must have been bird's-eye *maple*, a wood native to America and not produced in Europe.

Bremen was an important city at that time, a seaport, and the seat of an Archbishopric; and it evidently had adventurous and rich citizens, at least one interested enough to make a long Northern journey and pay a high price to a traveller who had returned from the West, with a beautiful new kind of wood. This incident is evidence, too, that important navigators from Bremen now knew about

the Northmen's discoveries in Vinland, having received their information directly from Thorfinn Karlsefne and Gudrid themselves, only ten years after Leif Erikson left Vinland. A great deal of interest must have been aroused in Bremen on this navigator's return with Karlsefne's beakhead, not only by the mazar wood that he exhibited and the accounts of Thorfinn Karlsefne's three years in Vinland, but by accounts of Leif Erikson's Mission and his discovery of Vinland. The men of Bremen, also, were daring sailors, and why should they not begin to make voyages to secure this new kind of timber, and furs? Perhaps they did; and there is some reason to think that they did. It is certain that the churchmen of Bremen became eager to help in the work of Christianizing the West and the North, for the Archbishop of Bremen-Hamburg consecrated men to the work, and in 1059 a Bishop Jon of Iceland, one whom Archbishop Adalbert of Bremen-Hamburg had consecrated, fell as a martyr in Vinland beneath the arrows of the natives whom he was trying to convert. By that time, then, Vinland was known south of the Baltic, and in Rome.

## II. LEIF ERIKSON AND COLUMBUS

Thorfinn Karlsefne and Gudrid, who left Vinland in 1010, seem to have been the last of Leif Erikson's own associates who tried to colonize Vinland, but many other voyages were made there and continued to be made for centuries to obtain supplies of timber; in fact, they may have continued up to the time when Columbus began his study of the facts which pointed to the existence of lands in the West.

The last of these voyages to Vinland that is recorded occurred in 1347. Until that date, Greenland had continued to develop steadily, she had many communities large enough to support priests of their own, and before the end of the 11th Century these were so numerous and so important that Greenland was made into an independent Bishopric, a fact which, alone, proves that it was considered at the Vatican. The Sagas mention seventeen Bishops of Greenland in succession, and one of these, Bishop Erik Upse, made a personal visit to Vinland, presumably at the direction of his superiors. Copies of his instructions and his report may possibly still be found among the documents in Rome.

At any rate, it is certain that Vinland was known at the Vatican,

and Columbus could have obtained information there in his investigations. The disappearance of Greenland from History has usually been ascribed to the Black Death, which nearly or quite depopulated whole sections of the North of Europe, but a letter has been found, dated 1488 and signed by Pope Nicholas V, which throws new light on the subject. This letter authorized sympathetic provision for the few poverty-stricken people of Greenland who had returned to their ruined homes after a "captivity" to which "the barbarians" had subjected them thirty years before. "The barbarians" had gathered "on the neighboring shores of the pagans," had crossed to Greenland with a fleet, had "devastated the land with fire and sword," had destroyed the cathedral and carried away all survivors as slaves. "Fire and sword" were the conventional Roman expressions, it is to be supposed, but the "sword" was really tomahawks and arrows. This, then, was the fate of the people of Greenland; and this letter from the Vatican was written only twenty-nine years before Columbus made his voyage of investigation to Iceland, only forty-four years before he sailed on his own voyage of discovery to America.

The question rises whether Columbus knew of the discovery of Vinland by Leif Erikson and whether, therefore, his own discoveries are to be credited in any measure to his great predecessor. There is considerable proof that he did know:

(1) Gudrid, the sister-in-law of Leif Erikson, made a pilgrimage to Rome after the death of Thorfinn Karlsefne left her again a widow and well along in years.

A Saga records that Gudrid was greatly admired in Rome for her intelligence and her curtesie, this last word being foreign to her native language, a southern word to describe the courtly manners of Southern Europe, where Feudalism and Chivalry had been introduced; and we may conclude from the use of this word "curtesie" that Gudrid adopted the manners of the South when she was there, did in Rome as the Romans did, and did it charmingly. The fact that the Saga records these things of her is a sufficient proof that Gudrid was regarded as a notable person and had won name and fame for herself.

To win this wide renown for intelligence, Gudrid had only to tell the story of the lands that she had seen and the people she had known, remaining strictly true. And what stories she could tell,

right out of the life, new, varied, ultra-romantic, and stranger far than fiction! Stories vivid, in the first person, with members of her own family as the heroes, and heroes in no merely literary sense of the word. Odysseys of shipwreck, of adventure and discovery, seas uncharted, lands hitherto unknown, perils as deadly as the worst that the adventurous Greek had survived in the Southern Seas only by the protection of Wisdom, his god! Iceland, Greenland, whales like Behemoth, icebergs like mountains floating! and a breed of heroes who had sailed their ships far beyond the Pillars of Hercules, beyond the uttermost bounds of the West! Erik the Red, her own father-in-law, and the greater son of that great father, Leif Erikson, who had out-sailed Erik and had carried the Cross for King Olaf into the North. . . . she had been herself among the many in Greenland who put on the white robes to receive baptism. . . . And all had put on the white robes to receive baptism excepting the one, Father Erik, who had chosen to go to his grave in the faith of Odin and Thor. . . . But he was a hero! Then, the tragic death of young Thorvald, lying alone on that headland with the crosses at head and feet, slain by the Red Skins; then, the tragic voyage of Thorstein, in which she had taken a part, returning his widow; and the three years in Vinland with Thorfinn Karlsefne, with the Red Skins on every hand!

In Gudrid's narratives those Red Skins were new to Europe, and to Rome, fascinating, as they have always been, eagle feathers, war paint, war dances, war whoops, scalp locks, tomahawks, bows and arrows—perfectly thrilling! Gudrid could out-Cooper Cooper in thrills, for, after all, her stories were true and needed no dressing of fiction. Her hearers may have doubted much that she told, for the stories of the pilgrims had come to be proverbially dubious, but her manner in telling must have been very convincing, to judge by the term "intelligent" that the Sagaman used to describe her. If artfulness or artistry had been apparent, "intelligent" would not have been the word.

The facts that Gudrid told were of such extreme importance that they would cause much discussion and would be carried far from Rome, to the ends of Christendom, wherever navigators and churchmen and pilgrims went. That was an era of missionary effort, of Crusades and consequent extending travel, and such stories would naturally be repeated, repeated for years, even for centuries.

In a traditional form, a navigator like Columbus would hear them, for his was a profession that can use just such information as Gudrid gave—historians have come to realize that tradition is often the means of conveying valuable historical fact. Tradition may have served well, through Gudrid, in Leif Erikson's case.

(2) However, the facts that Gudrid told were preserved in a better form than tradition, in the written work by Adam of Bremen, *The History of the Propagation of Christianity in the North of Europe*, which recorded the facts about King Olaf, Leif Erikson's Mission, and Vinland in the West. This great scholar, a Canon and Magister Scholarum, held the highest position among scholars in the Archbishopric of Bremen-Hamburg. He died in 1076 and was, thus, a contemporary of Gudrid's. He certainly knew about the important events in Greenland and Vinland that she had taken a part in and he may have met her personally when she was a distinguished and wealthy widow making her pious journey to Rome, intending to build a Convent when she returned and dedicate the remaining years of her life there to religion. She undertook this pilgrimage to Rome when her son, born in Vinland in 1008, had married and taken his father's place in the management of his estate, probably about 1030, and even before that date the Archbishop of Bremen-Hamburg may have begun to christianize Vinland, for he must have known for years about Vinland through travellers like the man who visited Karlsefne and Gudrid and bought their mazarin beakhead as well as through his own ecclesiastical sources—for the northern lands were all under his jurisdiction. It is most likely that Gudrid passed through Bremen on her way to Rome, for she belonged to that Archbishopate and she had the additional reason that she would meet there friends whom she had entertained in her own home and churchmen and navigators interested in her relation to Vinland and the Mission of Leif Erikson—it should never be forgotten that Gudrid was one of Leif Erikson's converts and that she was fervid enough to go on this pilgrimage and to give herself to the religious life of the Convent. If she passed through Bremen on her way to Rome, particularly if she did so on her way home from Rome, where she had excited great interest in the New, Western Land, her influence with the Archbishop and with Adam of Bremen must have been considerable, stimulating the Archbishop to christianize Vinland and stimulating Adam of Bremen to write his History of

the Propagation of Christianity in the North of Europe, a continuation of the great work that he had long been writing, *The History of the Archbishopric of Bremen-Hamburg from 778 to his own time*. *The History of the Mission to Greenland and the discovery of Vinland*, both centering in Leif Erikson, would seem to him merely an extension of his earlier work. The facts of Leif Erikson's efforts could have come to him through various sources: first, through the navigator who had bought the mazar wood beakhead from Thorfinn Karlsefne, in 1011, also through passing travellers before and after that, probably also directly or indirectly through Gudrid on her pilgrimage, as well as through those who had heard her, or heard about her, in Rome, the returned pilgrims. Such were the usual sources of information in that day.

But it is not likely that so eminent a scholar as Adam of Bremen would consider such sources of information reliable and quotable. However distinguished and intelligent Gudrid herself might be, she was only a woman and a pilgrim, her information to be discounted and discredited unless confirmed by a higher authority. That higher authority and that confirmation, Adam of Bremen sought and found in Denmark by discussion with the most eminent men. He certainly adopted a policy which secured for his *History* the respect that he aimed to secure—and his policy was, to seek an audience, first, with the Danish King. Svend Estridson, that Danish King, was himself deeply interested in all kinds of knowledge, especially in History, so he received Adam of Bremen well and gave him introductions to the most reliable authorities in Denmark, from whom accurate accounts were obtained of the propagation of Christianity in the North of Europe. And these Adam of Bremen wrote in his book.

And he did not stop there. After he had presented the history of the propagation of Christianity in Denmark, Sweden, Norway, Iceland and Greenland, he added an Appendix on the geography of those lands; and when he had described Denmark, Sweden, Norway, Iceland, and Greenland, he added this statement about Vinland:

“Besides, there is another country far out in that Ocean, which has been frequently visited by the Northmen, and which they call Vinland because the grapes grow there wild, producing a very good wine, and grain grows there unsown.”

His account ends with these emphatic words:

“These facts we have learned not from mythical conjecture, but from positive statements of the Danes.”

Quoting the very best of the Danish authorities, Adam of Bremen agreed, thus, with the accounts preserved in the Sagas of Iceland; and his History establishes the additional fact that men of the greatest eminence, kings, archbishops, scholars, as well as navigators, were keenly interested and well informed in his day on missions, colonies, exploration, discoveries, and geography, and that this century of Leif Erikson was teeming with such activities. Adam of Bremen's work has always been regarded as standard, and numerous transcriptions were made of it, so it was known throughout Europe though published before the art of printing with type was discovered. Columbus, who was widely read on all that pertained to navigation and geography, could not have missed seeing it.

(3) The next link in the chain of evidence that Columbus knew of Leif Erikson and his discovery of Vinland is the account by Columbus himself of the voyage he made to Iceland in the winter of 1477. This was published in the biography of Columbus written by his own son and published in Genoa in 1521—this son had always been in close contact with Columbus and had accompanied him on many of his journeys. Of his father's voyage to Iceland, he says:

“In 1477 my father made a voyage to Iceland, and in regard to that voyage he wrote me the following letter: ‘In February, 1477, I made a voyage from Bristol, in England, to Iceland. Iceland is an island about the size of Great Britain,’ etc.”

The letter describes correctly the climate, the tides, and other physical features of Iceland, and then the quotation is ended abruptly, with “etc.”, a most tantalizing “etc.” to the historian, for it covers just what the reader wants most to know, (1) what facts Columbus had learned that made him want to go to Iceland, and (2) what facts he learned in Iceland from the records, Sagas, and learned men there. To make that long, expensive, and uncomfortable journey at that time in the year, he must have had a strong motive. It was not usual for ships to enter the harbor of Iceland in the winter, for it is icebound, but that Columbus did make that journey and in that month is corroborated by a record in the annals

of Iceland, for 1477, that in February and March the harbor was ice-free, and that a ship entered the harbor that winter.

(4) Recent investigation has brought out another important fact about Columbus' visit to Iceland, which is, that the Bishop of Skalholt, Magnus Eiolfson, a bishop famed for his learning, was visiting the neighboring churches in Iceland when Columbus was there, and that he conversed with Columbus, in Latin. It is in the record that Columbus questioned Bishop Magnus "concerning the Western lands," and it can hardly be doubted that he obtained the information for which he came. It may have been merely by chance that Bishop Magnus was in Iceland just at that unusual time, but it is thought more probable that he had been apprised from Rome through ecclesiastical channels of Columbus' coming, and thus put himself in his way.

(5) In 1484, Columbus' theories were submitted to the learned monks at the Rabida Convent, and his son, who was with him, tells that they questioned him closely. When he spoke with the greatest assurance of the lands in the West, they asked him how he could be so sure, since he had not yet seen those lands, and he answered them,

"I base my assurance on three things :

(1) On the nature of things.

(2) On the reports of navigators.

(3) On the authority of learned writers.

Among the "learned writers," Adam of Bremen would stand high; and the "reports of navigators" would include the Annals and the Sagas of Iceland.

