## NEW GOSPELS

AT least two factors contribute to the emergence of a new gospel. One is the vision and inspiration of its founder or founders. The other is the widespread sense of need which the new gospel gives promise of satisfying. For the man who discovers a new truth, or a new way of looking at things, its fresh insight is important because of the leverage it offers for constructive change.

In some epochs, the greatest attention is given to changing the world, or what we speak of as the "environment." Since the days of Rousseau. constructive change has been conceived of in the West in terms of two aspects of the environment—the physical conditions under which human beings live, and the social conditions. The new gospel relating to physical conditions and how to change them was rooted in scientific inquiry. The hope of improving physical life by the application of science was closely connected with the social gospel, which proposed that the benefits of progress should be available to all.

The dream of progress according to these principles was the basis of the plans of the Founding Fathers of the United States, whose vision is aptly summarized by Allan 0. Hansen in *Liberalism and American Education in the Eighteenth Century*, at the close of his first chapter:

The doctrine of the indefinite perfectibility of man and of institutions was defined and its implications elaborated in the eighteenth century. It became the dominant motif of the Enlightenment and of the revolutionary democratic movements in America and France. The idea that man was progressive by nature stimulated an analysis of the conditions that govern progress. This led to the conception of man as a being governed by natural law, the discovery of which was necessary in order that progress might be scientifically directed. The institutions that prevailed were in general obsolete and had been the result of chance and superstition. Institutions could alone be justified if they contributed to the advancement and welfare of mankind. In order that mankind might progress maximally, institutions must be flexible, fluid, and evolutionary. The only adequate means for freeing man from the limitations of superstition and archaic institutions would be a system of education that would make inevitable a scientific, objective, experimental attitude that would lead to creative innovation and that would energize reconstruction of everything related to the progress of man. The lines of progress could in this way be scientifically determined.

This is a generalized expression of the eighteenth-century gospel of social and scientific revolution and progress. It included both ideals and clear conceptions of how to realize them. The United States was seen by the Founding Fathers as a place of glorious opportunity for the progress of mankind. Here, a new beginning could be made, free of the restrictive traditions and institutions of the Old World. The people of the United States are now the inheritors of the great cycle of productivity which grew out of this gospel and its practical application throughout more than 150 years of American history.

But if the gospel of social and material progress has accomplished great things on the utilitarian plane, it left untouched other departments of man's life. The difficulties which once were external, arising from poverty, political injustice and class oppressions, seem to have been transferred to the inward, psychological situation of human beings. The realization of "progress," we now become aware, is not the same as the realization of contentment. Nor have the constitutional reforms which brought the idea of political equality to the nations of the West-and now, in recent years, to the East as welleliminated the causes of anxiety and unrest in Today, preoccupation with social human life. problems has turned into a painful awareness of

individual problems. We have, for example, a letter from a reader which reflects this new focus of interest. She writes:

I was interested that the psychiatrist in *Les Mandarins* questioned the advisability of helping people become adjusted to mediocrity. From what I have heard people say, who have had professional advice from psychiatrists, it seems psychiatrists often advise people to become adjusted to what is usual rather than helping people be adjusted to being creative for a better society.

A young person said a psychiatrist told him he was abnormal because he had never been angry, that he should have a fight with someone, get drunk, etc.

A housewife and mother said a psychiatrist said that parents shouldn't blame themselves too much if their children and homes are an unhappy mess, but should realize that other aspects of society have affected their children's behavior also (I am referring to their deep, habitual behavior patterns, not superficial ways of talking and acting they pick up temporarily), and that it is all right to fight if the cause is worthwhile.

Is there any soundness in blaming others or other circumstances, over which we have little control—for the way our children act or the way our house is? Children primarily act and react like their examples, their parents; this is where the main responsibility lies. Is there soundness in excusing fights, personal or national, because each person or group involved always has a good cause? This satisfaction with so-called human nature and mediocrity is not the line of growth for a better world.

The interesting thing about this letter is what it reveals of the equivocal status of psychiatry equivocal, at least, in the minds of many people. Psychiatry—or, more broadly, psychotherapy—is both a gospel and not a gospel. The therapist is a man who is confronted by symptoms of disorder in the *psyche;* he endeavors to deal with the symptoms. The more thoughtful a man he is, the more he is likely, in some cases, to suspect the long-term futility of dealing with "symptoms." On the other hand, the therapist's contribution to the recovery of the patient may be thought of as complete when the patient is reconciled to being honest with himself. Further, the man with a sick mind may not be interested in either morals or social reform. He wants to get rid of his pain. If the therapist can show him the immediate origin of the pain, and help him to remove it, a cure is accomplished. But what if the pain has a *moral* origin? Is it good to remove moral pain, to dull the conscience?

