HAS HISTORY A MEANING?

In 1934, the eminent English historian, H. A. L. Fisher, admitted somewhat mournfully that he saw no unfolding plot, no rhythm or predetermined pattern in the course of human events. "These harmonies," he said, "are concealed from me." History, as presented to his scholarly mind, was simply the succession of one common emergency after another, wave upon wave, and he admitted only one rule for the historian—that "the contingent and the unforeseen" play a major role in the development of human destinies. In 1935, the American historian. Charles A. Beard. confessed to a similar credo, formed early in his career: "It may be that some larger world process is working through each series of historical events; but ultimate causes lie beyond our horizon."

So say—or said—the experts, and so have said the great majority of conventional historians.

Has, then, history no deeper meaning than the events themselves, which history recites? Must we be resigned to the view that a good historian will never promote some theory of "ultimate causes" and offer evidence in its support?

It is on this question that the average man turns away from the typical professional historian and looks to someone else. For the average man is the practical man—the man who thinks that knowledge is not knowledge unless it can be put to some use; and history, after all, is supposed to be a kind of knowledge.

The writer of history who earnestly believes he has found out some secret withheld from other men is always the one who reaches the large audience, who makes some mark upon human history himself. It was Karl Marx who wrote and studied history, not, as he said, simply to understand it, but in order to *change* it—and change it, in some measure, he did. Oswald Spengler was another scholar who broke with the

academic dogma. He declared for the Destinyidea, in which, he said, "the *soul* reveals its world-longing, its desire to rise into the light, to accomplish and actualize its vocation." And Spengler, right or wrong, affected the current of human affairs by so declaring.

seems little need to "prove" this There view—that historians who contend that history is a great drama, who lay upon the human players in it a sense of destiny, and give promise of a great fulfillment to be won: that these are the historians who are listened to by mankind. They, and only they, can win the hearts of ordinary men, the people who are unable to understand or appreciate the rule of the professional historian against philosophical or religious interpretation. want history they can use—a book that will point to some definite conclusion; and, depending upon the quality of the book and the readers' eagerness to believe, they will praise it enthusiastically and recommend it to all their friends.

Several such books are before the public at the present time, and while none of them is exactly "popular" in content, it may not be doubted that they are having or will ultimately have a farreaching popular influence. For these books seem destined to establish a new convention in the writing of history—the convention of belief. Among them are the works of Arnold Toynbee (his most recent is Civilization on Trial), Richard M. Weaver's Ideas Have Consequences, and, as history of a sort, du Noüy's Human Destiny. All of these books, in some way or other, are plainly attempts to affirm the "rhythm" which Mr. Fisher could not see and to describe the "ultimate causes" not evident to Mr. Beard. The climate of opinion has changed, and faith and belief are on the march. These authors, Toynbee, Weaver, and du Noüy, have challenged the moral neutrality of historical studies. History, they say, has a

meaning, and they proceed to tell us what they think it is.

Mr. Toynbee, for example, in his *Study of History*, informs us: "Christians believe— and a study of History assuredly proves them right—that . . . the brotherhood of man is impossible for man to achieve in any other way than by enrolling himself as a citizen of a *Civitas Dei* which transcends the human world and has God himself for its King." Mr. Weaver is impressed by "the chivalry and spirituality of the Middle Ages," and, according to an unfriendly critic, has borrowed extensively from papal encyclicals for his exposition and argument. Mr. du Noüy, as is well known, likewise felt impelled by missionary zeal on behalf of the Christian tradition.

Ten or twelve years ago, the best historians told us that the meaning of history was terra incognita, and now we are given, not gentle hints, but blueprints with full directions on how to achieve the Good Society. What are we to make of this vast difference of opinion among historians? Who is right? Is anybody "right"? It would be a great mistake to suppose that the books just mentioned are "nothing but" examples of special pleading for a theological interpretation of human history. It happens that they are also brilliant essays on the defects of modern civilization. In many respects, they represent the moral energy of skepticism turned against itself, being vigorous protests to the theory, offered in the name of "Science," that history is and must remain a monotonous scroll of facts, barren of any deep meaning for the moral individual.

This issue stands out as the only thing worth talking about in connection with the social sciences. For illustration, read the review and correspondence sections of almost any copy of the *Scientific Monthly*. The learned gentlemen of laboratory and field are arguing about whether or not man has "free will," whether telepathy is a fact, and if so, what it means, and whether a scientific writer should dare to "mix science with metaphysics," or, as James Jeans attempted, to

"analyze the mathematical abilities of the creator of the universe."

