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EXITS AND ENTRANCES

WHY should anyone fear death? What is so terrifying in this prospect that mankind in general cannot bear to contemplate it? We see nothing to fear in death, nor can we see what others find to dread in it. Much less can we understand our fellow man who, born to the priceless boon of life, complains of it constantly, mourns his fate, despises his lot, and should, by his own account, think himself well out of it. Yet he does no such thing.

Men would, we feel, do better with their lifetime could they make their peace early with death. It is so natural a thing, and hence, so reassuring. Everything in the world around us dies, or seems to. Yet nothing really dies, but all things change. Either they come again to birth at the new season, or at the end they disappear and are transformed. In the entire cosmos, not excepting the universe of stars beyond our seeing, *there is no death* but only a returning. Of what then shall we be afraid? Of the returning? There, for us, lies the area most shrouded in mists.

Grant, first, that human life is the mystery transcending all mysteries. That being so, it occupies a zone forbidden to Modern Science, which though it deals with mysteries all day long, cloaks them in the language of the Greeks—as though that made *átomos* any less a mystery. And since, for a scientific age, first causes are ruled out, do not exist, modern men cannot, though they try, conjure up again the solid vision of a personal Creator. What, then, can they do? Millions in the limbo of Europe begin with BEING, and call themselves Existentialists.

Sartre in France and Heidegger in Germany hold sway over the young and over those not young who have lost the way. Man, they say, is flung into the world against his will, "condemned to freedom," homeless and forlorn, destined to know nothing but *sorge* and sorrow, anguish, anxiety and despair. He is a wretched being, doomed to live face to face with *le néant, das nichts,* nothingness. This, wars and the scientific view have done for men, and as man came not from God, man goes not to God, and must live on in terror of the end.

Suppose, however, we decline to begin with BEING. What then? To us, not death and what comes after, but birth and what came before, fill us with awe. The entrance, not the exit, holds for us the most frightening aspect.

Where have we come from to BEING ? That is the baffling question, for we know what it is to be alive, and we know, having at some time gazed on one who was not alive, that there is a difference. Furthermore, we know of that difference that it is not visible, tangible, or quantifiable. It is just life, all that we know. A man and woman, together, possess the potentiality for receiving it, and a woman is capable of giving of her body—*not to create,* but to make creation visible in bodily form. Does this not make the mystery more impenetrable still?

If there is something we recognize as life, and this something can be given form, where does this something originate, and why does it take form here and now? The name men give it can be anything: *psyche, pneuma, anima, e'lan vital,* essence, spirit, soul. There can be no denying that to be alive is to be animated by something whose presence becomes felt in the moment of its absence. Dead, we do not know it. Did not men once speak of death as "giving up the *ghost"?* Therefore, as it can leave the body, so must it be capable of entering it anew at the moment of conception. This fact only adds to the enigma surrounding our beginning. For, seen in this way, *Being,* for which the Existentialists are so ungrateful, is not a beginning but a terminal point on a course of which we know less than nothing.

Forgetting the trivia that constitute existence, where shall we seek the animating stuff for which our flesh and bone and muscle serve as a temporary abiding place? Our parents called us "their" child, though no one knows better than they and we that we are strangers, and will be to the end. As members of the company they gave us our entrance cue, and we came in. But how?

One of countless beautiful ways to envision life is to see it as a river, at night: an infinitely vast river on

which myriad lighted candles slowly drift. As a wind lifts the current, a light here and there goes out, the candle quickly disappearing in the black waters. But in the very instant that it is submerged, other candles are set afloat as by an invisible hand, and the process of replacement goes on tirelessly. Yet this cannot be the way.

If such multitudes populate the earth today as never before have been known to exist at one time in history, could they have been created from *nothing,* or is it likely that they are here in such numbers because they have all been here before, and have come back? If they have come back, one is compelled to imagine a vast reservoir existing where Existentialists find a "void," so that, instead of a lighted candle descending on a river's breast, one almost sees the skies alight with a million meteors, flashing with some invisible fire on their way to earth. Once, a human imagination contemplating such a reservoir called it *houranós,* "heaven," and peopled it with the dead, not seeing that there is no death, and that the "miracle" of the resurrection is the key to the mystery of life, which is endlessly recurring. The entrance is the big adventure.

Narrow is the gate, and straight the way. Life is life, and unmistakable for anything else. But Life and Birth are not the same. This simple fact is fraught with incalculable possibilities. The embryo comes the full term, the woman begins to be in labor; the body so recently impatient to be released is of a sudden still. What has happened to the self which a moment ago was alive?