Too little credit has been given to Columbus for the patient and exhaustive study that he gave to ascertain the facts and verify information before he put his well-matured theories to the test. He was anything but an audacious gambler staking his Queen's jewels and his men's lives on a doubtful hazard. His estimate that he must sail 700 nautical leagues to reach the further shore of the Atlantic was proved correct, based on the distance to Vinland; and the only errors he made in his calculations concerning the size of the earth and what lands he would reach by sailing West, were inevitable, given only such data as he had been able to secure. The existence of the Pacific Ocean as a separate body of water was not known in his day.

That Columbus chose to sail far to the south of Vinland was in accordance with what he had learned about Vinland and the lands to the south of it; and it was wise of him to steer his course to the south because lands there would be nearer to the Latitude of Spain, warmer, and in the locality of India, as he supposed. It was not required of him to tell all he had learned about the northern lands and about Leif Erikson, particularly because that would have complicated the main question with irrelevant debates concerning lands in which he was not interested, and which had been abandoned probably, debates that would have deferred his own voyage indefinitely. In all of his dealings there seems to have been nothing to tarnish his honor, but everything to his credit. Like that of Leif Erikson, his aim seems to have been far higher than that of the adventurer, discoverer, or colonizer, for he foresaw, tradition tells, that the New World would be a Land of Promise, offering hope and opportunity to the oppressed and the poor of Europe. . . . Did the fact that Leif Erikson sailed with the Mission of King Olaf serve to strengthen the trust of Columbus in his own Vision of the Promised Land? One likes to think that it did.

Tried by exacting standards, both Leif Erikson and Columbus were very great men, and both are worthy to be honored as national heroes in America. In them, we of the internationally-constituted nation have a rare opportunity to unite with both Northern and Southern Europe in homage to their own heroes, who are our heroes as well. Both are celebrated in October, and it would be fit and fortunate to celebrate the two together, anything but fit and fortunate to disparage either of them through sectional or national bias or to make invidious comparisons between them. These great Discoverers are Bridges across the Atlantic, both now celebrated in Europe by the nations whence they came to us, most fitly to be celebrated on this Continent to which they opened the way, thus becoming a bond of union for the Future between the East of the Atlantic and the West of the Atlantic, between the North and the South, a bond of union that might prove stronger than treaties to bring Good Will.

## THE DEVIL'S DEATH

BY MAXIMILIAN RUDWIN

IT has been reported from various places at various periods that the Devil is dead.<sup>1</sup> Scotland, among other European countries, claims to possess his tomb. A Scotch song says: "The Devil is dead and buried at Kirkcaldy." Beelzebub is believed to be buried in Brittany. When slain by St. Michael, according to an old tradition among the fisher-folk of the Breton coast, he was buried by the Archangel under the mountain which faces Mont St. Michel, and which is, therefore, called Tombelaine—"Tumba Beleni, the tomb of Belenus, Belus, Bel, Belial, Beelzebub" (Victor Hugo: *Quatre-vingt-treize*, III, ii. 1)<sup>2</sup> The demon Saracen must have died at a certain period in the past, for in the novel, *Tristan le Roux* (1850), by Dumas *filz*, he is evoked from the dead. But his resurrection is not of long duration. In the end, his human ally once more inflicts upon him such death as he must suffer, and he is again buried at Poitiers, the site of his original tomb.

Jean-Pierre Béranger, the popular French song-writer, in his satirical poem, "la Mort du Diable" (1828), gives a new and novel turn to the old legend of the death of the Devil. He is not concerned with the demise of the high and mighty personage, but with the effect it had on the conduct of the Catholic clergy. This song is a satirical attack upon Satan's supposed successors among the monks.

<sup>1</sup> The Devil's death forms the subject of the story, "The Devil and the Old Man" (1905), by John Masefield, reprinted in the present writer's anthology of *Devil Stories* (1921). Arthur Landsberger also used this idea as the subject of his novel entitled *Wie Satan starb* (München, 1919).

<sup>2</sup> Maupassant, in his story "la Légende du Mont St. Michel" (1888), has given an interesting version of the legend of the combat between the Archangel and the Archenemy, which occurred, according to a local tradition, on the famous mountain situated on the Norman coast. This story, accompanied by a critical essay, will be found in the present writer's collection of *Devil Stories* already mentioned.

Béranger was always poking fun at the priests. Even the Pontiff in the Vatican was not spared by his bold and boisterous satire. In Voltairean fashion, Béranger laughed Old Mother Church to scorn. This poem figured prominently among the pieces selected as a basis for Béranger's indictment. It was denounced by the priests as irreligious and blasphemous, and its author was declared an enemy to religion. The archbishop of Paris and the other bishops hurled their anathemas in pastoral letters against the poet of "la Mort du Diable."

The song describes the commotion and consternation caused among the Catholic clergy by the rumor of the Devil's death. The priests wail when the news of the Devil's demise reaches them. The reason for their dismay over the death of the Devil is not that they loved Lucifer so well. What worries these good men is the fact that they have thus lost their means of a livelihood. The Devil being dead, what man will now pay them to be delivered from his clutches? But Ignatius Loyola, the founder of the Order of the Jesuits, bids them to stop their wailing. He himself intends to succeed to the power of the prince of this world; and in order to be delivered from him, men will now pray and pay more than ever before. It is not easy to render in English the delicious humor and irony which this poem contains. We shall give it nevertheless in its first English translation for the benefit of the reader to whom it is not easy of access in the original:<sup>3</sup>

I sing today a lay of lays,  
 A glorious miracle you'll see,  
 Give the great saint Ignatius praise,  
 Of little saints the glory he.  
 A dirty trick—if saints can trick,  
 And if the truth may all be said,  
 Has done the business for Old Nick,  
 The Devil's dead—the Devil's dead!

Old Nick went out one day to dine,  
 And pledg'd the saint to drink his health,  
 Aye, said the saint—and in the wine  
 Some holy poison dropp'd by stealth;  
 Gripes seiz'd the Devil—cruel-sick—  
 He swears—he storms—and hangs his head,  
 Then bursts, as bursts a heretic—  
 The Devil's dead—the Devil's dead!

<sup>3</sup> This translation appeared in the *Westminster Review*, X (1829), 210-13.

"Alas! He's dead—the friars said,—  
 The Devil an *Agnus* shall we sell;  
 Alas! the canons cried—he's dead—  
 Not one *Oremus* shall we tell.  
 The conclave is in deep despair,  
 Power and the iron chest are fled,  
 O we have lost our Father dear,  
 The Devil's dead—the Devil's dead!

Love is not half so strong as fear,  
 For fear was constant with her gifts.  
 Intolerance is fading here,  
 Who now her blazing torch uplifts?  
 If man from us should once be free,  
 What light may beam upon his head;  
 God greater than the Pope shall be—  
 The Devil's dead—the Devil's dead!

Ignatius came—"Let me but take  
 His place—his right—and see; in brief—  
 He has made men for ages quake.  
 I'll make kings tremble like a leaf!  
 With plagues, thefts, massacres, I'll ban  
 Both north and south—where'er I tread;  
 Leave ruins both for God and man—  
 The Devil's dead—the Devil's dead!"

"Come, blessed one," they uttered, "come,  
 We hallow thy most saintly gall"—  
 And now his Order—sent from Rome—  
 O'ershadows, darkens, curses all.  
 I heard a choir of angels tell  
 Their sympathies for man, they said,  
 "Ignatius is the heir of hell,  
 The Devil's dead—the Devil's dead!"

The reader who is perhaps inclined to be overjoyed at the report of the Devil's death should recall that Satan has a successor who is fully capable of carrying on the government of Gehenna after his death. In the words of a famous quatrain:

"The Devil is dead. He died serene,  
 Though somewhat oppressed by cares;  
 But his wife, my friends, is a woman of mind—  
 She looks after her lord's affairs."

\*

\* \*

Moreover, the Devil's death would be the greatest of calamities for humanity. It would mean the end of all virtue, the extinction of the human race, and even the end of the world. First of all, virtue could not exist at all without vice to offset it. It is, moreover, doubtful whether men would still practise virtue if the Devil were gone. Even lacking temptation would they continue to be good without the pitchfork? No progress can be conceived without the Prince of this world. Conflict is the father of all things. It has been said that man must know the spirit of discontent if he is to advance. Moreover, with the passing of the Devil, life would simply disappear from the face of the earth. The history of the world has shown that the supposedly opposed realms of human activity personified in the Almighty and his Adversary are equally essential and eternal. Evil, no less than Good, is an indispensably necessary element in the economy of the cosmic system.

Anatole France states over and over again in his works that "Evil is the necessary counterpart of Good, as darkness is of light," and that the Devil, in whom Evil has been incorporated, is consequently immortal.

"Yes [this latterday diabolist affirms]. Evil is immortal. Satan, the genius, in whom the old theology incarnates it, will survive the last man and remain alone, seated with folded wings, upon the ruin of extinct worlds" (*la Vie littéraire*: "la Vertu en France," 1887).<sup>4</sup>

<sup>4</sup> Quotations in this essay are taken from the uniform English translation of the works of Anatole France published by John Lane, London and New York, 1902ff.

"Evil is necessary [he says elsewhere]. If it did not exist, neither would good. Evil is the sole potential of good. . . .

"It is thanks to Evil and sorrow that the earth is habitable and that life is worth living. We should not therefore be hard on the Devil. He is a great artist and a great *savant*; he has created at least one-half of the world. And his half is so cunningly embedded in the other that it is impossible to interfere with the first without at the same time doing a like injury to the second. Each vice you destroy has a corresponding virtue, which perishes along with it.

"I enjoyed the pleasure of seeing, one day, at a country fair, the life of St. Anthony the Great represented by marionettes. . . . Oh, how vividly it brings before us the two things working together to one end,—God's grace and the Devil's!

"St. Anthony is a great saint only because he successfully resisted the Queen of Sheba. Well, is it not obvious then that in sending the beautiful lady, . . . the Devil indispensably performed an act which was indispensably necessary to constitute his Saintship?

"Thus the marionettes confirmed me in my belief that Evil is an indispensable pre-condition of Good, and the Devil is a necessity for the moral beauty of the universe" (*le Jardin d'Épicure*, 1895).

"Evil is necessary [this author repeats himself]. It has like Good its source in human nature, and the one cannot be destroyed without the other" (*M. Bergeret à Paris*, 1901).<sup>5</sup>

In his autobiographical work, *le Livre de mon ami* (1905), Anatole France tells us that one day he took his baby-girl Suzanne to a Punch and Judy show, the culminating point of which was the death of the Devil.<sup>6</sup> This ending delighted the common crowd, which applauded the heroic act of Punch, but it saddened our philosopher, who thought that it was a great pity that the Devil had been

<sup>5</sup> The late James Huneker shows himself a pupil of the great French diabolist by his long encomium of the Prince of the Pit, which begins with the following: "The Devil is the mainspring of our moral system. Mock him and you mock God, who created him. Without him the world would be all light without shadow. . . ." (*Bedouins*, 1920).

<sup>6</sup> The Punch and Judy show invariably ends with the death of the Devil. *Païte Collier*, in his book, *Punch and Judy* (5th ed., London, 1870, p. 66), mentions a marionette-player who had religious scruples about making Punch kill the Devil, but the audience were so attached to the canonical ending that they hooted and mishandled him. On the origin of this traditional ending of a Punch and Judy show, see F. M. Cornford: *The Origin of the Attic Comedy* (London, 1914), p. 146.

killed. Paying no attention to Suzanne sitting by his side, he went on musing:

"The Devil being dead, good-bye to sin! Perhaps Beauty, the Devil's ally, would have to go also. Perhaps we should never more behold the flowers that enchant us; and the eyes for the love of which we would lay down our lives. What, if that is so, what in the world would become of us? Should we still be able to practise virtue? I doubt it. Punch did not sufficiently bear in mind that Evil is the necessary counterpart of Good, as darkness is of light, that virtue consists wholly of effort, and that if the Devil is no longer to fight against, the Saints will remain as much out of work as the Sinners. Life will be mortally dull. I tell you that when he killed the Devil, Punch committed an act of grave imprudence.

"Well, Pulchinello came on and made his bow, the curtain fell, and all the little boys and girls went home; but still I sat on deep in meditation. Mam'zelle Suzanne, perceiving my thoughtful mien, concluded that I was in trouble. . . . Very gently and tenderly she takes hold of my hand and asks me why I am unhappy. I confess that I am sorry that Punch has killed the Devil. Then she throws her little arms round my neck, and putting her lips to my ears, she whispers:

"I tell you somefin: Punch, he killed the nigger, but he has not killed him for good."