The Scientific Monthly itself is solidly behind the skeptical position, for skepticism is the convention that is being attacked. SM has little patience and seldom a fair hearing metaphysical thinkers like Mr. Toynbee and Mr. Weaver. This editorial bias becomes evident in the choice of reviewers. Mr. Weaver's *Ideas* Have Consequences, for example, is discussed in the May issue by W. E. B. DuBois, of the National Association for the Advancement of Colored People, and this reviewer quite naturally fixes on Mr. Weaver's unhappy choice of the Southern Gentleman to represent Culture and Idealism. Mr. DuBois cannot see why "a white man should own my body and soul just because he can spout Cicero," which is a fair observation to make about some southern plantation owners, although it hardly does justice to the serious burden of Mr. Weaver's argument.

But if you turn to Charles Clayton Morrison's review of *Ideas Have Consequences* in the Christian Century (May 5), you get the idea that at last a Daniel has come to judgment in the field of history. Mr. Morrison's high praise, as he reports the contents of the book—what it sets out to prove, and the supporting evidence—seems pretty well justified. And Mr. Morrison, no more than Mr. DuBois, thinks well of human slavery. But then you look at the facing page, and there . . . as if to prove that there is really no hope for the modern reader . . . another editor of the Christian Century, Mr. W. E. Garrison, attacks the book as eagerly as Mr. Morrison has praised it, and his observations, too, seem important and well-Here are two mature Christian conceived. thinkers, both on the staff of the leading religious journal in the United States, one of whom declares that with "relentless penetration, Mr. Weaver lays the inward corrosion of Western civilization," while the other finds the book "fatally fallacious in its argument and false in its conclusion."

So, finally, it becomes clear that the question, "Has History a Meaning?" is one that neither the best historians nor the leading critics and reviewers can agree upon at all. Thousands of volumes of careful historical research, easily available in our great modern libraries, can contribute practically nothing to the problem of what history is really about. The same inconclusiveness haunts the philosophical evaluation of the more exact sciences. Whatever our civilization may have accomplished, it has left the question of truth right where Pontius Pilate set it down some nineteen hundred years ago. If, tomorrow, a plumed knight came back from Ultima Thule with the holy Grail under his arm and eternal wisdom on his lips, we wouldn't know whether to take him over to the Columbia Broadcasting Company or report him to the FBI. If a child were again born in a manger and later walked among men, offering to instruct them in the mysteries of the Kingdom of Heaven, we should have to admit that whether or not he spoke truly was anybody's guess.

The modern world, in short, is wholly without guidance when it comes to judging between theories of meaning, and in order to reject theories of no-meaning, it feels obliged to argue for ancient allegories in the name of religious truth. If this grave situation cannot persuade us of the need for practical study of philosophy, nothing will. Without philosophy, how can we know when to control our hearts, which are naturally allied, as they should be, with the appeal of men who assert that life does have a meaning, so that we may avoid being carried away into some new-old box canyon of sectarian religion? How shall we judge of Mr. Toynbee's evangelical conviction? He may be a bold opponent of sterile skepticism, for which we may thank him, but that does not make him our best guide, philosopher and friend to the end of the line.

And before we reject Mr. Fisher's conception of history as nothing more than a planless jumble of events, we must decide what to

accept as evidence that we know how to recognize a "larger harmony" when we see one. We can of course wait for Mr. Weaver to tell us, but he might be wrong. Unless we adopt a *reasoned* idealism, we shall have to admit, as some others are admitting, that not philosophy, but two great wars and the statistics of divorce and juvenile delinquency have made us believe in God again.

Unless we have found good reasons for believing that a symmetry of cosmic purpose hides behind the chaos of historical events, there will be pith in the criticism that Mr. Fisher and Mr. Beard were more rational in their doubts than we are in our enthusiasms. And suppose—as is probably the case—that both the believers and the unbelievers in the meaning of history are partly right and partly wrong? How do you tell who is right, how right, and when? Or are you going to add to the controversy only a religious "Amen!" or a scientific "Oh yeah"?

