

PHILOSOPHER AND SOCIAL SCIENTIST

ONE view of the world situation is very familiar: the view that applied science—technology—has developed so rapidly that its processes have lost their rational connection with the familiar ethical controls of our society; and that the existence of the human race itself, and of its biologically indispensable resources, is threatened by this amoral dominance of the machine.

Another familiar view is that, despite modern scientific achievements, the mind of the citizenries—call it the political and the business mind—operates at a pre-scientific level, so that the intellectual barbarism of nations is immeasurably extended by technology, and by those same achievements is armed with tools and weapons whose potency in barbarian hands can wreck the world. It is the "race between education and disaster" of H. G. Wells.

A third, less publicized view comes into focus, not on technological triumphs as threateners of doom, nor yet on the intellectual barbarism of political and business mankind, but on that *process of social dissolution*, almost though not quite world-wide, which has gone forward across nearly two hundred years and now appears to be reaching its climax. The dissolution is marked by the submergence of cultural and ethnic heritages, the shredding away to naught of the community, the supplanting of institutions and values of mutual aid with institutions and values of exploitation—exploitation of men, exploitation of earth; and the de-socialization of human attitudes.

This dissolution of society is seen as involved with technology and with the affirmations and denials of *laissez-faire* economics; involved with industrialization, with intensified urbanization and at the same time rootless mobility of the population; involved with mass-communication as forced down by commerce and by politics to the lowest common denominator in public appeals; involved with the racial and cultural arrogance with which Europe and

the United States have assaulted the souls and societies of Asia, Africa, Oceania, and aboriginal America; involved even with superficial and inadequate theories of human nature, and the mechanistic world-view and life-view projected into our own time from the days of Newton and Descartes. Very complex, these causes of dissolution, and perhaps central to them all is the failure to advance, and now, the intellectually and morally timid advance, of the social sciences toward discovery of what is wrong.

So complex, indeed, is the causation throughout the whole technological and human field, and so multiform the factors of social erosion, that one could consider that all the other elements of crisis in our age are but the ministers to, and in turn, the products of, this central crisis which they have helped to induce—the dessication, atrophy, and obliteration of society and of social personality, moving on into those deformations of society and of personality known variously as Fascism and Communism and Free Enterprise. The mechanisms of these deforming forces are embodied in the cartel, the pressure group, in the down-grading use of all the institutions of mass communication, in the public lie as accepted common coin, in the replacement of the pluralistic society and all its voluntaristic profundity by the monistic, authoritarian, political-economic-military state—and in cold war and hot wars.

Let the over-simplified picture stand. It is over-simplified, I submit, not in its quality of grimness and encroaching darkness, but in its omission of the elements, which exist, of promise and hope. If these elements of hope were stated, every one of them—if included in the picture were the greatly creative achievement of Israel, the domestic program of Britain, the social achievement of Sweden, the achievement of Gandhi dead and Gandhi living on, the cumulative accomplishment of the International Labor Office, the triumphs of the Soil Conservation

districts, the crucial advances of psychosomatic medicine in current years, the occasional demonstrations of man's power to control social change—if all of these and many more elements of hope were added, the *feeling-tone* of the world picture would be modified, but *prediction* would not, I believe, be decisively altered: because as yet, to this hour, within the accelerating, world-wide rush of disintegrating forces, the factors of hope are quantitatively so small. In other ages than ours, there has been time enough for the small nuclei of social creation—the minority movements—to build until they became potent to modify total contexts. For our own epoch, the time allowance has almost run out.

What, in this crisis of a world, is the philosopher's role?

I am not a philosopher; and answering the question, I must rush where angels would fear to tread. But here is my answer.

The development, rapid, profound, and various, yet integrative, of human science—of social science—is our world's one hope.

That development must include experimental investigation of how social discovery may be enabled to pass into massive social action.

And that development must be planned and schemed out in terms of the life-and-death problematical situations which aggregate into the crisis.

Therefore—and for many reasons beside—the *valuing process* must be made organic to the very core and heart of social science. The whole of the *human* endowment of the social researcher—as Robert Redfield has insisted—is demanded by his task: the brooding and divining use of his emotional, moral, and valuing capacities. How else can the obscure nature of the world's crisis even be known? How else can the emotion, the imagination, the ego, the will of the citizenry be brought to share in a task that has greatness in it?

