

ATOMIC AND MORAL FISSION

The great need of the modern world is for sustained moral intelligence. The function of moral intelligence is to make human beings able to face and resolve the ultimate dilemmas of life. Today, not merely individuals, but an entire society, is confronted by such a dilemma. We do not know what to do.

The dilemma is that created by the atom bomb. There is no half-way solution to the problem of the atom bomb. Either we become the most powerful nation on earth, placing our full reliance on vigilant and aggressive militarism, or we choose to have faith in the power of international friendliness and mutual trust to secure the world from destruction.

This is really a decision that confronts the individual man, as well as governments and nations, for the choice will affect each individual in countless ways.

What, actually, are the values at stake? The man who votes for uncompromising militarism must be ready to transform America into a "garrison state." All personal and civilian purposes will be subordinated to military purposes. He must accept military survival as the highest good. Not simply the energies of the nation, but its thinking, will have to be directed into channels that serve the military conception of national defense. Education, therefore, will become simply a tool of the military State, which will be acknowledged as the source of all human security. Indecision as to what is "right," or "patriotic," will tend to become the most serious of crimes. Men tortured by conscience, pondering problems of good and evil, are bad for military morale.

There is little hope that time will relieve the darkness of this prospect. So long as atomic bombs remain to threaten the future, so long will

the military plans for national security be shaped along these lines. There is the further gloomy consideration that even the most thorough-going military organization and preparedness will probably prove futile against the bombs of an aggressor—an ugly thought that will always haunt the strategist of national defense, making his efforts a little more frantic than they would have been without this fear, and his dogmas as to the requirements of "military necessity" more stridently demanding.

If we proceed along this path, it will be well to admit, at the outset, that the human society of the future cannot afford the luxury of civil liberties. Soon we shall become persuaded that any deviation, even in thought, from the necessities of national defense must be met with sudden and complete suppression. Peculiarly dangerous will be those who dare to unsettle the minds of other men with recollections of the Bill of Rights. The man who finds any merit in the old idea of "trusting" another nation will be declared a "fifth columnist." Human fellowship will become the narrow fraternity of the regiment. The bond of common humanity will be forgotten in the universal fear.

If it be supposed that the picture is overdrawn, we need only refer to the presence of this mentality already among us. Within the month, a military spokesman proposed that an atomic bomb be dropped on some uninhabited tract of Russia—"to teach them a lesson"! Again, within the month, in one of the larger cities of the country, a speaker for the American Civil Liberties Union was shouted down by an audience of Kiwanis Club members—representative American business men. The speaker had dared to quote Supreme Court Justice Holmes on the meaning of Free Speech—asserting the right of an unpopular cause to a public hearing.

These events are merely symptoms. What will happen when the disease itself appears?

The other course, that of attempting genuine friendship with other peoples, is much more difficult to imagine, simply because we have already gone so far in the direction of the military "solution." The way of friendship would mean trust in those whom we have been taught to suspect, by both experience and propaganda. It would mean "taking chances" we have never been willing to take before, now, when the "risk" is far greater, and to be prepared for the worst, even while hoping for the best.

It is impossible to discuss this second course without an overwhelming sense of unreality. While a man may honestly advocate a national policy of this sort, he cannot intelligently expect very many people to listen to him or agree with him. Historic trends do not reverse themselves suddenly. Individuals have been known to change their lives, but not whole populations. The momentum of mass feeling and fear is an irreversible force; it may sometimes be deflected, but never essentially changed.

The advocates of organized internationalism know this, either intuitively or from experience. Instead of proposing the simple idea of direct fraternity and good will among nations, they conceal its basic meaning within the more complicated idea of world government. This makes the concrete *act of trust* remote, less "dangerous," therefore. But actually, all government by law, whether national or international, is simply rationalized trust. It is either that or unconcealed despotism. The body of law defines the terms on which men agree to trust each other. If they do not trust each other in the first place, they will never have confidence in the body of law. It follows that any proposal for world government as a practical substitute for international trust is foredoomed to failure.

The issue is quite simple. It is a moral issue, involving an answer to the question: Can a man behave morally, regardless of what other men do?

If the answer is "yes" for the individual, it is "yes" for the nation as well, though, for the nation it may be far more difficult of accomplishment.