Has the patient come to a psychiatrist, when what he really wants is the more profound catharsis of some sort of "spiritual" awakening? Or, at a more primitive level, does he seek "conversion"? If he is seriously ill, he probably doesn't know what he wants. A lot of apparently well people don't know what they want, either.

The therapist also may have problems. As a diagnostician, he is likely to recognize at least two great classes of delusions and neuroses—those peculiar to a single patient and those which afflict society at large, in generalized form. Of course, he will have trouble on his hands if he accuses Society of delusions, for then he will be charged with wanting to be a reformer as well as a therapist.

This is a problem not only of psychotherapists, but of doctors of every sort. The doctor often must write prescriptions that, for one reason or another, can't be filled. He may insist on a "rest," knowing perfectly well that it is The correct treatment may be impossible. economically out of the question. Many doctors do become personal reformers by giving their services to people who can't pay for them. It is natural enough for doctors to become mightily disgusted with many aspects of our cultural and social status quo.

The psychotherapist, however, deals with attitudes of mind and the values, genuine or counterfeit, of his patients. He can't help but begin to form judgments about popular attitudes. He can't help but wish that "things were different." He can't help but wonder about the relative validity of the values which affect the lives of his patients. Unless he is a man seriously lacking in imagination—and such a man would hardly make a good psychotherapist—he is bound to think long thoughts about what might be, in contrast to what is.

The inescapable fact is that the psychotherapist cannot inhabit the neatly limited universe of the ordinary specialist. He works in the shadow of incommensurables, and, indeed, must include some theory of their influence in his working hypothesis for practical therapy. He may, like Charles Jung, adopt the "psychological theory of truth," in order to avoid any sort of philosophical judgment, but the scope of his work will suffer just to the extent that he tries to place an equal value on all beliefs. Beliefs are not equal in value.

But since judgment about beliefs is both uncertain and hazardous, the therapist is usually content to criticize beliefs which are manifestly destructive in their effects on human beings. For example, Brock Chisholm, distinguished Canadian psychiatrist, asked to discuss the psychological requirements of an enduring peace, did not declare his opinion that hesitate to the conventional Christian idea of good and evil is a force which "produces inferiority, guilt and fear, which makes controlling other people's personal behavior emotionally necessary, which encourages prejudice and the inability to see, understand and sympathize with other people's points of view."

Dr. Chisholm's view probably merits being called an experimental conclusion based upon clinical evidence. The question naturally arises: How far can you take such conclusions? If clinical experience can provide evidence against a belief, can it also help to identify the *best* beliefs? What is the therapist's responsibility in this case?

Or, looking at the matter from the social point of view, how far ought the therapist to go with an indictment of the social conditions which form the environment of his patients? If, after years of practice, a therapist is forced to the conclusion that the conventional patterns of, say, modern urban life in the United States are contributory to psychic or emotional disorder, should he report that conclusion in a book or a professional paper? And if his conclusion has "revolutionary implications," what then? Something like this happened in Erich Fromm's recent book, *The Sane Society*. Dr. Fromm also has something to say about philosophical attitudes in this book. In fact, it is difficult to see how any therapist, whatever his "school" or background, can avoid judgments involving both social and philosophical implications, if he is to place of record what he has learned from his practice.

This sort of dilemma was described by Dr. William C. Menninger in the *American Journal of Psychiatry* for September, 1947. Fresh from heavy wartime responsibilities as psychiatric adviser to the Surgeon General of the United States Army, Dr. Menninger wrote on "The Role of Psychiatry in the World Today." War, he found, produced a "pathological outpouring of aggression and destructiveness." The context for therapy presented by society to the psychiatrist sometimes passes through bewildering changes. In civilian life, Dr. Menninger wrote, the psychiatrist—

attempted to understand and treat abnormal reactions of persons to normal situations. In military life he attempted to understand and treat the normal reactions to an abnormal situation. One might seriously question if our world condition does not now place many of us in a continuously abnormal situation to which we are having normal reactions, even though these by all previous standards are pathological. To such a turbulent world, one might legitimately ask, what is a normal reaction?

In short, the psychotherapists are burdened with responsibility beyond the call of professional duty as medical men. They are drafted to be prophets, philosophers, and seers. Naturally, they often resist this responsibility. They may resist it from personal humility, or they may resist it from conformity and timidity, or from a careful sense of limit to their science. But as men, they are bound to wonder.