The philosopher *and the artist*, if they shall become social scientists, can supply direction and dynamic, and a sense of the extreme urgency of problems—perspectives and attitudes which as yet

are wanting in much of social science—not in all of it, but in too much of it; attitudes which, indeed, are psychologically resisted by many researchers and outlawed by the familiar techniques in much of social science enterprise, now. With direction and dynamic and value shut out, or not brought in, there will be little of creative development, little of world-saving and world-shaping destiny for social science. With direction and dynamic and courageous affirmations of values, and these made central and controlling, social science could match and master the blind titans now wasting our world and bludgeoning into unconsciousness our human hope.

By and large, social scientists have been inclined to believe that they *do not need* philosophy, that philosophical presuppositions do not operate, and philosophical conclusions are not implied, in the work of social science. It should be enough to suggest that philosophical presuppositions, however much ignored, inescapably do exist, and exert an even fateful influence, in any enterprise of science. The unstated, even unacknowledged, philosophical presuppositions of the social scientist, uncriticized and unrevised, very often tend to be *those of the epoch of Newton*. A real cultural lag often exists, and it severely limits problem-identification and hypothesis and perception alike. These underlying, and today, archaic, presuppositions are among the several factors which explain why social research many times beats the air of insignificant, even non-existent problems—and why the researcher tends to work in sequestration upon unrelated segments of the research task; and again, why it is that even when research does become a concerted operation involving many disciplines, the tendency is to do no more than "list" together the findings of the several endeavors, and not to strive to *integrate* the results—*nor creatively to synthesize* the results.

The dawning world view of "gestalt," of "field," of "event," of "directiveness" omnipresent in organic nature, and of the man-nature relationship ecologically conceived, has but a little way penetrated into social science as yet. An exception is that great light and far-availing stimulus which Kurt Lewin provided, along with other social psychologists like Gardner Murphy and Moreno and

Lawrence Frank, and ecological researchers like Ward Shepard and Hugh Bennett. And there are other exceptions. But eminently, in sum: the social scientist needs the help of the philosopher, in order to *become* a philosopher and so bring his presuppositions within the flow of the intellectual currents moving toward a better world.

And now, concerning the philosopher, one remark.

It is my impression—an impression, I am prepared to be told, perhaps naive and erroneous—that the philosopher's own potential contribution to human science, and to public education, too, is made less than it could be through a timidity of his own. He hesitates to find a meaning of the world unless *physics* can supply that meaning, or unless somehow the meaning can be equated with the physical sciences. As a result, man remains only a spectators—a non-participating spectator—of the cosmic drama: he watches the changing configurations of the atoms within the void. Perhaps, hereafter, mathematics and microscopic and macroscopic physics may yield a cosmic-human meaning, but social science and mankind desperately need world meaning *now*.

I suggest that if and when Philosophy, with complete and persevering determination, shall apply itself to the *life sciences*—to biology, to anthropology and to sociology—world meaning will commence to be unveiled—to reveal and assert itself in flashes of silent lightning.

The "directiveness of organic nature" is no mechanical "feed-back" mechanism or process; *it made and makes* the feed-back mechanisms and processes and all the rest. That same directiveness is seated deep in the laboring human breast. It plied controllingly in ancient man. It plies in the myriad wonders of the ecological process, in the self-making, self-healing, climax-trending web of life. It *would* ply, if only we knew how to unimprison its genius, in local and in world society now. Let philosophy seek and find and define and proclaim world meaning *there*, in the directiveness of organic existence, from protoplasm to society—world meaning, and world dynamic and hope and goal.

Such a seeking will require the transposition of the philosopher *into* biology, *into* anthropology, *into* all the psychological and social and ecological sciences. His transposition, with all of his apperceptions and all his disciplines, and a subjecting of himself to the apperceptions and the disciplines of the life sciences; even as the life sciences in their turn await subjection to philosophy's apperceptions and disciplines and, through philosophy, a swifter race to run.

The genius of philosophy is to see life and world steadily and whole; and its genius is to orientate, and to discover—even to create—value and purpose. Socrates and Plato, Plotinus and Goethe and William James, in own culture stream, have established that fact once and forever. The genius of art is the same. Let these—the philosopher and the artist—give of that genius, holistic, evaluative and purposive, to social science. But they can give it only one way. That is through *identify* with social science, through merging with social science and being possessed by it and possessing it, in market place and arena, and all out there beyond that "dark gate across the wild" of the human ordeal and of the social deed which need not fail.