In order to answer this question, a man has to decide for himself what "moral" means. If he has been brought up a Christian, the obvious thing for him to do is to attempt to apply the Sermon on the Mount to the international situation.

The next step is to ask himself whether he really accepts the Sermon on the Mount as his standard of morality. For if, as will certainly be the case, he finds that there is no change at all for the Sermon on the Mount to be applied to the international situation, in terms of national policy, what then is he, a Christian, going to do about it?

He may decide with relief that he can apply the Sermon on the Mount only in limited personal relations—in his business, perhaps. But there, he discovers his partner has another view of commercial enterprise. Well, he still has his family and community life.

His community, however, is threatened—on the fringes, of course—by an influx of Negro migration. Already his home has dropped two thousand dollars in value, while the mortgage remains the same. He has no racial prejudice. . . . but there are limits! And the Jews are objecting to the singing of Christmas carols in his daughter's high school; they say they don't believe that Jesus was the Son of God at all!

It's not quite fair to be expected to apply the Sermon on the Mount to people who don't accept Jesus. Look at the Russians—they don't believe in Jesus, either. They'll have to be watched. Dropping a bomb somewhere *near* them might be a good idea. . . .

That Christianity in America has in this way been whittled away to nothing at all is a fact that ought to be faced. Our traditional religion is little more than a bundle of sentiments, quotable, but "impractical." Hardly a trace remains of the original conviction of the men who came here from England and Holland to save their immortal

souls. Nor is it possible to return to the religion of the Pilgrim Fathers, and their sectarian ways. But something like this conviction is needed, if we of the twentieth century are to save *our* souls.

The tragedy is not so much in the dying out of Christian belief, but in the sickening hypocrisy which allows us to pretend to any religion at all. The ghastly parody, "All men will be cremated equal," may make a fitting epitaph for a civilization that cannot be awakened to its moral responsibilities, even by an atomic bomb.

Where shall we begin? First of all, we have to determine the moral unit. Is it a man or a nation? Who is morally responsible, men or "nations"? If we are Nazi mystics, we shall say that nations are responsible. If we are liberals and democrats, we shall say that men are responsible.

But if men are responsible, as individuals, *we* are responsible as individuals. This means we must stop talking about what is right or wrong for "nations" to do, and start acting upon what we think is right or wrong for individuals, ourselves, to do.

Every project for world peace that has public attention today involves getting millions of *other* men to behave in a desirable way. Most of these proposals are wasted words. Peace is not obtained by trying to get other men to change; it is obtained by becoming peaceful.

Peace can be created by men who believe themselves to be moral units. Or, put in other terms, by men who think of themselves as *souls*. A human soul is a moral intelligence. It lives according to principle. It finds its "security" in allegiance to principle. Socrates was a man who lived and died according to soul-conviction. Jesus was another. And, from all reports, so was Eugene V. Debs. A world populated by men like that would be a world fit to live in. Can you imagine Jesus dropping an atom bomb somewhere in Russia to put the fear of God in the Communists? Can you imagine Socrates campaigning for peacetime conscription because

the Russians may have atom bombs, too? Can you imagine a society of men like them whipping themselves into a frenzy of fear and militarism, creating by their insane dread the very destruction they would avoid?

There is only one resolution of the dilemma of the atomic bomb. It is to start building the kind of a society in which men like Socrates, Jesus and Debs would be at home—instead of being poisoned, crucified and imprisoned. We can begin by finding out what men like Socrates, Jesus and Debs did, and why they did it. Of course, we may be poisoned, crucified and imprisoned ourselves, if we follow their example. But that's not much worse than what happened to Hiroshima. And we will have tried.

Letter from **INDIA**

BOMBAY—A new era is opening in the affairs of mankind. The old world of “nations” has travailed, giving birth to the new world of one humanity, and what the infant will become depends upon those who are labouring in the present hour. Forces of greed, ambition, and competition are present and prominent in more than one sphere, but are especially evident in the economic struggle. Financiers and politicians are vociferous. They utter pompous threats and mouth the old national “ideals,” until in the din the voice of reason, of peace and of love, is almost inaudible. But not altogether. There are still poets and philosophers, true patriots who value their own countries for the help they can give to the human race as a whole.