This very common occurrence is to us the most mysterious of life's mysteries. No one today looks on it so, but when a perfectly formed infant comes lifeless to the gate, one cannot but wonder, speculating on the nature of that something that went away too soon. Perhaps it was not ready. Perhaps it ought to have alighted somewhere else. And when the entrance, so much more perilous than any exit, has been managed, and life escapes in flight before the tiny body has had a day on earth, what can one suppose has happened ? Perhaps the harsh sounds and lights, the "booming buzzing confusion" were too much for the incoming being. Where do they go, these sparks of invisible fire for whom the entrance onto life's stage is too awful to be borne ? Yet for these, the unready, in flight at the door, there are others who cannot wait to come in, and must crash the barriers, whether their reception room be a department store, a subway platform or a taxicab. They do not care. They're in!

What is one to make of this unfathomable affair we so lightly greet as "Birth"? To one bodiless in incandescent space, knowing beforehand what penalty will be exacted for simply existing on earth, surely nothing could appear more terrifying than that entrance. Yet of it we remember nothing. Having survived it, we come to learn that what we have, and are permitted for a brief span to possess, is an ineffable something called *life*. Mysterious to the end, it is a gift given us, we know not why, and to be taken from us, we know not when. It bears within it all the heaven mortals can ever know, and more than enough of hell. He who once walked the earth said it: "The kingdom of God is *among you (éntos humown*)*."*

For the hour in which we live, as the Christian Ethic (Greek and Roman) sinks slowly under the tide of technical barbarism and the world awaits the coming of one who may even now be born, an infant as always, we are wanderers in the uncertain night, having no one to thank for our Being, and seeing no outstretched arms waiting on high to enfold us. Dreaming our nameless dreams, childlike, we stumble, fall, rise, laugh and hurry on, knowing not whence we have come nor whither we are bound. We ask of everyone the way, not knowing we are on it.

Is death, then, so terrible that we should shrink from it in horror? It is of absolutely no matter that we leave behind all we have stored up—for nothing. Naked we came in, and naked we go out, singly and sightless, for life has dramatic unity. Fulfilling to the letter the Aristotelian requirements, let us see to it that the subject matter of our individual drama is "of sufficient magnitude" to deserve a lifetime spent on it.

There is no more to fear than one would fear in walking off a stage whose shadowy wings open out on a lighted dressing room. Death is an exit cue. If there is reason to be afraid, the time is past. It was at the moment of coming in!

New York City ISABEL CARY LUNDBERG

Letter from ENGLAND

LONDON.—Although we have entered upon a new half-century, not much comment has appeared on what is in store for us during the next fifty years. Only King George VI, whom now all England mourns, has put clearly the momentous choice before the people of this country and the Commonwealth. In a broadcast heard by millions of people throughout the world, he gave this warning: "If our world is to survive in any sense that makes survival worth while, it must learn to love, not to hate; to create, not to destroy." He added:

> Man will have to decide between these two creeds—perhaps the most momentous choice that he has had to make in his whole history. It will be made not as a result of any abstract political theory, but through the way of life, the way of thought, that each one of us practices at home.

The first half of a century that began in the reign of Queen Victoria has seen two world wars, and has opened the atomic age, so that the King's Message was very much to the point. The satisfaction that was once felt at the development of man's inventive genius, particularly in the field of science and mechanics, has given way to a sterner emotion. Where (we ask) are all these new marvels leading us ? Even broadcasting, which we had hoped would be a truly civilizing influence—nation speaking to nation—has been used by dictators and commercial interests to corrupt both intelligence and taste.

John Morley, British statesman and rationalist (1838-1923), noted in his *Rousseau* that "The dominant belief of the best minds of the latter half of the eighteenth century was a passionate faith in the illimitable possibilities of human progress." That faith is a little tarnished today. Nevertheless, if we have a deeper consciousness than had our forbears of the dangers that beset our path, we do not (as the King advised) read Bunyan's *Pilgrim's Progress,* or find much comfort in the current urge to plan for "security." Our educational and industrial systems have worked full blast to produce "fractional" man, who is content with surface values, heeding not the admonishment administered by T. S. Eliot in *The Rock:*

> . . . you neglect and belittle the desert.
> The desert is not only around the corner,
> The desert is squeezed in the tube-train next to you,
> The desert is in the heart of your brother.