New York City

JOHN COLLIER

Letter from **GERMANY**

FRANKFURT-AM-MAIN.—It seems as if a general indifference and laxity of mind have taken control of human beings over wide areas of the globe. It has gripped me, too. Only the worry for daily bread keeps me and others going. Corruption of mind and morals, in business and politics, has taken deep root. Much that is being said and written, not only in Germany, but all around us, has such a hollow sound and effect.

I have wanted to write about the relationship of American personnel to German civilians in the course of their daily duties and in private life. The idea is depressing me more than I like to admit, because there is not much of a constructive nature to say. Further, to go into this problem deeply would be to belittle the common things, the daily occurrences of life, and, perhaps, to lose sight of the whole. But it would, at any rate, show the fallacy of assuming that the citizens of a so-called "democratic nation" are necessarily of higher morals and culture than those of a conquered, "non-democratic" nation.

From the experiences of the past four years, I have learned only one important fact, namely, that an occupying power can either raise the standards of morality, ethics and virtues, or undermine and shatter the last remnants of an established order and way of living. The last three and a half years tell a sad story for those who can see. Hundreds of thousands of Germans believed in the "Liberators" as described to them, day in and day out, before the war ended. What happened after the smoke cleared away? Ask some of the untold thousands of ex-prisoners of war how they felt when their wrist watches and wedding rings were torn off—or their fountain pens and other valuable goods taken away. Nor can we forget those huge boxes and crates of household goods—war booty—sent to the United States by members of the Forces.

That 80 million Germans received less calories than the inmates of concentration camps, up to last year, is not a disputed fact. What help was given to the Germans in their "democratic" rebirth by allowing more than forty new political parties to raise their selfish heads is incomprehensible to many. Was this an entirely unselfish and benevolent policy or did it

come from the ancient principle of "Divide and rule"? Why are men like Giesecking, Furtwangler and the boxer Hein Ten Hoff not permitted to perform in the United States, when there are scores of Nazi scientists already residing there, working on new weapons of destruction?

So you see that there are really more vital problems to be coped with than the relationship of a few thousand Americans to the natives of this country. This relationship tells only of greed and selfishness and utter indifference toward other human beings—with a few notable exceptions of course. I will not go into the merits of the so-called "currency reform," which made the poorest poorer, or the "Blockade of Berlin," or the Ruhr or occupation statutes, as these things will be better judged by historians. What Germany needs is a peace treaty and not an occupation statute!

Instead of tackling the problem from the political point of view, let me suggest another way. Why not print MANAS in German? As has been pointed out by your Bavarian correspondent, a great movement "away from church and present political parties" is in the making. Where it may lead, no one can definitely say. Could it not be your and our responsibility to give this movement guidance in its infancy? The movement hasn't taken shape yet and will not do so for some time to come. A German-language MANAS would of necessity have to be printed in Germany or else be translated and printed in German in the United States. Such a journal might influence many peoples' attitude towards others, friends as well as yesterday's enemies, in greater magnitude than any present daily newspaper dealing with stagnant world and political affairs. Untold numbers of people here have realized that our salvation does not rest in political dogmas (or Christian ones), but wholly in the relationships of individuals and nations towards each other. The soil is fertile in present-day Germany. To wait and let this opportunity go by is perhaps to lose it for a long time to come.

GERMAN CORRESPONDENT

REVIEW

THE MORAL LAW

A "SERIOUS" *Life* editorial is not the most likely place to look for evidence of the need of the West for greater discrimination in metaphysics, yet this is the effect of some recent *Life* comment on *There's Freedom for the Brave*, a new book by Paul McGuire. *Life* is primarily concerned with opposing the "philosophy" of Karl Marx, and finds in Mr. McGuire's volume "a good basic book to fling at the Communists." The issue, as *Life* formulates it, is whether or not there exists "a natural moral law" as the foundation for the civil order of society. The ideologists of State Absolutism hold that there is no such moral law, that all authority, all concepts of rights and duties, derive from the State, while Mr. McGuire and *Life* Magazine declare for the Moral Law. *Life*, however, goes a step further than most champions of a natural moral law, pointing out that—

The difficulty, as Mr. McGuire fails to stress, is in knowing what the laws of nature are. Catholics may have one idea about them, Presbyterians another. But if the community does not at least agree on the proposition that natural moral law can be determined by a close study of human nature in all its manifestations, then we have no defenses against what Mr. McGuire calls the "monstrous state."