Something like this has also happened to the atomic physicists. Suddenly, with the detonation

of the bomb over Hiroshima, the atomic physicists felt called upon to become amateur moralists. They began writing *amicus curiæ* briefs to be presented before the bar of a mankind on trial. They didn't exactly *want* to become moralists, but an accidental discovery—of nuclear fission pressed them into service.

But the psychotherapists are more insistently drawn into the circle of moral and philosophical thinking by reason of the attention they must give to human motivation. Even if they want no more than the physicists to become moralists or reformers, they cannot help but recognize the bearing of moral ideas on mental health and mental disease. Many of them, doubtless, are philosophers intuitive without an overt metaphysic, who exert beneficent influence by a kind of osmosis. Others, on the other hand, attempt to deal only with the mechanisms of disorder, without what seem pretentious or presumptuous efforts to wean the patient of his "mediocre" ideals. There is, doubtless, a dynamic balance to be achieved by each practitioner, and how he solves this problem is certainly a private affair.

But that there is criticism of psychotherapy at both ends-from those who want its practitioners to avoid any semblance of reforming fervor, and those, on the other hand, who demand that the therapists offer better or higher ideals-is a completely natural phenomenon of our time. For this is a time when men hunger for a new gospel. They look about for a point of view, a practice, or a method which exhibits the power to change things, and they find that psychotherapy, whatever its limitations, does have some power of this sort. From this discovery follow naturally all the various reactions that we see, today, to psychiatry, psychoanalysis, and every brand of psychological therapy and counselling. These methods are praised as a new dispensation in the knowledge of man, but they are also feared in some quarters as representing an insidious movement to deliver the nation into the hands of a psychological

dictatorship.

In general, it may be said that psychotherapy began as a branch of behavioral science, but soon grew into a science which includes the study of human attitudes, and therefore human values. This development made therapy the rival of all the traditional authorities which deal with valuesreligion, philosophy, and politics. And since religion, philosophy, and politics are in a generally impoverished state, an inevitable tendency to universalize this medical specialty into a total philosophy of life is showing itself. There is, moreover, the inner logic of the content of psychotherapy to encourage this tendency. Psychology is organically connected with philosophy and can be separated from it only at the cost of the mutilation of both.

Psychotherapy is now trying to break out of the straitjacket of mechanistic science, and it can do so only by becoming openly philosophical. There is nothing to be gained by opposing this development. But if it is to become the new gospel for which men hunger, it will have to change from a medical specialty into something quite different—into, perhaps, a credo of ethicalpsychological laws of human nature.

### *REVIEW* A BETTER "AMERICAN WAY"

No one would ever accuse Arthur E. Morgan of complacent satisfaction with the *status quo*, yet it would be difficult to find many men who have done the good that he has done, within the framework of the *status quo*. His latest book, *The Community of the Future* (Yellow Springs, Ohio: Community Service, Inc., \$3.00), is a remarkable testament of active, practical idealism, offering the mature reflections of a man of eighty on the field of enterprise to which he has devoted his life.

While Dr. Morgan has not the habit of writing in a way that calls attention to himself, the thoughtful reader is bound to be impressed by the stubborn originality and peculiarly American genius of the author. For here is a man who would delight the hearts of the Founding Fathers of the United States, could they return to the present scene. He makes determined and imaginative use of the freedom that Americans now enjoy in order to exercise a transforming influence on the future. One never hears from Arthur Morgan the complaint that "conditions" or the "system" prevents constructive activity. He undertakes the constructive activity that is entirely possible, right now, while envisioning and planning for wider possibilities in the world of tomorrow. Dr. Morgan's entire career is a lesson in the adaptation of a working idealism to existing with enthusiasm conditions. and without compromise. No young man, having studied that career, can say that the world is not a fit place for him to apply his high resolves. The opportunities for practical idealism are endless. Arthur Morgan has proved it.

The Community of the Future will be a refreshing inspiration to those who have never read Dr. Morgan before, and a fine recapitulation of his thinking for those who know his other works. This book reviews what has been discovered in recent years about the importance of the small community, examines the qualities vital to community life, and projects a picture of ideal community living in the future. The chapters are sprinkled with practical suggestions. A man who lives in a small town can read this book and the next day go out and start doing something to enrich the life of his neighbors and that of himself and his family. There are things he can do by himself, and things he can do with others. In his chapter on Recreation, Dr. Morgan writes:

One of my most successful efforts to make provision for recreation was to provide a large craft shop in a construction camp, together with a well qualified furniture designer. Here many families would gather for entire evenings, making everything from pewter dishes to motor boats. The free play of conversation, counsel and mutual aid helped to turn a working force into a community. . . . No community can fulfill all the possibilities of leisure, but if there is freedom from conventional regimentation to a few kinds of activities, such as to conventional sports or conventional dancing, the range which will emerge will be large.