One of the causes of our distress is not far to seek. It lies in the fact that we have taken civilization (and its worth) for granted, and have been caught up in its momentum to such an extent that our inner resources have been impoverished. Information pours in upon us from every quarter. Newspapers, radio programmes, and discussion talks bring us myriad facts and views. But all this increase of knowledge brings neither wisdom nor understanding. Above all else, we need universal and essential truths about man and his destiny, and we may rest assured that these will in no way be a reflection of the general notions prevailing in our community as to what constitutes "the good life." We say that we know more than our predecessors. Yet we feel carried along by impersonal forces that we cannot identify, and by gigantic events that we cannot control. "The trouble with most of our contemporary writers," remarked a *Times* reviewer recently, when discussing the 1940's, "is that they find it extremely hard to make up their minds about the nature of the world, let alone that of the universe. Past, present and future have become mixed; in the forms of regret, aspiration and anxiety the three tenses overlap." In such moments we may well ask ourselves, as of literature, what are we trying to achieve?

Sociology has been defined as the anthropology of the western barbarians. In this sense, we may suggest that no task is more worth pursuing through the remaining years of the century than the re-examination of the assumptions upon which we have deduced the tendencies in human history. Have we rightly established the role of prehistoric man? Do we really know anything about race or inheritance? Or the forms of human society? Are we so certain that there is nothing more to learn about the laws of association or the cohesive elements in social behaviour? And have we yet realized the importance of a knowledge of ourselves in any approach to the social sciences ?

"It is time, high time, that civilized man turned his mind to the fundamental things." Looking at the world today, no sane person will disregard Dr. Carl Jung's advice.

ENGLISH CORRESPONDENT

REVIEW
GOD EMERITUS AT YALE

GOD AND MAN AT YALE is a highly controversial volume, written by a Yale graduate after a stormy career of editing campus papers, during which he defended God against all comers, and particularly against the "iconoclasm" and "atheism" of the faculty. William F. Buckley, Jr., came to New Haven, after a two-year stint in the army, "with a firm belief in Christianity" and "an active faith in God"—something a little unusual back in 1946. (Contrary to some wishful thinking in religious circles, the preponderance of evidence suggests that atheism did very well indeed in the "foxholes.")

It is possible to find uses for *God and Man at Yale* without subscribing to the author's conclusions. Buckley desires to stir up controversy on the subject of religion and irreligion in universities, and in this, at least, we wish him well. A deeper understanding of "religious issues" would be a fine thing, since the ends and aims of human life are presently in supreme confusion. *God and Man at Yale* is already a much-talked-about book, and it is not unreasonable to suppose that opinions in the form of both endorsement and refutation of Buckley's views will find their way into print for a considerable time.

Some of the author's contentions are as follows:

> If the atmosphere of a college is overwhelmingly secular, if the influential members of the faculty tend to discourage religious inclinations, or to persuade the student that Christianity is nothing more than "ghost-fear," or "twentieth-century witch-craft," university policy quite properly becomes a matter of concern to those parents and alumni who deem active Christian faith a powerful force for good and for personal happiness. . . .
>
> 1. The responsibility to govern Yale falls ultimately on the shoulders of her alumni.
>
> 2. Yale already subscribes to a value orthodoxy.
>
> 3. At any given time, a responsible individual must embrace those values he considers to be truth or else those values he deems closest to the truth.
>
> 4. Truth will not of itself dispel error; therefore truth must be championed and promulgated on every level and at every opportunity.
>
> 5. A value orthodoxy in an educational institution need not lead to inflexibility in the face of "new experience."
>
> 6. A value orthodoxy in an educational institution need not in any circumstances induce credulity in the student, nor deny the value of skepticism as a first step to conviction.
>
> 7. Freedom is in no way violated by an educational overseer's insistence that the teacher he employs hold a given set of values.

Next, Mr. Buckley asserts that many men on the Yale faculty, particularly its most popular and influential members—are strongly antagonistic to Christianity, whereas a proclaimed non-denominational institution should not *subvert* Christianity, just as it should not convert to it.

As Buckley also points out, this sort of militant agnosticism will probably be found leading an even livelier existence in other institutions of learning, where even fewer professors than at Yale "are committed to the desirability of fostering a belief in God."

