A LOOK AT RATIONALISM

SOME letters in *Science* for last November 3 are of interest for what they reveal about the presentday understanding of "rationalism." correspondents comment critically on an article, "The Nature and Sources of Irrationalism," by Charles Frankel, which appeared in Science for June 1, 1973, and Frankel replies. It becomes obvious that there is not much agreement as to the meaning or application of the term "rationalism." Ronald Laing and Theodore Roszak, for example, are charged by Frankel with advocating irrationalism "in some areas of thought and life." Now this is either a ridiculous charge, as one correspondent points out—remarking that these two are "eminently rational persons"—or Frankel has a meaning for rationalism not shared by his critics.

What, then, is it to be "rational," and what is the goal of rationalism as a viewpoint or philosophy? The question could be briefly dissolved by saying that rational comes from the Latin root for "to think," and that all thought-processes are therefore rational. But this leads nowhere. The rational approach to an area of experience seeks to put its elements in some kind of order, in a way that gives better or even complete understanding of the experience. An explanation which defiantly or ignorantly ignores certain plain facts or realities of what is under examination cannot claim to be "rational."

This helps us some, but not enough. Other questions arise. Explanation is always and *must* be selective in choosing the elements that are to be related in order to produce the meaning sought. So the question of whether or not more than one level of "reality" should have attention is crucial.

Or, you could ask about the idea of "order." Are their several kinds of order, and if they exist,

are they independent, or do they have relationships one with the others?

If you have firm opinions on such questions, then you can proceed to confident definition of what you mean by rationalism. If you are uncertain, but have strong inclinations to think that reality is graded or hierarchical, then you will define rationalism in a somewhat different mood.

Historically, Rationalism seems to have had at least three or four distinctive meanings. Western thought it began with certain theologians who dared to maintain that religious truth must submit to rational means of inquiry. This had radical effects, since in one case it led to absolute rejection of the dogma of original sin and the fall of man. The rationalism of the early scientists of Europe was mainly mathematical. The code of nature, Galileo held, was written in geometrical symbols, and mathematics, with its axioms and theorems, constituted a rational system of explanation of natural phenomena. Descartes contended that all thought could be given mathematical rigor, its goal being complete knowledge of the entire universe, built up by reasoning from first principles. The concepts essential to mathematical inquiry were held to be innate ideas, "not drawn from experience but required for scientific investigation." The greatest metaphysical rationalist of European history was Leibniz, whose Monadology was a magnificent tour de force of reason, evolved from what he conceived to be first principles. Leibniz is increasingly honored today by thoughtful scientists, and we might remember that he shared with Newton the honor of inventing the differential and the integral calculus, and was also the founder of the "symbolic logic" later developed by Boole, Whitehead, Frege, and Russell. Kant might be said to have put an end to the flights of metaphysical rationalism, by

declaring that the thing-in-itself can never be known by either intellectual or empirical inquiry, contending that we can discover only the forms of experience, but not its essence.

While speculative thought was exhausting itself in Kantian analysis, the world of science was making impressive strides and gradually becoming the definer of "reality" according to methods that seemed to be working with dramatic success. Metaphysics was soon classed with theology by scientific thinkers who were busy "conquering" nature and following the instructions of Francis Bacon to improve the world through practical knowledge. Empiricism—finding out the facts through observation, exploration, first-hand investigation, experiment—became the sole means to explanation or certainty, while the intellectual skills were turned into taken-for-granted tools of the Science declared by Auguste Comte to be "positively" the final avenue to Truth.

And that is more or less the working or popular conception of rationalism, today. It means, usually, a mechanistic approach to all processes of nature and life, a rejection of subjective experience as the source of significant material for investigation, and a reasoned account of things and events based upon those facts and laws which are currently accepted by the various branches of science. Any suggestion that inquiry pursued outside the assumptions and limitations of this "rationalist" orthodoxy is viewed with distaste and intolerance—as irrelevant and a waste of time. That persuasive tool of the working skeptic, Occam's razor, or the "law of parsimony," is invoked with casual finality. Tiring of scholastic inventions, Occam had voiced the rule, "Postulate no more entities than are necessary," which for the modern scientist has meant: The fewer causes which are involved to account for an apparent result, the better.

Occam's rule, as antidote to the multiplication of intellectual abstractions by Realist doctors of the fourteenth century, was probably entirely appropriate, but made into a pious sanction for scientistic reductionism in the twentieth, it becomes a modern version of determined medieval obscurantism—*ignorabimus*: we *will* be ignorant. As one of Frankel's critics says:

What Laing, Roszak, and others like them oppose is the narrow and uncritical application of certain modes of science and reason to the human state that fail to be adequate to their proclaimed purpose, in spite of their effectiveness in the nonhuman world. They further argue, still in the rational mode that these inappropriate applications distort relationship in a way which significantly detracts from human experience.