In India the Communalists [religious sectarians, *i.e.*, Muslims, Hindus, etc.] and the Communists (two opposed extremes) and some others have been making a great noise and attracting much attention. In gaining her political freedom, India has had to face the unleashing of creedal and communal rivalries. If the world at large suffers from national and political fanaticisms, here in India the people suffer from provincial, communal and parochial fanaticisms. Political factions have been corrupted by the nefarious policy of the British Raj in India—“divide and rule”—for many decades. Hindus, Muslims and Sikhs did not themselves unite while their political organizations made common cause for *Swaraj*—Self-Rule—and now this sin of separateness has overtaken their peoples. The British have gone, but the divide-and-rule policy remains in its moral effects. The National Congress, India’s only unsectarian political body, did what it could to labor constructively for the welfare of the masses, but even the Congress is found wanting at this hour when ancestral prides and superstitions manifest themselves in an uncontrolled orgy. Those who were partisans before India became free are partisans still. Political liberation has not made us better men. For India, the present is a time of trial.

What can the West do for India? First of all, Americans should have accurate news about existing situations. The reports of press correspondents are usually superficial, often distorted. There are important tendencies not perceived by writers who are preoccupied with day-to-day affairs.

Second, the West should recognize the fact that the cycle of Nationalism is closed. Sectarianism in race and religion must also end. The individual man is a Christian or a Hindu, an American or an Asiatic, only secondarily. He is primarily Man, and his Religion should be to think as man. The day which is dawning is the day of human intelligence—not of nation or race, but of all humanity. To think accurately, knowledge is essential, and knowledge does not mean only the facts of the technical sciences, based mainly on sense perception, but also of man’s heart—of the qualities by which separative tendencies are overcome. To know the truth and to act with virtue, man needs a re-interpretation of the meaning of The Good. Man, the Thinker, must synthesize science, philosophy, religion and art by endeavouring to become himself an integrated being. This must be preached to India, where creeds pass for religion, superstition for mysticism, and competition for human vigor. India is divided in its *Psyche*, its mind-soul; she needs voices at home and abroad to declare the truth of her own condition and of her future possibilities.

What can India do for the West? A great deal. Fallen though our country is, divided and tortured her people, the light of a timeless wisdom still shines in India. There are depths of understanding in the heart of India, but the world knows little of that heart; it sees and hears only the political vociferousness of demagogues, the social degradation and weakness of the inchoate masses. The West must penetrate the mask of outward appearances to know the heart of the real India, that beats today more strongly than it has for centuries.

Modern India is restlessly alive, is changing rapidly. Having thrown away its political fetters, India finds itself enchained to its psychic and moral past—to centuries of debilitating practices, and divisive customs and beliefs. But this modern India is bound to transmute the hard iron of irreligion into the fine gold of spiritual idealism; its divided peoples may yet become united. One day we shall see the friendly smile of old return to our villages, the refinement of soul to our cities. The moral credit of our hearts will increase, the creative urge of our schools and academies will manifest, and all this, not for the glory of India alone, but for all the world.

INDIAN CORRESPONDENT

CHILDREN ... and Ourselves

The phrase, “*our* child,” should strike us as essentially unfair. It is a symptom of the usual possessiveness with which most of us regard our family relationships. To the extent that we follow the common pattern in describing “our” child, “our” wife or husband, “our” family, we are partisans of such psychologically related totems as nationalism and sectarian exclusiveness. The “family,” as Plato appears to have been aware when he wrote *The Republic*, must undergo radical change if we are to have real hope of a cooperative society. Just as an intense family consciousness had much to do with some past German habits of blind obedience—which English-speaking peoples so vehemently deprecate—even so is the single idea of “our child” a disturbing element in our own culture.

It was maintained last week that we are teaching children to believe in “Possessiveness, Fear, and Sensualism,” when we teach them they are creatures. “Creatures” must believe in these three, for they are really one—the conventional attitude of mind—and because there is nothing else to believe in, for creatures. If either “God” or “Heredity-Environment” is responsible for the way you think and act, you are a creature—moved around by forces beyond your control. You can fear the forces which threaten you with “Hell,” or physical death, you can see how many sensations may be enjoyed before your brief life is ended, or you can try to “possess” somebody else, to even the score for being nothing but a creature yourself. All this you can do as a creature, but you cannot be fearless in the quest for knowledge. And without fearlessness, there is no real teaching or learning, for the fearful man fights against disturbing truths.