Now these two arguments, it seems to us, cannot be harnessed and made to stride together smoothly as a team. Buckley is certainly right in his assertion that a presumably non-denominational university should not subvert sincere Christian faith by derision, but corollary reasoning suggests that neither should the Yale alumni "subvert" the ideal of a non-denominational university by insisting that teachers hold "values" of denominational origin. Like many another ardent Defender of the Faith in the past, Buckley seems oblivious of the fact that Christianity—the whole works, inclusive of every creed and sect—is only *one denomination* of religion. Further, not all religions encourage belief in God, even though that belief seems so important to Buckley. Buddhism is an

outstanding example of a religion without God, and as more than one philosophical psychologist has recently pointed out, the ethical record of the Buddhists seems to look better than that of the Christians. So, if all of Yale's alumni were Christians, albeit of different sects, and if they banded together at Buckley's behest to make sure that "Christian values" were taught, they might have a nice Christian seminary, but they could no longer claim that Yale is a "non-denominational institution." Further, the broadest definition of religion must include those who profess no specific or codified faith, yet *do* have a "faith." Many of the great agnostics who labored to clear away pernicious and irrational religious dogmas obviously had "religions" of their own, their negations of dogma often being but a way of affirming another, and, to them, nobler and more inspiring view of human nature. It was Peter Abelard who said, "It is through doubt that we come to investigation, and through investigation that we come to truth."

Buckley has the right to believe "that Christianity is ultimate irrefutable truth," but the *a priori* claim that any set of ideas is the "irrefutable truth" makes any further *education* in respect to those ideas impossible—education, once again, as we understand it, requiring comparative analysis. "Comparative analysis" can hardly be applied to truths one considers "irrefutable."

Buckley also lowers himself into dangerous waters by championing both "individualism" and "God." He finds the specter of Godless Communism threatening as a likely successor to God-fearing Christianity, but when he champions "individualism," he obligates himself to let Christianity stand on its own feet in the free market of ideas. If Christianity represents the truth in the sense that Buckley thinks it does, and if belief in God be a positive need for the well-being of man, the only true Christian is one whose conviction is arrived at *individually.* Now, we think that Buckley would have to accept the argument that no "individual" conclusion can be arrived at without comparison of one set of values with another. But if all of the Yale faculty were obliged to embrace the *same* religious values, there would be no room in that institution for comparison.

Buckley seems to think that professors who make side-swipes at Christianity—and many of them do, in ways that are neither scholarly nor polite—are simply perverse in nature. He ignores the fact that good arguments in opposition to "God" are to be found in the study of intellectual history, and that until we are able to inspect with impartiality the sociological effects of this Christian dogma, we shall not be able to understand why so many professors have adopted an *agnostic* religion of their own, and why iconoclasm is as popular as it is with students.

However, Buckley does make a good case for abandoning the popular academic prejudice against metaphysical subjects. That "prejudice" is the right word is aptly demonstrated by passages which he quotes in illustration, indicating that not simply Christian theology is discounted, but also *any* ideas which pertain to the "soul" or to the possibility of immortality or any kind of superphysical existence. It is at this point, as consistent readers of MANAS may imagine, that we display the greatest interest. Skepticism in respect to matters of religion is not necessarily negative, but those who are perpetually iconoclastic and *never* affirmative will inevitably develop dogmatisms of their own, which are simply negative rather than positive.

Since Buckley has left Buddhism entirely out of consideration in his discussions of religious values, it is interesting to reflect on Buddha's reputed reluctance either to affirm or deny the existence of soul. That great educator, it is said, explained that if he made some definite *affirmative* statement as to the existence of soul, his hearers would be apt to convert what he said into dogma, and dogmas do not lead human minds any closer to the truths they need to discover. And, again, if he *denied* the existence of soul, the

same thing would occur, save that the dogma would then be nihilistic rather than superstitious in quality.

Here we may have a suggestion, carried down to us from a time preceding the Christian era, which offers a solution for some of Buckley's concerns. Many of the professors he criticizes insist on making the Second Error which Buddha refused to fall into. But many of those who will be found wildly acclaiming Buckley's defense of God—and perhaps Buckley himself—show no guarantee that they would not eagerly fall into Error Number One. Actually, the disregard by enthusiasts of Christianity of these all-important psychological factors in true education becomes incontrovertible evidence of either their ignorance of, or their enmity toward, the dignity of man.