It is not difficult, however, to locate Mr. McGuire's views concerning the origin and nature of the moral law. It comes from "God."

Christianity [he writes] may not always and everywhere produce Democracy; but only the Christian sense of the ineffable destiny of man and the dignity attached to it has long resisted the general tendency of human society toward serfdom or slavery, in one form or another. As that sense grows socially effective, serfdom declines. As that sense declines, serfdom and slavery increase, as we can see about us now.

Like other admirers of theocracy, Mr. McGuire looks to past centuries with great nostalgia. Medieval society was not, he argues, totalitarian because the State was denied authority in matters of faith and morals. This latter authority belonged to the Church. He quotes from Lord Acton the principle that "the only liberty . . . is a liberty connected with order,"

and adds that this liberty was "largely realized" under what Lewis Mumford has called the "medieval synthesis."

What is missing in books like *There's Freedom for the Brave*—and, at a more philosophical level, in books like Richard Weaver's *Ideas Have Consequences*—is a candid historical survey of the causes of the reaction to and revolution against the "medieval synthesis." Were there elements in the Christian way of dispensing justice—of "administering" the natural moral law—which men found too unnatural to tolerate?

To ignore this question is to suggest, by implication, that the rise of naturalism, agnosticism and militant atheism—with their various political offspring, communistic and otherwise—has been due to the innate viciousness of a large portion of the human race. And this suggestion, on the face of it, is false. The great secular reformers were not vicious men. Some or all of them may have been mistaken in their views, but a deep humanitarianism—as sacred as that of any religious leader—was their major inspiration. The life of Debs was a life of consecration, and the same may be said even of Lenin, whatever the historical consequences of his ideas. The thought of many of the great founders of modern materialism—Baron d'Holbach, for example—is profoundly ethical in origin and intent. Nor had Robert Ingersoll or Clarence Darrow need of bowing to anyone, as possessed of a greater altruism.

If it be argued that while the free thinkers and atheists "meant well," the doctrines they spread were devastating to the foundations of morality, this argument is as easily turned against their theological critics, for the "organic society" of the Middle Ages—regardless of the *theoretical* separation of clerical and secular authority—was hardly representative of the spirit of freedom and "natural right" now claimed for it by writers like Mr. McGuire. Remember the persecutions of the Bogomiles in what is now Yugoslavia; remember the crusade against the Albigenses; remember the burning of Giordano Bruno, the persecution of Galileo, the "editing" of Copernicus, and the countless victims of rack and stake claimed by the Inquisition in Spain.

The fortunes and the works of writers are generally expressive of the temper of the age in which

they live. If we go to the twelfth century—conceded to be a period of "renaissance" within the Middle Ages—we find a questioning mind like Peter Abelard hunted, persecuted and hounded for his daring, while his contemporary, Adam of Saint-Victor, a mystical poet, embellished his placid career with verses like the following:

Thus professing, thus believing,
Never insolently leaving
 The highway of our faith,
Duty weighing, law obeying,
Never shall we wander straying
 Where heresy is death.

This does not sound very much like the "liberty" for which the Founding Fathers of the United States labored and fought; in fact, both the history and the doctrine of the Middle Ages are more suggestive of the totalitarian methods of political and thought control—against which we are now invited to arm ourselves with the medieval conception of "natural right."

Nevertheless, ignorance of history and the absence of any metaphysical criticism of theological reasoning have allowed the argument for the medieval synthesis to gain considerable plausibility. It is the only argument for an organic society which is both fairly well developed and familiar, and, right now, it is being repeatedly presented with much skill and vigor by Catholic thinkers. Two years ago—in the *Journal of the State Bar of California* for March-April, 1947—Harold R. McKinnon, a prominent San Francisco attorney, gave this argument a brief and lucid statement in the form of a summary of the changing interpretation of the law in the United States. With much of what he says, it is difficult to disagree. He begins:

Modern history presents the strange phenomenon that just when democracy and the rights of man appeared to be sweeping everything before them, there was a sudden relapse to unparalleled tyrannies and abuses. . . . What accounts for this relapse?