The only alternative to teaching children they are creatures is a belief in “Soul”—the timeless soul of Socrates and Plato instead of the *created* soul of Christianity. The soul of Greek

philosophy was a creative power, a self-moving intelligence. From the point of view of this soul, possessiveness, fear and sensualism are the three great stupidities instead of the three great realities.

The words, “our child,” of course, do have another meaning than a possessive one for those who are learning *with* children instead of learning them, cooperating with their unfolding individual needs rather than trying to cut them to fit a pattern. But from the look of things, there are still far too few parents willing to hold on for long to such a view.

Whether early child-training be in private, parochial or public schools, the child’s first impression of what his elders wish him to learn is apt to be very much the same. Whether he be religious or irreligious, he is usually asked to accept the fact that *he himself is chiefly an “event” in someone else’s life*. In the case of religious instruction, the child, in the last analysis, becomes an event in the life of God—part of a plan of life for which the child himself has no responsibility. If the child happens to go to a “godless” school, or has “godless” parents, he will find himself considered to be principally an event in the life of his parents, and an event in the life of the school. The dominant point of view accepted by the irreligious is that the parents actually create the child—thus usurping God’s prerogative. Some moderns hold to the view that the parent creates the child by providing him with certain genes or chromosomes, while others regard the conditioning factors of childhood as being principally responsible for molding the child’s nature.

The average child, then, emerges at birth as someone’s possession. If the parents feel that God owns the child, they will attempt to interpret God’s will by evolving a pattern of “righteous living” into which the child must be fitted—else no peace between parents and God. If the parents feel the child to be their own possession, a creative accomplishment of their own lives, they will cut out a pattern of similar rigidity in an

attempt to encourage or force the child to realize their own wish-fulfillments. In most instances, of course, a slight confusion exists as to who does possess the child—God or the parents—since the average preceptor, whether parent or teacher, is willing to leave the matter fuzzily undecided—but the fact that the child is possessed by *someone* emerges without a shadow of doubt.

Long centuries of a deeply ingrained “creature complex” have developed the sense of possession in human relationships to such an extent that it is simply assumed and never questioned. The child is not only subjected to the influence of the two theories of education just mentioned, but also enters into a world where family relationships, the economic structure, and the political orientation of the land in which he lives all reflect the idea of “possession.” The usual attitude of man towards woman and woman towards man, out of which habits of marriage grow, is one of possession. The typical happy ending of the scenario is still the gaining of a husband or a wife, *i.e.*, a final and irrevocable possession.

It is impossible to investigate or evaluate our educational system without dissection of the institution of marriage, for if a child is born in a home where parents are only “normally” possessive in respect to each other, he is, from the moment of birth, subjected to an atmosphere reflecting the psychology of possessiveness. This earliest “psychic experience” will in time blend with the obvious intention of most parents to possess their children even as they “own” one another. In the rare instances where parents think themselves to be *chiefly* possessions of God rather than of each other, they will nonetheless feel that they have been divinely appointed to see that *their* children are a credit to the Almighty—and to themselves before God.

Closely connected with these easily recognizable expressions of the possessive attitude is the apparently contrary indifference of some “possessive-attitude” parents toward the welfare

of their children. A parent who is able to remain more or less unaffected while his or her child establishes a juvenile criminal record, obviously does not consider the child as anything more than an *uncherished* possession.

“Responsibility” is a word which has come to have little clear meaning, perhaps because its definition is so often in terms of legal obligations. For the man who desires to become a practical philosopher, however, “responsibility” represents the reality of human interdependence. A sense of possession cannot be made to substitute for human responsibility, since possessiveness regards children only from the standpoint of what is convenient for oneself, while responsibility considers children as both ends in themselves and as “belonging,” as participants, to the entire society of humankind.