In the effort to re-establish transcendent ethical values, and a supporting metaphysics—if Western civilization, indeed, ever possessed such values—it seems of great importance to be willing to cut ourselves off from *all* traditional prejudices. The conceptual patterns of our history, whether theological, political or psychological, have not given us what we need. Here and there, perhaps, we can note an ingredient or two worth saving, such as the Declaration of Independence and the Bill of Rights, both of which embody philosophic affirmations of power and inspiration. As R. H. Tawney has said, "The foundation of democracy is that sense of spiritual independence which nerves the individual to stand alone against the powers of this world." Yet this "spiritual independence" antedated Christianity, and it is difficult to see what the idea of a Personal Creator has ever done for it. Buckley's concerns are valid if his plea is for replacement of sardonic and nihilistic skepticism by assertion of a transcendent source of hope and courage in man. Yet this is not a logical derivative of either God or Free Enterprise, as presently defined, both of which represent but limited conceptual patterns rather than an affirmation in respect to a creative source from which all conceptual patterns arise. We need, let us say, less dogmatism everywhere, less religious narrow-mindedness, and less professional narrow-mindedness, too.

COMMENTARY
THE HEAVENLY PROSPECT

IT has long been an open secret that college professors tend to be less than enthusiastic about the dogmas of religion. Education and orthodoxy have never mixed well, and the better his education, the smaller the hope of orthodoxy to gain control of the mind of the educated man. Mr. Buckley, author of *God and Man at Yale* (see Review), seems to think that this relationship ought to be reversed, and that, instead of trying to improve the quality of Christian orthodoxy, we should weaken the power of education. We wonder how the professors will meet the attack—whether they will meet it honestly, as Dr. Einstein (quoted in "Children") did, years ago, or with evasion, and softly equivocal answers.

Years ago the research psychologist, James H. Leuba, sent a questionnaire on God and immortality to four classes of people listed *in Who's Who:* Bankers, all other business people, lawyers, and writers. The replies showed that "twice as many bankers as writers believe in the God of the churches." Another of Leuba's surveys was directed at distinguished scientists, with the following results: Believers in God: physicists, 17 per cent; sociologists, 13 per cent; psychologists, 12 per cent.

Prof. Leuba's comments are pertinent to both the "God" and "Free Enterprise" planks in Buckley's book:

> What may be said of the enormous lead of the bankers over the writers, and of their stil1 larger lead over the scientists? Bankers are more commonly supposed to constitute a strongly conservative group, they are the bulwark of the present economic system. The traditional Christian religion itself is a powerful support of the existing order, for it places among its important commands obedience to established authority and readiness to accept one's lot on earth, however hard it may be, in the expectation of heavenly compensation.
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> As to most writers and scientists, their dominant tendency is to look, with appreciating curiosity, beyond the existing order to something better. They are not so sure that the present economic theories and practices are the best; and that the ancient religious convictions because they have so far accompanied the rise of civilizations, cannot be improved upon.
>
> Are we to see in these peculiarities, differentiating the bankers from the writers and the scientists, an explanation of the figures under discussion ? It seems so. One who should suppose that belief in God and immortality leads to heaven, might well stand aghast at the glimpse he gets here of its population: almost no great scientist, few writers, a large contingent of lawyers, and a crowd of bankers!

CHILDREN
. . . and Ourselves

IT may seem strange to recommend writings by Albert Einstein to parents and teachers of the young, yet we have no hesitation in saying that Out *of My Later Years,* a collection of Einstein's essays (Philosophical Library, 1950), meets all the requirements of this use. Dr. Einstein, it seems to us, is in every sense a *natural* teacher. His mind, whenever it leaves problems of technical complexity, inclines to the simplest expression.

Since Dr. Einstein is one of the deservedly famous men of our time, we can hardly be blamed for finding enjoyment in the fact that many of his points of emphasis have often appeared and been repeated in these pages. Although, as Macneile Dixon once remarked, "Counting heads will not demonstrate a truth, even if they be good heads," to discover that one has been in worthy company is undeniably pleasant. It must be admitted, however, that the thoughts expressed in the following quotations obviously do not "belong" either to MANAS editors or to Dr. Einstein; rather they are, insofar as they are affirmative and hopeful in implication, the commonly shared property of all who work to raise the level of educational effort.

We turn first to Dr. Einstein's presentation of the case for "radicalism." This passage may not be directly "challenging," but it certainly opens the way to examination of some of the fundamental objectives of education:

> A large part of our attitude toward things is conditioned by opinions and emotions which we unconsciously absorb as children from our environment. In other words, it is tradition—besides inherited aptitudes and qualities—which makes us what we are. We but rarely reflect how relatively small as compared with the powerful influence of tradition is the influence of our conscious thought upon our conduct and convictions.
>
> It would be foolish to despise tradition. But with our growing self-consciousness and increasing intelligence we must begin to control tradition and assume a critical attitude toward it, if human relations are ever to change for the better. We must try to recognize what in our accepted tradition is damaging to our fate and dignity—and shape our lives accordingly.