## RELIGION AND THE FUTURE OF INDIA

DALJIT SINGH SADHARIA

INDIA, in contrast with the other nations of the modern world, is notoriously a religious country, given over to the discussion of unprofitable theological speculations and devoted to the useless pursuits of the things of the spirit. All progressive nations have freed themselves from the world of medievalism and religion and direct their concentrated forces to the practical problems of human welfare and well-being. Europe and America have secularized their political, social, educational, and industrial institutions, and have compelled religion to keep itself aloof from politics and secular interests. In contemporary western society the love of country has supplanted zeal for the supernatural, and material prosperity has become far more important than future salvation. Soviet Russia has dashed Christianity to the ground and has made hecatombs of heavenly and earthly czars. The whole system of Russian government and society has been constructed on the principles of Marx, Lenin, and other proponents of the theory of communism and the Christian Bible has been replaced by *Das Kapital* as a source book of human conduct, social and sexual relations, and proletarian morality. China, after a painful humiliation and a grievous loss of national sovereignty, has awakened to world realities and has decided to shed her age-long lethargy, unchanging modes of life, contentment with her hoary past, and ancient traditions. She has fully realized that the future lies with scientific civilization which she must adopt in order to shine forth in redoubled radiance as the wonder and envy of mankind. An educational system based on the secular model has been introduced in the schools and colleges of the Celestial republic and the foreign controlled educational institutions have been obliged to conform to governmental regulations. No longer the

young Chinese rocks his head on Taoist magical formulas and stultifies his mental and physical energies in qualifying himself to answer such silly questions as "how the moonlight sleeps on the lake," but studies useful subjects as science and economics, and learns the doctrines of Sun and international politics. And Turkey by a deliberate exercise of the will and an extraordinary effort, and a national resolve and rapidity for which there is no parallel or analogy has transformed herself from a medieval and theocratic state into a modern and progressive nation.

But India, in spite of catastrophic and revolutionary changes that have taken place all over the world, remains quite unaffected and the least willing to learn or follow the example of other nations. Religion is still her warp and woof and dictates to politics, law, and economics. God is the pivot around whom her whole being revolves like satellites and absorbs all her best thot and sublime aspiration. Those so-called revealed scriptures still furnish her with a philosophy of life and a rule of conduct, and determine her attitude towards the problems of twentieth century ethics and politics. India is hopelessly a religion ridden country more sorely and onerously than was Europe under the cruel domination of Christianity in the Middle Ages. She is cramped in on every side by religion. The condition of her life is such that she shall be an instrument of and shall exist for the sake of a mythical divine personality. Her whole life is sacrificed for the observance of degrading religious ceremonies and dedicated to the service of God or gods. Religion encircles her like the coil of a snake and weighs upon her feeble body and mind with a physical pressure.

The future of India is bound up with religion; it will be the most important factor in the evolution of Indian politics and in the development of Indian public opinion. Indian nationalism of which the world has heard so much of late is simply a religious fanaticism. But before we enter upon the discussion of the relation of religion with the present day Indian problems and make any forecasts about the future of India, we may cast a cursory glance over her past history, and visualize clearly the influence which religious beliefs have exercised on her history and civilization. The present day India can only be understood in the light of her past.

The religious development of India may be divided into the fol-

lowing periods. First, Vedism, or the earliest religious beliefs of the Indo-Aryans; second, Brahmanism, or the faith inculcated and taught in the books called Brahmanas, Upanishads, law books of Manu, and numerous other works; third, the rise of Buddhism as a reaction against the sacrificial monstrosity of the priests and against the perversion of Vedic religion; and last Hinduism, or mutilation of Vedism and Brahmanism adulterated with Dravidian fetishism and superstition. It is now the prevalent religion of India.

The primitive Indo-Aryans who invaded India in the period about 4,000 to 1,000 B. C. were a hardy and warlike race. From the very beginning of their entry in the Punjab they found themselves arrayed against the aborigines and waged relentless wars against them. The Rig Veda hymns describe in beautiful language the bloody conflicts between the fair-skinned Aryans and the dark-skinned aborigines and relate the details of warfare in those far-off days. The bands of attacking Aryans marched with their leaders carrying banners. The soldiers on the march sang and shouted both of the victories of their generals and of their war gods. The leaders rode on war chariots while the soldiers followed them on foot in bands. The fighting weapons used by both sides were bows, arrows, and darts. The Aryans by their superior power, military spirit, disciplined leadership, valor, and bravery finally overwhelmed their enemies and reduced them to submission. They invaded the large part of the country and drove the aborigines to the hills. They exterminated several original tribes and burned down their villages. The Vedic Aryans lived and died in war and their religion sanctioned and glorified war. With them war was a passion and a profession. Their whole being was saturated in war traditions and was rooted in courage and military virtues.

The religion of the Vedic Aryans was comparatively simple; it was emphatically a natural religion. The elemental forces of nature served as objects of veneration symbolized in a visible phenomena. The early Indo-Aryans were a people gifted with high mental capacities and strong moral feelings. They were endowed with marvellous powers of appreciating the beauties of nature and with a profound consciousness of their kinship with the visible and invisible forces which regulated the order of the world. Their material welfare depended on the influences of the sky, atmosphere,

light, and sun, and to these they turned with deep respect and admiration. Thus Agni was the fire-god, the friend and benefactor of men; Surya the sun-god, the enemy of darkness and bringer of light; Indra the god of rain, the fertilizer of agricultural soil; Rudra the god of the destructive thunderstorm, punisher of the evildoers, but a defender of the virtuous; Soma the god of inebriating juice, destroyer of every form of disease, imparter of bodily strength, and a bestower of health and so on.

The Vedic Aryans addressed their prayers to the gods to extort from them the good things of life: rain, food, cattle, health, wealth, and other boons. They did not invoke the aid of their deities as representatives of a superior being before whom they should bow in sheer awe and repent their sins. The savage idea of sin, fear of a transgression of the law of any heavenly being, and atonement for misconduct never entered into their sublime optimistic nature and never barbarized their philosophic intellect. They looked upon the gods as their comrades and servants who assisted them in their campaigns against their adversaries and showered upon them material prosperity. Their gods feasted with them and shared their joys and difficulties. They were a people thoroughly conscious of their intellectual and physical powers and refused to submit to the claims of any arrogant deity. Their religion was characterized by a passionate love of liberty, utility, materialistic advance, and a Nietzschean sense of power. They were the first people who recognized that man is essentially a material being with ethical and moral wants and that his moral life can only blossom and come to fruition under favorable economic conditions. They were utilitarians, materialists, and self-assertives before Mill, Dewey, Marx, Feurbach, and Nietzsche. They justly called themselves Aryans.

The form of Indo-Aryan worship was also a natural process. To their personified forces of nature they gave characters like their own. They attributed to them human likings, tastes, and predilections, and invested them with human qualities. They propitiated them by praise, accompanying their hymns with such presents and offerings of food and drink as was deemed acceptable among themselves. Rice, clarified butter, and the Soma plant formed their offerings. They had no temples and images; sacrifices were performed in the open air and were not fettered with meaningless rites

and cumbered with demoralizing ceremonies. There were no precincts permanently devoted to worship and no idols before whom they bowed in abject servility. The gods were so closely connected with natural phenomena that no need of any invisible power was felt. Each man satisfied his moral instincts, according to his own conception of the deva or devas on whose favor his prosperity was thot to depend.

Brahmanism was the second stage in the development of religious thot in India. It grew out of Vedism but it drifted far from the original and simple teaching of the Vedas and the primitive mode of worship. In place of Vedic gods of natural phenomena, Brahmanical mythology set up one universal supreme being, the only real entity, from whom all things emanate, like drops from an ocean, like sparks from fire. The natural process of devotion by an intricate ritual and monstrous sacrificial ceremonies. The democratic Vedic organization of society was supplanted by an aristocratic system of society based on caste distinctions. The great Indian law-giver, Manu, formulated the caste system and split Indian society into four rigidly defined divisions. First were the Brahmans, second the Shatris or the warriors, third the Vaishas or the farmers and traders, and fourth the Sudras or the conquered aborigines. On each caste was fixed a definite life-programme and to each was assigned a special mission or avocation in life. The Brahmans were were charged with the duty of performing sacrifices for themselves and for others, and of ministering to the spiritual needs of mankind. The Shatris were to cultivate heroic and military virtues in order to defend and protect the other classes from marauders and invaders; the Vaishas were to follow agricultural and industrial pursuits to feed the people; and the Sudras were condemned to engage in menial and servile avocations and to serve the three upper classes. These distinctions were fixed immovably. In the place of natural plasticity and fluidity of a social organism were substituted inflexible and ineluctable moulds which could not be broken. Marriage, social and family relations, industries, vocations, military service, rights of property, laws of inheritance, every interest of human life was regulated by caste rules.

Brahmanism evolved beliefs and elaborated philosophical doctrines which were wholly unknown to the Vedas. The doctrine of Karma and spiritual salvation were quite foreign to the Vedic sages

and exercised a very pernicious influence on the minds of the Indian people. The former held that man is not the author of his actions; but all his actions come from the force and from the necessary concatenation of things. An irresistible fate, good or evil, causes some to be born for good, others for evil. All men are born under the empire of one or the other of these two destinies. The latter despised earthly life and bred a sheer contempt for what savored of flesh. It replaced the worldliness of Vedic Aryans by the other-worldliness, and the love of nature with its grandest operations, by the love of an unknown deity.

As a protest against Brahmanical religious tyranny and corruption Buddhism arose during the fifth century B. C. The great leader and instigator of the Buddhist reaction was Gautama of the Sakya tribe, whose father was the king of the territory round Kapilvastu—a town situated under the mountains of Nepal about one hundred and fifty miles north of Patna. The Buddha was well qualified by his intellectual attainments and majesty of character to stem the tide of degradation in religion and to restore the simple teaching of his forefathers to its original and pristine purity. Brought up in leisure and royal comforts, endowed by nature with graceful features and sound intellect, gifted with a remarkable power of speech and expression, and well versed in all the philosophical theories of his time the young reformer inaugurated the greatest intellectual and social revolution the world has ever seen or known. With the voice of a prophet Gautama rejected ceremonies, sacrifices, incantations, and the worship of any God or gods as a means to salvation and repudiated the authority of the priest and the infallibility of any revealed scripture.

Salvation was to be attained by right meditation, right belief, right action, right knowledge, and not by the mortification of flesh and divine grace. No traditions, no sacred writings, and no commandments of any supermundane personality were to be respected or accepted unless they satisfied the requirements of human reason and experience. The young Shatri with his indomitable courage repulsed with all the force at his command the old order of ethics which attributed the principles of morality to divine will and curbed the human will by the ordinances of God. The morality of the sky, it was argued, is subversive of all human freedom and an evident obstacle in the moral progress of man. Morality should obtain its

sanctions in human relations, in the complex growth of human needs and aspirations, and not in the injunctions of a mythical divine personality. Man is essentially a moral being and the roots of morality are laid deep down in the lowest forms of organic life.

The Buddha in his social teaching was equally a most uncompromising reformer and dissenter. He denounced the claim of the innate superiority of the Brahman or Shatri over the Sudra and protested against the artificial barriers erected against the lower classes. He proclaimed the equality of the Sudra with the Brahman and eliminated social rigidity and caste discipline. The doors which the Brahmans had slammed against the Sudras were broken down with a crash, the like of which we have not heard in priest-ridden India up to the present day. "*Jarmana jaete Sudra, karmana jaete d̄vija*"; that is "by birth every one is a Sudra, it is by action that one becomes a Brahman," became once more a practical reality. "My Dharma is a Dharma of mercy for all," said Buddha, "proclaim it to all men; it is as vast as the spaces of heaven which excludes none." All were welcomed into Buddhist brotherhood without any distinction of race or color and were put on a uniform system of morality and equality. Purity of mind, nobility of character, knowledge and goodness were set up as the criteria of man's worth, and not race or religion. Those who lead moral lives, render useful service to society, help their fellowmen in times of distress and emergency, and cultivate learning for the welfare of mankind should be honored and exalted no matter from what race, caste, creed they may hail. Those who lead dissolute lives, fall into evil temptation, and wallow in the mire of sensuality should be pitied and efforts should be made to extricate them from their moral degradation.

For over a thousand years Buddhism guided and controlled the life and thot of the Indian people and affected tremendous changes in the structure of Indian society and polity. The old iniquities in society and incrustations in religion were swept away and a new social system based on the doctrines of equality, liberty, and fraternity was reared and a positive religion founded on secular ethics and rational inquiry was established. The attention of the Indian people was diverted from metaphysical hairsplitting, from that so-called nonsense Brahmvīdyā, and was concentrated on the practical problems of human well-being and the advancement of the kingdom

of man.

Buddhism prepared the way for and furnished the material to India's greatest Emperor and Son Chandra Gupta to construct his political edifice on a firm and solid structure and to make India a nation. It was under his glorious reign that the successor of Alexander the Great, Seleucus Nicator, was driven out of the Punjab and was forced to conclude a humiliating treaty. Nicator was obliged to give the hand of his daughter in marriage to the Indian ruler, was compelled to evacuate Indian territory, and was made to sign all the articles of the Treaty. Chandra Gupta brought the whole of India under his political control and reduced all the incoherent mass of Indian populations, warring factions, petty chiefs, and tribal organizations to one regular and compact political entity. For the first time in Indian history he subjected India to a uniform system of law and government and organized his governmental system on the principles of the great Indian political philosopher and his prime minister the celebrated Kautilya, the author of Artha Shastra. The government of the country was divided into separate departments, such as foreign affairs, army and navy, trade and commerce, agriculture and husbandry, currency and finance, and the function of each was intrusted in the hands of a competent minister. The emperor regarded himself as the servant of the state and a father of his people. He did not arrogate to himself the divine right of kings, like the European despots of the sixteenth and seventeenth centuries, and did not claim to possess an absolute authority over his subjects. He was a constitutional monarch and his rule was based on the patriarchal ideals of government.