The Britannica article on Rationalism is instructive, and among the sources it recommends is W. E. H. Lecky's History of the Rise and *Influence of the Spirit of Rationalism in Europe* a good book in two volumes, but not one written for anyone in a hurry to make up his mind. It first appeared in 1865, attracting immediate attention and approval. His History of European Morals, which came out four years later, enjoyed a similar repute, and is now perhaps better known. Lecky was an Irishman who represented Dublin University in Parliament, worked for reform in Ireland, supported the agricultural policies of Horace Plunkett, and died in London in 1903. For him, as he explains, the spirit of rationalism means "not any class of doctrines or criticisms, but rather a certain cast of thought, or bias of reasoning," which had been developing in Europe for some three centuries, and which "leads men on all occasions to subordinate dogmatic theology to and conscience." the dictates of reason predisposing them to seek natural rather than miraculous causes; and, "in ethics, to regard as duties only those which conscience reveals to be such." Lecky is manifestly a champion of reason, and in his introduction he tells the reader what fidelity to reason means to him:

I conceive that the highest principles of liberty we are capable of attaining are to be found in two facts that our will is a faculty distinct from our desires, and that it is not a passive thing, the direction and intensity of which are necessarily determined by the attraction and repulsion of pleasure and pain. . . . The struggle of the will for a right motive against the pressure of desires, is one of the chief forms of virtue, and the relative position of these two influences, one of the chief measures of the moral standing of each individual.

As a historian he is painfully aware of the gradual growth of the rational spirit:

The number of persons who have a rational basis for their beliefs is probably infinitesimal; for illegitimate influences not only determine the convictions of those who do not examine, but usually give a dominating bias to the reasonings of those who do. But it would be manifestly absurd to conclude from this, that reason has no part or function in the formation of opinions. No mind, it is true, was ever altogether free from distorting influences; but in the struggle between the reason and the affection which leads to truth, as in the struggle between the will and the desires which leads to virtue, every effort is crowned with a measure of success, and innumerable gradations of progress are manifested. All that we can rightly infer is, that the process of reasoning is much more difficult than is commonly supposed; and that to those who would investigate the causes of existing opinions, the study of predispositions is much more important than the study of arguments.

A reading of this book shows the author to be an extraordinarily perceptive man. In one place (Vol. II, 96) he has a long note in which he writes of the deep-seated causes of psychic disorders or compulsions somewhat in the manner that Freud was to deal with them years later, although Lecky offers no psycho-dynamic theory of explanation. This is a part of his study of how human predispositions are formed, since he makes psycho-social applications of such observations in discussing gradual alterations of the mindset of an age.

Interestingly, in his last chapter, he examines the socio-economic effects of the rise of rationalism, showing how the material progress of his time had been accompanied by a decline in individuality and leadership. He seems also to have been able to anticipate the general effects of social reform under the inspiration of sensationalist psychology and hedonist ethics:

There has always been an intimate connection between utilitarianism and those systems of metaphysics which greatly restrict and curtail the original powers of our nature, regarding the human mind as capable only of receiving, arranging, and transforming ideas that come to it from without. Those who hold that all our ideas are derived from sensation, will always, if they are consistent, make utility the ultimate principle of virtue, because by their system they can never arise to the conception of the disinterested; and, on the other hand, it will be usually found that the sensual school and the materialism which it has produced, have arisen in periods when the standard of motives was low, and when heroism and pure enthusiasm had but little influence. In our present absolute ignorance of the immediate causes of life, and of the nature and limits of mind and matter, this consideration furnishes perhaps the most satisfactory argument in favour of spiritualism [as a philosophy of spirit—not the spiritualism of the mediums], and it is as an index of the moral condition of the age that the prevalence of either spiritualism or materialism is especially important. At present, the tendency toward the latter is too manifest to escape the notice of any attentive observer.

Good evidence of the blanketing character of the materialism spoken of by Lecky is the paucity of language to which it has reduced modern thought. We don't know what to call the sources of meaning which lie beyond the empirically-tied rational area and so name them "irrational," which is enough for many, for historical reasons, to declare them out of bounds. One has only to read a few pages in Lecky's history to understand the suspicion of theology felt by Western scientists and other thinkers who are acquainted with the centuries of the ascendancy of the Church, "for during that gloomy period," as he says, "the only scholars in Europe were priests and monks who believed that no amount of falsehood was reprehensible which conduced to the edification of the people." And "edification" meant the invention of tens of thousands of miracles "for the purpose of stimulating devotion," and turning history into "the wildest of fables." Such people could acquire only a complete indifference to truth, yet these very men, says Lecky, "who scattered these fictions abroad over Christendom,

taught at the same time that credulity was a virtue and scepticism a crime."