Unless one is determined to instruct both oneself and the young *in order to alter and improve* the traditions which tend to govern behavior, education has no conspicuous value. We *must* criticize and challenge traditions, in order to improve them. The pioneers of thought have been those who have had to fight their way upstream, against strong currents of prejudice. The Copernican revolution, as elsewhere noted recently, accomplished a complete alteration of viewpoint in respect to the heavenly bodies, despite the narrow-mindedness of the times. Writing of Kepler's part in this great change, Dr. Einstein shows appreciation of certain ingredients of heroism which need to be understood if the philosophical significance of Education is to be grasped:

> Kepler was one of the few who are simply incapable of doing anything but stand up openly for their convictions in every field. Kepler was a devout Protestant, but he made no secret of the fact that he did not approve of all decisions by the Church.
>
> This brings me to the inner difficulties Kepler had to overcome—difficulties at which I have already hinted. They are not as readily perceived as the outward difficulties. Kepler's lifework was possible only once he succeeded in freeing himself to a great extent of the intellectual traditions into which he was born. This meant not merely the religious tradition, based on the authority of the Church, but general concepts on the nature and limitations of action within the universe and the human sphere, as well as notions of the relative importance of thought and experience in science.

This, for Kepler, was the real struggle,—an "inner" struggle, as Dr. Einstein terms it, and one which he finds reflected in many of Kepler's letters. Must not every would-be teacher stand ready to wage just such a battle in order to qualify as an educator? In fact, unless it is possible for a child to conceive and wage something of this battle, can a child truly learn?

Although Dr. Einstein is justly respectful toward "traditions," he has never been able to come to terms with the idea of a personal God—a dilemma also confessed by ourselves. While stressing the need for *moral philosophy,* Einstein insists that the personal-God idea stands squarely in the way of obtaining a reasonable basis for such:

> The more a man is imbued with the ordered regularity of all events the firmer becomes his conviction that there is no room left by the side of this ordered regularity for causes of a different nature. For him neither the rule of human nor the rule of divine will exists as an independent cause of natural events. To be sure, the doctrine of a personal God interfering with natural events could never be *refuted,* in the real sense, by science, for this doctrine can always take refuge in those domains in which scientific knowledge has not yet been able to set foot.
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> But I am persuaded that such behavior on the part of the representatives of religion would not only be unworthy but also fatal. For a doctrine which is able to maintain itself not in clear light but only in the dark, will of necessity lose its effect on mankind, with incalculable harm to human progress. In their struggle for the ethical good, teachers of religion must have the stature to give up the doctrine of a personal God, that is, give up that source of fear and hope which in the past placed such vast power in the hands of priests. In their labors they will have to avail themselves of those forces which are capable of cultivating the Good, the True, and the Beautiful in humanity itself. This, is, to be sure, a more difficult but an incomparably more worthy task.
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> The further the spiritual evolution of mankind advances, the more certain it seems to me that the path of genuine religiosity does not lie through the fear of life, and the fear of death, and blind faith, but through striving after rational knowledge.

But this does not mean that Dr. Einstein is what is usually meant by "atheist" or "materialist." He stands, philosophically, for the reality of spiritual and moral life, and for the necessity of transcending the impulses of the purely sensual world in order to attain the full stature and happiness of which man is capable:

> As far as I can see, there is one consideration which stands at the threshold of all moral teaching. If men as individuals surrender to the call of their elementary instincts, avoiding pain and seeking satisfaction only for their own selves, the result for them all taken together must be a state of insecurity, of fear, and of promiscuous misery. If, besides that, they use their intelligence from an individualist, i.e., a selfish standpoint, building up their life on the illusion of a happy unattached existence, things will be hardly better. In comparison with the other elementary instincts and impulses, the emotions of love, of pity and of friendship are too weak and too cramped to lead to a tolerable state of human society. The solution of this problem, when freely considered, is simple enough, and it seems also to echo from the teachings of the wise men of the past always in the same strain.