COMMENTARY

ATOMIC POTENTIALS

MANAS readers will soon realize that certain topics are receiving repeated discussion—topics which, in the opinion of the editors, have much to do with the shaping of our moral environment. The Atom Bomb, for example, will be dealt with from many viewpoints, not because of its morbid fascination, but because it has torn away layer after layer of human complacency and exposed the nerves of moral perception. Thinking men are trying to see more clearly the implications of atomic destruction, and are saying what they think.

One devoted advocate of absolute decision in regard to the bomb is Robert M. Hutchins, Chancellor of the University of Chicago. As an educator, he has used the bomb to drive home his thesis that disciplined thinking is our only savior, that this has always been true, but that the bomb has made it self-evident. Unlike most college professors, Dr. Hutchins has for years been stumping the country on behalf of his convictions on education, carrying on a campaign for study of the Great Books. Through the University, and its subsidiary, the Encyclopedia Britannica organization, he has helped to establish popular Great Books seminars for adults in many of the cities of the United States—reading and discussion groups which are bringing to life the classics of the Western cultural tradition and applying their wisdom to contemporary problems. In short, Dr. Hutchins is both an idealist and a practical man.

His latest discussion of the bomb—in the *American* for December—strikes a note different from his familiar theme, and is therefore worth special attention. He begins by stating facts of general interest:

In July, 1945, when University of Chicago physicists first learned from an experimental blast that the atomic bomb would “work,” sixty-five members of the scientific staff signed a letter to

the President petitioning him to prevent its use. This letter was never acknowledged. Two members of the group flew to Washington to repeat the appeal. They likewise failed. In a few days, on August 6, Hiroshima was destroyed.

“Then and there,” says Dr. Hutchins, “our opportunity to control atomic energy vanished.” The Smyth Report, he adds, put an end to all “secrecy” by giving virtual blueprints for the manufacturer of atomic bombs to every foreign physicist familiar with the processes of nuclear fission.

Thus, no secret—and, as Dr. Hutchins claims, with facts and figures—no defense. He details the ease with which an “enemy power” could first paralyze and then destroy the United States by dropping a few, well-placed atomic bombs. No military measures, he implies, can avert this fate.

What then? Changing his mood, and assuming the establishment of world government, Dr. Hutchins paints a delirious picture of a world in which atomic energy has the role of Aladdin’s Lamp. Abolition of disease, nothing but easy work, with very little of that, and countless new materials for industry, with endless power to run industry’s machines—a physical paradise of health, pleasure and gadgets is just around the corner . . . if we’ll all be intelligent and not bomb each other to pieces.

Dr. Hutchins ends by telling us that now, at last, “we truly hold in our hands the power to shape our own destiny, to choose our own fate.” And how shall we ascend to the heights of future greatness? The reward that will lure us on is unimaginable “productivity” . . . and “ease of living beyond our brightest dreams.”

Maybe it’s the influence of that superlative organ of “success,” the *American* magazine, but for the first time, in this article, Dr. Hutchins has left out the main point of his lifetime’s educational endeavor. He can but know that a Sears & Roebuck catalog of atomic miracles has nothing to do with the building of the good society. The

good society will not come about from promises of effortless living, but from blood, sweat, and tears. It has always been so, and atomic energy, whatever else it may do, can have no appreciable effect on the qualities of human nature.

Tomorrow's atomic world described in the *American* sounds fine from an engineering viewpoint, but what about the people living in it? There is nothing in history to suggest that gadgets can be substituted for thinking, and even the discovery of perpetual motion would fail, of itself, to make us better men. Today, those who have the public attention ought to be saying that atomic power to create "ease of living" could be just as disintegrating socially and morally as the bomb is physically, if material luxury is the only ideal.

YOU LUCKY PEOPLE

Everyone knows that advertising corporations tend to be extremely idealistic. It is therefore no surprise to discover that the outdoor advertising concern, Foster & Kleiser, is promoting religion in southern California, completely free of charge, doubtless as a gesture of community good will. One of the latest inspirations, presumably an aid to the understanding of Real Americanism, announces—against a delicate pink background—that "freedom to worship is a precious heritage."