Chandra Gupta was followed by his grandson, Maharaj Asoka, one of the greatest and noblest sovereigns of all Indian history. He made Buddhism the state religion of India and exerted zealous efforts to put the teaching of the Prince-Philosopher into actual practice. He planted fruit trees, dug wells, established hospitals for both men and animals, founded charities for the poor and the needy and did his best to banish evil and poverty from his country. He looked upon his subjects as his children and worked with almost a fanatical zeal to ameliorate their social and moral conditions. He certainly succeeded in his sacred mission and left an imperishable record of his achievements. The thing which struck the great Chinese scholar, Hien Tsan, when he visited India was the complete

absence of prostitution, gambling, intoxicating liquors, crime, theft, murder, and other social evils, among the Indian people. Asoka made his country a social paradise and raised it to the height of humanistic civilization.

But it is a prophet of righteousness and internationalism that the great Indian Emperor has earned an undying glory and has become an immortal of history. He despatched missionaries to all parts of the world to communicate the message of spiritual deliverance and intellectual enlightenment discovered by the Buddha under the Bo Tree to all the races of mankind. He did not send missionaries to fetter mankind with dogmas, *ex cathedra* of morals, religious superstitions, but to preach the "Law of Piety"—mercy, truthfulness, goodness, justice, human brotherhood, tolerance, and the like. He did not make religion a pretext for robbing other people of their territory, of depriving them of their place in the sun, and of despoiling them of their riches and privileges. He did not regard the world beyond India as a legitimate field of exploitation and political domination. He aimed at founding a world wide, ideal, human society, in which justice and good will should be realized and all world communities should be brought together in a spirit of harmony and love, on a moral basis. His goal was nothing less than the creation of a new world.

For over a thousand years Buddhism existed as a dominant faith of the Indian people. But, after all, it could not in the end escape the usual fate of deterioration and decline written on every human institution. Its powerful influence began to wane with the lapse of years and the impulse which it had received from the magnetic personality of its great Founder grew fainter. There was no leader to vivify its primitive zeal and no one to step in the place of the Buddha. The later Buddhist teachers such as Nagsena, Buddhghosha, and others, lost their touch with the common people and gave themselves up to metaphysical wranglings. The old forces which were smouldering beneath the surface of Indian society raised their heads and challenged its right to exist. They had not become extinct, but had simply retreated before its mighty tide. The old inveterate propensities gradually reasserted their sway over men's minds. Sacredotalism, priestcraft, and every form of superstition were too firmly planted on the Indian soil to be completely uprooted. The ponderous and mischievous longing of the Indian heart for

the unseen and its shameful mystical leanings were too powerful to be wholly eradicated. The positive rationalism of Buddhism, its philosophical conception of human salvation and destiny were too abstruse for ordinary people to understand, and its cold blooded postulates were too barren to satisfy their abnormal religious instincts. It finally met with a cruel fate in India and succumbed before the onrushing tide of Brahmanical revival.

After the expulsion of Buddhism two doctrines came to the fore which led India straightforward to ruin and to the destruction of her liberties. The first was the crazy cult of Bhagti analogous to the Christian doctrine of the kingdom of God, that did more than anything else to make India a prey to foreign invasions and contributed most to her downfall. It caused the Indians, as the teaching of "Lay your treasures in heaven" caused the worldly Romans, to forsake this world for the next and to sacrifice earthly existence for the false promise of celestial felicity. The thirst for eternity induced the Indians to tear them away from their family affections and domestic ties, and to dedicate themselves to the search of God. In their erotic passion for immateriality they renounced all the good things of earthly life and withdrew themselves to the jungles. There they imposed upon themselves voluntary vows of poverty and beastly existence, practiced severe penances and fastings, inflicted indescribable cruelties and horrors on their mortal bodies, mortified their flesh, and reduced themselves to mere skeletons.

They held their arm upright for years, until the tissues withered and it became impossible ever again to bring the arm down to a normal position. They took long journeys walking on sharp spikes; sat for years by day and slept by night on a bed of thorns. Many rolled hundreds of miles in sun and storm, thru dust and mud; while others hung for half an hour at a time by the feet, head down, over a smouldering fire, or sat surrounded by five fires, thru the blistering heat of an Indian summerday. Numerous Indians loaded their bodies, and still do, with a heavy chain of iron fastened into the muscles at their back. The savage craving for the ultimate and the universal drove the Indians to mutilate and murder themselves and to destroy themselves from the face of the earth. While the Indians in their acquisition of the infinite were assassinating themselves their country was overrun by the foreign devastators and was put to fire and the sword. There is nothing which has degraded India po-

litically, economically, socially, and morally as God. It has been the bane of Indian life and is responsible for all her past woes. "The idea of God" says Marx, "is the keystone of a perverted civilization," and the truth of the statement is completely borne out by India's corruption and degeneration.

The doctrine of ahimsa or non-killing, preached and inculcated by the founder of Jainism, Mahavira, derided the military virtues and utterly undermined the fighting spirit of the Indian people. His followers have been and are the curse of India and it is they who preserve the lower forms of animal life such as rats and precipitate infectious diseases and bubonic plagues upon the country every year. Tho born a Shatri this mischievous degenerate taught the most degraded form of effeminacy and popularized a cult of decadence and national annihilation. He entirely dehumanized the Indians and reduced them to a sodden inertia and quiescence. The hypothesis of a state of perpetual peace in the human race and mercy with every sentient existence was the hypothesis of absolute immobility and sheer debility. The Vedic hymns, the ethics of the Gita, the doctrines of the sages of Maha-Bharata and Ramayana all had taught and glorified war and had regarded it as the mother of all heroic virtues and manly civilization. But this prophet of non-killing and peace discarded primitive Aryan traditions of courage, love of war, and devotion to the cultivation of heroic virtues and erected on their place his own cult of feebleness, meekness, and mercy. He bears the same relation to India as Christ does to Rome. Just as the Romans were enervated and ruined by the demoralizing teaching of the sermon on the mount and turning the other cheek so the Indians were crippled and paralysed by the degrading cult of ahimsa and non-injury.

Thus the damnable prescriptions of bhagti and ahimsa brought down India from a high pedestal and a position of eminence to that of subjection and helotage, and exposed her to the incursions of barbarian freebooters. Her primitive buoyancy of heroic action and the principles of her Shatri morality were eclipsed, and her positive and martial virtues were entirely annihilated. She gave up, as her lover Nietzsche would say, her master morality and adopted in its place slavish morality. In her active life she followed the ethics of the Christian gospel rather than that of the Gita while Europe guided her affairs by the political philosophy of Manu and

the war teachings of Mahabharata sages. And for this criminality she has paid and is still paying the price. Her history after the forsaking of her traditions is a record of wars and rebellions, crimes and catastrophes, bloodshed and murder, and of economic spoliation and political slavery. The wild tribes who poured from the north into her territory carried fire and sword wherever they went. She became to them what carrion crow is to the vulture. They razed to the ground blooming cities, magnificent and gorgeous buildings, desecrated beautiful temples, and trampled under their mailed feet all the works of art and the refinements of civilization. The white plunderers who came from the west swept India like a flight of devouring locust and enacted bloody scenes on her sacred soil. The Portuguese, the Dutch, the French, and the English fought sanguinary battles for supremacy and converted her into a veritable pandemonium of bloodshed and misery. She finally passed, and deserved to pass, under the cruel yoke of the British and is now reeling under imperialistic domination. She wrote her own death sentence when she adopted the saint as her ideal man in place of the soldier and made that so-called damnation Brahmvidya (literally the knowledge or search of God) the alpha and omega of her life instead of Raj Niti or the science of government and organization.

If religion is responsible, as we have seen, for the destruction of India's civilization and national freedom, it is at present the sole bar to Indian unity and progress. It is the canker at the root poisoning and stunting the healthy growth of Indian society and patriotism. It divides family from family, class from class, and community from community, and keeps alive communal jealousies, racial antipathies, and caste distinctions. It stratifies Indian society into water-tight compartments and demarcates the Indian peoples into innumerable divisions and gradations. All sorts of religious barbarisms are running riot in unhappy India and there is no superstition invented by human imagination, ignorance, psychological illusion, or weakness that does not claim its votaries among Indian populations. The followers of each religion have their own peculiar observances, their own rules as to food and clothing, their own clubs, their own theory of life, and their own special occupations. Any intermingling of the members of different religions by intermarriage or even by intimate social intercourse, is out of the question, and is absolutely prohibited. In western lands meals, eating, drink-

ing, and numerous other amenities of social life serve to promote mutual sympathy, friendly feeling, genuine liking among different layers of social organism and tend to draw all the members of society into a harmonious and workable blending and fusion, and co-operative goodwill. In India it is a horror for a Brahman to sit at the same table with his Mohammedan countryman and to participate in his social functions. He looks upon him as a disgusting animal, a food-eating barbarian and brands him with the stigma of melesha, a savage. A Sikh nobleman will never accept the hospitality of his Christian countryman and will not even suffer to take a glass of water from his hands tho he may be dying of thirst. Religion encloses the Indians as if in a magic circle outside of which they dare not step and checks the growth of society on democratic principles.

India, as she is at present, is a continent rather than a country—a congeries of nation races, and not a nation. She is a vast international system, embracing nationalities, languages, and religions. All the elements of nationality such as common historical traditions, universal languages, common ideas, and above all, the spirit of patriotism are conspicuously absent. There is practically no patriotic feeling among the vast majority of the Indian people and no nationalistic fervor. An average Indian is devoted more to his fantastic superstitions than to his country. To the Hindu his god Vishnu, to the Mohammedan his Allah, to the Sikh his Wahguru, to the Parsi his Ahurmazda are far more important than India and its interests. A Hindu will forego all material comforts, will sacrifice his means, and will even depart with his life for the sake of his cow religion, and will stand before his idols in a temple in abject servility from morning till night. A Mohammedan will give away all his scanty money, tho he and his family may be dying of starvation, to the cause of Islam and will gladly suffer death over a religious trifle. But ask any average Hindu or Mohammedan to do something for the country which has given him birth and he will turn a deaf ear to your request. He will not contribute anything for a national cause and will not pay any attention to the appeal of nationalist orators. The words patriotism and national sovereignty are meaningless terms to him and do not strike any responsive chord in his breast. The western man regrets that he has only one life to give to his country; the Indian regrets that he has only one life to sacrifice for his religion. Patriotism does not exist in India and will not

take root until religious emotion is excised out of its moral constitution.

It is not only the ignorant and superstitious masses who are swayed by their theological outlook and lack any enthusiasm for a patriotic cause; the educated classes are equally destitute of the spirit of patriotism and are guilty of subordinating the interests of nationhood and the country to their individual and group interests. They never transcend the boundaries of race and religion, and are committed to the advancement of interests of their particular province and community, but never of India as a whole. That so-called Mahatma Gandhi has frankly told that he is Hindu first and Indian afterwards and that cow is to him more dear than India. He openly proclaims that he will not accept Russian aid, if it were offered, to free India, not because the Russians are insincere and selfish, but because they are atheists and hostile to religion. Gandhi loves more his God and future salvation and is infinitely more selfish than a servile Indian in the employment of foreign administration. The Moslem Ali brothers have declared more than once that they are Islamists first and Indians by necessity and that they owe allegiance to the country of their faith, Arabia, and not to India. They want to establish a Moslem raj, and not an Indian raj, based on the Koranic conception of law and government and controlled in the interests of their co-religionists. The English educated Sikhs are equally sectarian and clamor for separate communal representation. The founder of their nationality intended them to be patriots from the first to the last and to lay down at the altar of the Motherland what they hold most dear in life. But they have ignored Lord Govind Singh's commands and have practically degenerated to the level of other Indian communities in patriotism. There are Hindu and Moslem patriots, Sikh and Parsi patriots, but no Indian patriots. There is not a single Indian leader, with the sole exception of Jawahar Lall Nehru, who can be called a sincere patriot.

At present Hindus and the Mohammedans are engaged in a suicidal struggle and a relentless warfare. In the last four or five years there have been many physical clashes between the two communities over religious differences such as the playing of music before the mosque by the Hindus and the killing of the cow by the Moslems, resulting in much bloodshed and riots, and loss of life and property. The tension between the two is becoming more in-

tense than ever before in Indian history and there is no prospect of the speedy demise of the demon of communal bitterness. The hatred of the Hindu and the Moslem is deeply rooted in religion, in tradition, in history and in outlook on life, and will not cease to exist in the near future. It is not the creation of yesterday and will not pass away tomorrow. There are towns and districts in India where the two religions face each other like armies on a battlefield, and where the slightest provocation given by one side or the other ignites pent-up hatreds and ushers in furious carnage and bloody human destruction. A cow slaughtered in the Hindu quarter, and a dead pig thrown into the mosque is enough to fan the flames and to incite the two communities to fall at each other's throats. Cow is sacred to the Hindu and its protection is enjoined upon him by his sacred books. The Hindu will not eat beef and tolerate beef eating because cow is always pure and divine; the Mohammedan will not eat bacon because to him it is always unclean and impure, and strictly prohibited by the injunctions of the Koran. The Hindus cannot assimilate and fuse with the cow slayers and cannot admit them into their personal and social relations. Beef and bacon do not mix, and will not mix until there is a radical change in the mentality of both.