We have to go back to the beginning of things, or at least, the beginning of thinking about them. It will do us no good to fight on one side or the other in a war between old and new conventions. It is a question, first, of deciding, "What must I believe about myself, my life, and the world?" and then of, "What dare I believe, in addition?" Having settled these questions tentatively, anyhow, a person is ready to read and think over the Sermon on the Mount, or the Upanishads, and inquire, as a few are now inquiring, what was Gandhi's theory of history, or Emerson's or Tolstoy's. It is probably as silly for a man to suppose that he can find thoroughly workable answers to all his questions all by himself as it is for him to think that he can get them, ready-made, from somebody else. The first thing to be learned from history, personal or otherwise, is that truth, whatever else it may be, is never second-hand.

Letter from ITALY

Naples.—An Italian proverb says, " *Non ogeni danno viene per nuscere*," that is: Not every damage harms one. Italy's defeat has stirred up all the problems which concern the life of the nation. Among the most important questions are the school and education. Some months ago, I read an article in *Reader's Digest* about "Our Vanishing Schoolteachers." This presents a dark picture of education in America, but the Italian situation, also with respect to schoolteachers, is most discouraging.

Italian education has three divisions: Elementary School, Middle and High School (Scuola Media) and University. The Elementary School gives only the skeleton of culture and the tools indispensable to the common life. In the Middle and High School, the pupil learns to connect the past with the present; and here he raises his wings to dreams of the future. But nowhere is the soul of young people more easily confused than in this type of school, where the child becomes a boy and a young man. I can't pretend to judge about the quality of a strong education or a mild education. It depends upon the character of the teacher and the disposition of the pupil: the two must meet, if the instruction is to be profitable.

At present, the students spend too much time in school—30 hours weekly, on the average. In most schools, especially in big towns, the pupils are constrained to sit still for four, five and sometimes six hours without relief for even ten minutes. Then they go home (often by train), where they must eat and perform their tasks. When does the boy play; how can he have recreation?

As to courses studied, mathematics is taught adequately, instruction in physics and chemistry is necessarily faulty, due to the lack of experiments and practical applications. Much better is the teaching of history, philosophy and classical languages. Italy is the country of classicism. Here, more than in Greece, you can see how vivid is the tradition of beauty and wisdom: you can live in Hellas, contact the Latin world, experience the beauty of the Renaissance. You are enriched by the magic sound of Greek and Latin languages and enjoy the visions of Dante's *Commedia*. But this takes a lot of time and begins to be a luxury.

Certainly, we have good schools and we can say that an Italian student who passes the examinations after eight years of classical Middle and High School is a very well-educated boy. These studies, however, conceal a danger: they sharpen the critical mind, but enfeeble simplicity and neglect mechanical work. Too often we must remark that our young people are bombastic and tediously pettifogging, especially when enthusiasm is the result of a bad effort. One is reminded of the young man who tries to catch the clouds and to sell vanities. This is a bad inheritance and ought to be subdued with all our force—particularly today, when we need to make our best effort in gaining friendship with all nations.

I am convinced that UNESCO could succeed if it proposed to all member States that each government engage in the propagation, through the schools, of the ideal of brotherhood; and this might be done by contacting individual students of all Universities and High Schools first by letter. Later, UNESCO might make possible more personal intercourse among the student youth, in the hope that the young people may attain what older and more experienced persons could not hitherto accomplish: the freedom of the world.

ITALIAN CORRESPONDENT

REVIEW THE GERMAN PROBLEM

THE new Human Affairs pamphlet, *Is there still a Chance for Germnay?* By Karl Brandt, should be read for at least three reasons. First, it describes the actual conditions of the German economy, today—which means, in human terms what individual Germans are getting to eat, today and tomorrow; second, it proposes a practical program for the rehabilitation of Germany; and finally, it illustrates the vast confusion caused by wartime propaganda.

Our interest is with this third reason, for propaganda for war seems to operate after the war in a manner ruinous to peace. A government can order its armies to cease firing, but it cannot order its population to cease hating. The moral seems to be that you can't make peace with propaganda, and that you can't make war without it, which is another way of saying that if wars are necessary, peace is impossible, or so it seems.