As I look around our little village [Yellow Springs, Ohio, pop. 3,000] I observe such a variety. When a village art show was organized there were more than a hundred exhibitors, in a great variety of media-textiles, ceramics, photography, stained glass, printing, sculpture, cabinet work, painting, drawing, gardening, and others. On a pleasant spring or autumn day our village "green belt" of woods may have a hundred local visitors. Dramatics with a home theater has a large following. A considerable number of the villagers are gardeners. The village swimming pool is greatly in demand. The summer day camp for little children is popular. Family outings in the nearby woods are common. Baseball, basketball, volleyball, tennis and golf, all are present. . . . It is not an accident that there is not a stadium of any kind in the village, no equipment for spectators for baseball, basketball, football or any other sport, except for limited space in the high school gymnasium. Play is chiefly for the interest of the players.

Let no one suppose, however, that this is a book in an artsy-craftsy mood, or devoted to opportunities for merely folksy companionship. It is a book devoted to the recreation of the intensity of life which goes with the direct contacts of the face-to-face community. The depersonalized existence of the highly organized, centrally controlled, mass society is an existence without the rich flow of human feeling from man to man. Loss of touch means loss of love, loss of obligation, loss of responsibility. A sterility of the spirit overtakes urbanized man. City populations must constantly be replenished from the country. A cold, statistical order takes the place of the community relations, the long and elaborate contract makes an end to spontaneous cooperation. As Dr. Morgan says:

The city commonly fails to keep alive and strong those elemental traits-of mutual confidence and good will-without which society cannot exist. There is a decrease of all-round trusted friends and neighbors who share the total process of living, and a resulting loss of emotional ties of affection and regard, and of a sense of social responsibility. Out of this comes a tendency to breakdown of ethical standards as they are concerned with human relations. As traditional standards tend to dissolve there is a lack of community participation in creating new and better standards. Social disintegration is characteristic of city life, and but for the fact that most city dwellers are but one or two generations removed from the small community this disintegration would be more marked. This does not imply that there are no urban influences which favor the survival of the spirit of community. The medieval guild was such, and the modern city has others. But they are inadequate for the burden put upon them.

The city is a place of endless crowds. Packed together in cities, we jostle one another through life. "How many a man, with potential capacity for great contribution to his times, has been so crowded with associations, busyness and the pressure of trivialities, that finally his spirit was smothered and he gave up the struggle to be his best self!" Dr. Morgan continues:

How many of us live in limbo, afraid of the society of real human fellowship and communication, and also afraid of solitude? We communicate often but superficially, and are afraid of exposing our real selves; yet are afraid to meet our own real selves alone.

That is one reason why American life is so deeply committed to mediocrity. It is not because Americans lack capacity for high quality, but because our social habits discourage it. We are friendly to talent, but not to deeper quality. We welcome Billy Graham, Norman Vincent Peale, or Father Sheean but John the Baptist would be in very bad form, and where would there be a nearby desert for him to go to?

This book ranges from practical sociological notes on the possibility of a reform in industry in the direction of units of small-scale manufacture, to enable decentralization and multiplication of industry—industry scaled to human а proportion-to those higher qualities of human life which belong to artistic and mystical experience. Unlike most "scientific books," the image of the human individual, inviolable, creative, and free, is present on every page of this one. The controlling values are human values. The opportunity for solitude, the availability of wild areas, the precious gift of being able to enjoy being alone-these are as important in Dr. Morgan's scheme as a proper distribution of goods and services and the community's economic The uncalculating balance and welfare. sociological wisdom of St. Paul and Robert Burns are matched against the urbanized cynicism of Machiavelli, and the reader is obliged to recognize which is the prophet honored in our time.

Finally, while there is dreaming and many dreams in *The Community of the Future*, each vista of contemplated achievement is seen through the sharply defined arch of some partial realization. There is enough Yankee in Dr. Morgan to make him write about projects he has tested out himself, at least in part or in principle. Dr. Morgan's has been a life in the building of communities, not the least of which was Antioch College. He has, it may be said, taken the "American Way" and given it a dignity and an elevation of which we all may be proud.

### COMMENTARY THE SCIENTIFIC PLATEAU

THE "Science" which Dr. Ducasse examines critically in this week's Frontiers—and which has had its full share of critical attention in other, recent issues of MANAS—is not a science attacked or "discredited" (to attempt to discredit science would be ridiculous), but a science cut down to size, seen in proportion to its actual undertakings and discoveries.