The cleavage between the two communities condemns India to bear the brunt of British domination and compels her to resign submissively to the will of her foreign rulers. British imperialism in India does not rest on sword or the consent of the governed, as wrongly supposed by many, but on religion. India has been brought under English imperial sway by religion and is kept down under subjection by it. Were religion to disappear miraculously from India today British rule would pass away tomorrow. No machine guns, no efficient instruments of human destruction of latest invention, no resources of materialistic science, no political acumen, and no subtle diplomacy can ever hope to keep three hundred million people in bondage if they resolve to throw away imperialistic despotism. Were Indians to withdraw their cooperation and boycott everything British the whole machinery of government would collapse like a house of cards and would come to a sudden end. But India is torn with religious dissensions and cannot make any combination against her exploiters. The British have become past masters by their long acquaintance with the country and its people in the method of divide and rule. Their two big wives, Hindu and

the Mohammedan, are always jealous and suspicious of each other and cannot form an alliance against and cannot bridle the evil propensities of their lord. As long as there is religious difference between the two communities the position of the British as paramount dictators is secure and there is nothing which can dislodge them from their aristocratic authority.

The British recognize this fact more than the Indians. They are very careful of preserving religious animosities and superstitions among the Indian people in order to keep them immune from the infection of foreign ideas and to make them amenable to their rule. At present British bureaucracy is devising the most sinister methods to check the advancing tide of nationalism and secularism and to throw back Indian freedom by a century. Last year a bill was introduced in the Indian legislative assembly known as the public safety bill by British officialdom to shield the faiths of India from the onslaughts of Bolshevism and to deport from the country all communistic agitators. A proposal has just been made to thrust religion in all schools and colleges and to ram the throats of innocent Indian students with the principles of theism. The most mischievous propaganda is carried on in favor of religious education with the help of Christian missionaries, and with the religiously inclined Indians whose interests are identical with the British and whose very existence depends upon the religious superstitions of the people. Liberal grants are given in-aid to all communal institutions out of the public revenue. The sectarian schools, whether they are Hindu, Moslem, Sikh, or Christian, are the hotbeds of unscientific, unhistorical, and unphilosophical education, and are the centers of perpetuating class rivalries, and national and religious antipathies. They fasten upon the minds of poor students barbarous physics, barbarous astronomy, and barbarous history, and stuff them with antipatriotic ideas and tendencies. The puranic, the Koranic, the Granthic, and the Biblical interpretation of the universe and the cosmos is just the one and the same thing; it simply differs in detail. The religious pedagogical institutions are the greatest menace to the intellectual development of the Indian youth and the most dangerous enemies of the creation of a united Indian nation.

What India needs most is not a religious education, but a thoroughgoing secular education with universal and compulsory military training based on the French pattern. She does not need saints,

mahatmas, and theologians, but agricultural chemists, mining engineers, students of hygiene, and political economists, who shall help to develop the material resources and further the industrialization of the country. She is already too much cursed with mystics and dreamers who are a notorious burden on the people. India wants a government that shall put an end to all communal schools, that shall do away with all economic and social inequalities, that shall abolish priesthood and confiscate all property allotted to monastic institutions. The Hindu temples, the Moslem mosques, and the Sikh Gurdwaras are the dens of vice and frightful immorality and the priests of the Indian religions as a class are the most immoral, the most vicious, and the most contemptible specimens among humanity extant. They are a thousand times more rapacious, cruel, and sensual than were the Catholic clergy before the storm of Protestant upheaval burst upon Europe. They are Rasputin thru and thru. They live in magnificent buildings with their hawks and hounds and with their splendid retinue of beautiful female concubines. These parasites and drones feed upon the produce of Indian peasants and workingmen and exploit them by their threats of excommunication and hell and by their promises of heaven and salvation. They eat, drink, and beget, and pass their days in ignoble revelry and in aimless sloth. They are pervaded by profound moral corruption and are enmeshed in sensuality and the lust of the flesh. They are like a barren fig tree fit only to be cast into the hell-fire.

To sum up, the path of India is beset with enormous difficulties and is strewn with almost insurmountable obstacles. The gulf between the Hindu and the Mohammedan will persist for a considerable period of time and will not be easily bridged over. As long as there is religion India's fate is sealed and there can be no true social, political, educational, and industrial regeneration of the Indian people. The sun might begin to rise in the west and set in the east but to say that India will emerge as a united and dominant nation and will take an honored place appropriate to her size and population without complete elimination of religion, in the comity of nations is a dream and by no means a sensible dream. It is utterly unthinkable and impossible. It must not, of course, be supposed that religion will continue to condemn India to an effete epoch and to subserviency to the foreigner. It is liable to go down before the new forces that

are convulsing Asia and shaking India to the center. The impact of modern civilization is pressing upon the old and conservative Indian world order with irresistible fury and is bursting asunder the firm joints of caste and ancient moorings. The new ideas are a dynamite that batters down the steel ramparts of religious obscurantism and shivers the thick ice of invetrate custom and tradition. Nor must it be forgotten that the process of evolution involves the dissolution of primitive beliefs and that the advance of society on industrial lines implies the disintegration of religion. The crusade of Russia, China and Turkey against this colossal Asiatic barbarism will exercise a tremendous influence on the Indian situation and will prepare the peoples to adopt a hostile attitude towards religion. In India itself conditions are arising which make for sudden change, for distrust against established social regime, and for a wide-spread intellectual and spiritual unrest. India indeed is standing unheeding, as France stood in the second-half of the eighteenth century, on the brink of a crater which is destined to change profoundly by its eruption the whole course of her historical development and civilization. And when that explosion occurs it will be the most glorious day in the history of India and the East.

## THE COSMIC TEETH

BY LAWRENCE PARMLY BROWN

### IV. *The Teeth of Vakub-Cakix*

THE most elaborate and altogether the most obscure mythic concepts relating to the teeth are found in the story of Vakub-Cakix in the *Popol Vuh* of the Quiches of Guatemala in Central America. As extant, the *Popol Vuh* dates only from the seventeenth century A. D., but it purports to be a memory reproduction of an ancient lost book. The extant text was written in Quiche by a native of Guatemala and shortly translated into Spanish by Francisco Ximenez; but both the Quiche text and the Spanish translation remained concealed in Guatemala until the middle of the nineteenth century, when they were found by C. Sherzer, who published the translation of Ximenez in 1856. Brasseur de Bourbourg published the Quiche text with a French translation in 1861, and several other translations or versions have appeared since then,<sup>17</sup> the best of which is that of J. A. Villacorta and F. Rodas, in Spanish, published together with the Quiche text under title of *Manuscript de Chicicastenango (Popol Buj)*, Guatemala, 1927.

We shall find reasons for concluding that in the original myth of Vakub-Cakix he was a personification of the imaginary fire of the underworld, and that as such he was recognized as a dawn figure:

<sup>17</sup> An English version of Book I (otherwise Traditions I and II), including the Vakub-Cakix myth, was published by J. Price in *Lucifer*, a Theosophical magazine, 1894-1895. K. S. L. Guthrie followed with an English version of the whole *Popol Vuh* in another Theosophical magazine, *The Word*, 1905-1906. A German version by N. E. Pohoriller appeared in 1913; a Spanish version by S. I. Barberena, 1923, and a French version by G. Raynaud, 1925. We also have English epitomes of the work by H. H. Bancroft (in his *Native Races*) and by L. Spence (in his *Popol Vuh*, a booklet, 1908; in his myths of *Mexico and Peru*, 1913, and in the *Open Court*, Vol. XLII, Nov., 1928). All these versions and epitomes follow Brasseur or Ximenez, or represent a composite of both; but Brasseur is not very exact and Ximenez even less so.

for it was supposed that the underworld fire is seen in our world when the gates of the east are opened for the rising of the sun (and again at sunset when the western gates are opened). And we shall also find reasons for concluding that the personified Vakub-Cakix was conceived with a materialized body, and that as a dawn figure he was fabled to have lived in the mythical dawn period that followed the night of a universal deluge; his fabled dwelling place being the dawn land in the far east where the Quiches and other ancient Americans<sup>1</sup> supposed they had originated.

Therefore in all probability the original dental organs of Vakub Cakix were flame-teeth which were conceived as materialized like the rest of his body. And there are reasons for concluding that his materialized teeth were fabled to have been the primordial precious stones, while his eyes were the primordial precious metals; the existing precious stones and metals of the earth being recognized as fragments of his teeth and eyes.

In the *Popol Vuh* we have the only extant account of the personified Vakub-Cakix. His name is translated "Seven-Fire-Plumes" by Villacorta and Rodas, while others make it "Seven-Fire" and interpret it as "Seven-times-the-color-of-fire"—which may safely be rejected. The same name is applied by the Quiches to the ara-macao, guacamaya, guaca or great macaw, a gorgeous parakeet whose predominant colors are red, blue, yellow and green; and as the personified Vakub-Cakix was decorated with plumes according to the *Popol Vuh*, there can be no doubt that they were conceived like those of the great macaw, and that the "Seven" in "Seven-Fire-Plumes" referred alike to all the colors of the bird and all the colors of the dawn—the gorgeous clouds of the dawn being the plumes or feathers of the personified Vakub-Cakix. Here we seem to have the European concept of the seven primary colors, which could hardly have been known to the Quiches except through the Spaniards; and therefore it is possible that the name as extant is of comparatively late origin. But in all probability the myth of Vakub-Cakix as we have it represents an ancient original in a more or less corrupt form.

Tradition I of the *Popol Vuh* closes with an account of a universal deluge and the destruction of a race of man-like beings who preceded the human race on earth. In Tradition II we have the

story of Vakub-Cakix, which opens as follows (according to a close rendering of the Spanish version of Villacorta and Rodas):

"As yet there was not on the surface of the land more than very little light, for the sun did not exist. But there dwelt thereon a being filled with pride; Vakub-Cakix was his name.<sup>18</sup>

"The sky and the land already existed, but hidden still were the faces of the sun and moon.

"Then said Vakub-Cakix: 'Only in this manner shall it be possible to bring hither the pure teaching after the inundation of the people. . . . I will be their sun. I will be their light. I will likewise be the moon that illumines them.' So he spoke then.

"Great is my wisdom and intelligence. I will be he who looms among the people.

"For my eyes are as of metal, like emeralds set in their sockets where they gleam; and similarly my teeth shine as precious stones, like the clarity of heaven. [Further on he is made to say 'I hold my riches in my teeth and eyes,' and it is stated that "his teeth of emerald. . . . made his mouth gleam," while his eyes had a "metallic glitter"].

"In this same manner my nostrils gleam afar, like the moon; the place where I shelter myself is also of metal; the surface of the ground also shines when I go forth in front of my place of shelter.

"In this same manner then I am the sun and the moon, and I will be the cause that the sons and daughters of the land civilize themselves and become intelligent; and so will it be because my sight reaches afar.'

"Thus spoke Vakub-Cakix; but in truth he was not the sun that gives light, and it was only pride of his plumes and metallic glitter that made him speak thus."

That Vakub-Cakix was conceived as a gigantic figure is evident from the character of his two sons, whose adventures after the death of their father are described in Tradition III of the *Popol Vuh*. In Tradition II we have only their names and occupations. Cabrakan ("Earth-shaker") shakes the mountains and upsets the earth, while Zipacna ("Earth-heaper") is said to have heaped up certain large mountains which existed at the time of the dawn, and

<sup>18</sup> Villacorta and Rodas have "Gakup-Cakix." While their translation will be followed throughout the present consideration of the myth, the older and generally received transliterations of the proper nouns will be employed as being more readily recognizable than those of V. and R.

were in a night created by Zipacna. These sons appear to be no more than mythic variants of Vakub-Cakix himself as a figure of the underworld fire, which was supposed to burst through the earth in volcanoes, heap up mountains and cause earthquakes.

According to the *Popul Vuh*, the wife of Vakub-Cakix and the mother of his gigantic sons, was Chimalmat ("Shield-bearer"), whose death occurred at about the same time as that of her husband. She is well-known as an Aztec goddess (with her name variously transliterated), and is probably a personification of the night, with the starry sky or perhaps the moon as her shield. The mother and father of the great Mexican man-god Quetzalcoatl were Chimalma and Camaxtli, according to Mendieta; but according to Motolinia, they were Chimamatl and Iztacmixcoatl (See H. H. Bancroft, *Native Races*, Vol. III, pp. 249, 250). Quetzalcoatl ("Bird-serpent") is often figured with a conventionalized bird-face, the bird being the beautiful green and red trogon known as the quetzal (*pharomacrus mocinno*), the feathers of which are sometimes placed on a serpent in Maya art (Tozzer and Allen, "Animal Figures in the Maya Codices," in *Papers of the Peabody Museum*, Vol. IV, no. 3, p. 340).