On the other hand, if freedom of thought is to be restored or maintained, then surely the capacity of individual human beings to think independently requires not only bold assertion by libertarians, but also a rational ground. What is it in man that establishes not only the right, but the capacity, for theories. judgment? Mechanistic private behavioristic theories, psychoanalytical theories any of the "reductionist" doctrines—have nothing to say on this point. They oppose philosophical and metaphysical forms of rationalism on the ground that they supply no objective evidence no measurable, sense-perceived data—for their support; but neither has human freedom as desirable, nor the "right" of private judgment, considered as a "good," any empirical support, save in the gathered judgments of decent men and the over-all record of history with its verdict concerning the general welfare and human happiness. These are value-judgments, subjectively reached, by an authority given in the human heart—by which, indeed, we live, and for which we are sometimes willing to die.

The moral realities of human life, concerning which very nearly every age but our own has had developed doctrines and conceptions—with accompanying disciplines for their cultivation and flowering in human and social relations—require a foundation in a philosophical vocabulary if they are to be understood at all. No other culture has had only one word—"irrational"—for both the demands of the gross appetites and transcendent longings of many men, articulated by philosophers, poets and mystics. No other culture has made so many brassy denials of the reality of the psycho-spiritual side of human beings, with accompanying faculties and powers. No other culture has systematically ignored the roots of moral aspiration in the higher—but not "supernatural"—endowments of human beings, to which the great arts of Egypt, India, Greece, and the pre-Columbian Americas have left monuments

that may outlast even the memory of our age, if it continues in its present self-impoverishment of thought.

Greek philosophers maintained that the rational spirit in man was an expression of Nous, the universal principle of Mind throughout the Cosmos, providing every human with a spark of divinity, a potentiality which he could, if he chose, nurture and fan into the flame of high achievement. His mind, then, was of the stuff of universal intelligence. Plato held that the body was for the soul a kind of Babylonian captivity, to which, if he submitted to it, he would have to return again and again by the old palingenetic process taught by Pythagoras before him, by the Brahmans of India, and, indeed, by numerous indigenous peoples around the world. Mind is the arena, the battlefield, the Kurukshetra, even the Armageddon and the Ragnarok, of human transcendence. It is the place where the moral struggle is joined, where the meanings of existence are sought out, where sympathies declare themselves, where understanding is born—where messages are received from above Socrates used his mind to and below. comprehend the instructions of his daemon. Gandhi said the Conscience is of no account unless it is arduously cultivated, and Krishna told Arjuna to undertake the great struggle to understand both himself and the field of the self's operations—"through this glorious unsought fight which only fortune's favored soldiers may obtain."

No man who has a mind and has learned to use it, however unsurely, can have failed to recognize the difference between mind as the identifier and labeler of sense perceptions, and mind as the motor of the flow of meaning, the energizer in the sweep of comprehending explanation, organic in its life, continuous in its play, capable of high reaches of the imagination—although capable also, on occasion, of the most misleading applications of its feeling of certainty. To this extent, surely, on internal evidence, the mind is two-fold, and its subtle structure may have

more storeys than we are presently aware of. The deliveries of dream, of which many have written, from Synesius to Roszak, are sometimes filled with suggestive splendors on which the mind may Not only Coleridge and Poe have work. celebrated such polarities, and not only Freud and his followers have systematically ignored them. Those of a mind to look at some evidence in this respect might read L. L. Whyte's The Unconscious Before Freud and The Dream World by R. L. Megroz, noting in particular, in the latter work, the account of H. V. Hilprecht's extraordinary dream which solved a puzzling archaeological mystery. Similar reports are not uncommon in the serious literature of psychic research. Are such investigations to be consigned to "irrational" inquiry?

Even physical science owes its start to mystics and Pythagorean philosophers, which seems quite a debt on the part of the Rationalists to the "Irrationalists." Morris Cohen, author of a well-known text on scientific method, remarked in Reason and Nature that Newton had to have the astrologer Kepler's laws of planetary motion, and the "daring and unorthodox speculative idea (which Newton derived from Boehme and Kepler) of a parallelism between the celestial and terrestrial realm," before he could formulate the law of gravity. And Kepler evolved his laws "only after he brought to his vision certain speculative ideas of Apollonius (on conic sections) and of Plotinus." Then, to cite the most eminent of modern physicists, Albert Einstein said in a paper published in the Journal of the Franklin Institute (March, 1936):

Physics constitutes a logical system of thought which is in a state of evolution, and whose basis cannot be obtained through distillation by any inductive method from the experiences lived through, but which can only be attained by free invention. The justification (truth content) of the system rests on the proof of usefulness of the resulting theorems on the basis of sense experiences, where the relations of the latter to the former can be comprehended only intuitively.