. . . one thing is clear. The thinking of the people has broken down. The political, legal and social institutions of an age are in large part the product of the thinking of that age. If this is not true of the thinking of the masses of the people, it is true of that of the leaders. An age cannot produce a regime which is fundamentally uncongenial to the postulates of its leaders, and if it is a democratic

society, it cannot long act at variance with its fundamental ideas. If that be true, the basic explanation of the modern reversion to irresponsible dictatorship lies in the fact that there has been an interruption in our process of thinking on the subject of human rights and a retrogression to standards which preceded the formulation of democratic ideals. This explanation is confirmed by a survey of modern thought on this subject. . . .

The theoretic difference between free and totalitarian governments lies in the origin of human rights. The doctrine of a free society is that the human person has certain rights which are inherent in his nature and which he gets directly from his Creator. The totalitarian doctrine is that all rights come from the state.

There is not space to enlarge on Mr. McKinnon's development of his thesis, except to say that his admiration of the Middle Ages is as uncritical as his assumption that natural rights come from "God," while his demonstrations that the idea of a "higher law" has been dropped out of modern political and legal thinking are dramatically to the point. The reader waits in vain for some analysis of *why* so many thoughtful men have rejected the traditional God-idea as absolutely untenable from both a philosophical and a social point of view. Why Dr. Einstein, for one, is convinced that the doctrine of the personal God can "maintain itself, not in a clear light, but only in the dark," and is, moreover, a "source of fear and hope which in the past placed such vast power in the hands of priests"; and why such a man as Dr. Julian Huxley, who today heads UNESCO, affirms the view that "religion, to continue as an element of first-rate importance in the life of the community, must drop the idea of God."

All of which emphasizes the need for metaphysical discipline in modern thought. Do we really need the God-idea? —Or if we do, what ought it to mean to us? This is a question which has not been seriously asked, except by dogmatists and atheists, for centuries. It may be the most important question of our time.

COMMENTARY
JOHN COLLIER

As recent issues of MANAS have dealt somewhat ungently with the field of social science, it is appropriate to call attention, here, to the fact that John Collier, who contributes this week's lead article, is a social scientist who writes out of the background of a long career of practical social service. His book, *The Indians of the Americas*, tells the story of the American Indians in relation to the invading and usurping whites, and something, also, of his own efforts to restore to these first "Americans" their rights as human beings.

Mr. Collier was United States Commissioner of Indian Affairs from 1933 to 1945, and he is now teaching anthropology in the College of the City of New York. His article, "Philosopher and Social Scientist," is based on an address delivered last December before the annual meeting of the American Philosophical Society.

Something of the urgency of his struggle on behalf of the Indians overflows the form of his address to the learned members of the American Philosophical Society. He writes as one who knows from both inside and outside the nature of the "academic" lag, even as he must know from first-hand experience the frustrations of the slow-moving pace of political administration.

It is good, we think, for men who follow the calling of professional philosophers to hear from a man like John Collier; and good, too, for MANAS readers to know that there are social scientists who think and feel as he does about the responsibilities of teachers and practitioners of social science.

This week's Letter from Germany contains an observation which seems to us to deserve special attention. The liberal papers have lately been full of pros and cons regarding the treatment accorded in this country to Walter Giesecking, the German

concert pianist. Charged with being a Nazi sympathizer, he recently hurried home from the United States without playing his scheduled engagements. Our German Correspondent points out that none of the indignant anti-Nazis who heaped their scorn on Giesecking have been heard to complain that German physicists who helped to design the Nazi war machine are now living here and busily improving the war machine of the United States. The moral seems to be that only the makers of atomic bombs are the "true" internationalists, whose past associations are easily forgiven and forgotten.

CHILDREN ... and Ourselves

A FEW days ago we listened to someone defend an interesting speculation on our relationship to our children. Certainly, it was "revolutionary" enough to suit our taste, and had immediate appeal as a well-considered effort to defend the children of the world against the oppression of conventional adult "values."

Briefly, the argument was that when parents insist that the child who has grown under their care to adolescence or adulthood "owes" them a great deal, they have put the matter in reverse. Does not every adult whose attitudes are not hopelessly crabbed derive great *happiness* from the presence of children? The parent usually receives from his child a trust and a love which contain all the elements we hope to receive from our older friends. The child, for instance, is not at first inclined to regard us with suspicion. He believes the best of us at all times, and only relinquishes this sort of faith when we have cruelly shattered it for him. He shares with us his happiness without reserve: to us he brings his sorrows and lays them upon the altar of our closeness, enabling us to reach beyond ourselves in seeking an enlightenment with which we can assist him. However inexplicably, those who come innocently to ask our assistance are those who bring us the greatest opportunities for understanding *ourselves*. When we search for the ingredients which may bring happiness to others, we often discover what has so long eluded us in our own struggle for illumination; when we transcend the "egocentric predicament," we acquire a breadth of vision otherwise denied.