Like Vakub-Cakix, Quetzalcoatl was an introducer of civilization and is said to have been very wealthy in precious stones and metals—and also in maize and other food supplies (see Bancroft, Vol. III, pp. 241, 256, 261). Though generally recognized as a god of the air or wind, Quetzalcoatl is sometimes the celestial deity of the east, the region of wealth and fertility (Seler, *Codex Vaticanus B*, p. 88), and according to the *Anales de Quauhtitlan* he wore the decorations of the fire-god and finally burnt himself to death, whereupon his heart became the Morning Star (*Ib.*, p. 138). Acosta describes an image of Quetzalcoatl with the face of a bird having a red bill with ranks of teeth (probably those of a serpent, for birds have no teeth), and he says this image was surrounded by a wealth of gold, silver and jewels (see Bancroft, Vol. III, p. 249). In some respects, therefore, Quetzalcoatl has much the same character as Vakub-Cakix; but the serpent is in no way associated with the latter.

The story in the *Popul Vuh* continues to the effect that two youths (twin brothers), named Hunahpu and Xbalanque, decided to kill Vakub-Cakix because of his pride and arrogance. They

concealed themselves with their blowguns under a great tapal or nance tree which the giant was wont to climb (every morning) for the purpose of eating its fruits (which are small, round and yellow). When he had climbed into the tree, a pellet shot from the blowgun of Hunahpu wounded him in the mouth, dislocating his jaw and breaking his teeth. He fell from the tree; but was victorious in the ensuing struggle, during which he tore off one of the arms of Hunaphu. The suffering giant carried the severed arm to his shelter or house and hung it over the fire in vengeful rage, at the same time bemoaning his injuries to his wife.



THE MEXICAN TREE OF THE EAST  
(From Codex Fejérváry-Mayer, Sheet 1)

Hunahpu and Xbalanque doubtless represented the sun and moon originally, their blowguns indicating that they were recognized as producers of the winds, which break the teeth of Vakub-Cakix (and scatter his cloud-plumes). These great heroes of the mythical portion of the *Popol Vuh* were conceived miraculously by a virgin mother (the earth); many of their exploits belong to a journey through the underworld, and they seem to be viewed as human figures who were finally transformed into the sun and moon. The name Hunahpu is generally rendered Master-magician, but Villa-

corta and Rodas have Junajup Blowgunman. Most authorities, including V. and R., agree that Xbalanque signifies Little-tiger (so V. and R. for their Ixbalanque); the animal indicated being the ocelot or American leopard-cat, perhaps suggested as a lunar symbol because of its spotted or blotched appearance. Seler says that "Hunaphu" is the Quiche translation of the Mexican Ce Xochitl ("One Flower") and a variant of the Yucatec Hunhau, Lord of the Realm of the Dead; and this authority recognizes the Quiche hero as a solar figure and notes that "at the end of his exploits he mounts to the sky as the sun" (*Vaticanus B*, p. 11).

Therefore it appears that the rising sun is represented by Hunaphu when he causes the downfall of Vakub-Cakix as the dawn, while the handlike solar flabellum is represented by the young hero's severed arm suspended over the fire of the underworld (see the present writer's "Cosmic Hands," in the *Open Court*, Vol. XXIII, p. 8). In accordance with these interpretations, the great tapal or nance tree climbed by Vakub-Cakix may be recognized as belonging to the eastern quarter of the heaven at dawn, when its small, round and yellow fruits (for stars) are devoured by the giant. This tree is probably the Quiche variant of the Mexican Tree of the East, one of the four trees of the quarters of the heaven pictured in the codices. Each of these trees is formed somewhat like a Latin cross, with three main branches. The Tree of the East is painted blue, or blue and green; and always on the top of its upright branch is a green-plumed bird (a quetzal), while the other branches have flowers or jeweled disks at their tips. According to Seler: "The flower, the jewel, the quetzal bird, are all symbols of costliness, of the precious fecundating moisture. By them the East is characterized as a region of prosperity, of fertility, of abundant food supplies" (*Vaticanus B*, p. 78). In the *Codex Fejérváry Mayer* (sheet 2) we find an eight-rayed star at the base of the Tree of the East, and a human figure standing on either side of its trunk; the one on the right being recognized by Seler as the sun-god, while the one on the left probably represents the moon; and it is quite likely that these two figures reappear as Hunaphu and Xbalanque beneath the tapal or nance tree. Furthermore, in the same codex, all four trees have seven terminal branches, each with a flower at its tip; while in the *Codex Borgia* three of the trees, including the Tree of the East, have seven such branches tipped with jewels.

Originally there may have been only two of these cosmic trees, representing the solar flabelli of the east and the west; and their flowers (or jewels) may have represented the variously colored clouds of sunrise and sunset. Therefore the seven branches, like the "Seven" in the name Vakub-Cakix, may have referred originally to the seven primary colors, of which the Mexicans and Central Americans probably learned from the Spaniards.

According to the story in the *Popol Vuh*, the heroic brothers resolve to recover the arm of Hunaphu, and proceed to the house of Vakub-Cakix accompanied by an aged man and woman (unnamed) whose assistance had been obtained. The old couple make Vakub-Cakix believe that they are the grandparents of the youths, whom the suffering giant does not recognize (probably because his eyes as well as his teeth had been injured, according to the original myth—see below). All authorities are agreed that the old couple are the divine father and mother of the human race who appear in Tradition I of the *Popol Vuh*. Their names are generally transliterated Xpiycoc and Xmucane and translated Great White Boar and Great White Tapir; but it is quite probable that they were originally the Great White Boar and the Great White Sow (i. e., male and female peccaries), for swine have always been recognized as prolific animals. Xpiycoc and Xmucane as the divine father and mother appear in the Maya *Codex Cortesianus* seated under the Tree of Life, which was possibly introduced by the Spaniards as a variant of the Mexican Tree of the East and the tapal or nance tree of the *Popol Vuh*. It is not impossible that Xpiycoc and Xmucane represented the sky-father and earth-mother in the original Vakub-Cakix myth; but in the extant version they appear in human form (probably gigantic), and tell Vakub-Cakix that they belong to a class of physicians who extract worms from aching teeth<sup>19</sup> and cure diseased eyes as well as injured jaws. Sahagun preserves a native

<sup>19</sup> The erroneous belief in worms as the cause of decay of the teeth and toothache was probably suggested by the worm-like form of the tooth-nerve. This belief existed from a very ancient time among Oriental peoples, including the Chinese, Hindus, Babylonians and Egyptians. It was held by the Arabian medical writers of the first Christian millenium and was generally accepted in Europe during the Middle Ages, and even till the eighteenth century. But it does not appear to have been known to the ancient Greeks and Romans; the earliest extant reference to it by a classical writer being in the *De Compositione Medicamentorum* of Scribonius Lagus, cap. X, first century A. D. (See especially K. Sudhoff, *Geschichte der Zahnheilkunde*, pp. 21, 28, 36, 49, etc.).

account of the Mexican earth-mother Tlacolcōtl or Toci as the patroness of those who let blood, those who take worms from teeth, and those who take worms from eyes—literally “tooth-wormers” and “eye-wormers,” in Aztec *tetlanocuilanque teyxcuilanque* (see Seler, *Vaticanus B*, p. 173, and Bancroft, *Native Races*, Vol. III, p. 353). There can be little doubt that Xpiyoc and Xmucane were originally represented in the *Popol Vuh* story as pretending to be both “eye-wormers” and “tooth-wormers”; but in the extant text nothing is said of eye-worms and there is only a passing allusion to the eyes of Vakub-Cakix as injured or diseased, or both (see below).

In the *Popol Vuh*, Vakub-Cakix is unable to speak because of the pain from his broken teeth and injured jaw; but he makes signs to Xpiyoc and Xmuchane, imploring them to cure him. And then we have the following dialogue, in which the speechless giant is curiously enough represented as expressing himself by signs:

“Two boys, mischievous and malevolent, struck me in the mouth and produced this pain which prevents me from speaking, and I maintain myself only by keeping my jaws and teeth in restraint.”

“Very well, lord. Worms are what molest you. We will take out these teeth, and we will make replacements for you.” “But this not well,” said he, “because, being a lord, I hold my riches in my teeth and eyes.”

“We will put others [i. e., ‘other teeth’] in place of these. We will put in some that have the appearance of bone.” Then they thought of putting in for him grains of white maize, because they are like bone [and like teeth].

“It is well,” he said to them, “proceed to extract them then.” So they took out the teeth of Vakub-Cakix, and in their place they put grains of white maize which gleamed in his mouth.

“Soon his ostentation of a great personage fell away because already he was no longer such, since this state ended with his having his teeth of emerald extracted, which before had made his mouth gleam. Also they [the aged couple] acted as if to cure the eyes of Vakub-Cakix, and on uprooting them, they put an end to the metallic glitter which formerly they had.”

The death of Vakub-Cakix shortly followed, as did that of his wife; and Hunaphu recovered his arm, which was replaced by the

aged couple (in other words, the dawn and the night disappeared, and the sun-god rose with his flabellum hand or arm in place).

The eyes of Vakub-Cakix as a dawn figure are probably stars; and that his nose was identified by some with the crescent moon (as well as with the beak of the great macaw) is indicated by the statement according to which he said: "My nostrils gleam afar, like the moon" (see above). But it is not impossible that he originally had only one eye, for the Morning Star. There can be little doubt that the uprooting or gouging out of his eyes (or single eye) was conceived to have occurred during a pretended operation for the removal of worms; and it is possible that this treacherous act was suggested by the well-known Mexican pictures of a sacrificed human being or god (in profile) with an eye gouged out. According to Seler, this gouging out of an eye symbolizes sacrifice (*Vaticanus B*, pp. 184, 192), and Quetzalcoatl as celestial God of the East is sometimes figured in profile with one eye hanging from its socket, as in the *Codex Borgia* (sheet 51).

In the breaking and extraction of the first or natural teeth of Vakub-Cakix—probably materialized flame-teeth—we have some remarkable resemblances to the breaking and knocking out of the teeth of the Hindu Pushan, which represent the fiery rays of the sun (see above); but here we doubtless have one among many instances of similar mythic concepts originating independently.

The grains of maize (seeds of Indian corn) that became the second or substitute teeth of Vakub-Cakix were probably conceived as the product of the original maize of the dawn period and the dawn land: all things including maize being fabled to have been of gigantic size in that time and that place.

The ancient Mexicans and Central Americans had several maize deities and various myths relating to the origin of maize. In the latter part of the *Popol Vuh*, the first maize is said to have been found in a land to the east (the mythic dawn land), while the first human beings were created by the gods from the yellow and white maize of that land (see Bancroft, *Native Races*, Vol. II, pp. 716-718 and V, pp. 193, 194). Mythically this is the same maize that was originally found by Quetzalcoatl; one account representing him as the wealthy ruler of the Toltec city of Tulla in the ancient time when an ear of maize was an ordinary man's load, being so large that it required both his arms to clasp it (Bancroft, Vol. III, pp. 261, 241).

According to the Navajos, the original seeds of maize and other plants were brought by a turkey-hen which came from the region of the Morning Star (*ibid*, p. 83); and this bird is evidently identical with the sacred turkey of Mexico, called the emerald fowl, to which offerings of maize paste were made (See Spence, *Myths of Mexico and Peru*, p. 186. Seler says it was called the jeweled fowl, *Vaticanus B*, p. 75).

Nothing is said in the *Popol Vuh* as to what became of the body of Vakub-Cakix; but in the original myth it probably mingled with the earth everywhere (not only in the dawn land), while the giant's substitute teeth<sup>20</sup> were broken into fragments to become the seeds of the first maize plants of ordinary size. And it is also probable that the broken and extracted natural teeth of Vakub-Cakix were fabled to have become the precious stones of the earth, which are various colors and are often said to have a fire of their own;<sup>21</sup> while his gouged out eyes were changed into the precious metals of the earth. In the *Popol Vuh*, where the giant evidently has a materialized body, his teeth "shine as precious stones," and his eyes "are as of metal," etc.

Therefore it seems that the fire-giant as a dawn figure was conceived somewhat like the macrocosmic man of other myths, whose living body formed the material universe, or whose dead body became that universe. In the Egyptian *Hymn to Ptah-Tenen*, that god has a hidden body, with his eyes as the sun and moon, etc., and it is said to him that "the staff of life (grain) proceeds from thy back (the earth); thou makest the earth to bring forth fruit" (Budge, *Gods of the Egyptians*, Vol. I, pp. 509, 511). One of the forms of the macrocosmic Rā is that of Tenen, and he is "armed with teeth" (*Litany of Ra*, I, 3, 66, 71). It is said of the Persian Kuni that the sky came from his skin; the earth from his flesh; the

<sup>20</sup> The suggestion for these teeth is of course found in the resemblance between grains of maize and human teeth; and it is quite probable that some of the crude idols of Mexico and Central America were fitted with maize grains for teeth. No evidence of this appears to be extant; but the Hallow-e'en pumpkin heads of modern North America are sometimes given teeth of maize grains, and Sahagun tells us that some of the small images of Tlaloc were moulded of dough, with calabash pips for teeth and haricot beans for eyes. (*Historia General de las Cosas de Nueva Espana*, I, XXI; Spence, *Gods of Mexico*, p. 235).