It would be a great mistake to carry criticism of science beyond this point. Dr. Ducasse is careful to signify his great respect for the achievements of science in its proper pursuits; and we should like to add, here, some further notes on the obligations of the modern world to science and the scientific spirit, quite apart from the more obvious contributions to technology.

The first great gift of science to modern man is its inescapable demonstration that we live in an orderly universe, ruled by impersonal law. Since what knowledge we have is knowledge of law, the universe, through science, becomes a rational universe, discoverable to the human mind. This has led to a fundamental attitude of mind on the part of human beings: They expect to seek and to get knowledge about the world.

The expectation of getting and seeking knowledge produces a sense of competence, of being equal to life. Knowing is an individual, human act, and the feeling of competence in knowing is a source of self-respect and dignity. Some men have always had this feeling, and long before the days of modern science; but the advent of the scientific method and its widely circulated explanations and discussions have made this sense of competence almost a *social* possession—it is in the air. The idea that *we can know* is a cultural inheritance in our time.

Finally, science schools us in exactitude. We may not follow the example of the scientist in his care to define precisely, to qualify, and to withhold judgment when doubts remain, but his example is there.

No culture can survive for long without some overarching conception of ideal behavior. In our extrovert, up-and-doing, technological civilization, the scientists have supplied such an ideal. They have probably done as well in their role as exemplars as any other type of hero or ideal man, in other ages.

Now we are looking more carefully at the ideal, to see what is missing. We are trying to reconstitute our conception of ideal behavior. We are searching the attics and the cellars of the past and peering into the mist of distant horizons. Meanwhile, we are calling the scientists to account. "We thought," we are saying indignantly, "that you were *universal* men, but you are not."

But there is nothing in the spirit of science that we shall have to unlearn, however we shape the new ideal and ideals for tomorrow. Without the gifts we have had from science, we should be unable to go any further; indeed, we should have to go back—far, far back.

# CHILDREN ... and Ourselves

#### TEACHERS WHO BREAK THE MOLD

AMONG the materials which have come this way recently for review are two items which illustrate and confirm an old contention of this Department: that the teacher wh *oreally* aids the awakening of minds must depart far enough from the beaten path to encourage intellectual excitement and curiosity. One is an account of the teaching methods of Enid Larson, a biology teacher in the Carmel (California) high school, while the other is about Christe nKold, a principal founder of the Danish Folk School movement, from whom Gandhi derived considerable inspiration for his Basic Training schools of India.

While Kold opened his first Folk High School in Denmark more than a hundred years ago, the modulus he set for student participation has influenced imaginative educators ever since. Early in his career as schoolmaster Kold was reported to the Danish school authorities for refusing to teach by rote from the universally accepted "Book of Instruction" for Danish Youth. The following account of this controversy comes fro *nChristen Kold, The Little Schoolmaster Who Helped Revive a Nation*, by Nann aGoodhope:

Kold was summoned to the city o fRibe to appear before the bishop, who desired of him an oral account of the teaching method used in his school. The bishop listened t oKold with apparent interest. And when he had finished his report the bishop said to him: "You are undoubtedly an intelligent and promising young man, and I believe you are fully capable of teaching your pupils without the use of Balle's Book of Instruction. But how about the teachers in all the other schools?"

"That is not my concern," wa Kold's reply.

"Oh yes, it is," said the bishop, "for instruction must the same everywhere."

"What a pity!" replie **K**old. "You imply, then, that if there are ninety-nine shoemakers in a city who make poor shoes, the one who makes good shoes should be compelled to also make poor shoes, so they

can all be alike?"

The bishop, shrugging his shoulders, replied: "The same law governs us all."

"Then we must get such a law changed," said Kold.

But the bishop thought it might be better for Kold's own sake to get his sharp corners polished down. To thi sKold replied: "No, your highness, for then I'd be so smooth and round that I'd roll away among all the other teachers."

Kold at this time also wrote two lengthy articles in a leading newspaper, Dannevirke," in which he brought before the people his view on child education, pleading for reform and freedom in the teaching of religion in the public schools. And efforts were made by Kold and some of his friends to obtain from the national school authorities some individual leniency in the choice of teaching methods in the public schools.

Although Kold was a strict Lutheran he felt that "living religion" must come from living youth—that is, from inspired conversation with pupils. Because he was opposed to any sort of indoctrinatio n—even when the indoctrination presumably served the cause of the Lutheran faith—Kold realized that no one really can be enlightened before he has awakened. In an address to other teachers on the psychology of his method, he concluded by saying:

If you should ask how I, who am not among the prophets because I am not a great scholar, could be an educator of the people, then I would say it is because when I began as a teacher, I found myself among people who were unable to become enlightened before they were first aroused or awakened. They were simple folks who had practically no formal education. If I had been among people like the students here in Copenhagen, people who might become enlightened without first being awakened, then I would most likely have begun by educating without arousing them first, for that is the simplest way. But the people I had to do with, required the use of another method. I also believe that the better one knows the Danish people, the more one will come to realize that both in and out of Copenhagen they need to be awakened and enlivened before they can really become educated, or at least the one must accompany the other, as an awakened awareness is essential to education.