In any event, the problem of dealing intelligently with the needs of the German people has been vastly complicated by the popular hatred generated on behalf of the war effort in the United States. Mr. Brandt quotes Herbert Hoover on the program— now being carried out—of dismantling a total of 968 German industrial plants in the American, British and French zones:

At a time when the world is crying, even dying, from lack of industrial production we apparently pursue the policy of destruction of the gigantic productive equipment in the Western zones of Germany. It means less essential goods to all Europe, greater delay in the recovery of the world and larger drains on the American taxpayer. I can only repeat a statement in my report of ten months ago, "The removal and destruction of plants (except arms plants) should stop . . . we can keep Germany in economic chains but it will also keep Europe in rags." And, I would add, it will keep food scarcity and high taxes in America as we vainly spend a billion a year to keep alive these millions of idle Germans.

The "logic" behind the dismantling program is exposed by Dr. Brandt as an offshoot of

Morgenthauism—the development of a dogma rather than an argument based on the necessities of the German economy of the present day. (Dr. Brandt is an anti-Nazi German economist who came to America in 1933. Having served as economic advisor to the Chief of Food and Agriculture in the Office of U.S. Military Government for Germany, he writes of Germany's problems from intimate personal knowledge.)

This pamphlet is documentation for the judgment of a recent New York *Times* editorial:

The central fact in Germany today is that under the absolute rule of the victors Germany has been reduced to a slum and penal colony, constituting a political and economic vacuum. While most European countries have recovered nearly to their pre-war production level, and sometimes beyond it, production in the Anglo-American zones is only about 40 per cent of 1936. This is not because the Germans do not want to work but because of the Allied policy of economic strangulation, which has crippled both industry and agriculture.

The *Times*, as Dr. Brandt points out, was once an exuberant admirer of Mr. Morgenthau's ideas about what should be done to Germany. Such opinions have now changed, but the policy conceived under the stimulus of wartime attitudes is not so easily repaired. From the beginning, AMG in Germany had to operate under the limitations of a program that was basically impracticable, and "for any constructive move made, the Military governor was promptly subject to searing vituperation from large sections of the press and most of the radio commentators in this country."

Dr. Brandt calls Germany's food deficit *permanent*, if present arrangements are allowed to continue, and points out that the dismantling of factories in Bizonia has strengthened "the common belief that a deliberate policy of exterminating a substantial part of the German population is being followed." From this and similar causes, a sense of despair is growing among the people, whose hopes, once high, that the war's end would bring opportunity for the

beginning of a new life, are dying out. This despair, says Dr. Brandt,

is beginning to suffocate the wholesome process of acknowledging errors of omission and commission concerning the heinous acts of the Nazi regime and contrition on the part of the most responsible segment of the German population. It is sweeping away the natural and real appreciation of the aid which uncounted millions of individual Americans are giving to an even greater number of individual Germans and their families in a real flood of food and clothing parcels. [Up to July 1947 over 14 million private parcel gifts had been mailed from the United States to individuals in Germany, not counting parcels expedited through CARE, CARITAS, and other organizations.] The despair depreciates even the aid given by the American and British governments in the form of food loans and gifts, without which the major part of the population would be dead. It prepares the ground for a revival of militant nationalism. Such nationalism is little else than a straw for which people reach when they feel themselves isolated behind the barbed-wire fence that separates them from the world.

The recent agreement of Western powers to unite the American, British and French zones in a single economic unit, if it can be put into operation, is a step in the direction of Dr. Brandt's recommendations. However, under the present plan, the military occupation will continue, and although the 45,000,000 people of the three zones (there will be 49,000,000 when all prisoners of war are finally returned home) may draft their own constitution for a West German Federation, form state governments and elect representatives, the Allied military governors will remain with over-all veto power to keep the temporary nation decentralized and otherwise exercise control. This is something less than the "independent state subservient to no power, but which co-operates of its own free will with Western Europe" advocated by Dr. Brandt, and whether the West German Federation, if it comes into being, can restore hope and self-respect to people who have endured years of "economic paralysis and resulting political bitterness, despair and anarchy," will remain to be seen.

The basic obstacle to an intelligent policy in relation to the German problem is the deep-seated and widespread notion that the Germans have no "right" to want either sovereignty or self-respect, after "what they have done." The closing section of Dr. Brandt's pamphlet, the most important of all, deals with the root of Germany's future in the longing of the people for "law, justice and human rights," and for liberation from the rule of brute force, yet this human need is precisely what is most ignored, by both the Allied governments and the people at home. Germans are thought of as a vast, depersonalized guilty mass, and newspaper and magazine articles which treat of the German problem nearly always emphasize political or utilitarian objectives to be achieved, toward which Germans may be used as "means." They are to be a "buffer" against the communist threat, or their productive capacities are needed to balance the European economy. We seldom hear that they are human beings like ourselves, with the same individual hopes, the same desire for moral freedom and self-determination.