Well, there are minds which encourage the free flow of intuition, and minds which shut it off. So there are various levels of "rationality." Pico, judging from what was quoted from Ernst Cassirer in last week's Review, would not have been discouraged from metaphysical rationalism by Kant's declaration of the inaccessibility of things-in-themselves. Cassirer said:

Pico is by no means willing to renounce the power of pure thought; he seeks rather to increase it and carry it to the point at which it can be supplemented and enhanced by another purely intuitive kind of knowledge. But at the same time he maintains the position that our thinking, in so far as it is directed toward the Divine, can never be an adequate expression, but only an image and a metaphor.

For the kind of rationalism suggested here we need a richer language, but we should go about getting it gradually. Naming things before we know much about them is self-defeating. But to have only the word "irrational" to describe the intuition is as bad as having "anti-entropic" as the only term for the designing, organizing and synthesizing power of human beings. It is curious how for words with positive meanings we typically resort to anti-negative polysyllabic creations! You'd think we knew how to talk only in terms of analysis and about the running-down side of life. But if we start thinking in another way, then, when enough people do it, and the thought gains some structure and substance, the words we need will come, and they are likely to be the right ones.

REVIEW THIS AND THAT

A WHILE ago a reader sent in a clipping from a monthly journal called *The Layman Speaks* (May), a magazine devoted to Homœopathy. This paper was pleasant to discover, mainly by reason of reports over many years that homeopathy is dying out, with very few practitioners left. relied upon homœopathic remedies for common ailments such as colds for a long time, we found it encouraging that this school of medicine still has sufficient lay supporters to keep a magazine going; so we sent for a copy. The contents, whatever their merits from a critically professional point of view, are at least appealing to the general reader—contrasting nicely with all those microphotographs of morbid tissue one sees in the conventional medical journals. And its pages aren't defaced with dozens of jargon-fraught pitches for tranquilizers and other new drugs which civilized people are not supposed to be able to get along without, any more.

One homœopathic physician, well versed in Shakespeare's plays and sonnets, discusses in terms of homœopathy the possible causes of Shakespeare's death at only fifty-two, and of what Ivor Brown called "the period of the dark vision" in his life. The lover of Shakespeare may not warm to this attempt, nor value highly the tentative diagnosis, but the simple encounter with a number of exquisite quotations from Shakespeare—some familiar, some not—is a delight not found in many medical journals. And this way of thinking is refreshing.

Then, in a general article on homoeopathy by the editor, Arthur B. Green, there is a generally characterizing paragraph quoted from James Tyler Kent on Hahnemann's conception of healing:

Well, then, who is this sick man? The tissues could not become sick unless something prior to them had been deranged and so made them sick. What is there of this man that can be called the internal man? What is there that can be removed so that the whole that is physical may be left behind? We say that man

dies but he leaves his body behind. We dissect the body and find all of his organs. Everything that we know by the senses belongs to the physical man, everything that we can feel with the fingers and see with the eyes he leaves behind. The real sick man is prior to the sick body and we must conclude that the sick man must be somewhere in that portion which is not left behind. . . . We say the man feels, sees, tastes, hears, he thinks and he lives, but these are only outward manifestations of thinking and living. The man wills and understands; the cadaver does not will and does not understand; then that which takes its departure is that which knows and wills. It is *that* which can be changed and is prior to the body.

This *sounds* as though Homœopathy were some sort of psychotherapy, but of course it isn't. We lack the space to outline Hahnemann's theory, but a little more by Mr. Green will describe his approach:

Pharmacology is the word intended to dignify the knowledge of drugs, but not until Hahnemann [1755-1843] appeared had anybody put the three simple questions that would have to be answered: (1) What is a remedy? (2) How can a remedy be made? (3) How is a remedy to be selected?

These topics were simple enough, but by no means small. The work on them to find the answers occupied Hahnemann's little band of iconoclasts a generation, and they started out not having any idea that even that would be enough. But consider what it was in essence they came up with!

- (1) What is it in the sick man that is to be cured? The *Living Principle*, the *Dynamis*, the *Man Himself*.
- (2) What is a Remedy? Force of a like nature as the Vital Force which can influence, stimulate or modify the Vital Force.
- (3) How can a Remedy be Made? By Potentization from a natural substance, and then Proving on the healthy.
- (4) How is a Remedy to be Selected? On the Totality of Symptoms according to the Principle of Similars.