Enid Larson, according to an article in *Together* (condensed in the *Reader's Digest*), is in no sense interested in the problems of formal religion, Lutheran or otherwise. Her fervor is directed toward encouraging youth to trust their own capacities for research and evaluation. In the March *Together*, Frances V. Rummell tells how Miss Larson always begins by confounding her students with a refusal to answer any of their questions: "The authority here," she remarks, "is not the teacher. In science the only authority is the evidence. I'll have just as many questions as you." Miss Rummell continues:

Her spirited expression makes students sit a little straighter, get ready to be partners in the quest for knowledge. But what brings them up short is the discovery that they won't even have a regular textbook to use. Out of stubborn conviction, Miss Larson has abolished education's basic tool. Having students memorize textbooks, she argues, has all but made us a nation of biological illiterates. Equally scornful of home assignments, she says wryly, "Homework is a preposterous waste of parents' time."

Despite these deprivations—or because of them—her graduates are warmly welcomed in California's universities. A well-nigh incredible 23 per cent of her students, on the average, go on to specialize in science of one kind or another with 15 per cent of this total sticking to the biological sciences—everything from forestry to marine biology to medicine.

When Miss Larson first came to Carmel, she was prepared to "wait out" her students—a necessary lag in securing their support for an entirely new approach:

At first the students kept asking, "When do we study animals?" And she kept replying, "When you bring them in." Unaccustomed as they were to selfstarter learning, the stalemate was on. The class hung together somehow from September to April without studying a single animal, but Miss Larson determined not to give in to the pressure for games and gimmicks to pep up learning. Convinced that teen-agers enjoy a good intellectual tussle, she refused to sell her subject short, grimly awaited the chance to demonstrate that it could speak for itself.

Miss Larson succeeded. So popular did her methods become, once the students discovered

that *they* must decide upon the beginning and end of a true educational process, that they clamored for more of the same. Finally the Board of Trustees granted the use of a two-and-a-half acre canyon for Miss Larson's "science laboratory." With this much appreciated gift came opportunity for Miss Larson to employ an approach similar to that used by Gandhi:

The natural area provided the teacher with many obvious advantages, as well as new approaches to education, and she made the most of them. She chose a boy who was flunking geometry to set the lines for the boundaries, and he began to understand the reasons for triangulation. She chose a non-reading student to install and manage the new weather station—a cheap purchase from War Surplus—and the boy never missed a day reporting the temperature, precipitation, and wind velocity. With such technical observations finally stirring his curiosity, this nonreader took a chance on George R. Stewart's *Storm*, was fascinated, and began checking out formidablelooking reference books. They were hard going, he said, but worth it.

So, regardless of whether a teacher's background and learning are "religious" or "scientific," his work as teacher or parent will succeed in direct proportion to his realization that the individual *awakening* of the learner is the crux of all educational enterprise. Whether a youth requires confidence in his right and capacity to discuss "God," or in his right and capacity to explore his own interests in scientific fields, he may be encouraged to recognize that *self-discipline* in learning constitutes the most rewarding experience of human existence.

[Readers who have followed with interest discussions in MANAS concerning the relationship of science to psychical research will appreciate this article by Dr. C. J. Ducasse, professor of philosophy at Brown University. These remarks were delivered by Dr. Ducasse at the celebration of the fiftieth anniversary of the foundation of the American Society for Psychical Research, March 2, 1956.]

THE late Professor James H. Hyslop, in the twenty-seventh chapter of the last of his books, *Contact with the Other World*, discusses the relation between Spiritualism, Religion, Science, and Psychical Research. He finds certain faults with Spiritualism, and points out that it is possible to charge the representatives of Religion with the opposite faults. Then he turns to Science and writes (p. 425): "Science, content, without thorough inquiry, to confine its investigations to the physical world in which it has achieved so much, will not open its eyes to anomalies in the realm of mind and nature, and so degenerates into a dogmatism exactly like that of theology."

These words were written by Hyslop in 1919. The fact to which they point is what I shall start from; and the question I propose to consider is, What accounts for the unscientific attitude with which even now, thirty-seven years later, the majority of scientists continue to meet even apparently well authenticated reports of phenomena of the kinds investigated by the societies for psychical research?