These, of course, are matters of philosophy, and may seem obscure. But there is nothing complicated or obscure about the happiness which a child may bring to the home. Strangely, this is often most appreciated by those without children of their own, and who turn to adoption as a way of making their lives whole. These foster parents

consider it a great privilege to be able to secure the intimate companionship of the young. They seldom are impelled by ponderous reasoning to the effect that if they are to make the necessary number of "sacrifices" in life, they should undertake the gruelling task of raising children. Nor do they, we think, tend to calculate how much their young charges will "owe" them when the latter come of age. If this were so, child-rearing would be a shaky investment indeed. Does any foster parent feel he can count on continued financial support from an adopted child, when that child has pressed forward to make his own life and home? Or that such a ward should allow his entire life to be governed by the opinions of his parents, merely because he was fed and clothed in a home instead of in a foundlings' institution?

Usually, we regard our children in one of two ways: either we desire them as "pets"—small creatures whose antics while away the tedium of dull evenings and Sundays; or we wish the mysterious ties of constructive interdependence which we sense can come from such a relationship. In either case, *ours* is the decision to have the child, and *ours* the life which we are pre-eminently concerned with enhancing. When the child is with us, and when he does give us love and trust—the feeling that we are truly needed by another human being—we reciprocate with a love for him, matching his own for us. But he brings the conditions which make such love so easy to feel; he breaks through the crusty barriers of our responsibility. Yes, we have children for our own sake, through the prompting of some sort of incompleteness in our lives. And this form of gentle, not-too-much-to-be-deplored selfishness does usually bring us what we were searching for. We have love and trust assured for a considerable length of time, regardless of whether the rest of the world loves or trusts us.

One of the late Damon Runyon's most beloved short stories, called "Little Miss Marker," is a colorful and somewhat exaggerated version of

what happens over and over again all around us; the mean, tight-lipped, coldly calculating man is transformed by the presence of a child. He finds love because he finds someone who really needs *his* love. In giving, he *receives* the greatest gift. Such a thing is not a religious platitude; it is a fact of human living, and expresses a conclusion attested by our psychiatrists.

Now, before we go any farther, we must balance the scales a little. There are some who *do* feel, we think, a primary desire to help the unborn child. A psychologist once asserted, to the delight of his college class, that no one ever procreated human beings "for the sake of the human race." This we regard as a too-careless and too-callous generalization. A profession of interest in "humanity" may be a bit suspect, *but* there must be some to whom such sentiments are natural. Some men and women who do not personally care whether they have children or no, *must* have them through feeling some sort of obligation to the whole process of human evolution and wishing to do their part. The desire of a prospective mother or father for a child may also, at times, flow from this sort of feeling. Yet to admit these things, and to be happy in the admitting, does not invalidate our defense of the original argument, for those few who do bring children into the world for other than personal reasons are not those who keep telling the children, in later years, how much they have "sacrificed" for them. Those to whom this sort of consecration and sacrifice is natural never think or speak of it as sacrifice.

So it is our friend's thought that a parent is greatly privileged to have the company of a child: that when the child has ceased to be a child and is ready to venture into new fields, the parents owe *him* a great debt. This they must discharge, first, by placing no claim on the free choice of that one who for so long followed parental discipline *without* much choice. Yes, there is much to say for this peculiar view, especially when we remember how much of parents' unhappiness seems caused by resentment against a child's

desire for independence. No words are more alienating to the child than, "Just think how many and how great the sacrifices your father and I have made for you all these years, and now you. . . !"

Let us not forget that it is often the exuberance and enthusiasm of youth which keeps us shriveled-up "old people" that we are from drying up and blowing away completely. The "fountain of youth" from which all would like to drink flows daily in our contact with the young. As a man named Sterling once said, "While youth is concerned with developing a philosophy of life, old age is concerned with developing a philosophy of death." None of us really likes the symbol of death, so let us be fair and at least make as much obeisance to the young as we expect them to make to us.