Now this is a thought-provoking statement. The first conclusion, for the man who reads the headlines as well as Foster & Kleiser's billboards, is clearly that we are lucky to have a government different from Russia's. Freedom of worship, we are to realize, is something the Government gives you—like workmen's compensation, or old-age benefits. It is a noteworthy luxury of the spirit and only the best governments can afford it.

This is a strange departure from the principle on which freedom of religion is based. Men, not governments, create freedom, and men preserve or lose their freedom, regardless of government, according to the kind of men they are. Government is only the function of people

working together. If ever we become convinced that Government—like some Big Being—can give us our freedom, or take it away, we shall have lost, long before, not merely our freedom, but our capacity to be free.

REVIEW

MORE PSYCHOLOGICAL NOVELS

While the events of the war years were often spectacular, the general reading public has consistently shown more receptivity for stories about states of mind than for stories about states of affairs. Popular war novels include Erich Remarque's *Arch of Triumph*, James Ullman's *The White Tower*, and Frederic Wakeman's *Shore Leave*. Even the last and least pretentious of these, *Shore Leave*, is a psychological study of human nature against the background of the intensified pressures incident to war. The foundation of each of these stories is a love—or, if you prefer, a sex—affair, the medium through which complicated personal emotions can be most easily portrayed. While the settings of *The White Tower* and *Shore Leave* are entirely different, their essential theme is the same: Man is the victim of historical obstacles entirely too big for him to overcome. He seeks escape in emotional involvement and sensation, although knowing from previous experience that they hold no real solution. These novels, then, are the sum of the authors' thoughts on how little one may expect from life.

Another similarity may be noted in two of the books. Both *The White Tower* and *Arch of Triumph* become least convincing when the actual facts of war are considered by the characters. Ravic, Remarque's hero, murders a former Gestapo torturer in France—more as a gesture on the part of the author to bring in the war issue than because of any consistency with Ravic's own nature. Martin Ordway, the Switzerland-stranded bomber pilot of *The White Tower*, is made to discuss with his lover the necessity for his return to the war for much the same reason. Wakeman's Crewson is supposed to behave as he does because he must return to war, and because, subconsciously, he wants to go back.

These three books present three men who are, however diffidently, human sacrifices on the

altar of United Nations folklore. It is feasible to imagine that the conventional "war consciousness" of these novels is acceptable to most readers chiefly because it is expected to be there. Yet in all three books it has a hollow ring. *Arch of Triumph*, which makes the most obvious effort in this direction, acquires a thoroughly ruined plot because of the gesture. The fact of the matter may be that none of these authors actually believes that any attempt of the individual to link himself with the "purposes" of modern war can have any real meaning. Wakeman's story emerges as the most consistently convincing, since for him the war is almost entirely an impersonal background against which a certain type of amour runs its course.

This trend in fiction may be evaluated in two radically different ways. For the believer in bigger and better national and international organizations, these books express an immoral preoccupation with purely personal desires. But from the standpoint of someone who regards the understanding of the psychological nature of man as a major objective, they are good case studies. The individuals, whether drunken, sensation-ridden or confused, also manage to learn something about themselves and about the people they live with—which is perhaps more than anyone has ever learned from affairs of government. And each one of the central characters *wants* to be something more than a casual sensualist. He is simply cynical about the capacities for significant experience of the people he meets.

Of the leading characters of the three books, Ravic, in *Arch of Triumph*, is the most clearly drawn and interesting, except when he plods through the matter of murdering the German agent. Ravic first learns how to be both psychologically and morally "strong." He refuses to succumb to morbid fear of the deportation which he faces as a political fugitive from pre-war Germany. Although a skilled surgeon, he must perform his work illegally—underground—

“ghosting” operations for well-known but less capable doctors, yet never relinquishing the ability to give complete concentration to his work, despite the constant threat of prison and deportation. His “strength,” however, attained in difficult ways, brings with it a certain callousness, nor is he able to appreciate beauty or love in a normal manner. His love affair with an emotionally unstable girl provides the way by which Ravic moves once more toward becoming a “complete” man, simply because he experiences moments of unity with another human being.