The scientific attitude, as scientists and philosophers alike rightly proclaim, is characterized by unswerving and painstaking dedication to the discovery of truth; it is openminded in the sense of free alike from adverse and from favorable prejudice; and it welcomes facts as such, no matter whether they confirm or invalidate the assumptions or theories on which they have In short, disinterested curiosity-the bearing. passion to know the truth—is the one scientific passion. It is a stern censor, which rules out of scientific judgments factors such as emotion, dogmatism, hopes or fears, and wishful belief or disbelief—factors which so generally vitiate the judgments of ordinary men.

Such is the scientific attitude. It is altogether admirable, and the command over the forces of nature, which adherence to it and to the methods it dictates has put into the hands of man, testifies to the fruitfulness of that attitude.

But the fact that, in so far as it has actually been the attitude of scientists, they have accomplished wonders; and that these wonders have given magical prestige to the very words, Science, and Scientist-this fact does not at all guarantee that, whenever a man who is by profession a scientist speaks, what he says is always one of the fruits of the scientific attitude. For, like other men, scientists usually have the usual human frailties, even if they park some of them outside the door of their laboratories. Inside the door, of course, they either live up to the demands of the scientific attitude, or they achieve nothing. But, outside, they are as prone as other men to pride of profession or of office; and the prestige with which the name, Scientist, has come to endow them in the public eye easily provides for them an irresistible temptation to pontificate concerning all sorts of questions which fall outside their professional competence, but about which naïve outsiders nevertheless respectfully ask them to speak because they are known as Scientists, and Scientists, by definition, are persons who know!

The oracular role which this flattering deference invites them to play, of course caters to the vanity of which they are no more free than other men, and which then almost fatally leads them to assume that—except when speaking to a fellow scientist on scientific matters—their utterances have high authority. For the idea which a person harbors of himself is largely determined by the picture of him which other persons hold out to him.

Now, that pleasing though mainly

subconscious picture of himself as an oracle is what is outraged when outsiders venture to call to the attention of a scientist certain facts, such as those psychical research investigates, which seem to clash with some of the principles of his science, but which he ignores. It is on such occasions that the admirable scientific attitude I have described easily deserts him. On such occasions, as the late Dr. Walter Franklin Prince charged, proved, and illustrated in his book, The Enchanted Boundary, by quoting the words of some twenty scientists. from Faraday, Tyndall and Huxley to less eminent ones,-on such occasions the outraged scientist is prone to become unscientifically emotional, obscurantistic. inaccurate. illogical. evasive. dogmatic, and even personally abusive. Mention of this last-abusiveness-brings to mind an anecdote often quoted in textbooks of Logic in the chapter on Fallacies. It is that once, an eminent counsel had been asked by the lawyer for the defense in a lawsuit for advice as to how to conduct the presentation in court of his client's case. After examining the facts, the distinguished counsel advised: "Your client has no case. Abuse the plaintiff's attorney! "

My remarks up to this point have concerned only the psychological factors which account for the abandonment of the scientific attitude by so many scientists when their attention is invited to the existing evidence, experimental and other, that paranormal phenomena of various kinds really occur. But something must now be said also about the source of the quite honest and firm conviction of many of them that, in the light of modern scientific knowledge, those phenomena cannot possibly be real, but must be mere semblances, delusions, or frauds.

Let us note first that, when a scientist declares that something, which belongs to the field of his scientific competence, is *possible*, there is no mystery as to the basis of his assertion. It rests either on the fact that he or some other scientist has actually done or observed the thing concerned; or else that that thing is anyway not incompatible with anything which science has so far established.

Again, when a scientist declares something to be *impossible by certain means under certain conditions*, the basis of his assertion is likewise not mysterious. It is that he or some other scientist has actually tried to cause that thing in that manner under those conditions, but that it did not in fact then occur; or else that he already has observed what does occur when the procedure stated is employed under the conditions stated; and that what does then occur is *not* the particular thing in view but something different.

On the other hand, when a scientist declares something to be impossible, *period;* that is, impossible not as in the case just considered, *by certain means under certain conditions*, but impossible *unconditionally;* then it is a mystery indeed how he can possibly know this. And, in fact, he does not know it but when he asserts it, he is only dogmatizing even if unawares. The history of science is strewn with the corpses of absolute impossibilities which had been rashly proclaimed at various times.

But what then accounts for the scientist's nevertheless quite sincere conviction that certain things are impossible absolutely?

The answer, I think, lies in the fact that, all unconsciously, he has made a metaphysical creed out of what actually is only a description of the particular field of scientific inquiry he has elected as his own.