Dr . Brandt's pamphlet (available from the Henry Regnery Company, Hinsdale, Ill.) goes to the heart of the German problem and is a "must" for those who want to understand what is at stake in Germany, today. For further reading, we have five books to suggest, all of them dealing with the Nazi epoch of history. These books are important because they form a study of the enormous psychological influence of the Nazi movement, and show in some measure, what were the reactions to it of various types of Germans and their respective roles in this great historical tragedy. Geroge Frederick Kneller's Educational Philosophy of National Socialism (1941) was written as a doctoral dissertation at Yale University by a young Englishman who lived and studied in Germany. His book explains the rise of the Nazis in terms of the social and psychological forces of the period and enables the reader to understand the extraordinary emotional drive behind Nazism, while it lasted. A book of similar value is Stephen H. Roberts' The House that

Then, Confessions of a Hilter Built (1938). European Intellectual (1946)by Franz Schoenberner presents the story of a sophisticated editor, a liberal and anti-Nazi. Somehow, this book is disappointing in its treatment of the subjection of Germany by the Nazis. There is good description, but little penetration. writer is urbane and liberally "correct" in his opinions, but lacks the depth of analysis one feels to be necessary for historical understanding. Schoenberner was editor of Simplicissimus, the famous humorous magazine of Germany. The von Hassell Diaries, published in London this year, presents an entirely different picture—the story of the Army attempt to assassinate Hitler, told by a civilian member of the conspiracy, Ulrich von Hassell, who was executed in 1944 after the bomb explosion failed to kill the German leader. The courage and dignity of the men and women who figure in this book are of vital significance to any appreciation of the difficulties that confronted statesmen and army officers opposed to the Nazi By far the best book we know of, however, on the unhappy course of Germany between the two wars is Pearl Buck's How it Happens, published last year. Here is an unforgettable picture of a German family—the story of how a middle-class business man who thought himself a "liberal" was gradually converted to National Socialism, and how his daughter was not. The daughter, now living in New York, told Mrs. Buck the story. In a brief foreword, Mrs. Buck explains the circumstances of how the book came to be written; how, wanting to know more about what had happened to Germany, she sought out in New York a German woman who was anti-Nazi, but who "thoroughly understood how Nazism had laid its hold on her people." Mrs. Buck's introduction to her book may also serve as the reason that we have given so much space to Dr. Brandt's pamphlet, and have called the attention of our readers to five volumes devoted to the Germany of our time:

We never can really know the truth about anything unless we understand it, not only from our own point of view, but from the point of view of every other people concerned in it. I could not understand the two world wars until I understood them from the German point of view as well as the American, and certainly I could not understand Nazism, unless I also understood it from the point of view of the German people.

There must be many other Americans like me. What I have heard from my German friend—for certainly we became warm friends—I now put down for them. I put down what I learned not only for some Americans, but for all. As our talk developed, I found myself saying again and again —"But that is the way it is in America, too."

What has happened in one country, to one people, can happen to any other, under like conditions. So I have called this book *How It Happens*.

COMMENTARY ALL THAT MATTERS

IT is not pleasant—but it is necessary— to read the books now being printed about the German concentration camps. It is necessary to realize what some men will do to other men, and to try to understand, if this is possible, the processes and forces which are at work in cruelties and depravities of this magnitude.

We have before us a book on Buchenwald that is different from other accounts, for while the horror, the torture and certain destruction for many are all described, this book is really about the deathless hearts, the unbending spirit, that were to be found among the early victims of Buchenwald. It is Ernst Wiechert's Forest of the Dead, published in New York in 1947. Wiechert was a successful German writer— one who lived apart from crowds on a farm, and who was taken and sent by the Gestapo to Buchenwald in 1938 because he refused to conform his writings to the Nazi party line. Loving Germany, he could not leave; loving freedom, he could not stay; so he joined that strange combination of the best and worst of mankind, the prisoners of a Nazi concentration camp. Wiechert had no political opinions. He was a Lutheran who lived by the principle that "the poor of the earth" might "knock at his door at all hours." His book ends with this inscription:

> to the dead—in memory, to the living—in shame, to those to come—in warning.