FRONTIERS Science and Man

WHILE there were high words over the Evolution controversy during the nineteenth century, we do not recall that any heads rolled as a result of the defeat of one party or the other, in even the major engagements. The argument was a reasonably polite one between the theologians and the biologists. Some jocular blasphemy, perhaps, was heard from the scientific side of the grandstand, while the loyal clergy fulminated grandly against the impudent and impious atheists of the Darwinian school—but no one really got hurt.

It is different, today. The story of Nicoli Vavilov, who died in a Soviet concentration camp during the war for believing in Mendel's laws, is fairly well known. Vavilov was the victim of political persecution on behalf of the Lamarckian doctrines of T. D. Lysenko, a Soviet plantbreeder and champion of the Marxist dialectic in biology. *In Science* for March 4, Dr. Richard Goldschmidt of the University of California reviews the history of Lysenko's rise to power, and the consequences for Russian biological science, which, with his ascendancy, has become almost as "political" as the Party Line.

In the United States, dissenting professors are not sent to concentration camps to die, but they can be fired for adopting the wrong views. Within a month or two, for example, Oregon State University discharged a chemist—not for "atheism," nor even for an erratic theology—but for daring to agree with the Soviet Lysenko. Explaining, the President of Oregon State remarked:

"Any scientist who has such poor power of discrimination so as to choose to support Lysenko's genetics against all the weight of evidence against it is not much of a scientist or has lost the freedom that an instructor or investigator should possess."

Anyway, he has lost his job.

Another slant on the evolution controversy presents more serious aspects. An article in the

April Woman's Home Companion asks, "Should Anybody Be Sterilized?" and summarizes the practice followed in the various states. "Fifty thousand Americans," we learn, "have already been deprived of all possibility of parenthood." Many of these operations were performed on the basis of scientific theories about heredity which are now largely discredited—but the laws authorizing the operations are still in force. The cases of several people who were sterilized "by mistake" are described in this article. Two thirds of the states with sterilization laws make epilepsy a reason for sterilization. Yet, according to medical records, "not one epileptic in five knows of any epileptic relative, not one in twenty-five has an epileptic parent and . . . the chances of an average epileptic's having an epileptic child are only one in forty."

Sometimes the laws are so vaguely and sweepingly worded as to allow the sterilization of almost anybody. In Georgia, for example, any inmate to be released from a state institution is subject to examination for possible sterilization if he is thought to be "likely to procreate a child who would have a tendency to serious physical, mental or nervous disease or deficiency." Under the technical provision of this law, anyone having stomach ulcers might be a candidate for sterilization. Arizona's sterilization legislation is directed at the person who, "by the laws of heredity," may be regarded as "the probable potential parent of socially inadequate offspring likewise afflicted." In Oklahoma, the warden of the state prison can recommend cases for sterilization.

A few diseases are known to be hereditary—night-blindness, hemophilia, and Huntington's chorea are among them. But most human afflictions cannot be clearly traced from generation to generation. Some years ago, Waldemar Kaempffert reviewed the difficulties of any sterilization program:

. . . it would take about sixty generations to get rid of the hereditary feeble-minded even if we spotted

the carriers of bad genes as fast as they appeared. Besides, the mentally incompetent do not reproduce themselves rapidly enough to maintain their kind. We all carry defective genes. No one can tell when a case of insanity or feeble-mindedness may break out in the best of families. . . .

In 1937, a writer for the Los Angeles *Times* pointed with pride to the Nazi sterilization laws, claiming that they were patterned after California legislation. From the time of the enactment of the German law, to Jan. 1, 1937, about 250,000 persons were sterilized in Germany. The *Times* contributor, Fred Hogue, approved this application of sterilization "with the systematic thoroughness for which the German people are noted," and complained that the United States, with twice the population of Germany, was far less "progressive." California in particular, he urged, was menaced, for more than half the cases in state and private hospitals were then—and doubtless still are—mental cases.

This is the sort of thinking which put the sterilization laws in force; it is also a sort of thinking which has only the flimsiest scientific foundation. British research has made it plain that "the supposed abnormal fertility of defectives is largely mythical," and it is now admitted that the numerous progeny of the Jukes, the Nams and the Kallikaks are not typical.

The train of reasoning followed by the enthusiasts of eugenic "purification" of the race goes something like this: The "personality traits" of animals, both wild and domesticated, are largely determined by heredity, and therefore, since man is a product of biological evolution, the same as the animals, heredity must play the same part in shaping his personality or "psychic" endowment. "There is no reason to believe," remarks David C. Rife in *The Dice of Destiny*—a treatise on human heredity—"that man is a unique exception." It follows from this view that human betterment can be accomplished by the control of human breeding, in which the first and most obvious step is to prevent the propagation of the "unfit."