For a conclusion, we turn to Dr. Einstein's observations on education, *per se.* Here, again, we feel his gentle insistence upon a *philosophically* oriented synthesis of conflicting views:

> Sometimes one sees in the school simply the instrument for transferring a certain maximum quantity of knowledge to the growing generation. But that is not right. Knowledge is dead; the school, however, serves the living. It should develop in the young individuals those qualities and capabilities which are of value for the welfare of the commonwealth. But that does not mean that individuality should be destroyed and the individual become a mere tool of the community, like a bee or an ant. For a community of standardized individuals without personal originality and personal aims would be a poor community without possibilities for development. On the contrary, the aim must be the training of independently acting and thinking individuals, who, however, see in the service of the community their highest life problem.

But how shall one try to attain this ideal? Should one perhaps try to realize this aim by moralizing? Not at all. Words are and remain an empty sound, and the road to perdition has ever been accompanied by lip service to an ideal. But personalities are not formed by what is heard and said, but by labor and activity.

The most important method of education accordingly always has consisted of that in which the pupil was urged to actual performance.

I have said nothing yet about the choice of subjects for instruction, nor about the method of teaching. Should language predominate or technical education in science?

To this I answer: In my opinion all this is of secondary importance. If a young man has trained his muscles and physical endurance by gymnastics and walking, he will later be fitted for every physical work. This is also analogous to the training of the mind and the exercising of the mental and manual skill. Thus the wit was not wrong who defined education in this way. "Education is that which remains, if one has forgotten everything he learned in school." For this reason I am not at all anxious to take sides in the struggle between the followers of the classical philologic-historical education and the education more devoted to natural science.

On the other hand, I want to oppose the idea that the school has to teach directly that special knowledge and those accomplishments which one has to use later directly in life.... The development of general ability for independent thinking and judgment should always be placed foremost, not the acquisition of special knowledge.

FRONTIERS

Cosmology According to Hoyle

THERE is unmistakable grandeur in "The Nature of the Universe," as described by the youthful astronomer, Fred Hoyle, in his recent book of this title, but an even more impressive grandeur emerges, we think, in the workings of Hoyle's mind. This tribute, of course, is not dedicated solely or directly to Hoyle, but to the mind of man—more precisely, the disciplined reflective mind of man—in the twentieth century.

Fred Hoyle is manifestly free from any psychic compulsion to "prove" some particular view about the nature of the universe, of which he writes so invitingly. He seems to compose his thoughts upon an eminence which belongs to him by choice, and to his time by natural evolution of the science which he practices. It is, first, an eminence of freedom from anxiety. The astronomer of today is under no pressure of theologians backed by the Holy Inquisition to dwarf or pervert his discoveries to the support of "Divine Revelation." The imperialists and the racists bring him no dogmas to verify. Even the materialists let him alone, for they long ago left the arena of cosmology for the more immediate battlefields of sociology and economics. As a matter of fact, the century-old struggle between Science and Religion has about come to an end. The anxieties of the world have centered elsewhere, and the new men who have come along in the sciences have only a sluggish interest in a controversy which had already grown stale and unprofitable when they were in high school.

Astronomers, in short, have been given permission by their time to reflect in an unprejudiced manner. And Hoyle, it seems to us, has made the most of his opportunity.

If you read *The Nature of the Universe* (Blackwell, Ox£ord, 1950)—and it is easy to read, being made up of a series of British Broadcasting Company lectures—you will probably not remember very many of the "facts" which the author presents, except, perhaps, a fact or two involved in one of his particularly engaging-illustrations. But you will not forget at all the feeling of having heard from a man who has a cosmopolitan relationship with the depths of outer space. The last chapter of the book considers "Man's Place in the Expanding Universe." There is first the idea that the universe, and man in it, are no more than complicated machines. The materialists, however, leave us with too many unsolved problems. As Hoyle puts it:

> For instance, it is definitely up to the materialists to explain how consciousness has evolved in the human machine, exactly how your consciousness and mine can be squared with the machine idea. I can see that a sort of robot machine might be produced by normal biological processes, but exactly how is a machine produced that can think about itself and the Universe as a whole? At just what stage in the evolution of living creatures did individual consciousness arise? I do not say that questions such as these are unanswerable, but I do say that it will not be simple to answer them.
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> But all this is a minor issue compared with what seems to me the real objection to the outlook of the materialists. The apparent simplicity, such as it is, of their case is only achieved by taking the existence of the universe for granted. For myself there is a great deal more about the Universe that I should like to know. Why is the Universe as it is and not something else? Why is the Universe here at all? It is true that at present we have no clue to the answers to questions such as these, and it may be that the materialists are right in saying that no meaning can be attached to them. But throughout the history of science people have been asserting that such and such an issue is inherently beyond the scope of reasoned inquiry, and time after time they have been proved wrong.... All experience teaches us that no one has yet asked too much. How then can we accept the argument of the materialists, when the essence of their game lies in throwing up the sponge?