Forest of the Dead is Buchenwald, for Buchenwald means "Forest of Beech Trees," which are all about. Here, surrounded by a countryside of idyllic beauty, 8,000 human beings lived lives of indescribable degradation and agony. This was in 1938, before the war, when nearly all the prisoners were Germans.

Wiechert tells of men—a few—whose powers of moral and physical resistance are a

tribute to the human race, even in this time and place of ultimate inhumanity. He found there, not only despair, but a basic solidarity of man with man which nothing—nothing—could destroy. And that was all that mattered to him, in Buchenwald, and after his release.

Forest of the Dead is a simple book, containing a simple truth. One wonders why it seems to need the background and setting of a Buchenwald for it to shine forth—and at the many men who seem determined to ignore that truth until, overtaken by some new Buchenwald of history, they will experience it for themselves.

CHILDREN

... and Ourselves

A READER raises questions much in the minds of all thoughtful parents:

This column has not taken up the problem of Many parents disapprove of the sex-education. methods employed in our public schools and elsewhere of "educating" our teen-agers in the mysteries of sex. They seem to feel intuitively that there is much more to relationships between the sexes than the mere biological function which our so-called "education" makes of it. The question is, How can I as a parent help my child to make *natural* transitions from childhood to adolescence to adulthood? What shall I tell my child when I see him or her getting interested in members of the opposite sex? What sort of education can a parent give that will make the child want to talk things over with its parents rather than to get off into corners with others of the same age? Surely this is an important aspect of education, in view of the far-reaching effects of involvements. Many parents realize that a Sphinx-like silence is not the correct attitude, but on the other hand neither is the materialistic, biological approach.

It is difficult to say the things that we feel are the most important on this subject without sounding either trite or unconcerned. This is because we can see no more helpful way of beginning than by denying that there are any such things as "sex problems" in themselves, and by further denying that there is any such thing as helpful "sex education" as a subject in itself. The problems we call "sex problems," whether between adolescents or adults, are problems in human relationships, and problems in human relationships are invariably problems in attitudes of mind.

It is possible to unite all the idealistic philosophers of the Platonic School of thought together with our modern scientific pragmatists behind the assertion that no single practice or act can be either good or evil in itself. The emotional factors and the physiological capacities which combine to induce involvements between persons of opposite sex may be considered as powerful forces which can be used wisely or unwisely,

creatively or destructively, depending upon their effects upon the human personality.

As a culture, we are progressively rejecting all rigid moral catagories, and children are affected by powerfully the contemporary atmosphere of *laissez-faire* morality, regardless of the "controls" their parents may seek to impose out of a "sense of duty." Today, more than ever before, children tend to discount any parental approach to these problems which asserts that definite things and conditions are "good" and But there are constructive and others "evil." destructive *motivations*, and contrary to opinion, a child can understand this fact much better than he can a list of thou-shalt-not's. The important thing for children to learn about matters involving sex is the same thing that is important for them to learn about everything else they do—that it is the basic moral direction of their actions that counts, and that what may be built of lasting human value from those efforts makes them either "moral" or "immoral." Far more important than what adolescents do is how they think about what they do. The beginning of what is erroneously given a specialized consideration as "sex education" should be with this idea.

The second step involves a parental realization that the child's attitude towards emotional and sex factors will be strongly conditioned by the parents' attitudes toward each other. The need for parental "sex education" is a million-fold greater than the need for informing the young as to the biological facts of like, since there can hardly be helpful contributions to the lives of children on these subjects from parents who are confused, discontented and unable to help of themselves out their own emotional predicaments.

It should be profitable to attempt a brief review of the content of the mind of our age on this problem. For any such analysis reveals that the same trends and influences affect the lives of both parents and children. Associated with the general tendency to ignore moralizing strictures

of religion is the sophisticated casual attitude and callousness towards matters of sex. A parallel trend on the constructive side of the ledger is a growing honesty which encourages people to profess no code other than that which they actually expect to live. Defenders of the honestyschool, including all of our modern psychiatrists and psychologists, as well as the millions indirectly affected by the growth of this new science, have made honesty and tolerance their prime values. But in this "brave new world," one possibility has been neglected: It may be that there is a genuine importance, sacredness or religious dimension in this great field of human experience. At least, it is possible for a man to ask himself, "Am I rationalizing the indulgence of an appetite or shall I create a proud and lasting thing of value through this intimacy?" Such a question, by the way, can be asked with an equal logic of the long-married parents with several children, as well as of fifteenyear-olds who are just beginning to discover certain fascinating possibilities in young friends of the opposite sex. The parent who works out a good personal answer will have an untroubled mind, and a sense of conscious purpose in relation to his own life. He can approach the problems of his children without fear or bias, and by this means gain the confidence of children without even making overt attempts to do so.