This reasoning is based on what seems to us the unwarrantable assumption that human evolution is the same as animal evolution—that man, in short, *is* an animal and almost nothing more. While it would be gratuitous to expect scientists who have investigated only the physiological characteristics of man, or who build all theories of essential human nature on a biological foundation, to advance the doctrine that man is a spiritual being, it can at least be asked that close scientific attention be given to the *differences* between man and the animals, if only because the higher aspects of human beings have been almost deliberately neglected in scientific research. Man may have a body like that of the animals, but he is very different from them in numerous important respects, and when it comes to judgments of "fitness" or "unfitness" to survive, it seems criminal not to take those differences into account. Fortunately, a few scientists recognize their responsibility in this respect. Theodosius Dobzhansky, for example, professor of zoology at Columbia University, says the following on the question of the determination of *human* qualities by heredity:

The frequently advanced argument that because psychic traits in animals are rather rigidly determined by heredity they are so determined in man deserves careful consideration. The analogy may be good, but arguments from analogy do not prove anything. . . .

All that we can be reasonably sure of is that the evolutionary pattern of the human species is so different from those of the higher animals (not to speak of the lower ones) that judgments by analogy with respect to the psychic traits have little value. . . .

Man is a unique product of evolution in that he, far more than any other species, has escaped from the bondage of the physical and the biological into the social environment. Furthermore, human social environments are notable not only for their extreme complexity but also for the rapid changes to which immediate adjustment is demanded. Adjustment occurs chiefly in the psychic realm. The more advanced the social organization, the less important are the physical characteristics. Because the changes in the human environment are not only rapid but diverse and manifold, genetic fixation of personality traits is decidedly undesirable. The survival, much

more of success, of an individual in most human societies depends upon his ability to evolve superior behavior patterns which fit him to the kaleidoscope of circumstances he encounters. He must submit to some, rebel against others, and escape from still other situations. Individuals who display a fixity of response suffer under most forms of society. An animal becomes adapted to its environment by evolving certain physical or behavioral traits; the adaptation of man consists chiefly in developing his inventiveness. (*Science*, Aug. 31, 1945.)

Perhaps the most dramatic confirmation of this general outlook lies in the work of Dr. George D. Stoddard, Director of the Child Welfare Research Station of the University of Iowa. He found that babies were being adopted from Iowa state institutions without regard to their origin and the records of inferior mentality or "criminal" tendency among the parents. This discovery led to a program of research into what happened to these babies. After years of study of hundreds of case histories, a psychologist working in association with Dr. Stoddard exclaimed: "*We are still looking for our first feebleminded child whose environment was good from infancy onward!*" In some cases, children whose IQ average equalled that of offspring of college professors had been born of mothers who *as adults* were "definitely feebleminded." Dr. Stoddard made this general comment:

The only extraordinary thing about these results is the shock to our expectations. We have been led to believe that dull parents must of *necessity* have dull children. The mothers of these children are certainly dull, and we are reasonably sure that their fathers are little brighter. Moreover, as we look into the life histories of the mothers and fathers, they present a picture of economic and social inadequacy, of delinquent and criminal records, and of frequent institutional care. Their life histories are thoroughly consistent with their low mental ratings. Nevertheless, their children have turned out to be even above average in brightness when taken from their parents at a very early age and placed in good homes. (*Ladies Home Journal*, March, 1940.)

What, then, are we to say of man? One conclusion, at least, is certain: that heredity does not, in any significant sense, make him what he is,

and that the sterilizers and purists of race have little or no scientific evidence to support their claims. On the contrary, a British study completed in 1936 showed that if the German sterilization law of that time had been applied to one population group consisting of 103 mentally deficient parents, some 78 unusually intelligent children among the offspring of these people could not have been born. And among these 78 were a few, as Waldemar Kaempffert says, who "were even touched with what seemed genius." (*New York Times*, Nov. 29, 1936.) Mr. Kaempffert makes the obvious comment:

Evidently there is more than a slight risk of suppressing Goethes, Bachs, Newtons, Einsteins and Shakespeares if a compulsory sterilization law is rigorously enforced.

Even more evidently, what man thinks of man is of the greatest importance in projects for human betterment. Already, we have made some terrible mistakes.