Ravic’s real struggles are with his mind and his emotions. He learns that stability of feeling comes not from attaching himself to any particular person or circumstance, but from refusing to be too absorbed or engulfed by anything. Yet this does not rob him of the ability to live fully in any moment. Finally, he discovers that he can love, enjoy and appreciate anywhere—though why the killing of the German Haake is made a necessary prelude to this “illumination of self” is weirdly obscure. Subsequently the girl dies, and while Ravic loves her strongly, he is yet not torn by her death.

Remarque seems to be reaching for an answer to the endless round of confusion and pain which attends human living. Ravic is not satisfied with drunkenness, nor with any love affair which fails to provide hope of mutual growth. Yet he is not *dis*-satisfied with either. He simply knows that there are things to learn about himself, and about others, which may in time provide a more substantial core to human experience. He has cut himself adrift from most of the inadequate conventional answers to the problem of frustration. He knows it is a bigger problem than “sex” or “war.” He looks inside himself, instead of outside, and is still unshaken. He is a good fellow. We wish him luck.

FRONTIERS The New Cosmologists

The exceptional interest generated by such books as Lecomte du Noüy's *Human Destiny* (Longmans, 1947, \$3.50) is in response to a far-reaching trend in scientific thought which entered the zone of popular reading and discussion about 1935, with publication of Alexis Carrel's *Man the Unknown* (du Noüy, incidentally, was for years an associate of Dr. Carrel). Much occurred within the brief period from 1930 to 1940 to stimulate—almost to the point of desperation—a search for moral truth among the sciences. Those ten years saw a marked change of emphasis in scientific literature, resulting in publication of numerous speculative studies as well as popular books attempting to relate vital human questions with the remote, impersonal laws of physics and biology.

Explosive social forces helped to establish and maintain this trend. Early in the 30's the impact of economic depression became a universal experience. In 1934, Adolf Hitler was swept into power by a series of unhappy economic and political convulsions. From 1936 to 1938, all but the blindest of believers in the Russian experiment in "scientific socialism" were appalled and revolted by the infamous Moscow trials, which brought fundamental disillusionment to a multitude of humanitarian admirers of the Soviet regime. In Asia, the rape of China was proceeding with methodical brutality. Ethiopia was being "civilized" by Italian bombs and the Spanish Loyalists were fighting a losing struggle against Franco and his powerful fascist allies.

It was natural, therefore, in these depressing circumstances, for scientists to concern themselves with the ethical and social meaning—if any—of their impressive collections of "facts." The 101st meeting of the American Association for the Advancement of Science (1938) declared that scientists now accepted "the challenge to science for moral leadership in a disordered and

puzzled world." The Council of the Association made "an examination of the profound effect of science on society" one of the objectives of the organization. Its president, Dr. Edwin Grant Conklin, told the members that there is "no matter of greater concern to men of science and the general public than science in its relation to ethics."

The present scientific attempt to fulfill this commitment converges from several directions and viewpoints. Early efforts at synthesis reached for a technical sort of unity in scientific theory. (The urgent appeal for a rational or "scientific" system of morals—on which practically every contemporary investigator has composed an essay—came later.) The classics of this first period were Arthur Eddington's *Nature of the Physical World* (1928) and James Jeans' *Mysterious Universe* (1930). Both books are survey courses in the New Physics—but with something added. Eddington, from the facts of modern physics, deduced the idea that the final reality of Nature is "mind-stuff"—"more general than our individual minds; but we may think of its nature as not altogether foreign to the feelings in our consciousness." Jeans found satisfaction in the Platonic utterance, repeated by Plutarch, that "God geometrizes." The universe, in Jeans' eyes, is a vast equation; or, as a nineteenth-century thinker expressed it, the world, through all its departments, is "a living arithmetic in its development, a realized geometry in its repose."

No trace of theological thinking appears in either Eddington or Jeans. Even so, when Max Planck published his *Where Is Science Going* (1932), he included in his appendix a judgment by Albert Einstein to the effect that such expressions as those of Eddington and Jeans could not be called "scientific" at all. In Einstein's view, physical science had no room for metaphysical speculations about "mind-stuff" and "divine geometers."