Biological information should be organic to a context wherein the happiest and most creative uses of the "sex potential" have already in some measure been determined. The adolescent who is attracted to one of the opposite sex and who is puzzled about the question of physical intimacies may find it quite natural to talk to a parent about the matter, *if* a barrier of fundamental parental distrust has not been previously raised. In the course of such a discussion it might become natural enough to supplement the child's inadequate knowledge in whatever way seems called for, but here is a very different approach from the "horror technique" of some forms of so-called "sex education."

When a child returns from his or her first series of "dates" it is common for parents—and usually they are worried parents, thinking over the things they did when they were the same age—to administer a determined third degree: "Where did you go last night? If the show got out at tenthirty, why weren't you home until quarter after twelve? Who were you with? What did you do?" A sufficient amount of this and the average child will form a strong resolve never to let his parents know anything about anything, because their of suspicion makes attitude all frank communication seem undesirable.

More appropriately they might ask, "Did you have a worthwhile time last night? What do you think of so-and-so after being with him all evening?" Further questions are best left unasked unless such as would be fitting in adult conversation, where we usually recognize that it is inappropriate to ceaselessly "pry." The sort of support a child most needs is in the unspoken attitude of the parent who stands ready to sympathize with anything the child *genuinely* The "involvements" which the believes in. questioner mentions are always at their worst when the child is partially rebelling against what he feels to be a parent's attitude of opposition toward any "involvements" of any sort for any reason.

FRONTIERS PHILOSOPHER SCIENTISTS

THE apparent restoration to scientific standing of Immanuel Kant's theory of the origin of the solar system—if sustained by further investigation may serve to strengthen the somewhat battered reputation of philosophers who dare to offer speculations on the constitution of the universe. Kant, it is true, besides being a great philosopher, was as much of an astronomer as many of his scientific contemporaries, but, like other speculative thinkers, he seems occasionally to have been regarded as an unwelcome presence in the sacred precincts of actual scientific hypothesis.

The basic defect attributed to the Kantian system—which assumed that an original mass of undifferentiated world-stuff would slowly gather rotatory motion in the direction in which the planets now revolve—was that the sun rotates much less rapidly than the planets. "The sun," explains Prof. D. ter Haar in *Science* for April 23, "possesses about 99% of the mass of the total solar system, but only 2% of the total angular momentum [momentum of rotation]." On the basis of Kant's theory, he says, "it is not easy to see how the average angular momentum per unit mass should be so much lower for the solar than for the planetary matter." Accordingly, Kant's theory has been regarded as disproved.

However, after reviewing several recent hypotheses, including unsuccessful attempts to explain the rapidity of planetary rotation by the "tidal" influence of a passing star, or by actual collision of some star with a former "twin" of our sun, Prof. ter Haar asserts that the judgment against Kant's idea "was due misunderstanding of the problem and quantitative calculations appear to show, to the contrary, that Kant's theory is probably the most promising of all existing theories." This, he adds in conclusion "is rather satisfying, since Kant's theory starts from probably the simplest possible hypothesis—a sun, surrounded by a gaseous envelope."

There are of course still many difficulties involved in any hypothetical origin of the solar system, which a reading of Prof. ter Haar's paper We are not arguing for Kant's will show. infallibility, but are engaged in a defense of the scientific ideas of philosophers, and in deprecating the modern habit of ignoring philosophical thinking in the realm of scientific hypothesis. Without pretending that the Greek atomists, for example, could exercise the same control over physical forces as the modern engineer, it remains of some significance that ancient thinkers, as Robert A. Millikan tells us, has worked out "almost all the qualitative conceptions of the atomic and kinetic theories . . . thousands of years ago." In evidence, he quotes the principles of Demokritos, as formulated in the nineteenth century by John Tyndall:

- 1. From nothing comes nothing. Nothing that exists can be destroyed. All changes are due to the combination and separation of molecules.
- 2. Nothing happens by chance. Every occurrence has its cause from which it follows by necessity.
- 3. The only existing things are the atoms and empty space; all else is mere opinion.
- 4. The atoms are infinite in number and infinitely various in forms; they strike together and the lateral motions and whirlings which thus arise are the beginnings of worlds. [Kant used this idea in his theory of the solar system to account for the beginning of rotatory cosmic motion.]
- 5. The varieties of all things depend on the varieties of their atoms, in number, size, and aggregation.
- 6. The soul consists of fine, smooth, round atoms like those of fire. These are the most mobile of all. They interpenetrate the whole body and in their motions the phenomena of life arise.

Commenting, Dr. Milikan says: "These principles with a few modifications and omissions might almost pass muster today. The great advance which has been made in modern times is not so much in the conceptions themselves as in the kind of foundation upon which the

conceptions rest." (Electrons, Plus and Minus, 1935.)

Dr. Milikan, perhaps, would want to "omit" the category of "soul" atoms, and yet, without acknowledging a blind idolatry of the ancients, we might suggest that the "electro-dynamic field" which physiology now says exists within every living organism seems a not unlikely modern scientific parallel to Demokritos' fiery atoms which "interpenetrate the whole body" and from whose motions "the phenomena of life arise."

If, as seems to be the case, the science of today is the rationalization, even the mechanization, of yesterday's philosophy, why should not the science of tomorrow grow out of the philosophy of today?

It is generally agreed that the omission of mind and feeling from the scientific account of the really "real"—an abstraction from nature which began with Galileo's division between primary and secondary qualities and was confirmed by Descartes' rigid separation of mind and matter—has made science itself philosophically and morally *unreal* for the average man, the non-specialized human being. Why not, then, accept from other philosophers—if not from Plato, from Professor Whitehead—the idea of a unified *living* universe, a cosmic organism if you will, in which the forces of mind and feeling and the mechanistic motions of matter are interblended and inter-related?

But whether or not one is willing to admit the pertinence of contemporary philosophy for tomorrow's scientific hypothesis, the record of scientific history is very much on the side of the idealists, so far as the ancients are concerned. After summing up the achievements of Greek science—the mathematics of Pythagoras and Euclid, the astronomy of Aristarchus, the biological researches of Aristotle, the experiments of Ptolemy, the medicine of Galen—Frederick Lange, in his *History of Materialism*, asks and answers a question:

When we behold knowledge thus accumulating from all sides—knowledge which strikes deep into the heart of nature, and already presupposes the axiom of the uniformity of events—we must ask the question, How far did ancient Materialism contribute to the attainment of this knowledge and these views?

And the answer to this question will at first sight appear very curious. For not only does scarcely a single one of the great discoverers—with the solitary exception of Demokritos—distinctly belong to the Materialistic school, but we find amongst the most honorable names a long series of men belonging to an utterly opposite, idealistic, formalistic, and even enthusiastic tendency.

Lange continues with a glowing tribute to the fertility for science of the Platonic school, describing its far-reaching influence mathematics and in astronomy. A more recent study, published in the Journal of the Royal Astronomical Society of Canada for April, 1940, gathers evidence from a score of ancient documents to show that the so-called "Middle Fire" of the Pythagoreans was in fact the sun of our solar system. Considering this in connection with other and related discoveries of antiquity, the writer, E. M. Antoniadi, observes that "five centuries B.C. the idea of the heliocentric system had already dawned in the mind of the Greek philosophers." An abstract of the material on which this conclusion is based is worth quoting entire:

The ancient texts, as they came down to us, represent Philolaos placing Mercury and Venus beyond the earth's orbit. This could scarcely be true. Now, if we add to the above notions [concerning the "Middle Fire"] the fact that Aristarchus spoke of the rotation and revolution of the Earth around the Sun: that Seleucus asserted these two movements; that Heraclides Ponticus made Venus, and Theon of Smyrna Mercury also, turn round the Sun; that the Emperor Julian affirmed the dance of all the plantets round the Sun; that Plato conceived the rotation of all the heavenly bodies; and that Aristarchus explained the apparent lack of parallax of the stars by their infinite distance, we find that Greek genius has discovered a complete heliocentric system, more accurate than that bearing the name of Copernicus, and this with an anteriority of from twelve to twentyone centuries.