For further explanation of the method and the philosophy behind it, it will be necessary to go to books—Green suggests works by Herbert A. Roberts, Stuart Close, and Dr. Kent. We suggest a reading of the life of Hahnemann (Fischer, 1945)

by, oddly enough, Martin Gumpert, who was medical editor of *Time*—an excellent introduction to the subject. It might be remarked that a great many doctors not known as homœopaths use some of Hahnemann's methods, and a great many more ordinary folk take care of most of their medical needs themselves by learning something of homœopathic treatment. Despite harassments by the FDA, reputable manufacturing pharmacists make complete lines of homœopathic remedies and offer free catalogs descriptive of their use. *The Layman Speaks* is published from 910 17th St., N.W., Washington, D.C. 20006 (single copies 75 cents).

A phrase that will bear repeating (from Resurgence IV, 4): "In the bad old days a Gibbon or a Ruskin could write on complex topics with elegance and clarity but now it appears that 'informed' and 'scientific' thought can only be expressed in a style which has all the neatness and power of a dead jelly fish." This is Stephen Home, reviewing a text on rural Britain. Now and then a present-day scientist will write excellent prose, as with Henry Murray in psychology, Rene Dubos in biology, and Loren Eiseley in anthropology-and one could probably think of others, say, Julian Huxley, if we go to England. But as for the typical scientific paper—dullness seems to be the criterion and the goal, as Mr. Horne says. Or, as Maslow once put it, the young man training for a scientific career "is rewarded only for being patient, cautious, stubborn, controlled, meticulous, suspicious, orderly, neat, and the like."

There are delights in popular prose by the English which one seldom encounters in books by Americans. Take for example this accounting by a somewhat raffish church organist—who seems modelled after Barnardine in *Measure for Measure*—for his failure to "make good" (from *Leaven of Malice* by Robertson Davies—Clark, Irwin & Co., 1954, and Curtis paperback):

"My life," he declared, rolling his eyes at Miss Vyner, "is a headlong flight from respectability. If I tarted up in a nice new suit and a clean collar, I could spend hours and hours every week jawing to Rotary Clubs about what a fine thing music is and how I am just as good as they are. I'm not as good as they are, praise be to God! As a good citizen, I am not fit to black their boots. As a child of God, I sometimes think I have a considerable bulge on them, but I'm probably wrong. Sometimes I have a nightmare in which I dream that I have gone to heaven, and as I creep toward the Awful Throne I am blinded by the array of service-club buttons shining on the robe of the Ancient of Days. And then I know that my life has been wasted, and that I am in for an eternity of Social Disapproval. Wouldn't it be an awful sell for a lot of us-all the artists, and jokers, and striversafter-better-things if God turned out to be the Prime Mover of capitalist respectability?"

His eye was still upon Miss Vyner, who was uncomfortable. She never thought about God, herself, but she had a sleeping regard for Him, as a Being who thought very much as she herself did, though more potently. Dragging God into a conversation embarrassed her deeply.

In Kathleen Raine's *Blake and Tradition*, we found that Foster Damon's *William Blake: His Philosophy and Symbols* (Houghton Mifflin, 1924) first stirred her to study the English poet and artist. Getting Damon's book, from the library, we saw why. It is a friendly and inviting study. Early in its pages there is this summarizing passage on the pattern of Blake's work:

One of Blake's most cryptic poems, The Mental Traveller, resolves into an analysis of the five States. In accordance with Blake's customary arrangement of composition, it does not begin with the first State, Innocence, because that is not self-conscious. Only in Experience does man begin to feel his separate selfhood. The recognition of errors and sufferings, whether interior or exterior, brings about an immediate reaction. This newborn reaction is "The Babe," who in the Prophetic Books is named Orc. The Babe is crucified by the Old Woman, Custom; but this crucifixion, far from killing the boy, matures him. At last he breaks loose, and the third State, Revolution, is reached. The Old Woman becomes the vouthful bride of Orc. nature is subjected to the creative instinct. He establishes the Truth for which he has suffered, his hearth welcomes all the outcast.

But the fourth State is at hand. From his Truth springs Dogma ("the Female Babe") who becomes so sacred that none dares touch her. Blake elsewhere named her Rahab. She sets up her tyranny, indulging her chance favorites, but driving out the very Truth from which she sprang. This is the Dark Night of the Soul. Orc, now aged, wanders through the desert of error, seeking for a new ideal, which is Freedom (Jerusalem). In his pursuit of her, he grows younger and younger again, until the last State is reached, the ultimate Union. Blake, believing that the States move in an eternal cycle, identifies the last and first. Man is now a Babe again in the delights of the first State of ecstasy. In the arms of Freedom he has re-entered Innocence. But it cannot last; Freedom becomes aged into Custom, the Babe is again crucified and the poem ends while the cycle continues.