Hoyle is even less impressed by the Biblical Cosmology. Comparing the ideas of the ancient Hebrews on the nature of the universe with the comprehensive studies of modern science, he wonders why it should be supposed "that it was given to the Hebrews to understand mysteries far deeper than I can comprehend, when it is quite

clear that they were completely ignorant of many matters that seem commonplace to me?" He concludes:

> No, it seems to me that religion is but a blind attempt to find an escape from the truly dreadful situation in which we find ourselves. Here we are in this wholly fantastic Universe with scarcely a clue as to whether our existence has any real significance. No wonder then that many people feel the need for some belief that gives them a sense of security, and no wonder that they become very angry with people like me who say that this security is illusory. But I do not like the situation any better than they do. The difference is that I cannot see how the smallest advantage is to be gained from deceiving myself. We are in rather the situation of a man in a desperate, difficult position on a steep mountain. A materialist is like a man who becomes crag-fast and keeps on shouting: "I'm safe, I'm safe!" The religious person is like a man who goes to the other extreme and rushes up the first route that shows the faintest hope of escape, and who is entirely reckless of the yawning precipices that lie below him.

Thus far, then, a candid impartiality—"A plague on both your houses," so far as Materialism and Theology are concerned. But Hoyle does better than this. No cultural taboos prevent him from going straight to the question on which the entire issue of human philosophy—and perhaps cosmology as well—seems to him to turn: the question of immortality. "Do our minds have any continued existence after death?"

This question will give little encouragement to the purveyors of dogmas, for the astronomer wants "proof" of immortality. He wants "physical" evidence: "When a person dies, does a mind that is physically detectable survive?"

The requirement of physical detectability makes the problem a little difficult, at least semantically, for we have yet to meet a "physically detectable" mind in even a living person, and we doubt if Hoyle has, either. Perhaps he would settle for some other kind of evidence; we think he will have to, sooner or later, for the "consciousness" which he challenges the materialists to explain has no more "materiality" than a mind that persists after death. Suppose your body were dead, and you wanted to give "proof" of your continued existence: even if you could appear as a supernatural vision, it wouldn't be your *mind* that was exhibited, but some image made to represent your mind. And that, perhaps, is what the body really is, so far as the mind is concerned.

We can agree, however, that the immortality of the soul—or some similar conviction of equal persuasiveness as to the enduring value of the moral individual—has a crucial bearing on our total view of life and nature. And when Hoyle says he wants "physical" evidence of soul- or mind-survival, what he is really looking for is *reliable* evidence. To a physicist, it is natural that "physical" evidence seems to fill the bill.

Even so, it is fair to ask Hoyle what sort of evidence will he accept. An answer to this question would clear the air considerably for both believers and nonbelievers, and might reduce a lot of fuzzy argument on the subject to a few clear and basic issues.

We should not leave *The Nature of the Universe* without noting a far-reaching cosmological conception proposed by Hoyle. We have all heard of the "expanding universe" and have probably felt a little disturbed at the thought that the stars are all rushing away from us at almost incalculable rates of speed. Mr Hoyle deals with this uncomfortable situation by suggesting that while the universe is spreading itself more thinly through incessant expansion, the density of matter in space is constantly being restored through the re-creation of "world-stuff" or atoms in space. We live, in short, in a materially stable system. As Hoyle puts it:

> It is this creation that drives the Universe. The new material produces an outward pressure that leads to the steady expansion. But it does much more than that. With continuous creation the apparent contradiction between the expansion of the Universe and the requirement that the background material shall be able to condense into galaxies is completely overcome. For it can be shown that once an irregularity occurs in the background material a

> galaxy must eventually be formed. Such irregularities are constantly being produced through the gravitational action of the galaxies themselves. So the background material must give a steady supply of new galaxies. Moreover, the created material also supplies unending quantities of atomic energy, for by arranging that newly created material is composed of hydrogen, we explain why in spite of the fact that hydrogen is being consumed in huge quantities in the stars, the Universe is nevertheless observed to be overwhelmingly composed of it.

This idea of a self-regenerating Universe is far more encouraging than the "heat-death" of yesterday's physics. It also lends to theories of man a paralleling hope that self-regeneration may be a dynamic principle in all the processes of nature. This is entirely reasonable, for we are forced to assume that the universe has had an infinity of time to "run down," and yet, both the universe and we, with it, are still here.