<sup>21</sup> Anatole France makes one of his characters say that the pearls which serve for the teeth of salamanders are composed of "materialized light" (*Rotisserie de la Reine Pédauque*, IX). A fragment of a rainbow is called "a tooth" and "an angry tooth" in some parts of England (J. Wright, *Dialect Dictionary*, s. v. Tooth).

mountains from his bones and the trees from his hair (*Sikand-gumanik Vigár*, XVI, 8-20). According to the *Elder Edda*, the Scandinavian Ymir's skull became the heaven; his bones, the hills; his hair, trees and plants, etc. (*Grimnismál*, 40); and the *Younger Edda* adds that stones and pebbles were made from his teeth, together with some bits of broken bones (I, 8). The teeth of men and animals are the hardest parts of their bodies, and in the Mexican calendar man the sign of the flint-stone is allotted to his teeth (Kingsborough, *Mexican Antiquities*, Vol. II, plate 75, and Bancroft, *Native Races*, Vol. III, p. 129). In the case of the macrocosmic man P'an Ku of the Chinese Taoists, his eyes became the sun and moon; the hair of his head and his beard became constellations; his skin and the hair thereon became plants and trees, while his teeth and bones were changed into the metals, and his marrow into the precious stones of the earth (Mayers, *Chinese Reader's Manual*, No. 558, edition 1924, p. 186). The Mangaian of Polynesia give a similar account of their Ru, as do the Iroquois Indians of their Chokanipak (See A. Lang, *Myth, Religion and Ritual*, Vol. I, p. 246).<sup>22</sup>

"The sky and the land already existed" before Vakub-Cakix died, according to the *Popol Vuh* (see above); but it is probable that the land was conceived as a barren waste immediately after the deluge, and that the subsequent vegetation was fabled to have come from the dead giant's skin, while his flesh became the fertile soil, etc. It is probable that his skin was originally conceived to have been of a green hue; for the dawn and sunset skies of the tropics are often remarkably green, ranging from a deep olive above to the lighter shades below, where they merge into the yellows and reds. And it is also probable that the green hue of the giant's skin was erroneously transferred by some to his teeth and also to his eyes (whence the allusions in the *Popol Vuh* to "his teeth of emerald" and his "eyes like emeralds").<sup>23</sup>

<sup>22</sup> See also the present writer's "Cosmic Man and Homo Signorum," in the *Open Court*, Vol. XXXV, p. 10.

<sup>23</sup> It is thought by some that "green jadeite" should be substituted for "emeralds" and "emerald" in these allusions, as words for the latter were also quite generally employed for the former by the Mexicans and Central Americans; and as many upper anterior teeth inlaid with little disks of jadeite and haematite have been found in Central American tombs, several of the leading authorities on American antiquities have suggested to the present writer that teeth inlaid with jadeite are to be understood in the Vakub-Cakix myth. But no such explanation can be accepted in view of what is said of the giant's eyes, etc.

Moreover, it is possible that the Vakub-Cakix macaw of the Quiches, as a symbol of the dawn sky, is a mere variant of the Aztec quetzal; for the wing coverts and tail feathers of the latter are green while the breast is scarlet (fiery). And it is also possible that the tooth extraction concept in the myth of the personified Vakub-Cakix was suggested by some ancient story according to which the great macaw or the quetzal originally had teeth but lost them in some such way as those of the dawn giant are said to have been lost.

According to the very unsatisfactory suggestion of Spence, Vakub-Cakix is an earth-god; the extraction of his emerald teeth and the implantation of the maize-seed substitutes being an allegory of the agricultural removal of the green turf of the earth and the planting of maize seed (*Popol Vuh*, p. 42; *Myths of Mexico and Peru*, p. 237). Others take the mythical giant for a sun-god, while Bancroft supposes that he was originally a human monarch (*Native Races*, Vol. V, pp. 184, 187).

## IS INSANITY UNSOCIAL?

BY GEORGE YEISLEY RUSK

IN a recent number of *The Sociological Review* Dr. Alice Raven enumerated the chief characteristics of various sorts of insanity. These, she held, can easily be detected, and the persons afflicted, by immediate detention and treatment in hospitals, can be saved from crime. With the article in general I am in complete agreement. I wish to raise a question about only one statement made in it although it is substantially repeated several times. The statement is this: "In all his thinking he (the insane man) has himself and his own advantage as the centre." (p.287) But is insanity always and in all respects unsocial in the thought of the person afflicted? My observation would suggest that it is not—as we shall now proceed to show.

(1) In some cases the insane man blames *himself*—possibly for deeds which he has done, and is grateful to society for searching him out and trying to redeem him—possibly in larger ways than society has done. One patient, on arriving home in a deluded condition, cried out to his family: "O love that wilt not let me go." He thought that his family had been seeking to redeem him from imagined sins all his life. It is true that even in this case the patient was thinking of his own advantage—but not in opposition to the advantage of society. Yet it is in the sense of in-opposition-to-the-advantage-of-society that Dr. Raven used the term "his own advantage." For earlier she had referred to the "anti-social tendencies which mark all persons of abnormal psychology."

(2) In some cases the chief comfort that the insane man has in his terrors is that no other human being has ever been called upon to go through worse tortures than he is experiencing. He identifies himself with all the most unfortunate of his fellow men—

“even these least.” Life in a hospital is helpful to him because here he can most easily make such an identification.

(3) In some cases the insane man is interested in himself to an unusual degree only as a servant of a real truth which society needs but will not accept. Even when his truth is an obvious delusion, his attitude is not anti-social. Jesus thought of himself as a martyr for truth. Would the author say that therefore he was anti-social? Dr. J. H. Jowett once declared that Jesus was either God-man or mad-man. Would Dr. Raven insist upon the latter alternative?

(4) And in some cases a man remains amid circumstances of great stress for those who will not compromise, with the purpose of serving society, and so goes insane, with the more or less conscious realization that thus he will reveal to society that it is not giving a square deal even to its devoted members. And any society which allows some members—perhaps through the mere fact of having inherited a fortune—to live in wanton luxury while it refuses work to many eager to work at anything at all equal to their intelligence and training is essentially unjust. The ten percent of the people who control ninety percent of the wealth of the country, do not possess ninety percent of the ability. Even when perfectly adventitious causes do not determine the financial status of a man, and when no unfair control of the means of wealth has been resorted to, men are rewarded for their special commercial ability, not absolutely, but geometrically. A slight initial superiority, because of the way modern society is organized, receives a constantly increasing reward. There is no essential justice in such a society. It is true that a man in need can generally get some help from charity, but he may be too *socially* sensitive to seek it—till after he has gone insane and so cannot help himself.

Or perhaps the work offered a man would prevent his carrying out a purpose which *he*, at least, thinks of as valuable for society. Or prospective employers may encourage a man to wait, and still wait, for the position in which he can serve society as he desires—but never actually offer him the position. In any of these cases a man may let his mind fall to pieces to get the help of society to get a proper position and to reveal to society its essential injustice and so aid it to reform. If the gentleness of the little child of Biblical

vision cannot lead society to the place of redemption, perhaps the expense and terror of the growing multitude of the insane will.

But perhaps it may be replied that a man can live *utterly* true to his ideals in the service of society without having to pay the price of insanity—simply by remaining level-headed. But he cannot. Perhaps the modern Calvinist, to take one extreme, thinks that he does so, strong in his faith in the final triumph of his God. But with all his consistency, no Calvinist has ever dared to think through the question of God's decrees, and all of them after assigning an untold section of mankind to eternal torment, are quite ready to go home and eat tenderloin beefsteak smothered in onions. Or, to take the other extreme, the modern socialist. The socialist candidate for president, Norman Thomas, said in a public speech on a hot summer day that increasingly he realized the compromises that he made, and so increasingly was tolerant of those that others made. It is the insane alone who have been utterly sincere in devotion to some truth which, in some aspect at least, they believe might be of service to society. The rest of us either compromise unwittingly with our holiest visions, and struggle blindly on under their waning light, and still hope; or, in the full glare of consciousness we reconstruct for our guidance philosophies which contain no absolute values unmediated by their opposites.

Even when personal complexes must share with society the responsibility for the wrecking of a man's life, these can be read as the result of the insupportable burdens which society has placed upon him. At last, as the result of his life in society, a man by a multitude of at least partly conscious mental acts may give in and gives up. He may let society have its way—but not while he is sane. Thus he is enabled to declare emphatically what society is by the very going insane and permits her to begin her own redemption by saving him.

By carrying out such a program, a man can have a profound influence upon society. All of the modern study of the mind, and the consequent construction of the true laws of happy thought (as opposed to the dogmas of religion through which formerly men hoped to find peace) may be said to have been forced upon society by those who went insane rather than give up purposes which they rightly held as worthy and wholesome. Of course it would have

been better if all men had always been happy and good, and so if it had never been necessary to study the psychology of the abnormal. But at any given time, with most men miserable, the man who goes insane, and so forces society to study the nature of the human mind and discover the laws of happiness for the benefit of all men, and to correct its irrational industrial awards and moral standards, may be conceived of as a social benefactor and in his own character as profoundly social—partly unconsciously, but partly consciously, in so far as he has remained true to his ideals and would not adjust himself to life as it now is. The longest way around is sometimes the shortest way home.

An excellent illustration of how effective such laying down of one's life may be is supplied by those whose lives were ruined by the old methods of education. The observation of the ruin thus wrought has caused the introduction of the project method of instruction into many schools. Even this method will be greatly improved as *its* failures are noted. The lives ruined by the old method were, indeed, ruined. Those ruined, in turn, were cruel or unwise to others. They would not make pleasant companions. Yet in a profound sense they have served the progress of education. By the sacrifice of such lives society has been progressively redeemed. In this knowledge, when even vaguely grasped, is their peace. In this service is their atonement—the only atonement which is morally defensible.

Insanity may, we must then conclude, in very important respects be social. Therefore it is not necessary to tell a patient—as the whole truth—that his failures have been due to his own deficiencies, that his whole past life has been so mistaken that society has been justified in rejecting him, that his labors have had no value, his bitter sacrifices have been useless, his feeble protests against society have had no objective justification, that at best he is a victim of his infantile history, and not at all the martyr of his true ideals. Yet psychiatrists, perhaps inadvertently, sometimes condemn by implication the entire past life of the patient, when trying to tear down the patient's idea of himself and of society so that they can be rebuilt in such wise that the patient will be willing to accept life as it is.

Now, I do not believe that society has as yet so fully become the

"beloved community" that such a view of the past life of a patient can be held in any case to be absolutely true. Insistence upon its truth naturally retards the reviving confidence of a patient in his doctor, and so in society, whose representative the doctor is to the patient. A patient may rightly believe that as a result of his tragic experiences, and his deep ponderings, he has come upon profound, revolutionary truths, which society is not ready to accept, and that it rejects him because he is "a voice crying in the wilderness." The possibility of all this being the case I believe that the psychiatrist can safely acknowledge, and so win the patient to reconciliation to society far more quickly than by the present denials, confusions or evasions in the matter. (For a single illustration of the uncertainty which now prevails in psychiatry about this matter, consult: *Understanding Human Nature* by Alfred Adler.) Imply that an insane person is anti-social until converted by the particular evangelist in charge, that at present there is nothing of sacrificial worth in his life ("Nothing in my hand I bring, simply to thy *word* I cling"), and he will remain unconverted for some time. But make clear that psychic health does not demand a denial of the value of devotion to individually formulated truth, and a patient will be reconciled quickly to his doctor and to society—in any respect in which he is not so already.

Freudianism, which views insanity from the standpoint of its origin in the initial experiences of those afflicted by it, and Adlerism, which views insanity from the standpoint of the efforts of the individual to master his environment, should be supplemented by a theory of insanity, and by a technique for its analysis and cure, based on its social implications—both the failures of society to meet the normal needs of the natural human being and the social ideals in the service of which the patient has assumed burdens which have crushed him. Until this has been done, our treatment of insanity will be unstable, ever defeating its own efforts, inadequate.

Any tendency on the part of a patient toward vindictive bitterness against society because of what he has endured, may be overcome by revealing all the members of society as the victims of complexes and unfavorable conditions as well as the patient, and so as worthy of the same respect (altho perhaps in varying degree) that he asks for himself. At length he will see society as a drama of conflicting forces out of which is slowly being evolved "the beloved

community," which is the Kingdom of God. In this evolution his struggles have an essential place. This is the teaching of religion, for "the things that are despised did God choose." And it is the teaching of science, for in science nothing that is can be denied its place in the final ordering of experience. In the physical sciences, we must in all formulas take account (implicitly) of every quantum of matter and force. And if we are to develop a social science, we cannot permit ourselves to regard any state of consciousness of any soul as of no ultimate significance, which the totally invalid cannot have.