Then Damon says:

Mysticism was *always* the inner impulse of everything Blake wrote or painted, from the *Songs of Innocence* to his last works; if we do not recognize this, we only wonder and aimlessly admire. It is the source of all his doctrines, for it was an actual experience which took precedence of the established faiths and theories. . . . But to those of us who are not seers, visions cannot be authoritative. Blake realized that, and he expended his energy, not in apologizing for his visions, but in teaching the truths they revealed. . . .

There is one more important aspect of Blake as a mystic. In him we find no rejections, no disgusting temptations, terrible starvings or lashings of mind or flesh, no cult or filth, . . . The normal life, *heightened*, was his ideal. . . . he puzzles in the back of his mind, how can I make other men see this?"

A splendid portrait of Blake the man seems to emerge in this study.

COMMENTARY EDITORIAL

WE omitted our customary "report to readers" in the first issue of 1974 for the reason that there didn't seem to be anything especially important to report. The main event of the year, so far as publication operations are concerned, was the gaining of our second class mailing privilege, which will save us considerable money and probably assure better delivery. Meanwhile, the friendly support from readers, unsolicited save for these occasional editorials, continues to make it possible for MANAS to go on being published, since the return from subscriptions does not come anywhere near to paying our bills, especially during these days of spiralling production costs. So many readers send in a few dollars extra when they renew—or at Christmastime—that, with a few larger gifts, it all adds up to a balanced budget, year after year—just. When we started publishing, we decided we would not run any money-raising campaigns or send out begging letters. We haven't, and we have survived; and we haven't increased our rates, except in effect from not publishing during July and August. We don't issue MANAS to make money; but if the paper could some day be self-supporting, this would be a major achievement! We may get there eventually, but that is still a distant goal. Meanwhile, we thank our readers for their support.

There are some areas in which, once you start making definitions, no matter what you say seems unsatisfactory. So it is with "rationalism." We doubt if anyone can get "rationalism" properly defined. You put words together and achieve meaning, but always there is some remaining term that shrieks for identification. In our definition, for example, on page one, we say that the rational approach puts things in order so that understanding or explanation results. But what is "understanding" or "explanation"? Psychologically, it may be no more than a tautological rephrasing of

a problem in more familiar language. To show a causal relationship is a species of explanation, but we may deceive ourselves. again. Mathematical accounts of phenomena are not explanations, but descriptions after all, behavioral descriptions. The "law of Gravitation" doesn't explain anything. Yet it seems fair to say that the application of mathematics makes science more rational. On the other hand, the last word on the meaning of "rational" will probably never be said.

CHILDREN

... and Ourselves

FORMATION OF A MAN

AT the suggestion of a reader, we have been going through *Lester F. Ward—The American Aristotle* by Samuel Chugerman, published by Duke University Press in 1939. We don't remember why this book was recommended, but it may have been because of Ward's great enthusiasm for education. He was the founder of American sociology and the major critic of Herbert Spencer's "individualism" during the early years of this century.

Well, it is a big book, not the sort of text we would read through without a strong compulsion. The reason for speaking of it here is the account provided by Chugerman of Ward's early years. Somehow, this seems more important than all the rest. Lester F. Ward, known to his family by his middle name, Frank, was born in Joliet, Illinois, in 1841, on the site of a quarry his father had bought for the stone he was using in building the locks for the canal which would connect the Mississippi River with Lake Michigan. Later the Illinois state prison was erected on the same spot. The family was not wealthy and moved around a lot. Frank had no formal schooling except for some exposure to a McGuffey reader by his mother, but since she bore ten children there was not much time for teaching. At sixteen he worked as a hand for a French farmer, and taught himself French from a grammar he found lying around the house.

In earlier years, when the family lived in Iowa, Frank had become fired with an endless curiosity about nature. He later wrote:

Roaming wildly over the boundless prairies of northern Iowa in the fifties, interested in every animal, bird, insect and flower I saw, but not knowing what science was, scarcely having ever heard of zoology, ornithology, entomology, or botany, without a single book on any of these subjects, and not knowing a person in the world who could give me the slightest information with regard to them, what chance was there of my becoming a naturalist?

But he did become a naturalist, and half a dozen other kinds of scientist besides. Meanwhile, he made up names for what he discovered. Chugerman remarks:

Within three years he had a respectable herbarium and a collection of some hundred bird skins. His scientific career had begun, but the future master of botany, fossil botany and geology, who discovered the petrified forests of the West, which Poe had visioned before Ward was born, was still a raw mill-hand without education or training.