By 1940, however, Gustaf Stromberg's much more daring—scientifically speaking—*Soul of the*

Universe, contending for the immortality of the soul on scientific grounds, won Dr. Einstein's qualified approval. Times had changed, and with them, apparently, Dr. Einstein's sense of the fitness of such speculation. He called Stromberg's book a "successful attempt to pick out of the bewildering variety of researches that which is of essential value, and to present it in such a way that the concept of Oneness of all knowledge can for the first time be stated with definite intent." Despite Stromberg's unmistakable sympathy for the God-idea—in this book, Newton's cosmic superintendent is quietly restored to benevolent watchfulness over the affairs of men—*The Soul of the Universe* met with surprisingly little criticism of the type usually directed by scientists at semi-religious speculations, indicating a definite change of temper among the scientific fraternity.

During this epoch, research in fields other than physics also gave new dimensions to scientific philosophizing. Morphologists discovered the "electrical architect" of embryology and of cell proliferation in general. The papers of Driesch, in Germany, added a touch of scientific mysticism to tentative solutions of the problem of origin of form. It became difficult for thoughtful biologists to avoid the conclusion that there is some sort of "intelligence," superior to, and functioning through, the apparently mechanical processes of nature. Then, as an added encouragement to the new cosmologists, the Duke University experiments in thought transference—Extra Sensory Perception—brought psychic research into semi-respectability.

As a result of these and other developments, the frontiers dividing the various specialized fields of research became irregular and indistinct. The need for synthesis in modern thought, from only a technical viewpoint, was obvious enough, so that when the looming social and moral thunderheads approached the bursting point, the Olympian reserve of the scientific fraternity gave way to the writing of tracts for the times. One can easily sample the result of paging through the issues of

the *Scientific Monthly* for the past five or ten years.

Human Destiny, by the late du Noüy (he died last September), has been widely greeted as a crowning attempt of this movement to unite scientific and religious thinking. Despite such high praise, the work is not particularly subtle. Dr. du Noüy, unfortunately, appears to know little of any religion except Christianity. Although the author's science is undoubtedly broad, his religion is sectarian and provincial.

Human Destiny has two schemes of development, one from scientific, the other from theological, premises. These premises are paired, but they never unite. The reality of "God" is established by the default of science in accounting for the wonder of life; to the scientists, "God" is simply a name for "anti-chance," but du Noüy's prefers the theological term. Although it is admitted that "God" cannot be known by the finite mind, the author persists in identifying deity with personal pronouns and, in effect, allows the reader to connect the entire dogmatic apparatus of the churches with this concept. This tendency is encouraged by du Noüy's opinion that "the only salvation for mankind will be found in . . . a sound Christian religion, vitalized by its own primitive ideals," and by his further statement: "Never in her two thousand years has the Church had a more urgent call and a nobler opportunity to fulfill her obligation as the comforter and guide of humanity."

For one familiar with the history of those "two thousand years," it is permitted to doubt the "realism"—if not the intelligence!—of a writer who appeals for reforms to the presiding religious institution of that bloody age. This is no time to issue rhetorical challenges to institutions which are little more than hoary cultural patterns. Dr. du Noüy speaks in one breath of the "primitive ideals" of Christianity, and in the next, of "the Church." He might better have invited his readers to study Leo Tolstoy for an illustration of how those "primitive ideals" could be practiced today.

But despite this major weakness, *Human Destiny* has many excellent passages, as for instance, the following diagnosis of contemporary collectivist morality:

For want of concentrating his efforts on the *true* problem, the internal problem, man will scatter his strength in vain endeavors which will end by restricting his liberty through the creation of collective entities whose artificial personality will smother the individual. New ethics based on the necessity of protecting these collectivities at the cost of the interests of their members will threaten individual morality which alone has any real meaning; or else will relegate it to second place, under the domination of the first, and keep it from developing. An artificial, entirely external solidarity will be imposed. It will never replace that which should spring from what is best in the heart of man and radiate around him. To impart cohesion to separate elements, it is not sufficient to seal them in a box; every element must be welded to the others. An imposed solidarity, entirely based on the material interests of a group, is contradictory to real human solidarity and impedes its development.

Dr. du Noüy sees what many men see in present-day moral and political conditions. He offers no larger vision, but patches up the plausibility of an outmoded faith in a period which cries out for originality, for the creation of new vistas in moral philosophy. To over-estimate his work would be to efface what value it has, which, in some ways, is substantial.