All detention of a patient in a hospital as too unsocial to be at large for his own good or that of society, till he renounces faith in himself and accepts the conditions prevailing in the hospital—for instance, continuous immoralities, as willingly as he would the truly necessary injustices out in the world; or until he becomes as docile to superiors as is a hundred percent American, is unjustified. No lover of mankind has ever been so. Anna Freud in the January number of *The International Journal of Psychoanalysis* (p. 37) supports the former of the two points which I have just made, and so by implication the social theory of insanity which I am advocating. She seems to disapprove of insistence by authorities upon prolonged hospital life for a patient whose super-ego under the conditions of hospital life increases its demands as it would not in normal life. Therefore she seems to believe that the actual good of the patient should guide his treatment, that he is not to be a pawn in the hands of his doctors, to be made over into a creature who simply accepts his environment. She regards the patient's ideals as the factor which should determine his environment, not vice versa. Therefore she seems not to regard insanity as unsocial, as something to be rebuked, stamped out. Rather, she seems to be laying the grounds for its recognition—at least in one aspect—as social because a constituent part of a personality not essentially at war with society, and for its treatment as such. She writes:

"By the kindness of Dr. Ferenczi I have had an opportunity of seeing the notes of a mistress at one of the modern American schools, the Walden School. This mistress, who has had a psycho-analytical training, describes how neurotic children whose home-standards are strict, and who comes to her school while still in the kindergarten age, after a longer or shorter period of holding back

in amazement, grow accustomed to the extraordinarily free atmosphere and gradually lose their neurotic symptoms, most of which are reactions to breaking the habit of onanism. We know that with an adult neurotic it would be impossible to produce a similar effect. The freer the environment into which he finds himself transplanted the greater is his dread of the instinct in question and, therewith, the more marked the accentuation of his neurotic defence—reactions, i.e., his symptoms. The demands made on him by his super-ego are no longer susceptible to influence from his environment. A child, on the contrary, once he begins to modify his standards, is inclined rather to go a long way in this direction and allow himself more latitude than even the freest surroundings could permit him."

But of course the outstanding author and advocate of a social interpretation of insanity is Trigant Burrow in his *The Social Basis of Consciousness*. And perhaps we shall not do justice to this aspect until we employ "group analyses"—such as he suggests. But even if we never go so far as that, we ought to give much thought to this aspect of the matter and recognize it in our treatment of patients—as some private psychiatrists are already doing largely empirically.

Yet even Freudianism approaches close to the social interpretation of insanity when it traces the origins of psychoses past the experience of the individual to that of the race. Adlerism does so likewise when it views insanity from the standpoint of the *purposes* of the individual. Perhaps these—at present inimical theories—will find their conscious reconciliation in a social theory of insanity—as thesis and antithesis in their synthesis. And perhaps thru a social theory of insanity, psychiatry will be brought into a fruitful relation to social reform—to the unlimited benefit of mankind. Perhaps in psychiatry we shall secure an exact knowledge of the places where society presses with too great a pressure upon the individual and how to reward the dreamer of dreams with reasonable means of self-expression before he turns his back upon reality in discouragement, thus at once making unnecessary the stern sacrifice of the insane for society and causing its mental health to become sound to the core.

Until we come to acknowledge that the insane are not necessarily anti-social beings, (1) we shall not deal with them wisely; (2) we shall not deal wisely with reformers who are not adjusted to society

as it is, yet who have not yet broken down (for instance, John Ruskin before his break-down); and so (3) we shall not be able to induce them to turn to psychiatrists for help before a crisis has overtaken them. To induce people to turn to mental doctors for aid in carrying their purposes into effect as readily as people now turn to physical doctors for the re-establishment of their bodily health—without any sense of shame or inferiority—is the great need of our contemporary life. It should be the final aim of all psychiatrists. But, let me insist, this they cannot do until they have divorced in the public mind mental sickness and fundamentally un-social attitudes.

## PLURALISM, LIFE AND "VALUE"

BY VICTOR S. YARROS

SINCE the brilliant and often paradoxical William James startled the metaphysicians and philosophers of his day by arguing for the possibility, or probability, of a "pluralistic" universe, not a few writers have ventured to supply additional—and stronger—props for that speculation.

The latest contributor to the discussion is C. E. M. Joad, the British author and exponent of recent philosophical thought. He has published a book on *Matter, Life and Value*, and, as the title perhaps indicates, the argument throughout is an effort to demolish the basis of Monism and to prove that pluralism is, at least, more consistent with the facts we human beings are forced to face and to explain.

We cannot here consider the argument in all its details, but some of Mr. Joad's views, methods of forming and drawing conclusions, and rather curious logic will be examined and analyzed.

In the first place, he questions the right of any school of thought to make definite statements concerning the nature and complexion of the universe. We do not know, he says, the *whole* of the universe, and consequently our notion about it must necessarily be *partial, incomplete and inexact*. This is true enough, but the reason Monism has found wide acceptance is to be found in the simple fact that it gave a better account of what we did and do know of the universe than does any other theory. If new knowledge, additional data, tend to refute Monism and enthrone pluralism, the philosophical situation is undergoing a great change, and serious thinkers will have to readjust their view.

Mr. Joad says further that he has never been able to find a good

reason why the universe should be reduced to one thing instead of two or more things, or principles. Yet the reason or reasons have been presented again and again, and most thinkers have found them cogent and satisfactory. It is the business of the pluralists to refute and invalidate them, and this they have scarcely succeeded in doing thus far.

The quintessence of Mr. Joad's own argument may be summarized as follows:—We are bound to conceive of or construct the mental model of the universe with the materials we possess, ignoring nothing and assuming nothing. Well, the actual materials, contends our author, include at least three independent existing "reals"—namely, Matter, Life and Value. No philosophy, it is contended, has covered and explained all reality, though some systems have furnished tolerably respectable accounts of some realities. The *physical universe* is "given." It is a fact from which the human mind cannot escape. The *Life Force* is another and distinct fact; it resists any effort of thinkers or rhetoricians to merge it with matter. The latter, indeed, seems to act as the instrument or servant of the former. Finally, there emerges the *World of Value*—distinct, self-existent, supreme. In its highest forms and reaches, according to the author, life contemplates and exalts value. Mystics, poets, prophets and idealists excel all others in their appreciation and realization of value. The goal of evolution is to be conceived as "continuous awareness of a world of objective value." When that final stage is reached, "the Life Force will come to rest in the contemplation of reality."

However, this ecstatic contemplation of reality fully revealed will never be possible to the average man. Only the happy few, the chief actors in the evolutionary drama, will catch fleeting glimpses of the infinite, the realm of pure being. Only the life force in its totality will rejoice in the apprehension of the complete reality.

Truly, a fearful-wonderful metaphysical system! Alas, it sounds better than it is. Let us reduce it to its elements and see what is left of each of them after majestic and noble words have been translated into plain terms of speech.

First of all let us ask whether it is true, and universally admitted to be true, that matter, life and value are *distinct, self-subsistent reals*. This claim is opposed to all modern physics and astrophysics. What is matter? We do not know. It is composed of atoms, and

the atoms are miniature solar systems with positive and negative units of electricity as the planets. Well, what is electricity? Again, we do not know. We do not know the stuff of our material universe. Hence we have no right to call it "material." We have no right to call it spiritual, or anything else, either. We simply note its behavior in certain circumstances and describe it.

In the second place, let us ask our metaphysician if he knows where matter, no-life ends, and Life begins. He cannot tell us, and no one else can. The line is far from clear or bold. We do not know what life is, what causes it to emerge, and just what occurs when it does emerge. We know that living beings act differently from things that are not alive, but that is all. For practical purposes, to be sure, life is a distinct real, but metaphysics and philosophy are not satisfied with practical purposes. Life and matter may not be as independent of each other as they seem to be. We simply must suspend judgment upon the question of their interdependence or mutual independence.

Now, as to Value. It is to be granted, of course, that value *implies* life. Where there is no life, there can be no thought, no contemplation, no wonder and awe, and hence no conception of value or values. But—is value a human monopoly? The Life Force informs, and acts through, the lower animals and the tiniest insects as well as through evolved and "Godlike" human beings. The most marvelous thing in nature, said Darwin, is the ant's microscopic bit of matter we call its brain. Does that bit of matter generate value? If not, at what point *is* value born?

But, insists Mr. Joad, value though it implies life, is yet a distinct and self-subsistent real. Is it? Modern thought holds that value is significant *only because it enhances and exalts life*, not for its own sake, if we can think at all of value-for-its-own sake. Value is a name we give to qualities or manifestations of Life, which makes our own existence desirable, pleasant, thrilling, worthy from a certain point of view. Life, even animal life, would be impossible without value—without, that is, altruism, sympathy, mutual aid, even sacrifices. How, then, can it be maintained that value is distinct from life? And in what sense can it be called self-subsistent?

Value has always, and in all religious systems, been regarded as a condition of the good life—either on earth or in some other and better world. Mr. Joad renounces personal immortality and the

whole notion of life after death so far as individuals are concerned. But he cannot deny the importance of value—of goodness, truth, beauty, wisdom—to life on earth. It is therefore, inconsistent for him to assert the independent, self-subsistent reality of value, apart from life.

He may claim, if the words convey any meaning to him, that, *in addition* to the limited, prosaic values of our sublunar existence, there is the ultimate value of the contemplation of the Infinite of Pure Being by the abstract, disembodied force of life. Frankly, to most modern thinkers such phrases must seem empty and barren. How does a life force engage in contemplation, and to what end and purpose?

Mr. Joad appears to know what the goal of evolution is. No one else knows that,—at least, no one else who thinks scientifically. The ignorant, naive fundamentalists imagine they know the goal of evolution, but who attaches the slightest significance to their childish ideas?

The simple truth is, no human mind can hope to form any hypothesis regarding the purpose or goal of evolution. The guesses and notions of the past are crude and naive, and we have nothing to substitute for them. Mr. Joad himself has only contempt for the notion that the purpose of the universe is "the preparation of a certain number of human souls for perfection." But even if we suppose that *all* human beings are to achieve perfection at some remote day, it would be rather ridiculous to assume that the universe was set developing just for the purpose of fitting the human race for what is vaguely called perfection. What larger purpose would that purpose serve?

Apparently, Mr. Joad believes that certain privileged persons—poets, mystics and prophets namely—are able to read some of the secrets of the universe, to enjoy ecstatic visions of reality. Then why have these happy few never been able to communicate their special knowledge to the rest of us? What philosopher, poet or mystic has vouchsafed to us a tolerably satisfactory account of Reality? When they try, words fail them, or rather, *ideas* fail them. They cannot describe what they feel or think they see. They talk of communion with the Whole, or with God, or with nature. Some of them say that their visions convince them that the universe is friendly to Man, and they conclude, therefore, that the alleged

human craving for immortality—a sheer assumption—must be gratified somehow and somewhere, and that life must ultimately realize itself in some glorious and permanent form. Unfortunately, those who talk about their intuitions and visions are not necessarily good interpreters of these phenomena. Professor Leuba thinks that psychology and psychiatry have more prosaic and scientific explanations to give us of the alleged glimpses and fleeting contacts with the infinite.

After all, the staunch and unterrified orthodox thinker, who says he accepts God on faith and finds the commandments and injunctions of God in some book, is more rational than the mystical metaphysician. The former knows that the ways of his God are inscrutable and mysterious, and that finite minds cannot enter into any actual relation with the infinite, perfect and eternal. The latter images vain things and evolves theories out of his own inner consciousness, which he often misreads.

No, it is idle to pretend that Pluralism explains any facts left unaccounted for by Monism. On the contrary, it raises more difficulties than does Monism. The agnostic leans to the latter view because its simplicity accords with the observed unity and order of nature. It may not solve the ultimate problem, but it emerges out of the study and contemplation of the phenomena of nature, *including the human spirit*. The doctrine of relativity re-enforces Monism. The new physics, with its striking comparisons of stars and atoms, also re-enforces the Monistic conception. The modern idea that mental and physical are merely *two aspects of the same occurrence* is clearly Monistic in its implications.

To repeat, we may not know or understand the whole of nature, but we cannot build on the unknown and the unrevealed. It seems certain that what we do know points to Monism.

*"The International Journal of Ethics Seeks to Clarify Theory and Improve Practice."*--

T. V. SMITH, Associate Editor.

SOCIAL problems will be separately analyzed in special issues of the *Journal* during 1930. Within the province of this publication lie both the central field of ethical knowledge and practice and the bordering fields of law, politics, economics, literature, and religion. The first of these related topics is Law and the Community.

**IN THE APRIL ISSUE—the ethics of law enforcement analyzed.**

*The International Journal of Ethics*

Managing Editor, JAMES H. TUFTS

Associate Editor, T. V. SMITH

English Editor, C. DESLISLE BURNS

EDITORIAL COMMITTEE

FELIX ADLER, New York

CHARLES M. BAKWELL, New Haven

JOHN DEWEY, New York

G. C. FIELD, Liverpool

L. T. HOBHOUSE, London

HAROLD HOFFDING, Copenhagen

M. JOURDAIN, London

J. M. MACKENZIE, London

J. H. MUIRHEAD, Birmingham

ROSCOE POUND, Cambridge, Mass.

FRANK THILLY, Ithaca

JOHN H. WIGMORE, Chicago

{ *Subscription price, \$4.00 a year; single copies, \$1.00.* }  
{ *Canadian postage, 15 cents; foreign postage, 20 cents.* }

THE UNIVERSITY OF CHICAGO PRESS

Publishers: DAVID NUTT, London—G. E. STECHERT CO., New York—FELIX ALCAN,  
Paris—Akad. Verlagsgesellschaft, Leipzig—NICOLA ZANICHELLI, Bologna—  
RUIZ HERMANOS, Madrid—RENASCENCA PORTUGUESA,  
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; On the contribution that the different countries have given to the development of various branches of knowledge; On the more important biological questions; On the great economical and sociological international questions*, 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 (110)

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