When he was seventeen he and a brother hiked from Illinois to Pennsylvania to work for another of his brothers—Frank was the youngest of the ten children-who owned a wagon-hub factory. At night, after work, the two boys "mastered Loomis's Physiology, Ollendorff's Greek Grammar," and Frank found time "to learn the conjugation of all the Greek irregular verbs as well as to make headway in the study of French, German, and Latin." Three years later, when he attended his first real school for a short term, he was far ahead of anyone else in Latin and Greek. Then he went off to fight in the Civil War, being wounded twice at Chancellonille. After his discharge from the army, a letter to President Lincoln obtained him a job as a clerk in the Treasury, and a few months later he moved to the Bureau of Immigration. He now began going to college at night, persuading Columbian (now George Washington) University to offer academic as well as law and medicine courses. By 1892 he had earned an M.A., and also won a diploma in medicine and was admitted to the bar. He never practiced either law or medicine, saying that "his conscience would not allow it."

His career in the government service, Chugerman says, "is without parallel in American history."

Original researches in botany and geology earned him repeated promotions until he became the outstanding figure in the Smithsonian Institution, in the Biological Society of Washington, and in other national scientific bodies. He was made librarian of the Bureau of Immigration and finally became chief of the Division of Navigation and Immigration. He

became distinguished for botanical research both in living and fossil forms, and was given the title of Honorary Curator of Botany and Paleobotany in the National Museum in Washington. In 1881 he was appointed geologist in the United States Geological Survey, and two years later, chief paleontologist. There seemed to be few scientific honors left to bestow on him, yet all his scientific labors were merely stepping stones to his real goal—the establishment of social science.

Ward began writing his first book, *Dynamic Sociology*, in 1869, while he was working for the Bureau of Immigration. It was not published until 1883, and Ward's longing to be a teacher was not fulfilled until much later when, in 1906, he was called to Brown University in Providence to occupy the new chair of sociology. He had been invited to come to the Sorbonne and to other famous European universities, but he chose Brown, perhaps for its peaceful atmosphere and the opportunity to teach. He died seven years later, in 1913, at seventy-two.

We've not said anything about Ward's "sociology," but might add that he was determined that science should form the basis of education, that education should provide the foundation of equality, and that social science should be the discipline guiding these great changes. confidence in "education" was unbounded, and since he was essentially an "environmentalist," he believed that "happiness" is the human goal and that the achievement of happiness is through the application of knowledge, primarily scientific knowledge, which would shape the environment to human advantage. His conception of science is essentially Baconian, although he conceived the conquest of nature to be for the purpose of freeing men from material want in order to devote themselves to art, science, and philosophy. Only the spread of knowledge among all men would make this possible: hence his reliance on education. And education supplied facts about Education was the task of nature and life. organized society, and it should be universal and Yet Ward was convinced that compulsory. education is deeply wanted by all.

Wry afterthoughts come to the reader of this book published in 1939. What, one wonders, would Ward think of what has happened to education in the sixty years since his death? How would he respond to Ivan Illich's strictures on public education? Or to Lewis Mumford's Pentagon of Power? The world of science, education and culture is now a very different affair. So we have not given space to Lester Ward's sociology, but leave the reader to moody wonderings about why there are not more young men like Lester Ward-young men willing and able to forge their lives out of the raw materials of an indifferent world. He was certainly one of the great audodidacts. Could he really have supposed that other young people hungered after knowledge with the same ardor that he felt?

The conclusion we draw from this book is the same one that Ortega reached after a lifetime of teaching: The work of the teacher is not to "transmit the cultural heritage," but to do what he can to stir in others the hunger to know. It seems plain enough that, sooner or later, all things are added to those in whom that hunger is strong enough.

FRONTIERS

The Liberal Churches

THE report of a seminar on "Death and Dying" held recently by Unitarian Universalists in Santa Barbara raises what seem basic questions. According to the account in the *UU World* for last Dec. 1, the participants considered mostly the psychological problems connected with death. The seminar leader, Mwalimu Imara, of Boston, stressed the importance of a full expression of "grief," regarding funerals as useful in this way. He also said: "People who seem able to accept the fact of their own deaths tend to be coordinated, cohesive, to have a world view which includes explanation of good and evil, joy and pain."

Wondering if the discussion was expanded to examine the world views of persons able to accept the prospect of death, and who had reached an understanding of good and evil, we asked a man who attended. He said that the seminar sought only to be of use in "psychological terms." Interestingly, a book which has just come in for review (Death in American Experience, edited by Arien Mack, Schocken, \$7.50) reflects the same restriction, although limiting the subject of death to its psychological and cultural impacts is probably more a habit of mind than a deliberate exclusion of other considerations, such as whether death means final extinction. Only one contributor, Roy Eckhardt, a professor of religion, deals with various conceptions of immortality, observing in one place:

Since our subject is death rather than life after death, it might be objected that we ought to lay aside the latter question. Yet just as human life is conditioned by the stern eventuality of death, so that possibility or impossibility of an afterlife must influence our whole understanding of and attitude toward death itself. It is clear that the belief in the immortality of the soul will sustain a vastly different orientation and response to the event of death than will a belief in human mortality.