Of course, he will indignantly deny that he, a Scientist, has any truck with that vain and vaporous thing called Metaphysics, which he is more than glad to leave to philosophers and other unscientific thinkers. But, as one philosopher has pointedly observed, a person's repudiation and scorn of Metaphysics does not at all insure that he does not himself harbor unawares a metaphysical creed—in which case he is the more helplessly a prisoner of it in that he does not suspect the existence of that mental prison and cannot recognize its walls.

That this is actually his predicament will become evident if we now consider on the one hand what that despised thing is, which philosophers call Metaphysics; and on the other, what is the field of inquiry which the Natural Sciences have chosen as their own.

Metaphysicians, of course can justly be charged with many sins, and the spectacle of these has led one philosopher to the facetious definition that Metaphysics is the systematic abuse of an elaborate technical terminology invented for especially the purpose! But in fact Metaphysics, or more particularly in the present connection the branch of it called Ontology, concerns itself with the question as to the nature of reality as distinguished from mere appearance, unimportance, or nonexistence. And a metaphysical creed is a conviction which, if put into words, takes the form: "To me real is to have such and such characteristics." Hence, to have a metaphysical creed is to proceed in all one's activities and judgments, and whether consciously or automatically, under the assumption that to be real is to have certain characteristics-the particular ones, namely, which differentiate one's conception of the nature of reality from other conceptions of it.

What, on the other hand, is the field of inquiry which the Natural Sciences have chosen as the one they undertake to explore? Before answering this question, it is necessary for us to be quite clear that, in the phrase "the Natural Sciences," the word "Natural" is not used as opposite of "Supernatural," but is only the customary name by which the physical, chemical, and biological sciences are distinguished from other groups of sciences—for example, from the Formal Sciences, namely Mathematics and Logic.

This being understood, it becomes clear that the field of inquiry the Natural Sciences have chosen as their own consists of the things and events we all can perceive by our senses—solids, liquids, gases, vegetable organisms, animal bodies. These things, their behavior, their minute constituents and hidden processes, are the whole of what the Natural Sciences study. And the comprehensive common name of that entire object of study is "the material world."

The material world, of course, is highly important to us, and study of it by scientific methods has yielded a vast amount of knowledge of it and of its laws. And this in turn has put into our hands a corresponding amount of control over its processes. The scientists who have devoted themselves to this great and difficult task can justly be proud of what they have achieved. But the material world is not the whole of the world, nor is it the only part of it capable of being investigated in a scientific manner.

Now, however, let us recall the question which led us to the remarks just made concerning Metaphysics and concerning Natural Science. It was: What accounts for the sincere conviction, so widespread among natural-scientists, that the phenomena in which psychical research is interested are absolutely impossible? Those remarks, I believe, will now make clear both the meaning and the truth of the answer to this question which I offered. That answer may now be restated as follows: The only reason why natural-scientists regard the phenomena in view as absolutely impossible is that, unconsciously, they have made a metaphysical creed—a doctrine as to the nature of *all* of Reality—out of what in fact is only the description of the particular part of Reality they undertake to explore, namely, the material world. That is, they have, uncritically and gratuitously, committed themselves to the particular metaphysical creed that to be real is to be some material event, process, or thing. And obviously, if one thus proceeds from the start and all along on the arbitrary metaphysical assumption that nothing is real unless it is some process or part of the world perceivable by the senses, then necessarily thoughts, feelings, mental images, volitions, and all the other psychological events, none of which is directly so perceivable but

perceivable only by introspection, are automatically conceived as unreal; that is, as mere appearances, incapable of doing or of accounting for anything.

It is, of course, perfectly legitimate and proper to push as far as it is successful the attempt to account in purely material terms for all material events, including the activities of human bodies. But at the many points in, for example, human voluntary acts, at which no material event is observable that would account for those acts. there is no rational justification at all for insisting wilfully that their causes *must*, somehow, anyhow, be material events; so that when, for example, I wrote the present words, my thoughts and my desire to formulate them in writing could not possibly have been what caused the writing of those words. What accounts for but does not justify that insistence is only the pious but quite arbitrary metaphysical creed, uncritically adopted and cherished by most natural-scientists, that only what is material is real; and therefore that not only the vast majority of material events, but all of them-absolutely all without exception-must have purely material causes.

In conclusion, the substance of my remarks may be put both summarily and picturesquely in the apt words used by Professor C. D. Broad in the preface to his Tarner Lectures at Cambridge University in 1923. What he said was that the scientists who regard the phenomena investigated by psychical researchers as impossible seem to him to confuse the Author of Nature with the Editor of the scientific periodical, *Nature;* or at any rate they seem to suppose that there can be no productions of the former which would not be accepted for publication by the latter!

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