Another writer, William F. May, considering "The Sacral Power of Death," says in conclusion:

If our humanity is tested and revealed in the way in which we behave toward death; by the same token, it is obscured and diminished when death is concealed from view—when the dying are forced to make their exit anonymously, their ending unwitnessed, uncherished, unsuffered, and unrecorded except in hospital files. So repressed indeed has the event of death been in our culture that when the dying man is rediscovered he makes his entrance not as a hero, warrior, or martyr, but as a pedagogue.

Here the writer, who teaches religious studies, makes reference to the recent spate of books and articles concerned with human attitudes toward death and with "therapy" for the dying—in virtually all of which, it might be said, the same neglect of philosophic or metaphysical inquiry into the possibility of an after-life is evident.

All this seems an unfortunate excess in the "psychological" approach to an inescapable experience that will confront every human being. Has our civilization given up entirely on the idea of a future life? Many individuals are convinced of its reality, as the present popularity of books on reincarnation shows, but institutions—universities and churches—are apparently still avoiding any direct approach to philosophical questions and solutions. In view of the logical cogency of the brief statements we have quoted from Eckhardt and May, one would think that the time has come for deliberate attention to the time-honored conceptions of immortality which have formed the foundation for the high religions for thousands of vears.

More than a century ago, a scholar of eminence, Ernest Renan, despite his skeptical turn of mind, made this warning:

The day in which the belief in an afterlife shall vanish from the earth will witness a terrific moral and spiritual decadence. Some of us perhaps might do without it, provided only that others held fast. But there is no lever capable of raising an entire people if once they have lost their faith in the immortality of the soul.

This, one may say, is a mere pragmatic argument, and so it is, but what if Renan is right;

and what if, besides being good for human beings, there is a sense in which the doctrine of the immortality of the soul is profoundly *true?* Not belief but investigation is what is called for. And we might remember also the view of Emerson, who said that "the impulse to seek proof of immortality is itself the strongest proof of all."

Today popular longings are running far ahead of institutional stances, with the result that, in the opinion of many, the universities are turning into sanctuaries of the past, while the churches are losing their moral influence. The people are going out in the streets, listening to soothsayers, seeking wonder-workers, and often following charlatans and engaging fools. Laggard orthodoxies have major responsibility for such trends during periods of cultural transition.

In such a time, the "liberal" churches bear peculiar burdens and obligations. These churches came into being in response to the hunger of free minds for a sort of religion that would not chain their thinking and aspiration to old, outworn beliefs. Undogmatic Ouakerism, for example, emerged in a valiant struggle to gain recognition for the "inner light" that the Friends of the time of George Fox believed could shine for every human The Unitarians have a similar heroic being. history, starting in the seventeenth century in Eastern Europe and England, and reaching, in England in the latter part of the eighteenth century, a kind of spontaneous synthesis embodying the underlying tendency of the age to seek open-minded, undogmatic religion. Unitarianism became broader still in the nineteenth century, under the inspiration of what became the Transcendentalist movement, and today the Unitarians, along with the Universalists, who have joined them, are said to find the seat of authority in "religious history and experience, interpreted by reason and the conscience of mankind."

In a study of education for the ministry of the UnitarianUniversalist churches (published in 1962 by the Unitarian Universalist Association in Boston), Harold Taylor remarked:

Looked at from the outside, the Unitarian Universalist answer to the theological question seems to amount to a plea for reason and a rational religion which accepts the ethical content of Christianity and a neo-Christian concept of human nature, leaving all the ultimate questions unresolved. It puts the ultimate questions on a continuing agenda. . . .

Time was, Dr. Taylor says, when the vitality of the Unitarian movement was generated by its dissent from Christian orthodoxy—but what happens when orthodoxy itself becomes weak? Then, he says, "dissent is not enough." Then a liberal church can no longer be "dependent upon the doctrine to which the dissent is addressed," and has need of distinctive affirmations of its own. "In a movement where everything is allowed, too little is asserted with passion." He also says:

There will no doubt continue to be many who turn to the liberal church for more enlightened views on doctrinal matters than have been available to them elsewhere. But a church for the disenchanted is not one which has within it the strength and vitality to build a new future.

These are the problems, honestly come by, of those committed to the practice and teaching of liberal religion. Direct and continuous attention to the possibility of "a world view which includes explanations of good and evil, joy and pain," might bring some solutions into sight.